



**WEST NORRITON TOWNSHIP  
MONTGOMERY COUNTY, PENNSYLVANIA**

**ACT 537  
PLAN UPDATE  
SEWAGE FACILITIES PLANNING**

**Prepared For:  
West Norriton Township  
1630 W. Marshall Street  
Jeffersonville, PA 19403-3236**

**June 2023**

**File No.: 18-04027T**

**Prepared By:  
Gilmore & Associates, Inc.  
Engineers ♦ Land Surveyors ♦ Planners ♦ GIS Consultants  
65 E. Butler Avenue, Suite 100  
New Britain, PA 18901  
215-345-4330**



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## 1.0 PLAN UPDATE / EXECUTIVE SUMMARY

West Norriton Township (Township) is located along the Schuylkill River on the westerly side of Montgomery County. The West Norriton Township Board of Commissioners has identified the need to review long term wastewater collection, conveyance, and treatment options for its sewer ratepayers, which includes residents and businesses within the Township. The Commissioners authorized Gilmore & Associates, Inc. (G&A), on behalf of the Township to submit a Plan of Study to the Pennsylvania Department of Environmental Protection (DEP). DEP approved the Plan of Study Task Activity Report and G&A has prepared this Act 537 Sewage Facilities Plan Update Report. The current Act 537 Plan was adopted by West Norriton Township on March 6, 1997. Additional Act 537 Plan Update revisions were prepared by others in 2009 and 2014 but were not approved. These draft updates were used to supplement background information for this Plan Update.

West Norriton Township owns and operates their sanitary sewer collection and conveyance system within the Township, which is comprised of approximately 5.86 square miles. The Township also owns approximately eight thousand five hundred (8,500) feet of eighteen (18) inch force main within Norristown Borough. The system generally dates back to the 1950's, with about seventy five percent (75%) of its current facilities being constructed prior to 1967. The system includes six (6) pumping stations, geographically located throughout the Township. The service areas include approximately one thousand eight hundred (1,800) manholes, over sixty (60) miles of gravity sanitary sewer mains, over thirty (30) miles of sanitary sewer laterals (services) and ten (10) miles of force main.

All the Township's wastewater is treated at Norristown Municipal Wastewater Authority's (NMWA's) Wastewater Treatment Plant (WWTP) under PA NPDES Permit # PA0027421. NMWA's WWTP was at one point formerly known as a Water Pollution Control Center (WPCC). Currently, sanitary sewer is conveyed to the NMWA WWTP by either: 1) gravity through a metering pit located at Jackson Street and Forest Ave into NMWA's gravity collection system (currently approximately 10% of the flow); or 2) pumped from West Norriton Township's Rittenhouse Pump Station through an eighteen-inch (18") force main that generally parallels the Schuylkill River along the Schuylkill River Trail and through the Borough of Norristown directly to the headworks of NMWA's WWTP (currently approximately 90% of the flow). This force main is owned, operated, and maintained by West Norriton Township, even though the asset is located beyond the Townships municipal border and within the Borough of Norristown.

An Agreement executed November 16, 1985 between West Norriton Township Municipal Authority (WNTMA) and the Borough of Norristown reserved 33-1/3% (3.25 MGD) of the total plant capacity (9.75 MGD) for West Norriton. The parties to this Agreement have been superseded by West Norriton Township and Norristown Municipal Waste Authority. The Borough of Norristown formed NMWA in 1993 to take over all sanitary sewer related matters. West Norriton Township acquired WNTMA in 2004 and took over all sanitary sewers. By way of the Agreement and reservation of WWTP capacity, and West Norriton being responsible for capital and operational costs, West Norriton shares ownership interest with the NMWA for the Norristown WWTP.

Norristown, in the late 1990's, commissioned an analysis of their aging WWTP. The study identified significant capital costs needed to repair and upgrade the plant to meet regulatory requirements. Additionally, there was discussion in the early 2000's of relocating the plant due to re-development interest along the Schuylkill River waterfront in Norristown. More recently, in 2008 NMWA had evaluated options relating to siting a new NMWA WWTP or upgrading the existing

NMWA WWTP. The study found that significant capital cost expenditures would be required, of which West Norriton would share one-third (1/3) of the cost based on reserve capacity and the Intermunicipal Treatment Agreement.

West Norriton determined that it to be in the best interests of their rate payers to investigate all options and prepare Act 537 Plan revisions and had authorized previous 2009 and 2014 Act 537 Plan Updates but were never finalized. These drafts were prepared with a focus on Norristown Borough/NMWA's intentions to relocate the existing WWTP or upgrade/expand the plant at its current location at a considerable cost to West Norriton or for West Norriton to consider alternative wastewater treatment alternatives.

Additionally, in 2003, NMWA was placed under a Consent Order and Agreement (COA) by PA DEP. This COA restricted connections to West Norriton Townships sewer system until Norristown and West Norriton made sewer collection system improvements to reduce the quantities of significant inflow and infiltration flows that enter the sewer collection system. Critical flow reductions implemented by West Norriton, along with improvements by NMWA allowed West Norriton to make new service connections via a Corrective Action Plan/Connection Management Plan (CAP/CMP). These release of service connections (EDU's) from the CMP were authorized by PA DEP pending flow reduction results. WWTP and collection system improvements by NMWA have been implemented as well. The COA was formally closed by PA DEP on June 17, 2019.

The entire Township is the study area for purposes of the Plan Revision. Refer to Figure 1 for information regarding the location of the study area. Furthermore, this study has been prepared in accordance with 25 PA Code Chapter 71, "Administration of Sewage Facilities Planning Program."

The absence of clearly defined plans for the future of the NMWA WWTP and the recent interest shown by private utilities to purchase or contract operate public wastewater utilities have added to the uncertainty of wastewater management in the Township.

Therefore, this Act 537 Plan Update is specifically concerned with developing a plan to provide long-term sewage collection, conveyance and treatment needs that are in the best interest of the Township, its rate paying customers and stakeholders.

As detailed in the Act 537 Plan Update, this Study considered the following:

- Evaluation of collection and conveyance capacity issues
- Evaluation of current treatment at NMWA and current Agreement including building a new plant
- Evaluation of building a new WWTP dedicated to WNT sewage flows
- Evaluation of conveying all or diverting a portion of the Township's flow to another nearby WWTP
- Evaluation of converting pump station(s) to package plant(s) with spray/drip irrigation or similar
- Evaluation of providing sewer to on-lot areas and properties not currently serviced
- Evaluation of pump station capacity needs
- Ten (10) year and ultimate sewer need projections
- Review administrative and institutional procedures, in particular as it relates to the transfer of ownership of NMWA

Alternatives evaluated were limited to:

- Continued Use of NMWA WWTP Alternative
- Regional WWTP in WNT Alternative
- New/Expanded NMWA WWTP Alternative
- Diversion of Flows to Nearby Existing WWTP Alternative
- Converting Existing Pump Station(s) or Collection Points to Small WWTP Alternative
- No Action

The selected alternative, based on the analysis contained herein, is for West Norriton Township to continue discharging to NMWA WWTP through its Intermunicipal Treatment Agreement. This includes updating and/or revising the Agreement as needed, as well as West Norriton Township participating in operational expenses and capital projects by NMWA. Further, West Norriton Township will update its own facilities as needed, for future growth and work with NMWA. There is no immediate additional cost for West Norriton Township, beyond the current operating and maintenance costs that the Township incurs, as well as the operation and capital costs that the Township incurs in accordance with the Agreement. The Township will fund any additional projects needed for growth with its own funds, bank loans, bonds, developer contributions or available grants. There are other non-economic factors that also make this the most attractive alternative which include:

- Ability to implement the alternative without interruption
- Regionalization of systems and cooperation
- Ability to continue growth within Township
- Consistent with existing plans and programs
- Provides sufficient capacity for the ultimate build out of the study area
- Minimizes pollution and environmental risks

The other Alternatives address, or partially address the needs of the study area, but come with significant costs, Intermunicipal Agreement negotiations, potential environmental concerns, increased operation and maintenance, additional environmental/pollution risks, increased staffing and increased costs to residents.

1.1 Municipal Adoption

To be completed in 2023.

1.2 County Planning Commission / County Health Department Comments

To be completed in 2023.

1.3 Public Comment

To be completed in 2023.

1.4 Comments and Responses

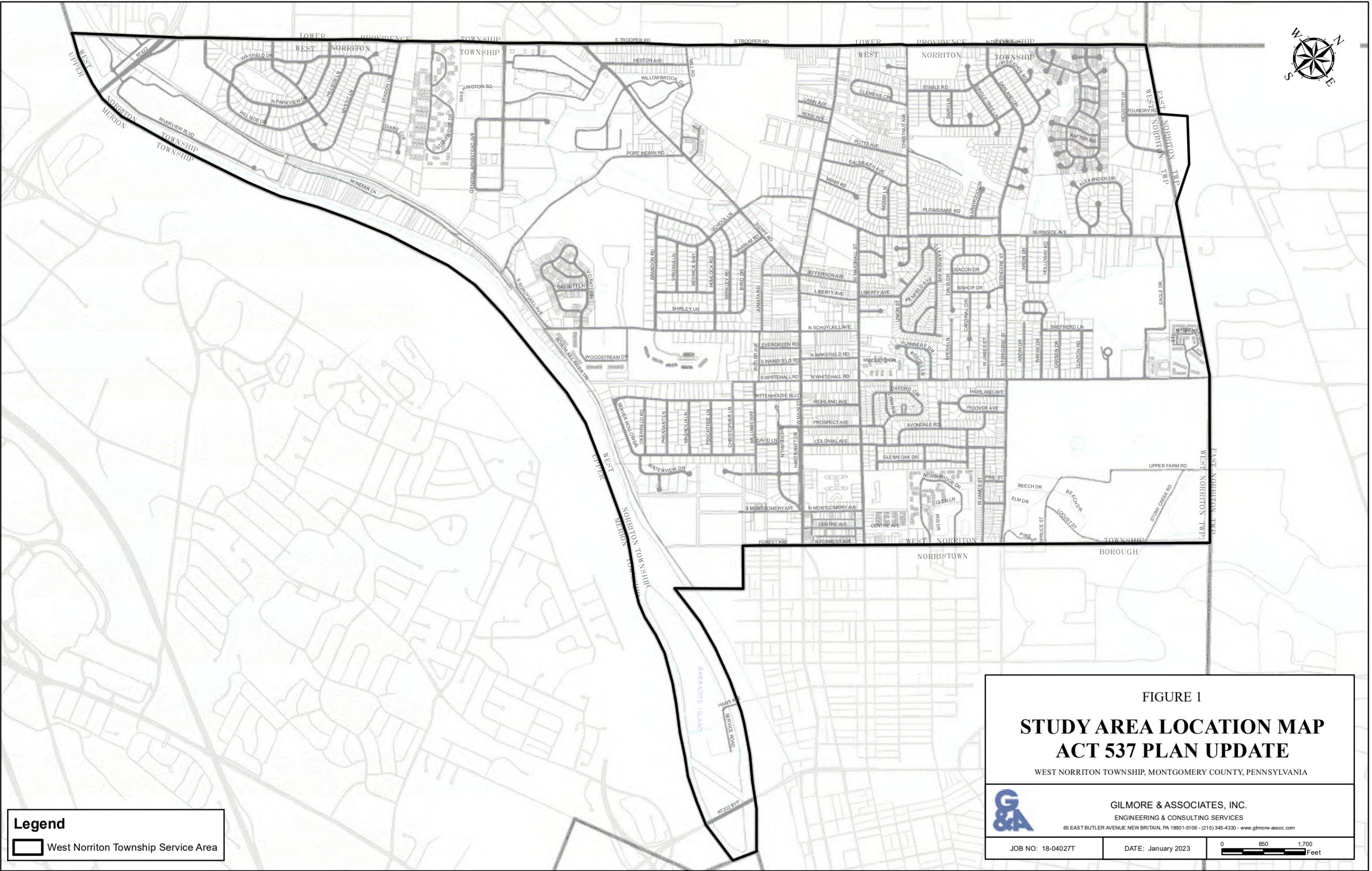
To be completed in 2022.

1.5 Implementation Schedule

Issue 537 Plan Update for Official Reviews	“Time Zero”
Township 537 Plan Update Adoption	2 Months
PADEP 537 Plan Update Approval	6 Months

1.6 Consistency Documentation

To be completed in 2023.



**Legend**

 West Norriton Township Service Area

**FIGURE 1**

**STUDY AREA LOCATION MAP**

**ACT 537 PLAN UPDATE**

WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

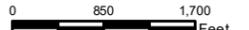
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**GILMORE & ASSOCIATES, INC.**  
 ENGINEERING & CONSULTING SERVICES  
 65 EAST BUTLER AVENUE NEW BRITAIN, PA 18901-5106 - (215) 345-4330 - www.gilmore-assoc.com

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JOB NO: 18-04027T

DATE: January 2023



## 2.0 PREVIOUS WASTEWATER PLANNING

### Previous Planning Under the Sewage Facilities Act 537

West Norriton Township has been proactive in the planning and construction implementation of wastewater facilities since the enactment of the Pennsylvania Sewage Facilities Act (Act 537) in 1966. Informally and conditionally West Norriton Township adopted the Montgomery County Sewage Facilities Plan (1972 edition, Revised) as its Comprehensive Wastewater Management Plan. Then in 1971 the Township developed its own Act 537 Plan and implemented the capital improvement recommendations. Significant growth in the 1980s diminished the usefulness of the 1981 Plan; therefore, a Sewage Facilities (537) Plan Update was prepared in 1990 to address the present and future wastewater management needs.

Aging infrastructure in the 19 plus years since 1990 created the need to prepare Act 537 Plan Updates in 2009 and 2014 to advance and redefine earlier capital improvement goals. The continuing dynamics of growth, both new and redevelopment, waste water treatment requirements to enhance regional water quality, environmental quality in the Township, and the efficient use of financial resources have all contributed to the need to develop a 2022 Act 537 update.

In addition to the Act 537 Plan Updates, West Norriton Township prepares a yearly Municipal Wasteload Management Report as required by Chapter 94 regulations. Chapter 94 reports focus on the past 5-year historic flows and projected flows for a five-year period.

### West Norriton Township Comprehensive Plan Update - 2010

The Township Planning Commission works with the Township Board of Commissioners and planning consultants to periodically evaluate existing conditions and to forecast trends from both internal and outside the community happenings. The Comprehensive Plan makes recommendations on future desirable patterns in land use, both in-fill and uses of vacant properties, and ways to rejuvenate or revitalize underutilized or underperforming land uses; improvement of the movement of people and goods through the municipality and focus on providing a policy framework and specific strategies for carrying out the plan.

The Comprehensive Plan considers history and regional connections, includes demographics present and future trends, contains an open space element, a traffic management element, assesses residential trends, and assesses land use trends. A concluding Vision Plan combines all of the elements into a program for the future of the Township.

### Montgomery County Planning Commission 2019 Implementation Update

The Montgomery County Planning Commission adopted a comprehensive plan in January 2015 entitled "Montco 2024: A shared Vision". The plan was and is a working document to guide the county's actions. Annual reports are prepared to identify the plan's implementation. Many goals are implemented by the County, but many are implemented by the County's partners, such as local municipalities, the Delaware Valley Regional Planning Authority, and other government agencies, nonprofit partners, and private developers.

*Montco 2024: A shared Vision* is a goal-oriented plan for actions which highlights the importance and benefits of pursuing connected communities for the collaboration and partnerships among governments and stakeholders. Other goals include transportation improvements, expansion of

greenways and trails, support for strong downtowns, improved stormwater management, support for energy-efficient infrastructure, support for housing choices and opportunities, and challenge communities and businesses to stimulate a vibrant economy.

#### Municipal Wasteload Management Annual Report Calendar Year 2021 (Chapter 94 Report)

West Norriton Township owns and operates a sanitary sewer system of gravity collector sewers, wastewater pumping stations and flow diversion/control facilities. The Township delivers raw sewage to the NMWA WWTP owned and operated by the NMWA. The challenge to the Township is to operate their system within the parameters set by the Pennsylvania DEP. The Township's contract operations maintain programs to monitor, maintain, repair and rehabilitate sewer system infrastructure, including pumping stations.

The six (6) pumping stations undergo routine maintenance on a regular basis. Repairs and improvements are made on a pump station by pump station basis and project by project basis. Flow trends and seasonal trends are evaluated over a five-year period. Assets are prioritized for corrective action on a scale of 1 to 3: 1-immediate action, 2- Priority action, and 3- Needs no action.

The collection system is the subject of a continuous infiltration and inflow reduction program to remove extraneous flows from the collection system. Extraneous flows rob sewer capacity from intended purposes, increase energy and pump repair costs, increase the cost of wastewater treatment, and prevented the release of EDUs for new connections when under a COA. The main elements of the reduction program include sanitary sewer television inspection, light cleaning of pipes, hydraulic pipe cleaning, leaking joint testing, grout sealing of joints, rehabilitation of lateral connections, root removal from pipe joints, trenchless pipe slip lining, and manhole frame and cover rehabilitation. Furthermore, the Township is committed to the elimination of illegal connections to the system from sump pumps, rain water conductors, and deficient laterals.

#### West Norriton Township Municipal Code, Chapter 27 Zoning Ordinance,

The West Norriton Township Zoning Ordinance defines requirements for 12 different zoning districts and contains community development objectives and the necessary technical provisions to regulate the use of land and structures. The ordinance establishes bulk, height, area, setback, and other standards. The Zoning Ordinance has been adopted and amended by the West Norriton Township Board of Commissioners and is contained in Section 27 of the West Norriton Township Code.

The Zoning Map was last revised January 25, 2021 and depicts twelve different zones that include the following: R-A Rural Residences District, R-1 Residence Districts, R-2 Residence Districts, R-3 Residence Districts, A Apartment, RR Retirement Residence, B-P Business and Professional Districts, Commercial Districts, L-C Limited Commercial Districts, LC & I Limited Commercial and Industrial districts, I Industrial Districts, and RE Recreational Districts.

#### West Norriton Township Municipal Code, Chapter 18 Sewers and Sewage Disposal

West Norriton Township has adopted Sewer and Sewage Disposal Chapter 18 which codifies the use of sewers in five parts and Appendix G Sewers which appends changes to the code for EDU distribution and other matters. The Chapter 18 five parts include the following: direct and indirect contributions into the wastewater system, holding tanks, installation and/or connection required, construction and maintenance, and pretreatment rules and regulations.

West Norriton Township Municipal Code Chapter 22 Subdivision and Land Development Part 5 sub part 22-513 that codifies Sanitary Sewers

West Norriton Township has codified land development in the Township in Chapter 22 with sub part 22-513 identifying conditions for sanitary sewer installations and connections to the Township's sanitary sewer system. In areas not presently served by public sanitary sewers, the Township shall require, according to Act No. 537 passed by the General Assembly of Pennsylvania (1965), in addition to installation of temporary individual on-site sewage disposal facilities, the installation and capping of sanitary sewer mains and house connections, if studies by the Board indicate that extension of public sanitary sewer trunks or lateral to serve the property subdivided appears probable or necessary to protect public health. When a feasibility analysis, conducted by the Township Engineer, Applicant's engineer and District Sanitarian, has ascertained that sanitary sewers are practicable, then sanitary sewers, with connection to each building in a subdivision or land development, shall be installed at the expense of the applicant or subdivider and connected to the Township sanitary sewer system.

### 3.0 PHYSICAL AND DEMOGRAPHICAL ANALYSIS

#### Location of Planning Area

West Norriton Township is located in the southwestern portion of Montgomery County and encompasses 5.47 square miles. The study area of this Plan is the entire Township of West Norriton and a small portion of East Norriton Township located in the vicinity of Foundry Lane and Industry Lane. Refer to Figure 1 for information regarding the location of the study area. As will be explained in a later section in greater detail, the Township is not opposed to the regionalization approach to wastewater treatment facility and the study area may grow to include other municipalities. The Township is amenable to the consideration of beneficial reuse of treated effluent where permitted by DEP Guidance Manual 385-2188-002 Reuse of Treated Wastewater for a significant portion of their raw wastewater stream.

#### Township Population History

Over the past 40 years, West Norriton population as reported by the Delaware Valley Regional Planning Commission (DVRPC) has grown modestly when compared to the earlier period between 1950 and 1980. The most recent 30 years has experienced little to slight growth. Montgomery County on the whole has experienced similar growth characteristics although the DVRPC reports a greater percentage increase in the last 30 years. Table 1 presents a summary of the historical population of West Norriton from 1980-2020 and Table 2 presents the percentage increases over the same time increments.

<b>TABLE 1</b>					
<b>HISTORICAL POPULATIONS</b>					
<b>Municipality</b>	<b>YEAR</b>				
	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2020 forecast</b>
West Norriton Township	14,034	15,209	14,901	15,663	16,145
Montgomery County	643,621	678,111	750,097	799,874	840,934

<b>TABLE 2</b>				
<b>HISTORICAL POPULATION TRENDS</b>				
<b>Municipality</b>	<b>YEARS</b>			
	<b>1980-90</b>	<b>1990-2000</b>	<b>2000-10</b>	<b>2010-20</b>
West Norriton Township	8%	-8%	5%	3%
Montgomery County	5%	11%	7%	5%

West Norriton Township has had substantial growth between 1950 and 1980 and slow growth to the present. The population growth can be attributed to the availability of reasonably priced land, economic growth, and the Township's proximity for easy access to the cities of Philadelphia, Reading, Allentown, the Borough of Pottstown, and the King of Prussia Area.

The Delaware Valley Regional Planning Commission has developed population projections for West Norriton Township and Montgomery County. Table 3 represents the population projections and trends for the years 2025, 2030, 2035, 2040, and 2045 for West Norriton Township and Montgomery County.

<b>TABLE 3</b>					
<b>POPULATION PROJECTIONS DVRPC</b>					
<b>Municipality</b>	<b>YEARS</b>				
	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
West Norriton Township	16,509	16,878	17,198	17,461	17,684
Montgomery County	863,327	884,387	903,114	918,918	932,820

The Montgomery County Planning Commission has utilized the Cohort Survival Method as the most feasible means of population projections for Montgomery County and the municipalities that comprise Montgomery County. The projections are computed by age and sex using standard survival rates, actual and projected birth rates, and historical rates of net migration.

The DVRPC used three separate alternate methods to forecast 2045 populations. One of the methods used was the Cohort Survival Method used by the Montgomery County Planning Commission; however, this method was not chosen for the final forecasts.

The alternate forecasting method chosen is described in DVRPC Analytical Data Report 022 and is summarized here. The adjusted 2040 population forecasts were summed and, for each set of alternatives, the percentage of the population forecasted to live in each municipality in 2040 (based on the adjusted 2040 forecasts) was applied to each of the 2045 county-level alternatives to create preliminary 2045 municipal forecasts, with the sum of all municipalities within each county matching the county-level 2045 forecast for each of the three alternatives. This method assumes that the proportion of the county’s population living in each municipality in 2040 will remain the same in 2045 and, when applied to the three alternative county-level forecasts, produced three alternative sets of municipal-level 2045 forecasts. These alternatives were sent to DVRPC’s member counties’ planning staff for review and comment, and consensus was reached on a full set of 2045 county and municipal forecasts.

Population projections are based on assumptions made regarding future growth and development. These assumptions are based on historical trends and anticipated development. Therefore, the accuracy of population projections is contingent upon the accuracy of assumptions. In addition, it is generally true that the accuracy of population projections generally decreases as the size of the area involved decreases.

Consequently, some generalizations can be made concerning growth expectation regarding the Township. West Norriton Township is anticipated to experience very minor growth in the 10 year planning period. This can be attributed to infill of lots and redevelopment. Most of development of the Township has been completed.

### Physical Characteristics of the Study Area

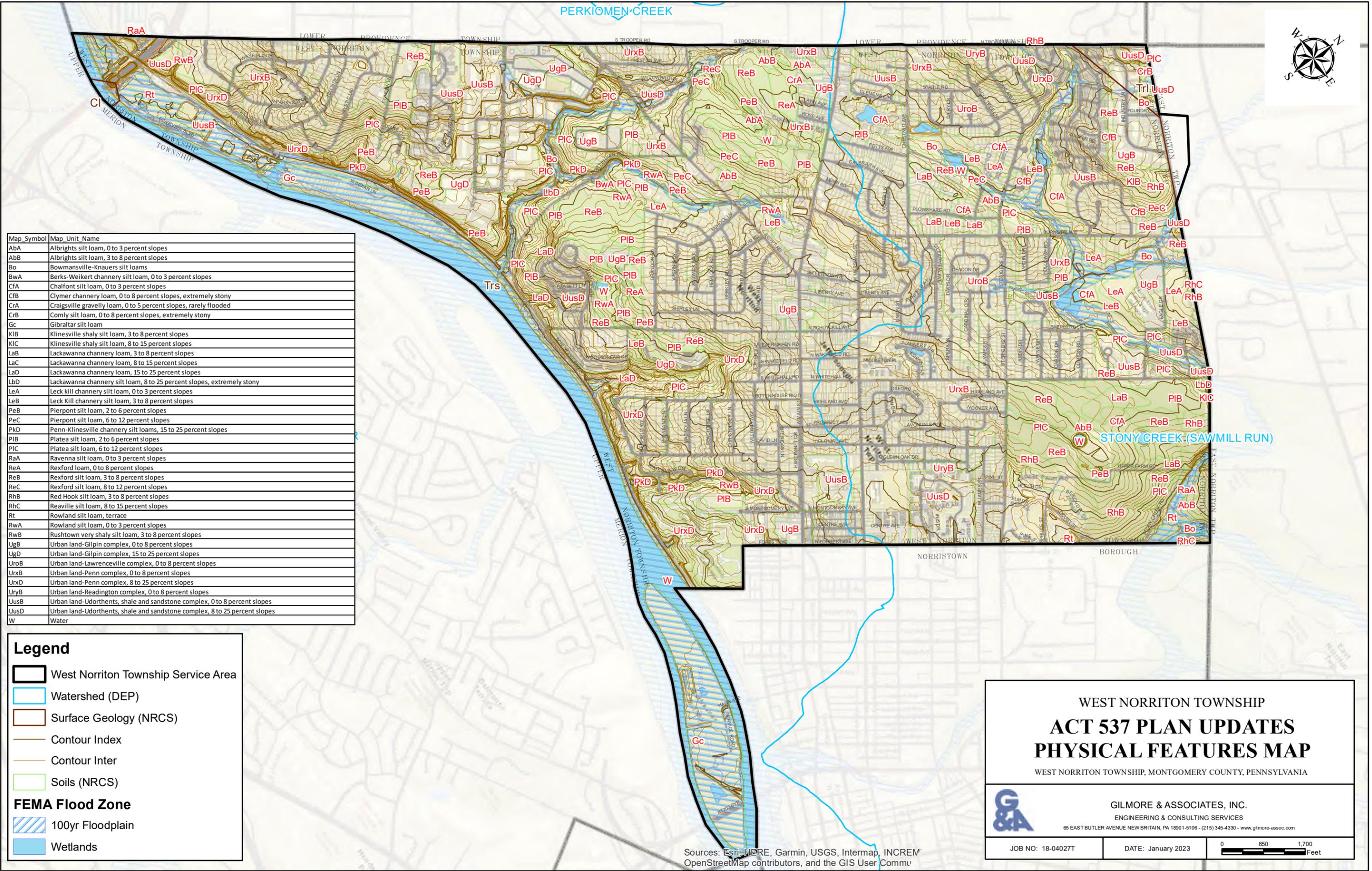
The physical characteristics of the planning area include two (2) major drainage basins: the Schuylkill River drainage basin and the Stony Creek drainage basin. The Schuylkill River and its sub-basins drain approximately 3.56 square miles of the western and southwestern portion of the Township. The Stony Creek basin drains approximately 2.50 square miles of the northern and northeastern portion of West Norriton Township. Refer to Figure 2 for information regarding the location of the physical characteristics of the study area.

### Potable Water Supply

Most of West Norriton Township is served by public water supply, provided by Pennsylvania American Water Company. It is anticipated that planned development will be served by the public water supply. Pennsylvania American Water Company has not provided a map/plan of their water system for the Act 537 Study Area.

### Wetlands

As with any wastewater project, there arises the possibility that wetland issues will have to be dealt with during design and construction. Since sewer lines, pumping stations and wastewater treatment plants are typically sited at low elevations, along streams or rivers, it is a normal procedure to have to mitigate or avoid wetlands or floodplains. The Township has in place various regulations in their ordinances dealing with these environmentally sensitive areas. Additionally, any construction along, in, or near wetlands or floodplains will be performed in accordance with DEP and U.S. Army Corps of Engineer's rules and regulations. Refer to Figure 2 for information regarding the location of the physical characteristics of the study area.



Map_Symbol	Map_Unit_Name
AbA	Albrights silt loam, 0 to 3 percent slopes
AbB	Albrights silt loam, 3 to 8 percent slopes
Bo	Bowmansville-Knauers silt loams
BwA	Berks-Weikert channery silt loam, 0 to 3 percent slopes
CfA	Chalfont silt loam, 0 to 3 percent slopes
CfB	Clymer channery loam, 0 to 8 percent slopes, extremely stony
CrA	Craigsville gravelly loam, 0 to 5 percent slopes, rarely flooded
CrB	Comly silt loam, 0 to 8 percent slopes, extremely stony
Gc	Gibraltar silt loam
KIB	Klinesville shaly silt loam, 3 to 8 percent slopes
KIC	Klinesville shaly silt loam, 8 to 15 percent slopes
LaB	Lackawanna channery loam, 3 to 8 percent slopes
LaC	Lackawanna channery loam, 8 to 15 percent slopes
LaD	Lackawanna channery loam, 15 to 25 percent slopes
LbD	Lackawanna channery silt loam, 8 to 25 percent slopes, extremely stony
LeA	Leck kill channery silt loam, 0 to 3 percent slopes
LeB	Leck Kill channery silt loam, 3 to 8 percent slopes
PeB	Pierpont silt loam, 2 to 6 percent slopes
PeC	Pierpont silt loam, 6 to 12 percent slopes
PkD	Penn-Klinesville channery silt loams, 15 to 25 percent slopes
PIB	Platea silt loam, 2 to 6 percent slopes
PIC	Platea silt loam, 6 to 12 percent slopes
RaA	Ravenna silt loam, 0 to 3 percent slopes
ReA	Rexford loam, 0 to 8 percent slopes
ReB	Rexford silt loam, 3 to 8 percent slopes
ReC	Rexford silt loam, 8 to 12 percent slopes
RhB	Red Hook silt loam, 3 to 8 percent slopes
RhC	Reaville silt loam, 8 to 15 percent slopes
Rt	Rowland silt loam, terrace
RwA	Rowland silt loam, 0 to 3 percent slopes
RwB	Rushtown very shaly silt loam, 3 to 8 percent slopes
UgB	Urban land-Gilpin complex, 0 to 8 percent slopes
UgD	Urban land-Gilpin complex, 15 to 25 percent slopes
UroB	Urban land-Lawrenceville complex, 0 to 8 percent slopes
UrxB	Urban land-Penn complex, 0 to 8 percent slopes
UrxD	Urban land-Penn complex, 8 to 25 percent slopes
UryB	Urban land-Readington complex, 0 to 8 percent slopes
UusB	Urban land-Udorthents, shale and sandstone complex, 0 to 8 percent slopes
UusD	Urban land-Udorthents, shale and sandstone complex, 8 to 25 percent slopes
W	Water

**Legend**

- West Norriton Township Service Area
- Watershed (DEP)
- Surface Geology (NRCS)
- Contour Index
- Contour Inter
- Soils (NRCS)

**FEMA Flood Zone**

- 100yr Floodplain
- Wetlands

WEST NORRITON TOWNSHIP  
**ACT 537 PLAN UPDATES**  
**PHYSICAL FEATURES MAP**  
 WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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 ENGINEERING & CONSULTING SERVICES  
 65 EAST BUTLER AVENUE NEW BRITAIN, PA 1801-5106 - (215) 345-4330 - www.gilmore-assoc.com

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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREM, OpenStreetMap contributors, and the GIS User Commu

## 4.0 EXISTING WASTEWATER MANAGEMENT FACILITIES

### Municipal Sewerage Facilities

Prior to 1954, all developed property in West Norriton Township was serviced by on-lot sewage disposal systems. In the mid 1950's, the Township constructed its first public sewerage system. The wastewater was sent to the Borough of Norristown for treatment and disposal. Subsequent extensions in 1968 and 1972 further expanded the service area to the then existing development. New development in previously undeveloped areas was connected to the public system as development progressed in accordance with Municipal Sewer Codes 18 and 22, which require connections to the Township sewer system.

West Norriton's sewage collection system services the vast majority of the Township. The sewage collection and conveyance system in West Norriton Township is owned by West Norriton Township and the pump stations are attended daily by contracted operators. This contractor maintains, monitors, and records flow within the system, including each pump station and metering pit. The system consists of more than sixty (60) miles of sanitary sewer mains and interceptors ranging in diameter from eight (8) inches to twenty-four (24) inches. The system is composed of reinforced concrete pipe (RCP), asbestos cement pipe (ACP), vitrified clay pipe (VCP), ductile iron pipe (DIP), and polyvinyl chloride pipe (PVC). Manholes within the collection system are either precast concrete or brick.

There are six (6) Township owned and operated pumping stations within the West Norriton sewer system. These pump stations are:

1. Rittenhouse Boulevard Pump Station
2. Chestnut Avenue Pump Station
3. Whitehall Road Pump Station
4. Port Indian Pump Station
5. Forest Avenue Pump Station
6. Halford Hills Pump Station

The capacities of these stations and their current average daily flow rates (obtained from the year 2021 Calendar Year Chapter 94 report) are shown on Table 4.

<b>TABLE 4</b>			
<b>PUMPING STATION AVERAGE AND PEAK DAILY FLOWS 2021</b>			
<b>Pumping Station</b>	<b>Permitted Capacity (MGD)</b>	<b>Avg. Daily Flow (MGD)</b>	<b>Peak Month Flow (MGD)</b>
Rittenhouse Blvd	8.74	2.261	3.160
Chestnut Avenue	0.259	0.073	0.099
Whitehall Road	3.78	0.611	0.922
Forest Avenue	0.864	0.147	0.225
Port Indian Road	1.44	0.393	0.663
Halford Hills	0.036	0.0021	0.0025

West Norriton Township’s Sanitary Sewerage Facilities Map is provided in Figure 3. A simplified schematic of the West Norriton Sewer System is presented on Figure 4. The schematic depicts a simplified interrelationship of the pump stations, force mains and collector sewers for the transmission of raw wastewater to the Norristown WWTP. Additionally, Figure 5 shows the drainage basins tributary to each pump station, meter pit, and interceptors.

The southeastern end of the Township sewer system is served by the Jackson Street Diversion Chamber. The chamber diverts wastewater that would otherwise flow to the Rittenhouse Pumping Station directly to the Norristown sewer system by way of gravity sewers in Jackson Street. Flows through the Jackson Street sewer are metered by the Jackson Street Meter Chamber.

<b>TABLE 5</b>		
<b>TOTAL 2021 FLOW</b>		
<b>Rittenhouse PS (GPD)</b>	<b>Jackson Street Sewer (GPD)</b>	<b>Total Flow to Norristown (GPD)</b>
2,261,240	307,460	2,568,700

Collection System Details

WNT is continuously working to remove Inflow & Infiltration (I&I) from the sanitary sewer system. Figure 6 entitled “I/I Investigation & Repair Status” identifies the sewers and manholes that were televised and repaired. Repairs to the sanitary sewers and manholes are continuously being prioritized as televising/repairs occurs. West Norriton Township has repaired mains, laterals, and manholes utilizing trenchless technologies such as grouting and cured in place pipe (CIPP) repair liners. Since the rehabilitation and repairs were implemented, there are no known capacity issues within the sanitary sewer system at this time. Further, WNT evaluates the sanitary sewers and its appurtenances prior to any road paving program. Numerous manhole frames and covers have been replaced which have further reduced I&I.

WNT is committed to continue with I&I remediation elimination of all illegal connections to the system, such as sump pumps, rain water conductors, and deficient laterals. WNT will continue inspections of properties at time of sale to locate any potential remaining connections.

Pump Station Maintenance

Routine maintenance of the pump stations generally includes, but is not limited to, the following tasks:

- Inspected daily
- Wet wells cleaned
- Floats cleaned
- Standby pumps exercised
- Pumps lubricated
- Filter(s) cleaned
- Compressor tank drained of condensation and inspected
- Oil and coolant checked in generators
- Exercise generators

- Exercise alarms
- Bubbler system and sump pumps inspected
- Grease removed
- Basket cleaned
- Building(s) cleaned
- Grounds maintained

- a. Rittenhouse Pump Station: Originally constructed in 1965, was comprised of three (3)-75 hp pumps, each capable of 1,750 GPM. The pump station was configured in a wet/well dry well orientation. This station was upgraded circa 1983 and 1995, each time with larger pumps to accommodate additional flow. A new submersible pump station with an emergency generator was constructed in 2015 on the same site, under Water Quality Management Permit No. 4613407. The permitted design hydraulic capacity of the pump station is 8.74 MGD. The firm pumping capacity for the new pump station is 3,680 gallons per minute (GPM) (5.3 MGD) with two pumps operating. The system has a standard alarm system with a dialer to notify the Township of any problems.

Replacement of the existing eighteen (18) inch cast iron force main is currently under design to replace the first eight thousand five hundred (8,500) feet with new twenty four (24) inch pipe. Additionally, as part of the force main replacement project, new impellers will be installed on the pumps. Upon completion of both projects, the pump station is anticipated to achieve a flow capacity of 5,000 gpm (7.20 mgd) with both pumps operating.

- b. Whitehall Road Pump Station: Constructed in 1965, was originally comprised of three (3)-60 hp pumps, each capable of 950 GPM. As Rittenhouse Pump Station was upgraded, the pumps from Rittenhouse Pump Station replaced the pumps at Whitehall Pump Station. Whitehall Pump Station is now comprised of three (3)-100 hp pumps capable of 1,750 gpm each, or 2,625 gpm with two (2) pumps operating.

This station is scheduled for upgrade as funds become available. Project is currently on hold until funding is available. It is anticipated that the pump station will be relocated to the opposite side of Whitehall Road in Norristown Farm Park.

- c. Forest Avenue Pump Station: Constructed in the 1960s, is comprised of two (2)-50 hp pumps, each capable of 600 GPM. This station was first upgraded in the 1980s with the addition of an emergency generator. Those pumps were rebuilt in 2013. The station was then rehabilitated in 2021 with two (2)-15 hp pumps capable of 600 GPM, new piping, valves, flow meter, emergency generator and upgrading lighting for safety.
- d. Port Indian Pump Station: Constructed in the 1990s, is comprised of two (2)-40 hp pumps, each capable of 1,000 GPM. Pumps were rebuilt in 2013.
- e. Chestnut Avenue Pump Station: Constructed in the 1970s, is comprised of two (2)-15 hp pumps, each capable of 150 GPM. This pump station was replaced in 2004 with a new station with two (2)-20 hp pumps, capable of 180 GPM and an emergency generator.

- f. Halford Hills Pump Station: Constructed in the 1970s, is comprised of two (2)-5 hp pumps, each capable of 25 GPM. The pump station services 10 residential homes.

#### Additional Challenges Facing Existing Collection and Conveyance Facilities

Within the existing collection and conveyance system, several locations within the Township may be inadequately served for handling additional wastewater flow. These areas/facilities requiring attention are described below.

- a. Whitehall (East End) Interceptor (MH 18/Chamber to MH 246 in Christopher Lane)

The gravity interceptor was thought to be nearing capacity due to significant inflow/infiltration. Also, the Jackson Street Diversion Chamber was diverting flow sooner through the Whitehall (East End) Interceptor towards Rittenhouse Pump Station, rather than flowing by discharging by gravity to NMWA through Norristown. Major efforts were made to reduce flows caused by wet weather and the interceptor, as well as the Jackson Street Diversion Chamber is being maintained more regularly. Therefore, the interceptor is within capacity with no known issues. However, if additional growth occurs tributary to the interceptor in the service area, this area should be further evaluated and possible consideration to be replaced. Developers have and will be required to make contributions to the Township for the upgrade of the interceptor.

- b. Jackson Street Diversion Chamber

The Jackson Street Diversion Chamber splits flow from the Whitehall (East End) Interceptor between the Jackson Street gravity sewer to NMWA WWTP through Norristown Borough and the Rittenhouse Boulevard Pumping Station through the Montgomery Avenue Metering Pit interceptor. A weir gate within the diversion chamber regulates the amount of flow sent to NMWA sewer system, while the remainder is directed toward the Rittenhouse Boulevard Pumping Station. Approximately 0.307 MGD of flow passed through the diversion chamber in 2021.

The current gravity diversion chamber is nearing its useful life and should be replaced with a more robust design. The weir gate used to divert typical average daily flows is inoperable. The chamber has to be cleaned routinely due to rags and debris getting stuck and backing up on the gate, which causes flow to divert more quickly to Rittenhouse Blvd. Pump Station through the Whitehall (East End) interceptor. This increased flow at Rittenhouse Blvd Pump Station creates additional demand at the pump station and takes up unnecessary capacity. Developers have and will be required to make contributions to the Township for the upgrade of the chamber.

There is no written agreement between the Borough of Norristown and West Norriton Township which limits the amount of flow allowed over the weir to Norristown's gravity system. It is significant to note that as early as 2003 the PADEP and the NMWA entered into a Consent Order and Agreement (CO&A) to take corrective action on infiltration and inflow that was creating sanitary sewer overflows. West Norriton Township was not originally a party to that CO&A; however, in 2007 the PA DEP issued a moratorium on new connections that included WNT service areas in the "Jackson Street Sewer-shed" which effectively linked West Norriton

Township to the NWMA CO&A. NWMA prepared a Corrective Action Plan (CAP) and Connection Management Plan (CMP) in 2010 which the PA DEP approved in 2011. West Norriton Township was prohibited to add new connections to the Rittenhouse Pump Station tributary sewer and the “Jackson Street Sewer-shed” pending action on the CAP/CMP. A meeting in 2013 between PA DEP, NMWA, and West Norriton Township relaxed the moratorium. West Norriton Township was never made a party to the CO&A, but has chosen to be comply with the spirit of the CO&A. The PADEP approval period for West Norriton Township sewer connections expired in 2018 but West Norriton Township continued to comply with the CO&A. On May 26, 2020, PA DEP issued correspondence to West Norriton Township stating that Township no longer evidence of being hydraulically overloaded. Therefore, no formal oversight of corrective action and connection management by PA DEP is required, thereby formally removing the CO&A and CMP. West Norriton continues to inform PA DEP of all new sewer connections to ensure that the Township is managing connections properly to avoid any hydraulic overloads.

Due to the historic sanitary sewer overflows within Norristown Borough’s Crawford Park that occurred pre-2007, NMWA has requested that flow be restricted to 1.6 MGD peak daily from West Norriton Township through the diversion chamber. Though the agreement between NMWA and West Norriton Township does not limit flow, WNT has installed metering and adjusted the weir gate, when it was operable, to divert flow more quickly to the Rittenhouse Blvd. Pumping Station until such time as NMWA repairs their section of the interceptor to allow full gravity flow in the interceptor by WNT. The NMWA Crawford Park section of the gravity sewer has had sanitary sewer overflows prior to this adjustment of the weir, but none since.

c. Rittenhouse Boulevard Pump Station and Force Main

The Pump Station’s output capacity was reduced with the construction of the new station in 2015. The new station is able to pump 3,680 gpm/5.3 MGD, with two (2) pumps operating. This is less than the projected flow capacity of 6,600 gpm/9.5 MGD as documented in Rettew’s Design Engineers Report dated August 13, 2013. Additionally, the station’s current flow capacity of 5.3 MGD is approximately 1.5 MGD lower than the previous flow capacity prior to the 2015 upgrade (6.8 MGD), as well as 3.44 MGD lower than the Pennsylvania Department of Environmental Protection (PA DEP) permitted capacity of 8.74 MGD. Several alternatives were evaluated by Gilmore & Associates, Inc., and the alternative recommended to increase the capacity of the pump station is the replacement of approximately 8,500 linear feet of 18-inch cast iron force main, with new 24” force main and larger pump impellers. It is estimated that this upgrade will increase the stations capacity from 3,680 gpm/5.3 MGD to 5,000 gpm/7.20 MGD with two (2) pumps operating. The increased capacity of the pump station will still be with the current Water Quality Management Permit. The design for this alternative of replacing 8.500 linear feet of force main is currently underway.

If additional capacity is required to accommodate future Projects, Developers have and will be required to make contributions to the Township for the upgrade of the Rittenhouse Boulevard Pump Station.

## Challenges Facing Existing Treatment Facilities

The Norristown WWTP had an extensive evaluation and assessment of the Norristown WWTP in 1997. The findings and recommendations were set forth in a report entitled “Process Evaluation and Assessment Relative to the Repair, Modification and Upgrading of the Norristown Water Pollution Control Center, May 1997” (the May 1997 Report).

The May 1997 Report provided recommendations for substantial modifications and upgrades to the existing plant. The estimated project cost of the recommended improvements was \$27,461,200 in 1997. West Norriton’s share of the estimated costs would have been approximately \$9,154,000.

A third-party consultant reviewed the May 1997 report on behalf of the West Norriton Township and concluded that the report provided a reasonable evaluation of the condition and needs of the Norristown WPCCC.

The Report findings are now over 25 years out of date, but substantial changes have been made to the WWTP. It should be noted, however, that the renovation of older treatment plants often becomes more expensive than initially contemplated and the plant is 25 years older than the 1997 assessment. Also, the Norristown WWTP was flooded several times since the 1997 report, and the flooding has caused damage which was not included in the renovations recommended by the May 1997 Report. All of the damage has been repaired, and much of which has since been corrected and improved in subsequent upgrades/renovations.

A more recent 2008 Evaluation Report was conducted by a different consultant to update conditions and to evaluate options related to siting a new NMWA WWTP versus upgrading the existing WWTP. The Report of the Norristown Sewage Treatment Plant Options included two alternatives for refurbishing the existing plant. The estimated cost for upgrading the existing treatment plant was \$66,000,000 in 2008 dollars and included treatment process upgrades with the addition of nutrient removal, odor control on all open-air tanks, sludge dewatering building changes, and a new decorative perimeter. A second alternative included the first alternative upgrades and provided an enclosure for the entire plant at a cost of \$171,000,000 in 2008 dollars. West Norriton Township’s potential shares of the above costs would have been \$22,000,000 and \$57,000,000 respectively 2008 dollars.

NMWA WWTP has undergone recent replacement and upgrades from 2018 -2022 that generally include:

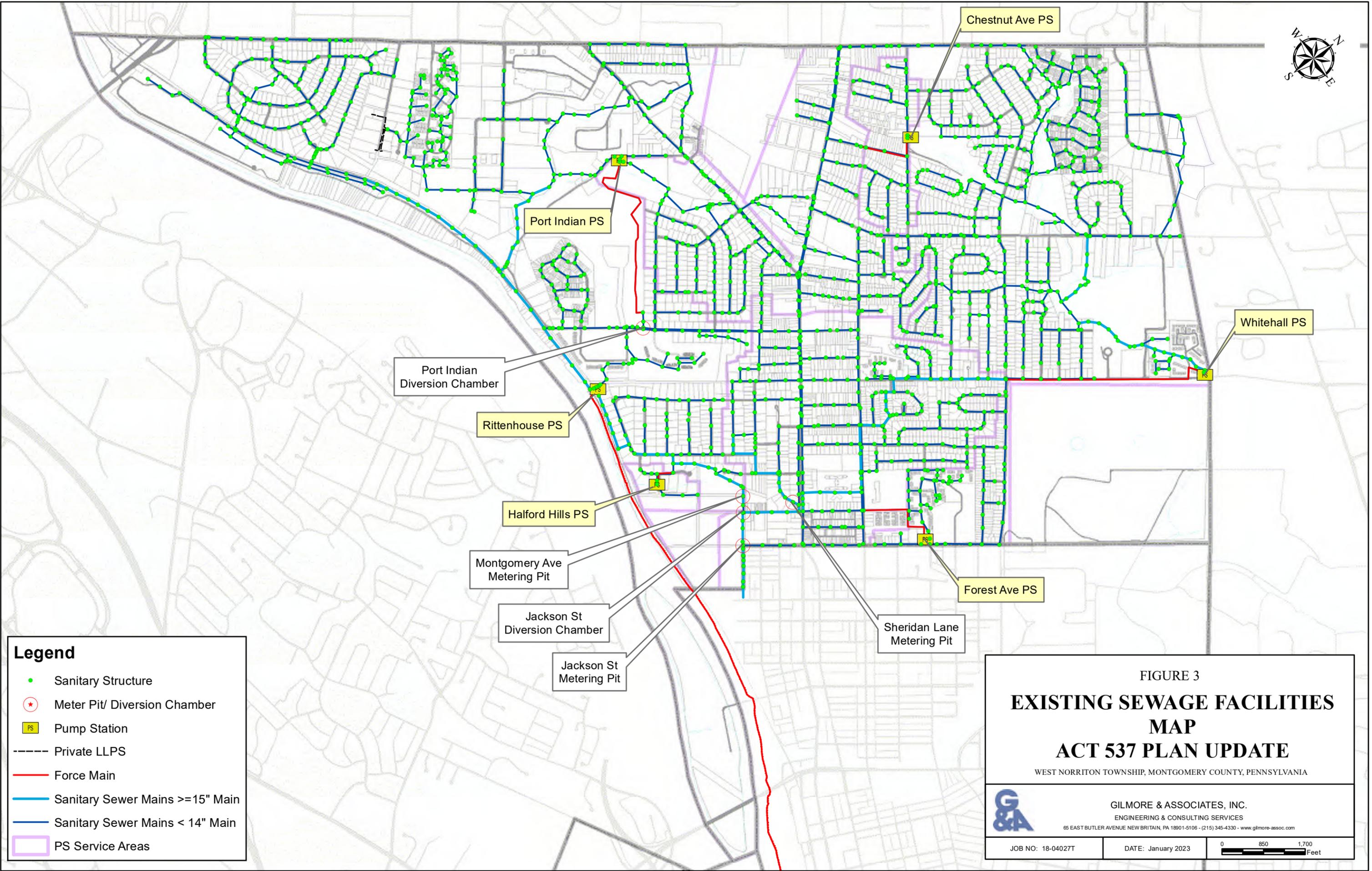
- Demolition
  - Influent pump station building
  - Maintenance building
  - Chlorine disinfection building
- Renovation/Improvements
  - Dewatering building
  - Administration building
  - Sludge digesters and mixers
- Replacement
  - Influent pumps, piping & controls
  - Aeration equipment & blowers
  - Dewatering equipment including a belt filter press
  - Bar screen

- Construction/Installation
  - New Maintenance building
  - New Blower building
  - New Chlorine & Electrical building
  - SCADA
  - Ballasted Biological Treatment System

West Norriton Township has shared in the cost per the agreement of these upgrades/replacements as NMWA continues to maintain their WWTP. The total project costs are estimated at \$14,234,500 in accordance with NMWA's Memorandum of Understanding, which outlines West Norriton Township's 1/3 contribution based on the Agreement.

#### On-Lot Sewage Disposal Systems

Approximately forty-four (44) smaller properties of the Township are not serviced by the sewage collection system. These are generally residential properties or small businesses where sewage treatment needs are currently being met by on-site subsurface systems. These properties are identified in Figure 7. Should there be several malfunctioning systems identified in a specific area by the Montgomery County Department of Health, the Township will consider at that time on a case-by-case basis the extension of public sewer. Additionally, these properties will also be evaluated on a case-by-case basis for connection to public sewer as they approach the Township for their sewer needs. Further, as development of the remaining parcels of land necessitate the expansion of the sewage collection system, it is anticipated that these locations will be provided with public sewage collection and treatment.



**Legend**

- Sanitary Structure
- Meter Pit/ Diversion Chamber
- PS Pump Station
- Private LLPS
- Force Main
- Sanitary Sewer Mains  $\geq 15$ " Main
- Sanitary Sewer Mains  $< 14$ " Main
- PS Service Areas

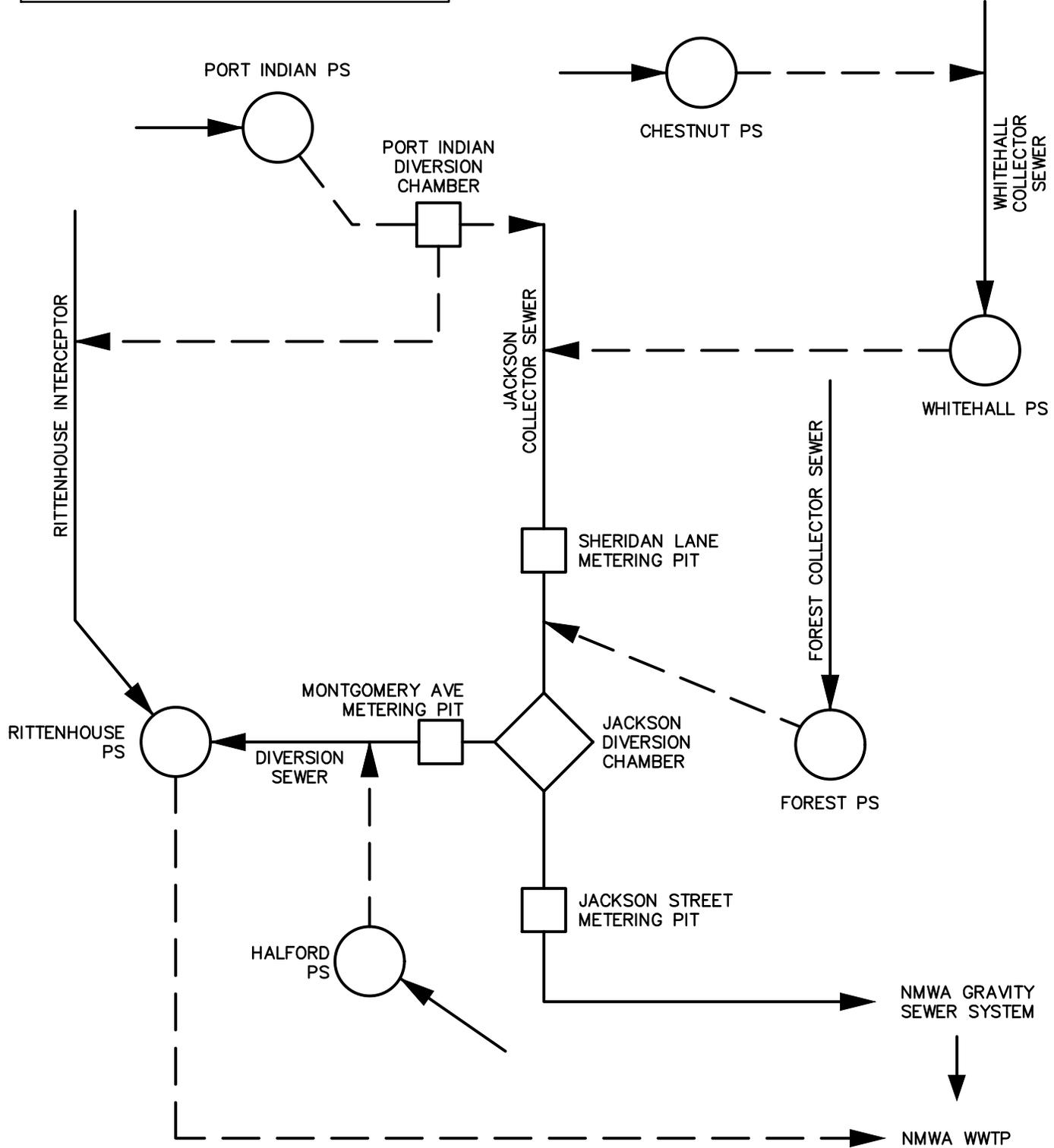
FIGURE 3  
**EXISTING SEWAGE FACILITIES  
MAP**  
**ACT 537 PLAN UPDATE**  
WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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JOB NO: 18-04027T      DATE: January 2023      0 850 1,700 Feet

Drawing Name: Figure 4 - WNT Sewerage System Schematic.dwg Layout: 8.5 X 11 P BORDER Plotted By: aschiale, on Fri Jan 27, 2023 at 4:55pm

LEGEND	
	GRAVITY SEWER
	FORCEMAIN



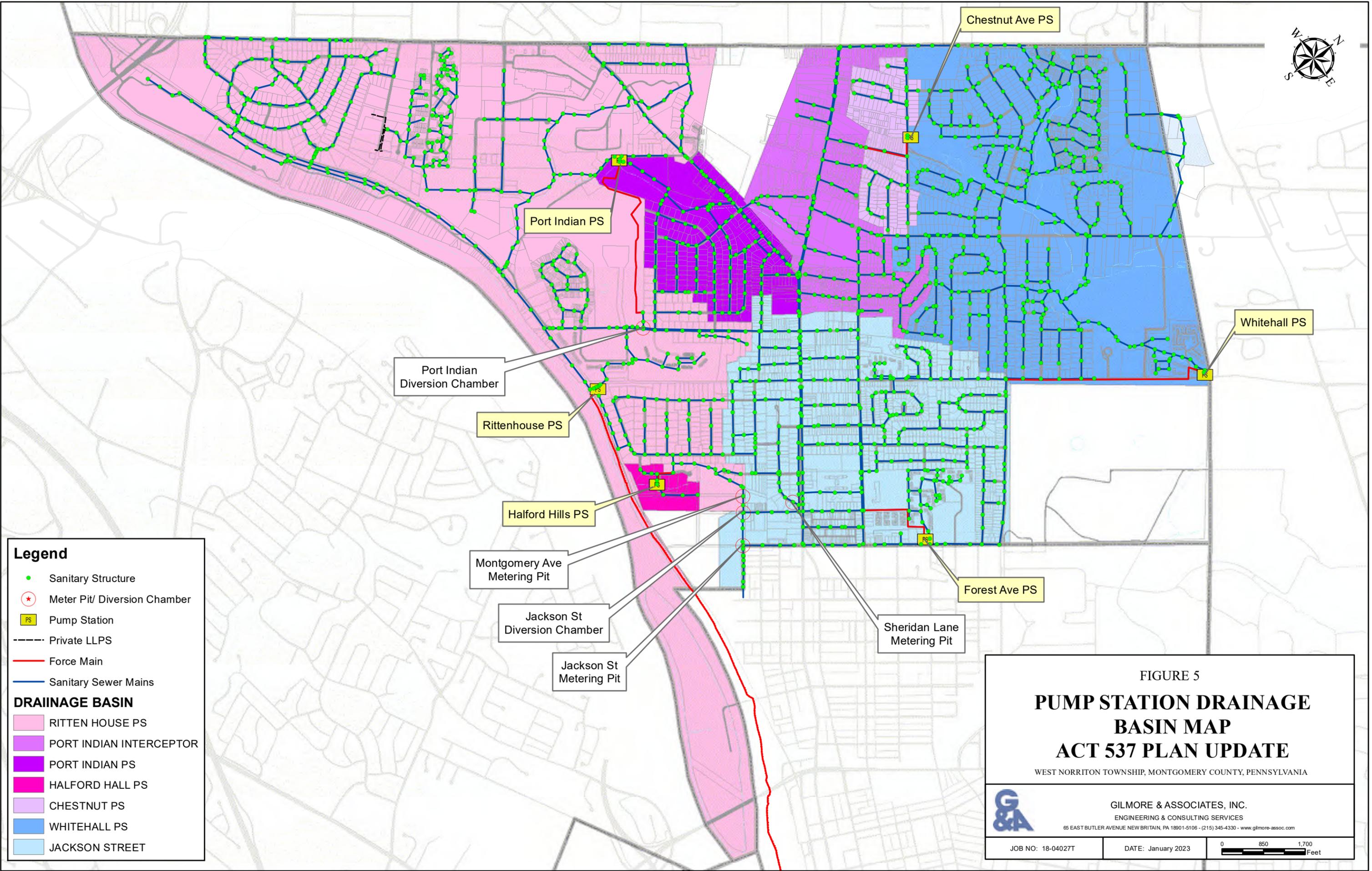
\*WHEN SHERIDAN LANE METERING PIT RECORDS INCREASED FLOWS, PORT INDIAN PS FLOWS ARE DIVERTED TOWARDS RITTENHOUSE PS.

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**FIGURE 4**  
**WEST NORRITON SANITARY SEWERAGE SYSTEM SCHEMATIC**

<b>DRAWN BY:</b> ACS	<b>JOB NO.:</b> 18-04027T	<b>DATE:</b> 01/27/2023	<b>SCALE:</b> NOT TO SCALE
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WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY PENNSYLVANIA



**Legend**

- Sanitary Structure
- ⊛ Meter Pit/ Diversion Chamber
- PS Pump Station
- Private LLPS
- Force Main
- Sanitary Sewer Mains

**DRAINAGE BASIN**

- RITTEN HOUSE PS
- PORT INDIAN INTERCEPTOR
- PORT INDIAN PS
- HALFORD HALL PS
- CHESTNUT PS
- WHITEHALL PS
- JACKSON STREET

Port Indian Diversion Chamber

Rittenhouse PS

Halford Hills PS

Montgomery Ave Metering Pit

Jackson St Diversion Chamber

Jackson St Metering Pit

Chestnut Ave PS

Whitehall PS

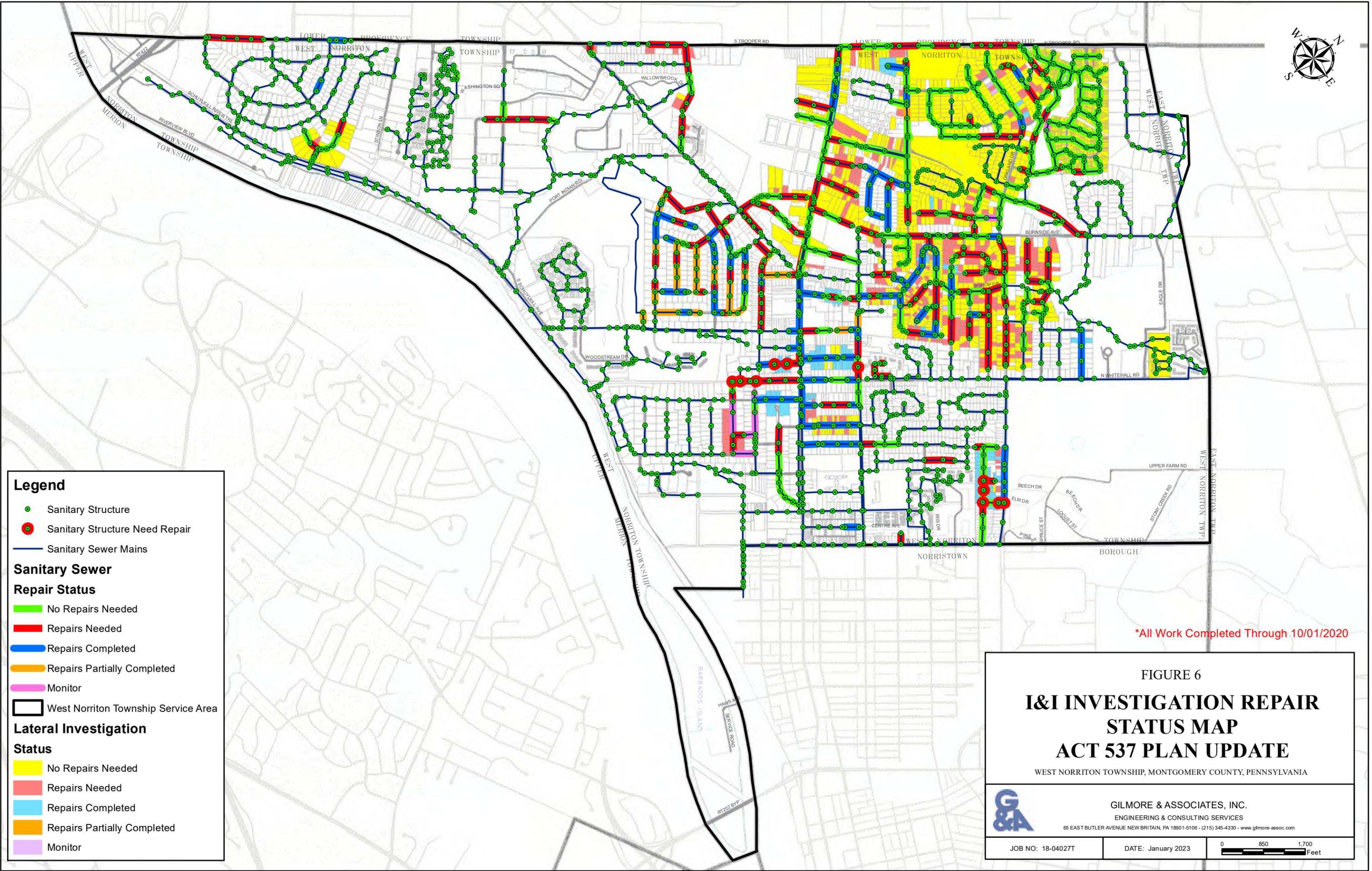
Forest Ave PS

Sheridan Lane Metering Pit

FIGURE 5  
**PUMP STATION DRAINAGE  
 BASIN MAP**  
**ACT 537 PLAN UPDATE**  
 WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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**Legend**

- Sanitary Structure
- Sanitary Structure Need Repair
- Sanitary Sewer Mains

**Sanitary Sewer Repair Status**

- No Repairs Needed
- Repairs Needed
- Repairs Completed
- Repairs Partially Completed
- Monitor

▭ West Norriton Township Service Area

**Lateral Investigation Status**

- No Repairs Needed
- Repairs Needed
- Repairs Completed
- Repairs Partially Completed
- Monitor

\*All Work Completed Through 10/01/2020

FIGURE 6

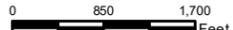
## I&I INVESTIGATION REPAIR STATUS MAP

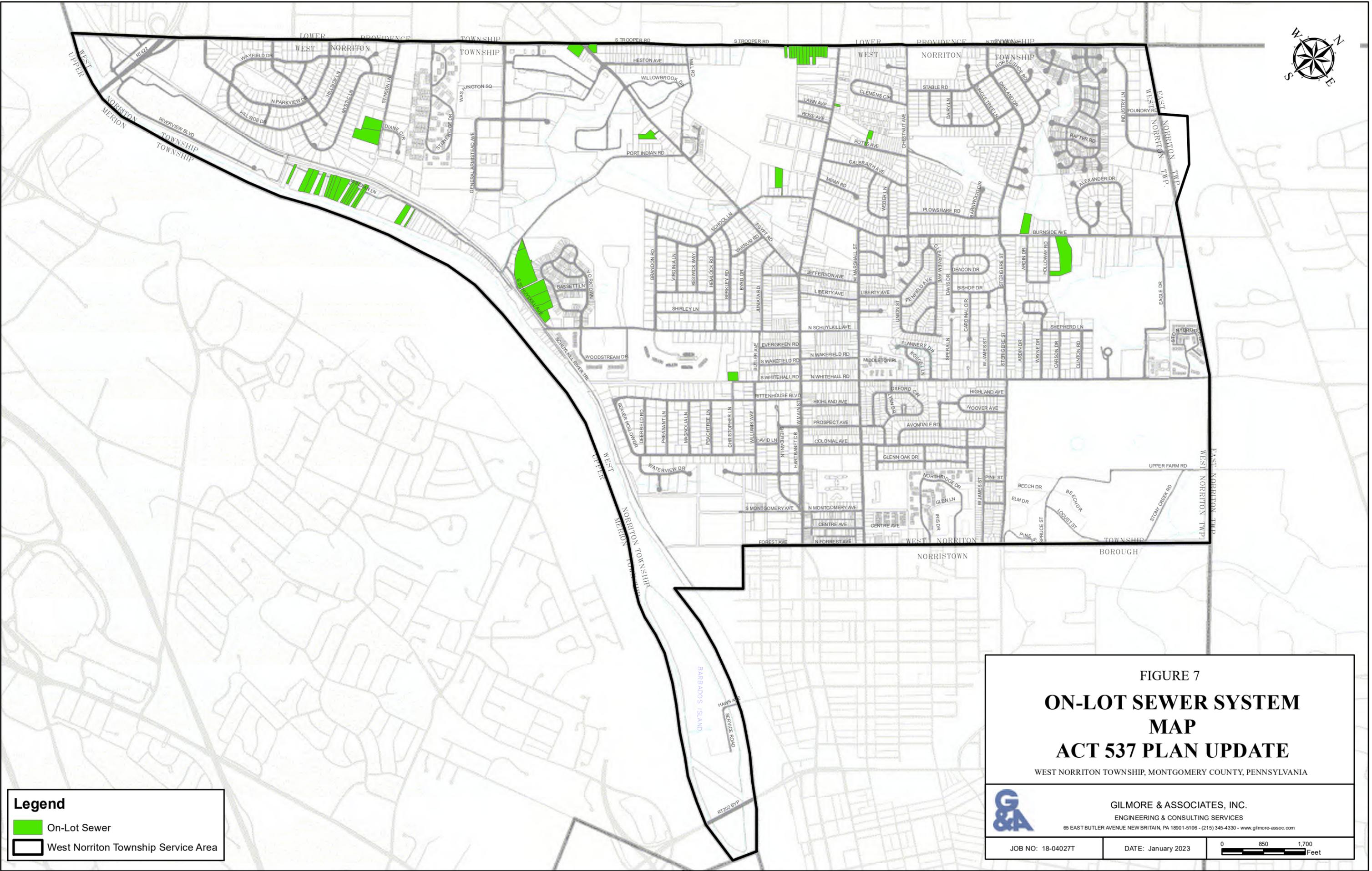
### ACT 537 PLAN UPDATE

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**Legend**

- On-Lot Sewer
- West Norriton Township Service Area

**FIGURE 7**

**ON-LOT SEWER SYSTEM**

**MAP**

**ACT 537 PLAN UPDATE**

WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

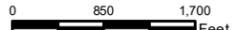
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## 5.0 FUTURE GROWTH AND LAND DEVELOPMENT

### Municipal, County and Regional Planning

Planning documents adopted by West Norriton Township pursuant to the Pennsylvania Municipalities Planning Code include the following:

- Comprehensive Plan Update 2010
- Zoning Ordinance
- Subdivision and Land Development Ordinance

The Comprehensive Plan Update embraces all the goals enumerated in the Montgomery County Planning Commission planning document entitled “Montco 2014: A Shared Vision”.

The Montgomery County Board of Commissioners adopted “Montco 2040: A Shared Vision” prepared by the Montgomery County Planning Commission in January 2015. A 2019 Implementation Update to Montco 2040 was published to highlight major achievements that took place in 2018 and identifies implementation actions for 2019. The shared vision is designed around three interrelated themes with the following goals:

#### Connected Communities

- Collaboration among stakeholders
- Improved transportation choices
- Trails and greenways connecting multiple places
- Vibrant downtowns and destinations accessible to everyone

#### Sustainable Places

- Modernized infrastructure network
- Improved stormwater management
- Protected natural resources
- Opportunities for healthy lifestyles
- Diverse housing choices
- Enhanced community factor

#### Vibrant Economy

- Improved transportation access
- Focused development
- Attraction and retention of businesses
- Flexibility adapting to changing market conditions
- Marketing of assets

Several of these goals and themes are consistent with this 537 Plan update. Further details are summarized within the Montco 2040: A Shared Vision plan.

Delaware Valley Regional Planning Commission (DVRPC) is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region for the purpose of leading the way to a better future. Montgomery County is one of the five Pennsylvania counties included in the DVRPC planning area. The DVRPC serves as a repository for land use trends, population projections, housing stock, and transportation information. As the region’s metropolitan planning agency, DVRPC provides technical assistance and services to its member state and local governments.

Delaware Valley Data is the DVRPC periodic series of free data bulletins, analytical reports, data reference guides, and data snapshots.

Land Use Designations

Zoning in West Norriton Township is established by Chapter 27 of the West Norriton Township Code. Zoning map is included in Figure 8. Land use within the Township has the following designations per the Township Zoning Ordinance:

- R-A — Rural Residence Districts
- R-1 — Residence Districts
- R-2 --- Residence Districts
- R-3 — Residence Districts
- B-P — Business and Professional Districts
- C — Commercial Districts
- L-C — Limited Commercial Districts
- LC&I — Limited Commercial and Industrial Districts
- I - Industrial Districts
- RE — Recreational Districts
- A — Apartment Housing Districts
- RR — Retirement Residential Communities

Identified Future Growth and Development

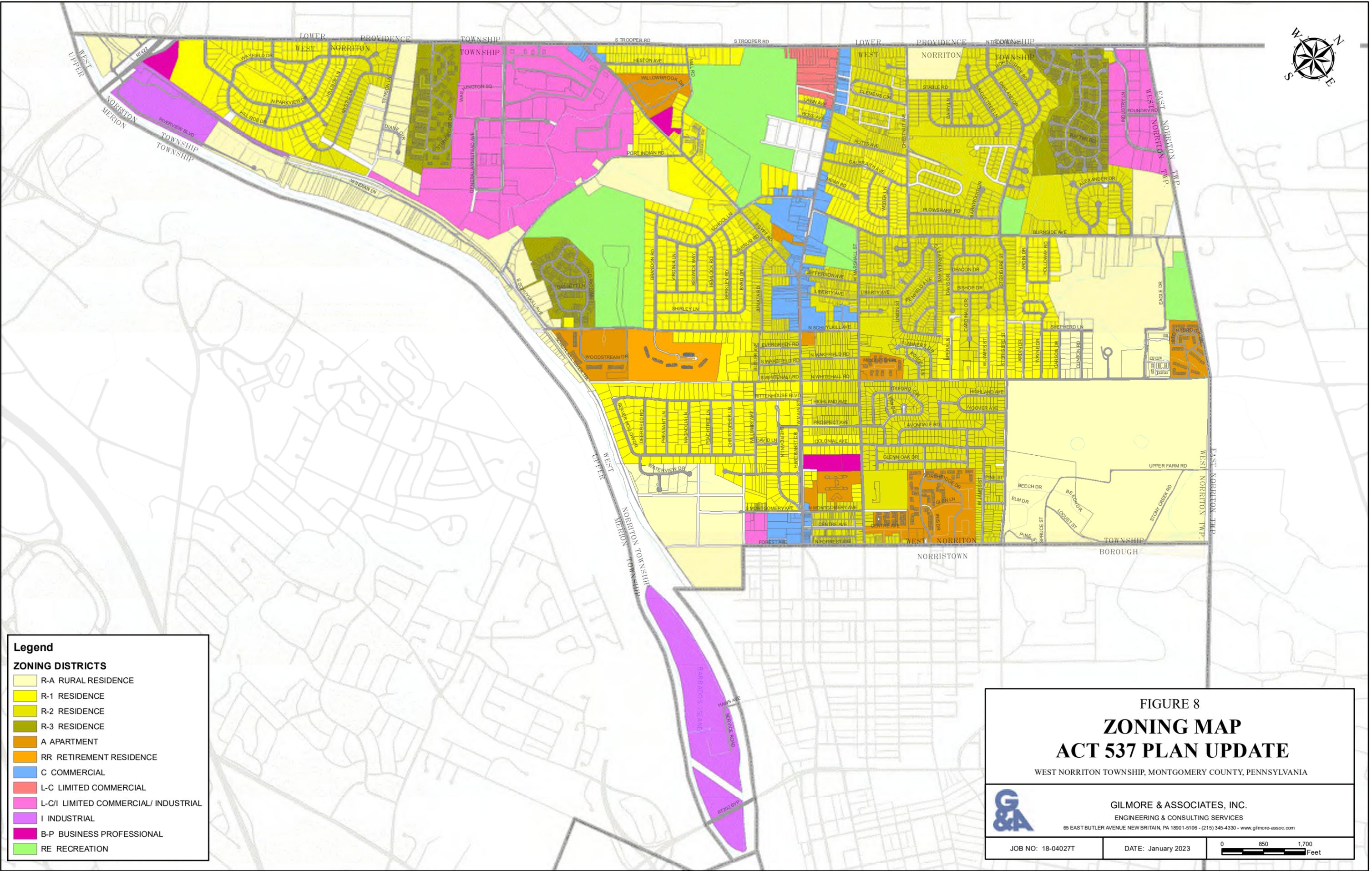
As documented in the 2022 Chapter 94 Wasteload Management Report, there are several proposed developments within the Township. Additionally, properties with potential for redevelopment were evaluated and included redevelopment projection estimates. Anticipated future growth in 2023-2034 is expected to generally be residential and with some commercial re-development. Included on Figure 9 is a plan of the West Norriton Township Sewer System indicating the projected and potential developments within the Township. Further, the following Table 6 best estimates the most conservative ultimate growth of the Township which includes wastewater flow.

<b>TABLE 6</b>		
<b>PROJECTED FUTURE GROWTH AREAS - 10-YEAR FLOW ADDITIONS (2023-2033)</b>		
<b>Project</b>	<b>Equivalent Dwelling Units</b>	<b>Wastewater Flow (GPD)</b>
Norristown School District	10	2,850
Apartments at Schuylkill & Main St.	22	6,270
Office Building at 239 Egypt Road	8	2,280
2580 Industry Lane	1	285
Riverview	330	94,050
Westover Golf Course	500	142,500
Fill in Lots, Redevelopment and OLDs	100	28,500
<b>Total Projected 10-year Flow Additions</b>	<b>971 EDU's</b>	<b>276,735 gpd</b>
Flow based on 1 EDU = 285 gpd		

Wastewater Planning Needs for Adequate Wastewater Treatment

Based on the above actual and potential projects and considering the existing zoning applied to open parcels, the ultimate flow projections for the Township are presented in Table 7. It is calculated that the total wastewater planning needs for the Township will be approximately 4,000,000 gpd.

<b>TABLE 7</b>		
<b>WASTEWATER PLANNING NEEDS</b>		
<b>Period</b>	<b>EDUs</b>	<b>Wastewater Flow GPD</b>
2021(Actual)	7,469	2,568,700
2030 (est)	12,272	3,497,500
2040 (est)	13,153	3,748,600
Ultimate(est)	14,035	4,000,000
Note: EDU's are from Township EDU Reports for billing (5202 + 2267)		



**Legend**

**ZONING DISTRICTS**

- R-A RURAL RESIDENCE
- R-1 RESIDENCE
- R-2 RESIDENCE
- R-3 RESIDENCE
- A APARTMENT
- RR RETIREMENT RESIDENCE
- C COMMERCIAL
- L-C LIMITED COMMERCIAL
- L-C/I LIMITED COMMERCIAL/ INDUSTRIAL
- I INDUSTRIAL
- B-P BUSINESS PROFESSIONAL
- RE RECREATION

**FIGURE 8**

**ZONING MAP**

**ACT 537 PLAN UPDATE**

WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

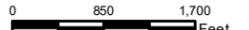
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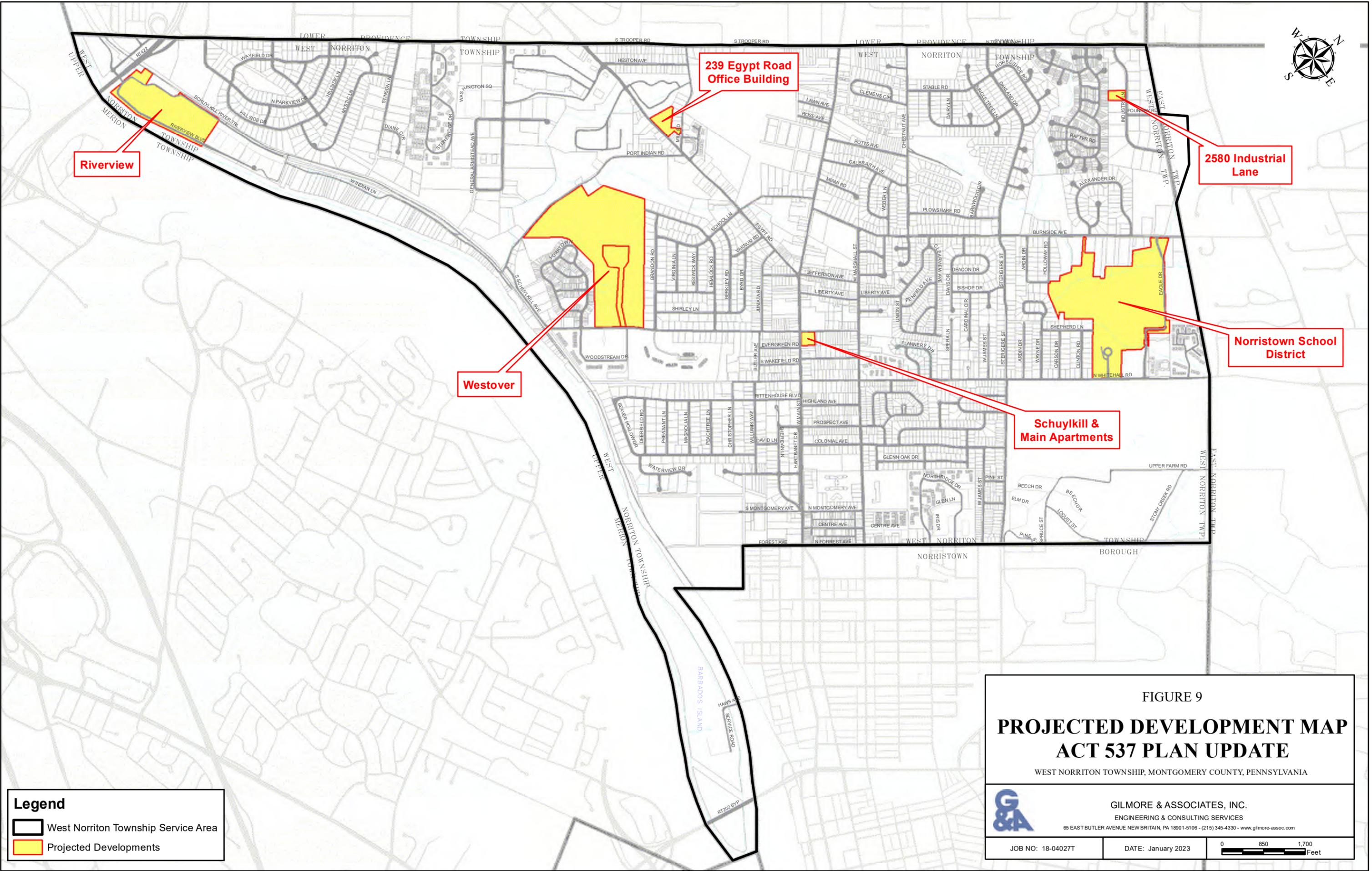


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0      850      1,700  
Feet





Riverview

239 Egypt Road Office Building

2580 Industrial Lane

Westover

Norristown School District

Schuylkill & Main Apartments

**Legend**

- West Norriton Township Service Area
- Projected Developments

**FIGURE 9**

**PROJECTED DEVELOPMENT MAP**

**ACT 537 PLAN UPDATE**

WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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## 6.0 IDENTIFICATION OF WASTEWATER DISPOSAL ALTERNATIVES

### General

In accordance with the PA DEP approved Plan of Study, the scope of this 537 Plan update is comprehensive to include the following alternatives:

- Continued use of NMWA WWTP Alternative
- Regional WWTP in WNT Alternative
- New/Expanded NMWA WWTP Alternative
- Diversion of Flows to Nearby Existing WWTP Alternative
- Converting Existing Pump Station(s) or Collection Points to Small WWTP Alternative
- No Action Alternative

### Continued Use of Norristown WWTP Alternative

This option is a continuation of WNT discharging wastewater for treatment at the Norristown WWTP. The Township currently owns 3.25 MGD of capacity at the Norristown Plant (33-1/3% of Plants Permitted Capacity of 9.75 mgd). This plant capacity is sufficient to handle West Norriton's current needs for present flows but WNT's capacity is anticipated to need to be increased in the future to provide for the ultimate flow of 4.0 MGD, or as negotiated in a new Agreement. Per the 2022 Chapter 94 Wasteload Management Report for NMWA, the annual average adjusting influent flow to the NMWA WWTP was 5.52 mgd. This is approximately 57% of the plant's design capacity. Therefore, it appears that there is significant capacity in the WWTP to accommodate 0.75 mgd of additional capacity needed from WNT for future flows and this alternative is a viable option.

The 1985 Intermunicipal Agreement between NMWA and WNT (formerly WNTMA) would require to be amended. Based on preliminary discussion with NMWA, it appears that updating to the current Agreement would be amenable to both parties.

Overall, this alternative keeps the current arrangement for collection, conveyance and treatment. There is no construction cost associated with this arrangement, as no new facilities are required. WNT would continue to pay its share of operating and capital expenses based on flow percentage to NMWA WWTP. NMWA has the short and long term capacity to accommodate the wastewater needs of the Township, which in turn should keep the sewer rates similar to customers.

WNT will continue to provide and/or approve sewer/service extensions to properties that are currently serviced by on-lot systems, as needed. Additionally, WNT will continue to repair, replace, rehabilitate, and maintain sewers and appurtenances as needed. There are currently no known hydraulic capacity issues within the sewer system, and it is not anticipated that sewers will require upgrades for new development, except for Rittenhouse Pump Station Force Main. The above is also indicative of any of the alternatives identified below.

### Regional WWTP in WNT Alternative

The County and the PADEP along with the Borough of Norristown have previously investigated the concept of a regional plant. A preliminary study was conducted by the County Redevelopment Authority and presented to all the interested parties. The required Facility was conceptually

envisioned to address the needs of several surrounding communities. However, this option was not implemented by the municipalities.

The construction of a new facility located on a site in West Norriton would divert all flows from WNT pump stations and gravity sewer mains/interceptors to a centrally located WWTP site. This proposed WWTP would be designed to accommodate all flows, including future flows, from West Norriton, and potentially with provisions to consider neighboring municipalities' flow needs. The proposed regional WNT WWTP would need to be designed to meet a minimum of 4.0 mgd average daily flow for WNT needs. A larger WWTP would obviously be required if neighboring municipalities were interesting in partnering. The current Intermunicipal Agreement would have to be terminated and all capital expense investments to NMWA would be forfeited. This alternative requires significant new infrastructure including, but not limited to, land purchase, new force mains, gravity sewers/interceptors and WWTP.

A property with significant size (estimating a minimum of 6+ acres) and proximity to a discharge would have to be purchased by the Township. At this time, there are a very limited number properties within the Township that could accommodate a 4.0 mgd WWTP. The sites considered include:

- Egypt Road: 63-00-02174-00-4 (25.07 acres)
- 741 Port Indian Road: 63-00-06286-00-5 (8.39 acres)
- 540-550 Port Indian Road: 63-00-06283-00-8 (29.97 acres)
- 200 S. Montgomery Avenue: 63-00-02476-00-8 (approx. 8 acres of 50.23 total)
- Norristown Farm Park (690 acres)
- Van Landeghem Site: East and West Norriton Townships (34.63 acres)

See Figure 10 for potential sites that could be considered. Further, the Alternative requires substantial design, engineering, permitting, revised rate structure and potential changes to WNT operations/staffing.

Overall, this alternative allows WNT to control its own growth, without any potential limitations from NMWA. Proposed facilities can be designed to accommodate additional growth expected and therefore WNT would not be dependent on NMWA and any decisions they make in regard to their sewer system and WWTP.

#### New/Expanded NMWA WWTP Alternative

A November 2008 study identified two alternative sites for construction of a new WWTP, one at a site in West Norriton Township (see Regional WWTP Alternative above) and another site in the Borough of Norristown downstream of the existing WWTP location. This study and alternatives are outdated since NMWA has invested into upgrading its WWTP, in which WNT has participated in 36% of the cost. Additionally, NMWA's WWTP appears to have capacity to accommodate the additional 0.75 mgd of anticipated future flow from WNT complete buildout.

WNT and NMWA would need to partner together in a new/expanded shared WWTP. The new facility may require additional property and open up opportunity for other municipalities to participate in regionalization. This alternative would also require a new Intermunicipal Agreement. Additional property may be needed for a new/expanded facility. which may not be immediately available at the existing NMWA WWTP site or adjacent property. The cost to construct a new/expanded WWTP is extremely expensive and since NMWA has invested into upgrading their

current infrastructure. Minimal conveyance infrastructure modifications/additions would be required for WNT if a new site is selected adjacent to the existing property.

Diversion of Flows to Nearby Existing WWTP's

In addition to the Norristown WWTP, there are several other municipal wastewater treatment plants in relatively close proximity to West Norriton Township that may be able accept some of the Townships flow due to their available capacity. The following wastewater treatment plants located on Figure 11 entitled Alternative Existing Municipal WWTPs were considered in earlier Act 537 Report evaluation and were reevaluated in this 2022 Update Act 537 Plan:

- Bridgeport Borough Wastewater Treatment Plant
- Upper Merion Township Matsunk Water Pollution Control Center
- Upper Merion Township Trout Run Water Pollution Control Center
- Valley Forge Sewer Authority Wastewater Treatment Plant located in Chester County
- Lower Perkiomen Valley Regional Sewer Authority Oaks Wastewater Treatment Plant
- East Norriton – Plymouth – Whitpain WWTP

Information used in the diversion evaluation alternative was obtained from multiple sources. These include a Summer of 2018 Status Report for Sewage Treatment Facilities in Montgomery County (Sewage Treatment Facilities Status Report), prepared by the Montgomery County Planning Commission and the Regional Act 537 Plan for the Valley Forge Sewer Authority dated November 2006.

The East Norriton-Plymouth-Whitpain Joint Sewerage Authority Wastewater treatment plant was added to the list of nearby plants worthy of evaluation as a receiver of wastes from West Norriton. The plant is situated close to the Bridgeport Plant, the Norristown Plant and the Matsunk Plant and discharges into the Schuylkill River.

The Sewage Treatment Facilities Status Report and the Valley Forge Sewer Authority report the following Capacities and Excess Capacities:

<b>TABLE 8</b>			
<b>EXCESS CAPACITIES AT NEARBY WASTEWATER TREATMENT PLANTS</b>			
<b>PLANT NAME (LOCATION/OWNER)</b>	<b>MUNICIPALITIES SERVED</b>	<b>NPDES PERMITTED FLOW</b>	<b>EXCESS CAPACITY</b>
Bridgeport WWTP (King of Prussia/Borough of Bridgeport) <sup>(1)</sup>	Bridgeport  Upper Merion	0.90 MGD	0.427 MGD
Norristown WWTP (Norristown Borough/NMWA) <sup>(2)</sup>	Norristown West Norriton Plymouth	9.75 MGD	3.91 MGD
Trout Run WPCC (Upper Merion Township/Upper Merion Township) <sup>(3)</sup>	Upper Merion  Bridgeport	6.00 MGD	3.20 MGD
Matsunk WPCC (Upper Merion Township/Upper Merion Township) <sup>(4)</sup>	Upper Merion	5.50 MGD	1.265 MGD

Oaks WWTP (Upper Providence Township/Lower Perkiomen Valley Regional Sewer Authority) <sup>(2)</sup>	Collegeville  Trappe Lower Providence Skippack Perkiomen Upper Providence	26.00 MGD	17.02 MGD
East Norriton-Plymouth-Whitpain JSA WWTP (Plymouth Township/EN-W-P JSA) <sup>(5)</sup>	East Norriton Plymouth  Whitpain	8.10 MGD	unknown
Valley Forge Sewer Authority WWTP (Schuylkill Township/VFSA) <sup>(2)</sup>	Schuylkill East Pikeland Charlestown Easttown East Whitehead Tredyffrin Willistown Malvern	11.75 MGD	5.19 MGD

**Notes:**

- (1) Based on 2019 ADF info from <https://www.bridgeportborough.org/sewer-department>
- (2) Based on 2022 Chapter 94 Reports received for Calendar Year 2021
- (3) Based on 2019 ADF info from <https://www.umtownship.org/departments/public-works/wastewater-management/#:~:text=Trout%20Run%20Water%20Pollution%20Control,western%20half%20of%20the%20Township>
- (4) Based on Table 1 – “Sewage Treatment Plants with Excess Capacity\*” from the Montgomery County Report titled Sewage Treatment Facilities in Montgomery County, PA 2015 Status Report
- (5) Based on <https://www.eastnorritontwp.org/index.asp?SEC=%7B8AC5511F-5B25-4462-97BA-C7EA08BE4EF5%7D>

**Sewer Rental Charges at Wastewater Facilities Near West Norriton**

The Sewage Treatment Facilities Status Report lists a noticeable disparity of equivalent dwelling unit charges between the different service providers as follows:

<b>TABLE 9</b>		
<b>ANNUAL EQUIVALENT DWELLING UNIT CHARGES</b>		
<b>Plant Name</b>	<b>Service Provider</b>	<b>Sewer Rental</b>
Bridgeport WTP	Borough of Bridgeport	\$180.00
Norristown WPCC	Norristown Municipal Waste Authority	\$661.78 (NMWA) \$428-\$504 Approximately (WNT)
Trout Run WPCC	Upper Merion Municipal Utility Authority	\$29.00

Matsunk WPC	Upper Merion Municipal Utility Authority	\$299.00
Oaks WWTP	Lower Perkiomen Valley regional Sewer Authority	\$1,872.00
Valley Forge Sewer Authority WWTP	Valley Forge Sewer Authority	\$300.00
East Norriton- Plymouth- Whitpain JSA WWTP	East Norriton- Plymouth- Whitpain JSA	\$299.30

Choosing a local municipal WWTP for some or all of the West Norriton flow could result in a sewer rental cost that is four (4) times higher than West Norriton Townships current cost. In addition, it may not be possible to select only one other municipal WWTP for the future 4.0 MGD flow capacity needed by West Norriton. Therefore, several municipal WWTP's may be needed to accept a portion of the 4.0 mgd. This could result in several sewer rental costs for WNT, depending on where flow is sent and Agreements with receiving municipality's WWTP. Further, significant infrastructure, such as pump stations, force mains and diversion of flows would need to be evaluated, engineered, designed, permitted and constructed, resulting in significant expenses. These expenses would be passed along to the residents in their rates.

Converting Existing Pump Station(s) or Collection Points to Small WWTP

This alternative involves the conversion of existing pump station(s) or collection points to a small WWTP facility. This small WWTP would generally be designed as a package WWTP or lagoon with either a stream or spray/drip irrigation discharge. The construction of the treatment facility would be located near the existing pump station(s) or collection points selected. The flows from existing West Norriton sewer mains would be diverted to the proposed WWTP facility, treated and either discharged to a nearby stream, or conveyed to a property for beneficial reuse within the Township. The beneficial reuses could be to irrigate land such as golf courses and parks, including Township Parks and the Norristown Farm Park. Reused water could not be used for drinking or applied to agriculture for human consumption. The goal would be to skim enough flow from the existing facilities to keep the discharge to the NMWA WWTP below the current 3.25 MGD capacity per the Intermunicipal Agreement. West Norriton would continue its contractual relationship with the NMWA.

The pump stations and collection points considered for evaluation of conversion to a small WWTP Facility include:

- Rittenhouse Pump Station (1.33 acres)
- Jackson Street Diversion Chamber/Jackson Street Metering Pit/Montgomery Avenue Metering Pit (adjacent to approximately 70 acres of cemetery)
- Port Indian Pump Station (Easement on 28 acres)
- Whitehall Road Pump Station (within ROW of Whitehall Road)
- Chestnut Avenue Pump Station (0.10 acres)

In addition to the existing sewerage facilities above, the Township owns several parks and properties. These properties could facilitate a small WWTP or benefit from the reuse of reclaimed water. The following are the Township owned sited and their features:

- Centennial Park (13.5 acres)
  - Baseball Fields (3)

- Batting Cages
- Pavilion
- Softball Fields (2)
- Walking Track
- Jefferson Firehouse Recreation Park (3.5 acres)
  - Basketball Courts (2)
  - Parking
  - Pavilion
  - Picnic Table
  - Playground
  - Restroom
  - Tennis Courts (4)
  - Water
- Oxford Circle Park (0.25 acres)
  - Playground
- Padden Park
  - Parking
  - Pavilion
  - Picnic Tables
  - Playground (2)
  - Restrooms
  - Soccer Field
  - Softball Field
  - Walking Track
  - Water
- Squire Croft Park (1 acre)
  - Basketball Court
  - Playground
- Betzwood Park (1.25 acres)
  - Basketball Court
  - Playground
- Jeffersonville Golf Course (150 acres)

There are also several larger private properties that could have potential to facilitate a small WWTP and/or could benefit from the reuse of reclaimed water. The following are the private properties considered for evaluation:

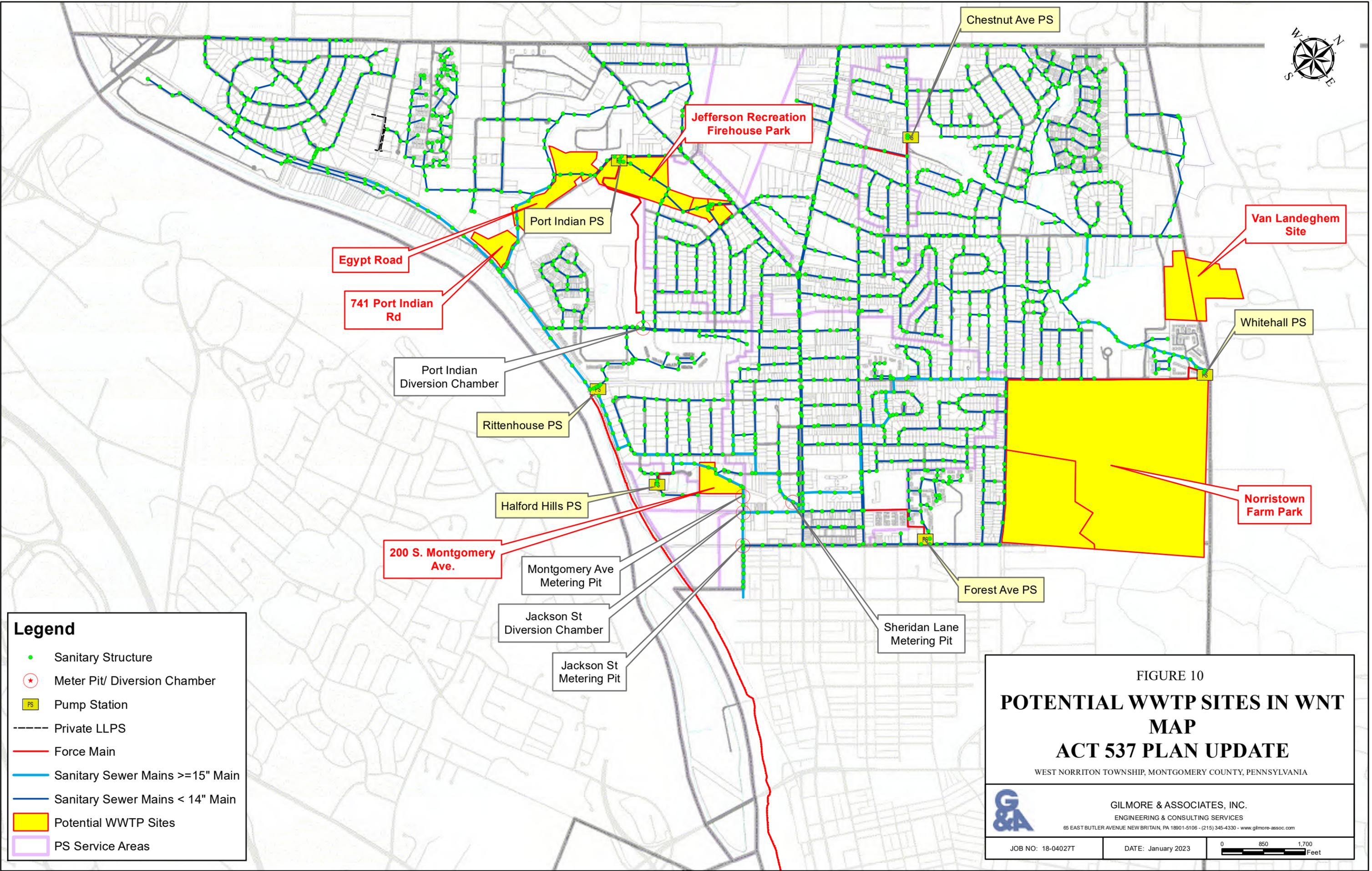
- Westover Golf Course (89.27 acres)
- Riverside Cemetery (50.23 acres) and Historic Montgomery Cemetery (25.5 acres)
- Norristown Farm Park: East and West Norriton Townships (690 acres)
- Norristown Area School District - High School Complex (92.05 acres)
- Van Landeghem Site: East and West Norriton Townships (34.63 acres)
- Markley Farms Open Space (24.23 acres) and Wagon Wheel Road stormwater basin (4.04 acres)

These above sites were considered with potential because of their existing structures (pump stations, metering pits and diversion chambers) and location to stream discharge points and locations where the water could also be used/pumped to for beneficial reuse and can be seen on Figure 12. However, based on closer review of the above sites considered, the most reasonable sites to construct small WWTP facilities include Port Indian Pump Station and Norristown Farm

Park. This is due to the available open land around the sites, discharge streams and areas to discharge the treated effluent. The treated effluent from the Port Indian area could discharge to the Indian Creek and could be pumped to Jeffersonville Golf Course and/or Westover Golf Course for irrigation when needed. Additionally, a small WWTP near Whitehall PS could discharge effluent to Kepner Creek and treated effluent could be pumped to irrigate Norristown Area School District property, Norristown Farm Park or the Van Landeghem site.

#### No Action Alternative

This option is essentially the same as Continued Use of Norristown WWTP but does not address the current Agreement. Continued deterioration of the Norristown WWTP and the major capital improvements identified would be at the discretion of NMWA. There are no short or long-term impacts to WNT or NMWA WWTP. No water quality/public health impacts would be anticipated, even with the potential growth and redevelopment within the Township. The community's economic conditions and recreational opportunities would remain unchanged.



**Legend**

- Sanitary Structure
- ⊛ Meter Pit/ Diversion Chamber
- PS Pump Station
- Private LLPS
- Force Main
- Sanitary Sewer Mains  $\geq 15"$  Main
- Sanitary Sewer Mains  $< 14"$  Main
- Potential WWTP Sites
- PS Service Areas

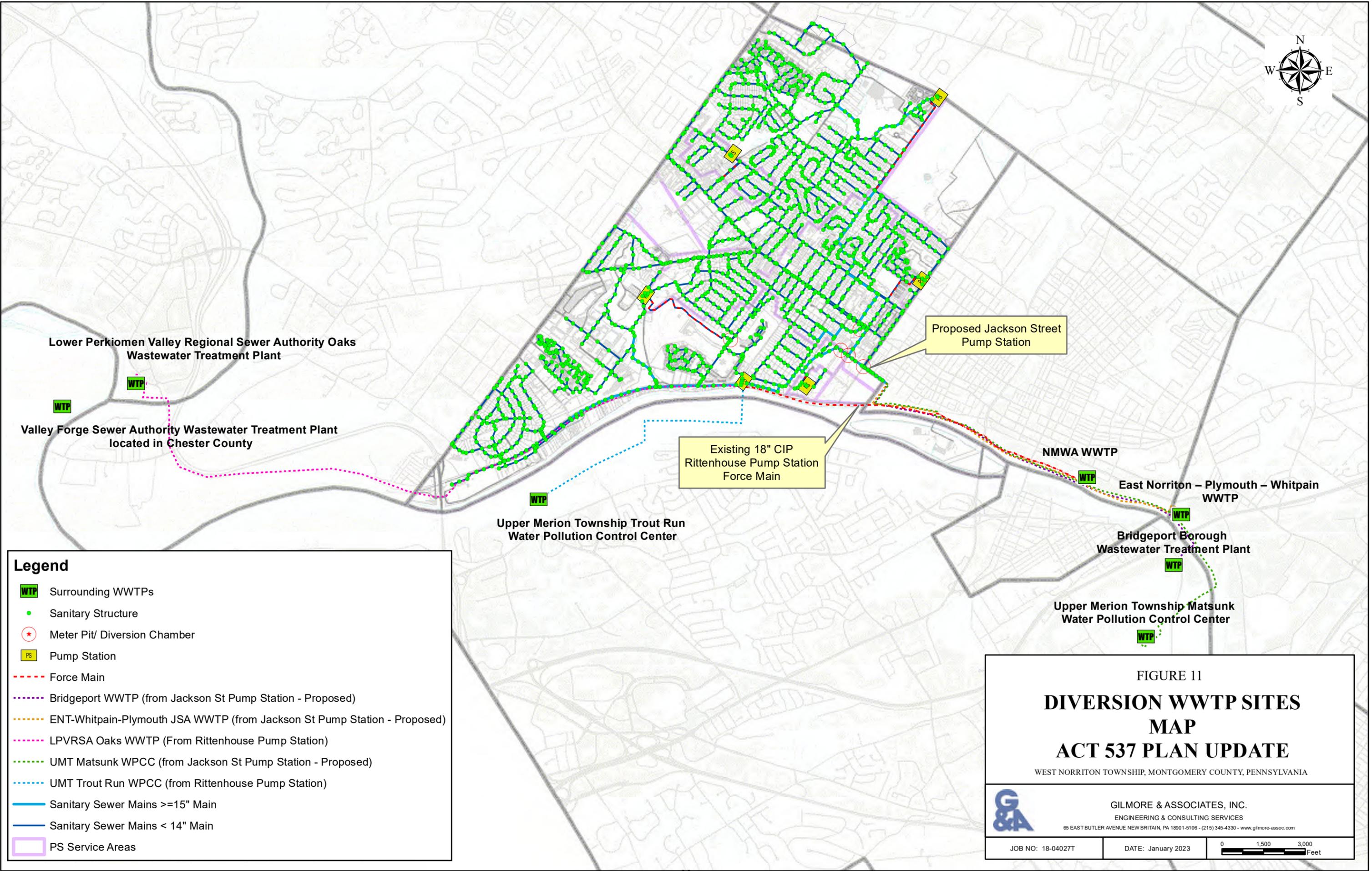
FIGURE 10  
**POTENTIAL WWTP SITES IN WNT  
 MAP  
 ACT 537 PLAN UPDATE**  
 WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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**Legend**

- WTP Surrounding WWTPs
- Sanitary Structure
- ⊛ Meter Pit/ Diversion Chamber
- PS Pump Station
- Force Main
- Bridgeport WWTP (from Jackson St Pump Station - Proposed)
- ENT-Whitpain-Plymouth JSA WWTP (from Jackson St Pump Station - Proposed)
- LPVRSOA Oaks WWTP (From Rittenhouse Pump Station)
- UMT Matsunk WPC (from Jackson St Pump Station - Proposed)
- UMT Trout Run WPC (from Rittenhouse Pump Station)
- Sanitary Sewer Mains  $\geq 15"$  Main
- Sanitary Sewer Mains  $< 14"$  Main
- PS Service Areas

FIGURE 11

## DIVERSION WWTP SITES MAP

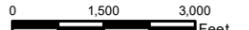
### ACT 537 PLAN UPDATE

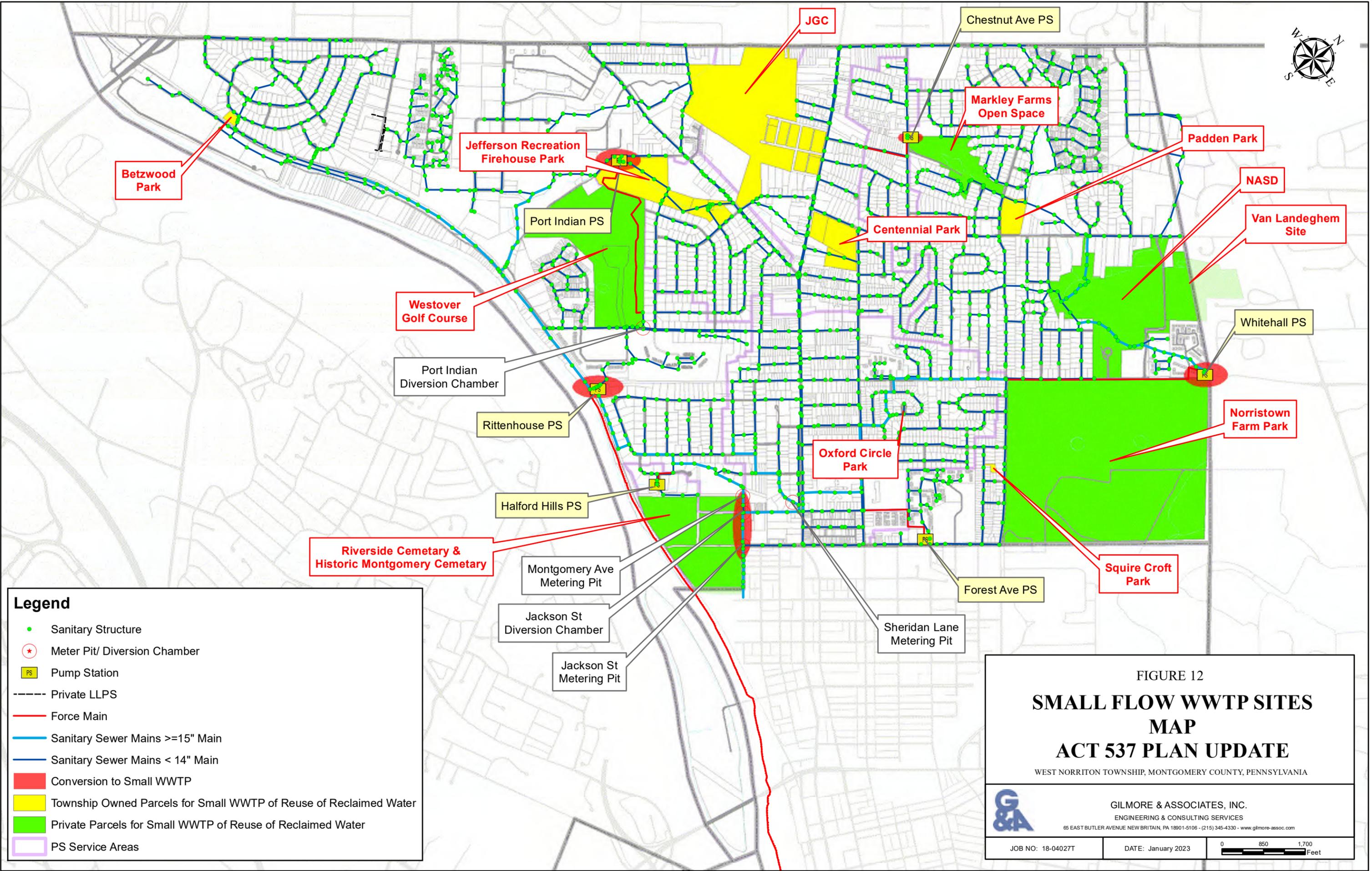
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**Legend**

- Sanitary Structure
- ⊛ Meter Pit/ Diversion Chamber
- PS Pump Station
- Private LLPS
- Force Main
- Sanitary Sewer Mains  $\geq 15"$  Main
- Sanitary Sewer Mains  $< 14"$  Main
- Conversion to Small WWTP
- Township Owned Parcels for Small WWTP of Reuse of Reclaimed Water
- Private Parcels for Small WWTP of Reuse of Reclaimed Water
- PS Service Areas

FIGURE 12

## SMALL FLOW WWTP SITES MAP

### ACT 537 PLAN UPDATE

WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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## 7.0 EVALUATION OF ALTERNATIVES

### Introduction

There are six (6) alternatives evaluated for this Act 537 Comprehensive Update which include:

- Continued use of NMWA WWTP Alternative
- Regional WWTP in WNT Alternative
- New/Expanded NMWA WWTP Alternative
- Diversion of Flows to Nearby Existing WWTP's Alternative
- Converting Existing Pump Station(s) or Collection Points to Small WWTP Alternative
- No Action Alternative

The guidance for this section requires that each alternative be evaluated for consistency with respect to the following items:

- **Plans Developed and Approved Under Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act**  
Any construction or improvements associated with the Alternatives within the Planning Area do not conflict and/or will comply with the Clean Streams Law or Section 208 of the Clean Water Act.
- **Chapter 94 Wasteload Management Report**  
The 2022 Chapter 94 Report for Calendar Year 2021 provided by WNT does not indicate any potential overloads in the Planning Area. Additionally, there are no recommendations in the Report. The growth projections in the Chapter 94 Report are for 5 years, which are consistent with this Act 537 Plan Update. However, this Plan Update includes ultimate buildout projections.
- **Title II Clean Water Act**  
This Act, and the Federal Water Quality Act, establishes specific planning requirements for wastewater facilities planning. These requirements only apply to municipalities intending to apply to municipalities intending to apply for financial assistance from the Federal Government for the construction of sewage facilities. Since the Township intends to fund the Alternatives in the Planning area with their own resources, this analysis is not applicable. No plans have been completed in the past for projects under Title II.
- **Comprehensive Plans**  
The Montgomery County Planning Commission (MCPC) Comprehensive Plan entitled "Montco 2040: A Shared Vision, The Comprehensive Plan for Montgomery County," was adopted in January 15, 2015. Within the Comprehensive Plan, the list of "Themes" are Connected Communities, Sustainable Places and Vibrant Economy. Each of these Themes has various goals associated, which the following are applicable to this Update:
  - Connected Communities
    - Encourage collaboration and partnerships among governments, business, institutions, schools, higher education, and other stakeholders.
    - With 63 municipalities and 22 active school districts, local cooperation is critical.
    - Issues are complex and funding often limited, which makes public private partnerships essential.

- This goal is to be implemented:
  - Through participation in multi-jurisdictional and regional organizations.
  - By expanding multi-municipal planning and other cooperation efforts.
  - With preparation and promotion of model ordinances, advisory guidelines, and stormwater standards for more consistent regulations.
- Sustainable Places
  - Support a modern, resilient, green, and energy-efficient infrastructure network
  - Safe and clean sewer, water and stormwater systems and well-maintained roads and bridges protect the health and safety of county residents and provide a foundation for economic development.
  - Many sewer and water systems are aging and need to be upgraded.
  - Communication, energy, and other infrastructure is rapidly changing and a critical concern for modern business.
  - This goal is to be implemented:
    - Through advocacy for environmentally friendly upgrades to municipal sewage systems.
    - By working with others to match water supply areas, sewer service areas, and growth areas
    - By encouraging recycling
  - Conserve natural resources, environmentally sensitive areas, and farmland
  - Wetlands, woodlands, trees, and natural areas reduce flooding, protect water quality, improve air quality, and increase property values
  - This goal is to be implemented:
    - With permanent protection of natural resources, open space, and rural areas
    - By adding environmentally sensitive land to parkland while improving county parks.
    - By preserving farmland.
- Vibrant Economy
  - Encourage development and transformative investment where infrastructure already exists
  - The cost of building and maintaining infrastructure is lower where it already exists.
  - Reusing former industrial sites cleans the environment, provides jobs, improves property values, and helps control sprawl.
  - This goal is to be implemented:
    - Through advocacy for locating new development in growth areas.
    - By encouraging redevelopment of underutilized and vacant industrial land.
    - By working with others to modernize and adapt older office and business parks through zoning changes, infrastructure improvements, marketing, and private sector investment.

With these themes and goals, there is no conflict with the strategies set for by the Township's comprehensive plans.

- **Antidegradation Requirements**

Implementation of the Alternatives for this Plan Update will not impact the anti-degradation requirements contained in Chapters 93, 95, and 102 of the Clean Water Act.

- **State Water Plan**

The Pennsylvania State Water Plan was completed in 2009, with a new draft update in 2022.

The primary goals of the new updated include:

- A reviewed and updated State Water Plan having the input, guidance and advice from a repopulated and reinstated Statewide Committee, six Regional Committees and the public.
- Approved and adopted Critical Area Resource Plans (CARPs) within the Potomac and the Ohio planning areas that were left unfinished during the Plan update of 2009.
- Enhanced web-based applications and tools to deliver improved access to water resources information, data and statistics for educational, and water planning purposes.
- Plan provisions to implement applicable water resources related strategies outlined in the 2018 Pennsylvania Climate Action Plan.
- Update the 2009 State Water Plan Atlas using a web-based GIS application.

Broad recommendations are made for the protection of water resources on major watersheds. All alternatives will be consistent with the 2022 Draft Update of the State Water Plan. Only alternatives that involve the construction of new facilities with discharges to waterways could have an impact on the State Water Plan. These include Alternative 3) Expanding/Replacing NMWA WWTP to accommodate additional flows from WNT; Alternative 4) Diverting all or some WNT flows to a nearby WWTP other than NWMA and 5) Converting existing pump station to package plants, spray/drip irrigation. These impacts would be further evaluated during the PA DEP permit review process. The NPDES permit would take into consideration the State Water Plan.

- **Pennsylvania Prime Agricultural Land Policy**

Only alternatives that involve the construction of new facilities could have an impact on the Pennsylvania Prime Agricultural Land Policy. These include Alternative 3) Expanding/Replacing NMWA WWTP to accommodate additional flows from WNT; Alternative 4) Diverting all or some WNT flows to a nearby WWTP other than NWMA and 5) Converting existing pump station to package plants, spray/drip irrigation. These impacts would be further evaluated during the PA DEP permit review process. The Prime Agricultural Land would be conserved, as feasibly possible, for the Alternatives. Most of the land that is designated as Prime Farmland is either already developed, not an area for development or preserved, such as the Norristown Farm Park. All other alternatives are expected to have no impact on the Prime Agricultural Land. Refer to Figure 2 for information regarding the location of Prime Agricultural Soils in the study area.

- **County Stormwater Management Plans**

Watershed-based stormwater management planning is a requirement of Pennsylvania's Stormwater Management Act (Act 167). The Pennsylvania Department of Environmental Protection oversees the Act 167 program, including designating the watersheds for planning purposes. Through watershed-based planning, municipal stormwater regulations are coordinated so that upstream control requirements in one municipality do not result in downstream flooding in another municipality. Montgomery County has completed plans for 10 of its 17 watersheds and is considering completing one countywide plan to complete the remaining watershed plans and update the existing ones. WNT is located within the Schuylkill River and Stony Creek/Saw Mill Run water sheds. The Stony Creek/Saw Mill Run is one of the 10 watersheds completed. Montgomery County does not have a plan for the Schuylkill River watershed. Refer to Figure 2 for information regarding the location of the watersheds in the study area.

Only alternatives that involve the construction of new facilities could have an impact on stormwater management. These include Alternative 3) Expanding/Replacing NMWA WWTP to accommodate additional flows from WNT; Alternative 4) Diverting all or some WNT flows to a nearby WWTP other than NWMA and 5) Converting existing pump station to package plants, spray/drip irrigation. These impacts would be further evaluated during the design and permitting process, and in accordance with all regulations, including the Stony Creek/Saw Mill Run Stormwater Management Plan.

- **Wetland Protection**

Wetlands within the Township are found in a variety of locations. Only alternatives that involve the construction of new facilities could have an impact on wetlands. These include Alternative 3) Expanding/Replacing NMWA WWTP to accommodate additional flows from WNT; Alternative 4) Diverting all or some WNT flows to a nearby WWTP other than NWMA and 5) Converting existing pump station to package plants, spray/drip irrigation. These impacts would be further evaluated during the design and permitting process, and in accordance with all regulations. If needed, a wetlands study would be conducted prior on design for the construction alternatives. Should any wetlands be found near the project area(s), they will be taken into consideration for final design, and disturbance will be minimized and restored.

- **Protection of Rare, Endangered or Threatened Plant and Animal Species**

A Pennsylvania National Diversity Inventory (PNDI) search was initiated for the entire planning area, which resulted in several potential impacts. The PNDI environmental review receipt is included as Appendix 4. The following responses with Potential Impacts are noted:

- PA Game Commission
  - Peregrine Falcon - Special Concern Species
- PA Department of Conservation and Natural Resources
  - Elliot's Beardgrass - Special Concern Species
  - Grass-leaved Rush - Special Concern Species
  - Few Flowered Nutrush – Threatened
- PA Fish and Boat Commission
  - Sensitive Species – Threatened

Since the entire planning area includes over 4,100 acres, and the exact location of affected areas are not designated, a more specific PNDI search will be completed, if needed, for alternatives that involve construction. These include Alternative 3) Expanding/Replacing NMWA WWTP to accommodate additional flows from WNT; Alternative 4) Diverting all or some WNT flows to a nearby WWTP other than NWMA and 5) Converting existing pump station to package plants, spray/drip irrigation.

- **Historical and Archeological Resource Protection Plan**

A Historical and Archeological Resource Protection Plan for the 537 Update was not conducted since there is no anticipated conflict. Specific sites would be evaluated based on Alternatives.

- **Resolution of Any Inconsistencies**

No inconsistencies are anticipated with the Alternatives, as indicated in Table 10.

<b>TABLE 10</b>							
<b>RESOLUTION OF ANY INCONSISTENCIES</b>							
<b>Determination For Wastewater Management Alternatives</b>							
Evaluation Category	Consistency of Alternatives						Comments
	1	2	3	4	5	6	
Clean Streams Law or Section 208 of the Clean Water Act	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Chapter 94 Wasteload Management Report	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Title II of the Clean Water Act	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Comprehensive Plans	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Antidegradation Requirements	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
State Water Plan	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
PA Prime Agricultural Land Policy	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
County Stormwater Management Plans	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Wetland Protection	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Protection of Rare, Endangered, or Threatened Plant and Animal Species	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
Historical and Archeological Resource Protection Plan	Yes	Yes	Yes	Yes	Yes	Yes	All Alternatives are consistent/will comply.
<u>Alternatives:</u> 1: Continued use of NMWA WWTP 2: Regional WWTP in WNT 3: New/Expanded NMWA WWTP 4: Diversion of Flows to Nearby Existing WWTP 5: Converting Existing Pump Station(s) or Collection Points to Small WWTP's 6: No Action							

- **Evaluation of Alternatives Identified in Section V**

- Continued Use of Norristown WWTP Alternative

This Alternative is a continuation of WNT discharging wastewater for treatment at the Norristown WWTP with an updated Agreement. This Alternative keeps the current arrangement for collection, conveyance, and treatment, with no change to current operations, standards, or limitations. However, an updated Intermunicipal Agreement would be required.

- Regional WWTP in WNT Alternative

This alternative proposes the construction of a new facility located on a site in West Norriton Township, which would divert all flows from WNT pump stations and gravity sewer mains/interceptors to a centrally located WWTP site. This proposed WWTP would be designed to accommodate all flows, including future flows, from West Norriton, and potentially with provisions to consider neighboring municipalities' flow needs. The technical and legal requirements would be significant, but routine and limited to those related to design, permitting, construction, and any necessary easement/property acquisition.

- New/Expanded NMWA WWTP Alternative

This alternative includes WNT and NMWA partnering together in a new/expanded shared NMWA WWTP. Minimal changes would be required, if any, to WNT's collection and conveyance system. The only anticipated modification is the termination of WNT's Rittenhouse PS force main location. The technical and legal requirements would be significant, but routine and limited to those related to design, permitting, construction, and any necessary easement/property acquisition. This alternative would also require a new Intermunicipal Agreement.

- Diversion of Flows to Nearby Existing WWTP's

This Alternative proposes the diversion of flows to one or several nearby WWTP's, requiring additional Act 537 Updates from receiving municipalities. Significant modifications to collection and conveyance are anticipated, along with technical and legal requirements for the associate construction. These would be routine and limited related to design, permitting, construction, and any necessary easement/property acquisition. This alternative would also require a new Intermunicipal Agreement(s). Further, this could result in several sewer rental costs for WNT, depending on where flow is sent and Agreements with receiving municipality's WWTP. The following discharge facilities were evaluated:

- Bridgeport WWTP - It is estimated that this WWTP has approximately 0.427 MGD of available capacity. Due to the limited available capacity at Bridgeport WWTP not all of WNT flow could be diverted. However, Bridgeport WWTP could accommodate all flow that currently goes to NMWA WWTP via gravity through the Jackson Street. This flow could be diverted and pumped to Bridgeport WWTP. Jackson Street Diversion Chamber would remain and the meter pit would be converted to a pump station. Approximately 15,700 linear feet of force main would be required, along with crossings of Stony Creek and the Schuylkill River. This proposed pump station would convey approximately 300,000 gpd. It is estimated that a 10" force main is required.
- Upper Merion Trout Run WPCC - It is estimated that this WWTP has approximately 3.91 MGD of available capacity. This WPCC has the ability to accommodate all of the Township's current flow through its' Rittenhouse Pump Station. However, it does not have the ability to accommodate all the projected future flow of the Township. Flow to NMWA through the Jackson Street Diversion Chamber is still required, and may

potentially need to be allocated to allow for additional flow through gravity for ultimate buildout in the future. Approximately 10,050 linear feet of 18" force main is required to divert Rittenhouse PS flow from NMWA to UMT Trout Run WPCC.

- Upper Merion Matsunk WPCC - It is estimated that this WWTP has approximately 1.265 MGD of available capacity. Due to the estimated limited available capacity at Upper Merion Matsunk WPCC, not all of WNT flow could be diverted, However, UMT Matsunk WPCC could accommodate all flow that currently goes to NMWA WWTP via gravity through the Jackson Street. This flow could be diverted and pumped to UMT Matsunk WPCC. Jackson Street Diversion Chamber would remain and the meter pit would be converted to a pump station. Approximately 20,655 linear feet of 12" DIP force main would be required, along with crossings of Stony Creek and the Schuylkill River. This proposed pump station would convey approximately 300,000 gpd with potential increase to divert more flow.
- LPVRSOA Oaks WWTP - It is estimated that this WWTP has approximately 17.02 MGD of available capacity. This WWTP has the ability to accommodate all of the Township's current and projected flow. Rittenhouse Pump Station and some tributary gravity sewers would have to be upgraded to send all of the Township's flow to LPVRSOA. Approximately 10,050 linear feet of 18" force main is required to divert Rittenhouse PS flow from NMWA to UMT Trout Run WPCC.
- East Norriton-Whitpain-Plymouth JSA WWTP - The available capacity of this WWTP is unknown and therefore, assumed that only the flow that currently goes to NMWA WWTP via gravity through the Jackson Street could be accommodated. Jackson Street Diversion Chamber would remain, and the meter pit would be converted to a pump station. Approximately 14,100 linear feet of force main would be required, along with crossings of Stony Creek and the Schuylkill River. This proposed pump station would convey approximately 300,000 gpd. It is estimated that a 10" force main is required.
- Converting Existing Pump Station(s) or Collection Points to Small WWTP

This alternative involves the conversion of existing pump station(s) or collection points to a small WWTP facility. This small WWTP would generally be designed as a package WWTP or lagoon with either a stream or spray/drip irrigation discharge. The flows from existing West Norriton sewer mains would be diverted to the proposed WWTP facility, treated and either discharged to a nearby stream, or conveyed to a property for beneficial reuse within the Township. The beneficial reuses could be to irrigate land such as golf courses and parks, including Township Parks and the Norristown Farm Park. The goal would be to skim enough flow from the existing facilities to keep the discharge to the NMWA WWTP below the current 3.25 MGD capacity per the Intermunicipal Agreement. West Norriton would continue its contractual relationship with the NMWA. The technical and legal requirements would be significant, but routine and limited to those related to design, permitting, construction, and any necessary easement/property acquisition. All reuse of treated effluent would be designed in accordance with the "PA DEP Reuse of Treated Wastewater Guidance Manual 385-2188-002." The PA DEP has established four (4) classes (Class A+, Class A, Class B and Class C) of reclaimed water use based on the treatment needed to protect the public and environment. The greater the potential for human contact with reused water, the higher the level of treatment is required. PA DEP has approximately sixty (60) different uses for reclaimed water. This alternative considered nineteen (19) reuse options that could be considered for uses within the Township, and that are consistent with the Township's Comprehensive Plan. Of the uses listed below, Class B or Class C are most reasonable due to less treatment when compared to Class A+ and A, less expensive to build and operate, and minimizes risk/liability.

<b>TABLE 11</b>	
<b>RECLAIMED WATER USE BY WATER CLASS - PARTIAL LIST</b>	
MINIMUM RECLAIMED WATER CLASS	RECLAIMED WATER USE --- Pennsylvania Guidance Manual 385-2188-002
A+	Augmentation or recharge to potable water aquifers by direct injection Augmentation or recharge to non-potable water aquifers by direct injection
A	Augmentation or recharge to potable water aquifers by surface spreading Augmentation or recharge to non-potable water aquifers by surface spreading Public and private swimming pools
B	Decorative water features such as fountains, reflecting pools and waterfalls Irrigation of golf courses Irrigation of public parks Irrigation of playfields Irrigation of residential landscaping Street Cleaning Wetland augmentation where access is unrestricted Wetland creation where access is unrestricted
C	Concrete Production Evaporative cooling towers Recreational lakes and ponds where access is restricted Washing and process aggregates Wetland augmentation where access is restricted Wetland creation where access is restricted

Section 8 - Identification of Wastewater Disposal Alternatives and Figure 12 identifies all of the sites that were considered. However, based on closer review of the above sites considered, the most reasonable sites to construct small WWTP facilities include:

- Port Indian Pump Station
- Norristown Farm Park

These sites were selected due to the available open land around the sites, discharge streams and areas to discharge the treated effluent. The treated effluent from the Port Indian area could discharge to the Indian Creek and could be pumped to Jeffersonville Golf Course and/or Westover Golf Course for irrigation when needed. Additionally, a small WWTP replacing Whitehall PS could discharge effluent to Kepner Creek and treated effluent could be pumped to irrigate Norristown Area School District property, Norristown Farm Park, or the Van Landeghem site.

Numerous small package plant manufacturers capable of providing treatment units which can meet Class B effluent discharge limits were evaluated. These manufacturers provide the necessary hardware and some can provide a complete service of pre-engineered design, equipment, contract operations and lease to purchase financing. Their Pennsylvania state reuse experience and their capital cost to furnish and erect on a prepared site in WNT was evaluated.

The manufacturers considered in this evaluation include the following:

- Evoqua (formerly Davco)
- Suez North America
- Smith & Loveless
- Pollution Control Systems, Inc.
- Envirep/T.L.C. Environmental
- Samco
- DPI Water Solutions

The two (2) selected sites currently have the following capacity/flows:

- Port Indian Pump Station → Small WWTP
  - Permitted Pumping Capacity - 1,000 gpm / 1.44 MGD
  - Estimated Number of Connected EDU's: 1,230
  - 2021 Flow (Monthly Average/Peak): 0.393 MGD / 0.663 MGD
- Whitehall Pump Station → Small WWTP
  - Permitted Pumping Capacity - 2,625 gpm / 3.78 MGD
  - Estimated Number of Connected EDU's: 1,588
  - 2021 Flow (Monthly Average/Peak): 0.611 MGD / 0.922 MGD

Package plants are pre-manufactured treatment facilities used to treat wastewater in small communities or on individual properties. According to manufacturers, package plants can be designed to treat flows as low as 2,000 gallons per day or as high as 500,000 gallons per day, although the most commonly treated flows are between 10,000 and 200,000 gallons per day. Therefore, based on the above flows, package plants are not large enough to accommodate the entire replacement of the pump stations. However, a portion of the flow can be skimmed from the existing conveyance and treatment process. The pump stations would need to remain.

#### No Action Alternative

This alternative is essentially the same as Continued Use of NMWA WWTP but does not address the current Intermunicipal Treatment Agreement. The continued deterioration of the Norristown WWTP and the major capital improvements are solely up to the direction of NMWA.

- **Cost Estimate**

Table 12 summarizes the opinion of probable cost for each alternative. Costs for several alternatives are represented in ranges based due to various options associated within the Alternative. Appendix 5 includes the breakdown of associated costs for each Alternative. Costs generally include miscellaneous sewer improvements for construction, along with soft costs for easements, property purchase, engineering, legal expenses, and contingency. All costs are in 2023 dollars and assume routine construction requirements, public bidding, and comply with the Township's Responsible Contractor Ordinance.

TABLE 12		
OPINION OF ALTERNATIVE PROJECT COSTS SUMMARY		
Alternative		Cost
1	Continued Use of NMWA WWTP	\$ -
2	Regional WWTP in WNT	\$ 85,000,000
3	New/Expanded NMWA WWTP	\$ 55,933,333
4	Diversion of Flows to Nearby Existing WWTP	
a	Bridgeport WWTP	\$ 14,250,000
b	Upper Merion Township - Matsunk WPCC	\$ 17,000,000
c	Upper Merion Township - Trout Run WPCC	\$ 21,000,000
d	LPVRS - Oaks WWTP	\$ 72,000,000
e	East Norriton-Plymouth-Whitpain JSA WWTP	\$ 12,000,000
5	Converting Existing Pump Station(s) or Collection Points to Small WWTP's	\$ 25,000,000
6	No Action	\$ -

- **Funding Methods**

Several funding methods for the Alternatives that have construction associated are available. These methods include developer financing, tapping fees, and public financing through West Norriton Township.

- **Developer Financing**

- Developers are charged a “Tapping Fee” in accordance with PA Statute. The capital created is reserved and used to finance projects or collection, conveyance and treatment costs associated with maintenance, replacement or upgrades as needed. The opinion of the probable cost on Table 12 and Appendix 5 could be reduced by funding contributions which may be made by prospective new project developers. No new developer financed projects have been confirmed within the study area, although prospects and land development potential exist in limited size. Therefore, the availability of developer financing is anticipated, but cannot be assumed.

- **Tapping Fees**

- Projects connecting to the WNT sewage collection and conveyance system is required.

- **Grants**

- As grants become available, the Township will review and consider each application, and apply as projects fit to offset costs.

- **Implementation**

- The Township intends, with PA DEP approval, to continue discharging sewage to WWTP in accordance with the current Treatment Agreement and upgrade the agreement as needed, for additional flow as needed. WNT will participate in all operation and capital costs for NWMA WWTP. No changes in administrative organizations or legal authority is necessary for plan implementation.

## 8.0 INSTITUTIONAL EVALUATION

### Implementing Wastewater Planning Recommendations

The Township is a First Class Township and is overseen by five (5) commissioners and operates in accordance with the PA State Association of Township Commissioners and applicable PA Code. The Township of West Norriton owns and operates its sanitary sewer collection and conveyance system, which is currently managed through contract operations. The Township also has a public works department that assists as needed. Therefore, all of the necessary staff and administrative resources required to implement most of the alternatives, except for building and operating its own WWTP. Additional staff/licensing may be required, in which the Township would contract or hire the required additional staff. Upon approval of the Act 537 Plan Revision, the Township will notify NMWA that they intend to continue to participate with NMWA in revising the current Agreement, in implementing the chosen Alternative.

The legal actions taken to form the West Norriton Council afford it the full legal right and power to implement wastewater planning recommendations, take enforcement actions against ordinance violators, and raise capital for construction and maintenance of facilities.

### Financial and Debt Status

The Township had a 2021 sewer system operating revenues of \$3,715,650.88, which were sufficient to pay all operating and debt service. As of the end of 2021, the total amount of debt owed by WNT to NWMA for Capital Projects per the Agreement is \$4,594,377.80. An additional \$6,898,000 in debt is also owed at the end of 2021. The Township has implemented a uniform rate and expense structure throughout its service area. Sewer system assets include a check account that has a balance of \$10,164,540.59 at the end of 2021. The Township also has various sewer system cash assets available, some of which are in the form of CD's, which total \$1,467,716.23 as the end of 2021.

### Available Staff and Administrative Resources

The Township of West Norriton currently manages its sanitary sewer collection and conveyance system through contract operations. The Township also has a public works department that assists as needed. Therefore, all the necessary staff and administrative resources required to implement most of the alternatives, except for building and operating its own WWTP. Additional staff/licensing may be required, in which the Township would contract or hire the required additional staff.

### Existing Legal Authority

The legal actions taken to form West Norriton Township afford it the full legal right and power to:

- Implement wastewater planning recommendations
- Implement system wide operation and maintenance plans
- Set user fees and take purchasing actions
- Take enforcement actions against ordinance violators
- Issue bonds to finance the construction, operation, and maintenance of the system
- Negotiate Agreements with other parties

- Raise capital, including issuing bonds to finance, for construction and operation and maintenance activities

#### Analysis and Description of Institutional Alternatives

There are no necessary changes to the Township's municipal departments, municipal operating personnel or municipal authorities to implement the Continued Use of NMWA Alternative. This alternative will not create any new or unusual burdens on the Township.

#### Discussion of Administrative and Legal Activities

There are no necessary administrative or legal activities that must be completed prior to implementation of the Continued Use of NMWA Alternative. The Township has already developed and implemented necessary ordinances, regulations, and standards. The Intermunicipal Treatment Agreement between WNT and NMWA is still valid. No new rights-of-way, easements or land transfers are required.

Implementation of the Continued Use of NMWA Alternative is not expected to require adoption of any other municipal sewage facilities plans or other legal documents. Should any modifications to the above be required, the current Township structure shall ensure that any required legal activities are completed as required by implementation of this alternative. When appropriate, WNT and NMWA will execute a new Intermunicipal Treatment Agreement. Additionally, WNT will upgrade its pump stations and permitting to accommodate growth, as needed.

#### Proposed Institutional Alternative for Implementing the Alternative

It is proposed that the Township will implement the Continued Use of NMWA WWTP Alternative. The Township has the experience, staff and administrative resources, as well as the legal authority to implement the alternative. After the Act 537 Plan Revision has been adopted and approved, the Township will implement participation. The necessary organization structure, legal authority, and ordinances are in place for project participation.

## 9.0 IMPLEMENTATION SCHEDULE AND JUSTIFICATION FOR SELECTED TECHNICAL & INSTITUTIONAL ALTERNATIVES

### Implementing Wastewater Planning Recommendations

The wastewater management alternative which best meets the needs of this study area and the Township is for West Norriton Township to continue to participate with NMWA and the Intermunicipal Treatment Agreement. There is no immediate additional cost for West Norriton Township, beyond the current operating and maintenance costs that the Township incurs, as well as the operation and capital costs that the Township incurs in accordance with the Agreement. There are other non-economic factors that also make this the most attractive alternative which include:

- Ability to implement the alternative without interruption
- Regionalization of systems and cooperation
- Ability to continue growth within Township
- Consistent with existing plans and programs
- Provides sufficient capacity for the ultimate build out of the study area
- Minimizes pollution and environmental risks

The other Alternatives address, or partially address the needs of the study area, but come with significant costs, Intermunicipal Agreement negotiations, potential environmental concerns, increased operation and maintenance, additional environmental/pollution risks, increased staffing and increased costs to residents.

### Capital Financing Plan

No immediate financing is required to implement the Continued Use of NMWA Alternative. As additional growth contributes to additional flow in the Township, and in particular pump stations basins, those pumps stations and appurtenances will be upgraded. At that point, the Township will determine how the project will be funded to minimize costs, which includes the use of Township funds, bank loans, bonds, developer contributions or available grants. Any debt service incurred will be defrayed by projected user and tapping fees.

### Implementation Schedule

Issue 537 Plan Update for Official Reviews	“Time Zero”
Township 537 Plan Update Adoption	2 Months
PADEP 537 Plan Update Approval	6 Months

## **APPENDIX 1**

### **Act 537 Plan Content Checklist**



## ACT 537 PLAN CONTENT AND ENVIRONMENTAL ASSESSMENT CHECKLIST

### PART 1 GENERAL INFORMATION

#### A. Project Information

1. Project Name

---

2. Brief Project Description

#### B. Client (Municipality) Information

Municipality Name	County	City	Boro	Twp
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1		Mailing Address Line 2		
Address Last Line -- City		State	ZIP+4	
Phone + Ext.	FAX (optional)	Email (optional)		

#### C. Site Information

Site (or Project) Name	(Municipal Name) Act 537 Plan
Site Location Line 1	Site Location Line 2

#### D. Project Consultant Information

Last Name	First Name	MI	Suffix
Title	Consulting Firm Name		
Mailing Address Line 1		Mailing Address Line 2	
Address Last Line -- City	State	ZIP+4	Country
Email	Phone + Ext.	FAX	

**PART 2 ADMINISTRATIVE COMPLETENESS CHECKLIST**

DEP Use Only	Indicate Page #(s) in Plan	In addition to the main body of the plan, the plan must include items one through eight listed below to be accepted for formal review by DEP. Incomplete plans may be <b>denied</b> unless the municipality is clearly requesting an advisory review.
_____	_____	1. <b>Table of Contents</b>
_____	_____	2. <b>Plan Summary</b>
_____	_____	A. Identify the proposed service areas and major problems evaluated in the plan. (Reference - 25 Pa. Code §71.21(a)(7)(i)).
_____	_____	B. Identify the alternative(s) chosen to solve the problems and serve the areas of need identified in the plan. Also, include any institutional arrangements necessary to implement the chosen alternative(s). (Reference - 25 Pa. Code §71.21(a)(7)(ii)).
_____	_____	C. Present the estimated cost of implementing the proposed alternative (including the user fees) and the proposed funding method to be used. (Reference - 25 Pa. Code §71.21(a)(7)(ii)).
_____	_____	D. Identify the municipal commitments necessary to implement the Plan. (Reference - 25 Pa. Code §71.21(a)(7)(iii)).
_____	_____	E. Provide a schedule of implementation for the project that identifies the <b>major</b> milestones with dates necessary to accomplish the project to the point of operational status. (Reference - 25 Pa. Code §71.21(a)(7)(iv)).
_____	_____	3. <b>Municipal Adoption:</b> <i>Original</i> , signed and sealed Resolution of Adoption by the municipality which contains, at a minimum, alternatives chosen and a commitment to implement the Plan in accordance with the implementation schedule. (Reference - 25 Pa. Code §71.31(f)) Section V.F. of the Planning Guide.
_____	_____	4. <b>Planning Commission / County Health Department Comments:</b> Evidence that the municipality has requested, reviewed and considered comments by appropriate official planning agencies of the municipality, planning agencies of the county, planning agencies with area wide jurisdiction (where applicable), and any existing county or joint county departments of health. (Reference - 25 Pa. Code §71.31(b)) Section V.E.1 of the Planning Guide.
_____	_____	5. <b>Publication:</b> Proof of Public Notice which documents the proposed plan adoption, plan summary, and the establishment and conduct of a 30-day comment period. (Reference - 25 Pa. Code §71.31(c)) Section V.E.2 of the Planning Guide.
_____	_____	6. <b>Comments and Responses:</b> Copies of <b>all</b> written comments received and municipal response to <b>each</b> comment in relation to the proposed plan. (Reference - 25 Pa. Code §71.31(c)) Section V.E.2 of the Planning Guide.
_____	_____	7. <b>Implementation Schedule:</b> A complete project implementation schedule with milestone dates specific for each existing and future area of need. Other activities in the project implementation schedule should be indicated as occurring a finite number of days from a major milestone. (Reference - 25 Pa. Code §71.31(d)) Section V.F. of the Planning Guide. Include dates for the future initiation of feasibility evaluations in the project's implementation schedule for areas proposing completion of sewage facilities for planning periods in excess of five years. (Reference - 25 Pa. Code §71.21(c)).
_____	_____	8. <b>Consistency Documentation:</b> Documentation indicating that the appropriate agencies have received, reviewed and concurred with the method proposed to resolve identified inconsistencies within the proposed alternative and consistency requirements in 25 Pa. Code §71.21.(a)(5)(i-iii). (Reference - 25 Pa. Code §71.31(e)). Appendix B of the Planning Guide.

**PART 3 GENERAL PLAN CONTENT CHECKLIST**

DEP Use Only	Indicate Page #(s) in Plan	Item Required
_____	_____	<b>I. Previous Wastewater Planning</b>
_____	_____	A. Identify, describe and briefly analyze all past wastewater planning for its impact on the current planning effort:
_____	_____	1. Previously undertaken under the Pennsylvania Sewage Facilities Act (Act). (Reference - Act 537, 35 P.S. §750.5(d)(1)).
_____	_____	2. Has not been carried out according to an approved implementation schedule contained in the plans. (Reference - 25 Pa. Code §71.21(a)(5)(i)(A-D)). Section V.F of the Planning Guide.
_____	_____	3. Is anticipated or planned by applicable sewer authorities or approved under a Chapter 94 Corrective Action Plan. (Reference - 25 Pa. Code §71.21(a)(5)(i)(A&B)). Section V.D. of the Planning Guide.
_____	_____	4. Through planning modules for new land development, planning “exemptions” and addenda. (Reference - 25 Pa. Code §71.21(a)(5)(i)(A)).
_____	_____	<b>II. Physical and Demographic Analysis utilizing written description and mapping</b> (All items listed below require maps, and all maps should show all current lots and structures and be of appropriate scale to clearly show significant information).
_____	_____	A. Identification of planning area(s), municipal boundaries, Sewer Authority/Management Agency service area boundaries. (Reference – 25 Pa. Code §71.21(a)(1)(i)).
_____	_____	B. Identification of physical characteristics (streams, lakes, impoundments, natural conveyance, channels, drainage basins in the planning area). (Reference - 25 Pa. Code §71.21(a)(1)(ii)).
_____	_____	C. Soils - Analysis with description by soil type and soils mapping for areas not presently served by sanitary sewer service. Show areas suitable for in-ground onlot systems, elevated sand mounds, individual residential spray irrigation systems (IRSIS), and areas unsuitable for soil dependent systems. (Reference - 25 Pa. Code §71.21(a)(1)(iii)). Show Prime Agricultural Soils and any locally protected agricultural soils. (Reference - 25 Pa. Code §71.21(a)(1)(iii)).
_____	_____	D. Geologic Features - (1) Identification through analysis, (2) mapping and (3) their relation to existing or potential nitrate-nitrogen pollution and drinking water sources. Include areas where existing nitrate-nitrogen levels are in excess of 5 mg/L. (Reference - 25 Pa. Code §71.21(a)(1)(iii)).
_____	_____	E. Topography - Depict areas with slopes that are suitable for conventional systems; slopes that are suitable for elevated sand mounds and slopes that are unsuitable for onlot systems. (Reference - 25 Pa. Code §71.21(a)(1)(ii)).
_____	_____	F. Potable Water Supplies - Identification through mapping, description and analysis. Include public water supply service areas and available public water supply capacity and aquifer yield for groundwater supplies. (Reference - 25 Pa. Code §71.21(a)(1)(vi)). Section V.C. of the Planning Guide.
_____	_____	G. Wetlands-Identify wetlands as defined in 25 Pa. Code Chapter 105 by description, analysis and mapping. Include National Wetland Inventory mapping and potential wetland areas per the United States Department of Agricultural (USDA) Natural Resources Conservation Service (NRCS) mapped hydric soils. Proposed collection, conveyance and treatment facilities and lines must be located and labeled, along with the identified wetlands, on the map. (Reference - 25 Pa. Code §71.21(a)(1)(v)). Appendix B, Section II.I of the Planning Guide.

\_\_\_\_\_ III. Existing Sewage Facilities in the Planning Area - Identifying the Existing Needs

\_\_\_\_\_ A. Identify, map and describe municipal and non-municipal, individual and community sewerage systems in the planning area including:

- \_\_\_\_\_ 1. Location, size and ownership of treatment facilities, main intercepting lines, pumping stations and force mains including their size, capacity, point of discharge. Also include the name of the receiving stream, drainage basin, and the facility's effluent discharge requirements. (Reference - 25 Pa. Code §71.21(a)(2)(i)(A)).
- \_\_\_\_\_ 2. A narrative and schematic diagram of the facility's basic treatment processes including the facility's National Pollutant Discharge Elimination System (NPDES) permitted capacity, and the Clean Streams Law permit number. (Reference - 25 Pa. Code §71.21(a)(2)(i)(A)).
- \_\_\_\_\_ 3. A description of problems with existing facilities (collection, conveyance and/or treatment), including existing or projected overload under 25 Pa. Code Chapter 94 (relating to municipal wasteload management) or violations of the NPDES permit, Clean Streams Law permit, or other permit, rule or regulation of DEP. (Reference - 25 Pa. Code §71.21(a)(2)(i)(B)).
- \_\_\_\_\_ 4. Details of scheduled or in-progress upgrading or expansion of treatment facilities and the anticipated completion date of the improvements. Discuss any remaining reserve capacity and the policy concerning the allocation of reserve capacity. Also discuss the compatibility of the rate of growth to existing and proposed wastewater treatment facilities. (Reference - 25 Pa. Code §71.21(a)(4)(i & ii)).
- \_\_\_\_\_ 5. A detailed description of the municipality's operation and maintenance (O & M) requirements for small flow treatment facility systems, including the status of past and present compliance with these requirements and any other requirements relating to sewage management programs (SMPs). (Reference - 25 Pa. Code §71.21(a)(2)(i)(C)).
- \_\_\_\_\_ 6. Disposal areas, if other than stream discharge, and any applicable groundwater limitations. (Reference - 25 Pa. Code §71.21(a)(4)(i & ii)).

\_\_\_\_\_ B. Using DEP's publication titled *Act 537 Sewage Disposal Needs Identification* (3800-BK-DEP1949), identify, map and describe areas that utilize individual and community onlot sewage disposal and, unpermitted collection and disposal systems ("wildcat" sewers, borehole disposal, etc.) and retaining tank systems in the planning area including:

- \_\_\_\_\_ 1. The types of onlot systems in use. (Reference - 25 Pa. Code §71.21(a)(2)(ii)(A)).
- \_\_\_\_\_ 2. A sanitary survey complete with description, map and tabulation of documented and potential public health, pollution, and operational problems (including malfunctioning systems) with the systems, including violations of local ordinances, the Act, the Clean Stream Law or regulations promulgated thereunder. (Reference - 25 Pa. Code §71.21(a)(2)(ii)(B)).
- \_\_\_\_\_ 3. A comparison of the types of onlot sewage systems installed in an area with the types of systems which are appropriate for the area according to soil, geologic conditions, topographic limitations sewage flows, and 25 Pa. Code Chapter 73 (relating to standards for sewage disposal facilities). (Reference - 25 Pa. Code §71.21(a)(2)(ii)(C)).
- \_\_\_\_\_ 4. An individual water supply survey to identify possible contamination by malfunctioning onlot sewage disposal systems consistent with DEP's *Act 537 Sewage Disposal Needs Identification* publication. (Reference - 25 Pa. Code §71.21(a)(2)(ii)(B)).

- \_\_\_\_\_ 5. Detailed description of O & M requirements of the municipality for individual and small volume community onlot systems, including the status of past and present compliance with these requirements and any other requirements relating to SMPs. (Reference - 25 Pa. Code §71.21(a)(2)(i)(C)).
- \_\_\_\_\_ C. Identify wastewater sludge and septage generation, transport and disposal methods. Include this information in the sewage facilities alternative analysis including:
  - \_\_\_\_\_ 1. Location of sources of wastewater sludge or septage (Septic tanks, holding tanks, wastewater treatment facilities). (Reference – 25 Pa. Code §71.71).
  - \_\_\_\_\_ 2. Quantities of the types of sludges or septage generated. (Reference - 25 Pa. Code §71.71).
  - \_\_\_\_\_ 3. Present disposal methods, locations, capacities and transportation methods. (Reference - 25 Pa. Code §71.71).

\_\_\_\_\_ **IV. Future Growth and Land Development**

- \_\_\_\_\_ A. Identify and briefly summarize all municipal and county planning documents adopted pursuant to the Pennsylvania Municipalities Planning Code (Act 247) including:
  - \_\_\_\_\_ 1. All land use plans and zoning maps that identify residential, commercial, industrial, agricultural, recreational and open space areas. (Reference - 25 Pa. Code §71.21(a)(3)(iv)).
  - \_\_\_\_\_ 2. Zoning or subdivision regulations that establish lot sizes predicated on sewage disposal methods. (Reference – 25 Pa. Code §71.21(a)(3)(iv)).
  - \_\_\_\_\_ 3. All limitations and plans related to floodplain and stormwater management and special protection (25 Pa. Code Chapter 93) areas. (Reference - 25 Pa. Code §71.21(a)(3)(iv)) Appendix B, Section II.F of the Planning Guide.
- \_\_\_\_\_ B. Delineate and describe the following through map, text and analysis.
  - \_\_\_\_\_ 1. Areas with existing development or plotted subdivisions. Include the name, location, description, total number of equivalent dwelling units (EDUs) in development, total number of EDUs currently developed and total number of EDUs remaining to be developed (include time schedule for EDUs remaining to be developed). (Reference - 25 Pa. Code §71.21(a)(3)(i)).
  - \_\_\_\_\_ 2. Land use designations established under the Pennsylvania Municipalities Planning Code (35 P.S. 10101-11202), including residential, commercial and industrial areas. (Reference - 25 Pa. Code §71.21(a)(3)(ii)). Include a comparison of proposed land use as allowed by zoning and existing sewage facility planning. (Reference - 25 Pa. Code §71.21(a)(3)(iv)).
  - \_\_\_\_\_ 3. Future growth areas with population and EDU projections for these areas using historical, current and future population figures and projections of the municipality. Discuss and evaluate discrepancies between local, county, state and federal projections as they relate to sewage facilities. (Reference - 25 Pa. Code §71.21(a)(1)(iv) and (a)(3)(iii)).
  - \_\_\_\_\_ 4. Zoning, and/or subdivision regulations; local, county or regional comprehensive plans; and existing plans of any other agency relating to the development, use and protection of land and water resources with special attention to: (Reference - 25 Pa. Code §71.21(a)(3)(iv)).
    - public ground/surface water supplies
    - recreational water use areas
    - groundwater recharge areas
    - industrial water use
    - wetlands





§71.73(b)(8)).

6. Requirements for bonding, escrow accounts, management agencies or associations to assure O & M for non-municipal facilities. (Reference - 25 Pa. Code §71.71).

G. Non-structural comprehensive planning alternatives that can be undertaken to assist in meeting existing and future sewage disposal needs including: (Reference - 25 Pa. Code §71.21(a)(4)).

1. Modification of existing comprehensive plans involving:

a. Land use designations. (Reference - 25 Pa. Code §71.21(a)(4)).

b. Densities. (Reference - 25 Pa. Code §71.21(a)(4)).

c. Municipal ordinances and regulations. (Reference - 25 Pa. Code §71.21(a)(4)).

d. Improved enforcement. (Reference - 25 Pa. Code §71.21(a)(4)).

e. Protection of drinking water sources. (Reference - 25 Pa. Code §71.21(a)(4)).

2. Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference - 25 Pa. Code §71.21(a)(4)).

3. Alternatives for creating or changing municipal subdivision regulations to assure long-term use of on-site sewage disposal that consider lot sizes and protection of replacement areas. (Reference - 25 Pa. Code §71.21(a)(4)).

4. Evaluation of existing local agency programs and the need for technical or administrative training. (Reference - 25 Pa. Code §71.21(a)(4)).

H. A no-action alternative which includes discussion of both short-term and long-term impacts on: (Reference - 25 Pa. Code §71.21(a)(4)).

1. Water quality/public health. (Reference - 25 Pa. Code §71.21(a)(4)).

2. Growth potential (residential, commercial, industrial). (Reference - 25 Pa. Code §71.21(a)(4)).

3. Community economic conditions. (Reference - 25 Pa. Code §71.21(a)(4)).

4. Recreational opportunities. (Reference - 25 Pa. Code §71.21(a)(4)).

5. Drinking water sources. (Reference - 25 Pa. Code §71.21(a)(4)).

6. Other environmental concerns. (Reference - 25 Pa. Code §71.21(a)(4)).

**VI. Evaluation of Alternatives**

A. Technically feasible alternatives identified in Section V of this checklist must be evaluated for consistency with respect to the following: (Reference - 25 Pa. Code §71.21(a)(5)(i)).

1. Applicable plans developed and approved under **Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act** (33 U.S.C.A. 1288). (Reference - 25 Pa. Code §71.21(a)(5)(i)(A)). Appendix B, Section II.A of the Planning Guide.

2. Municipal wasteload management **Corrective Action Plans or Annual Reports** developed under 25 Pa. Code Chapter 94. (Reference - 25 Pa. Code §71.21(a)(5)(i)(B)). The municipality's recent Wasteload Management (25 Pa. Code Chapter 94) Reports should be examined to determine if the proposed alternative is consistent with the recommendations and findings of the report. Appendix B, Section II.B of the Planning Guide.

3. Plans developed under **Title II of the Clean Water Act** (33 U.S.C.A.

1281-1299) or **Titles II and VI of the Water Quality Act of 1987** (33 U.S.C.A 1251-1376). (Reference - 25 Pa. Code §71.21(a)(5)(i)(C)). Appendix B, Section II.E of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
4. **Comprehensive plans** developed under the Pennsylvania Municipalities Planning Code. (Reference - 25 Pa. Code §71.21(a)(5)(i)(D)). The municipality's comprehensive plan must be examined to assure that the proposed wastewater disposal alternative is consistent with land use and all other requirements stated in the comprehensive plan. Appendix B, Section II.D of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
5. **Antidegradation requirements** as contained in 25 Pa. Code Chapters 93, 95 and 102 (relating to water quality standards, wastewater treatment requirements and erosion control) and the Clean Water Act. (Reference - 25 Pa. Code §71.21(a)(5)(i)(E)). Appendix B, Section II.F of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
6. **State Water Plans** developed under the Water Resources Planning Act (42 U.S.C.A. 1962-1962 d-18). (Reference - 25 Pa. Code §71.21(a)(5)(i)(F)). Appendix B, Section II.C of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
7. **Pennsylvania Prime Agricultural Land Policy** contained in Title 4 of the Pennsylvania Code, Chapter 7, Subchapter W. Provide narrative on local municipal policy and an overlay map on prime agricultural soils. (Reference - 25 Pa. Code §71.21(a)(5)(i)(G)). Appendix B, Section II.G of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
8. **County Stormwater Management Plans** approved by DEP under the Storm Water Management Act (32 P.S. 680.1-680.17). (Reference - 25 Pa. Code §71.21(a)(5)(i)(H)). Conflicts created by the implementation of the proposed wastewater alternative and the existing recommendations for the management of stormwater in the county Stormwater Management Plan must be evaluated and mitigated. If no plan exists, no conflict exists. Appendix B, Section II.H of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
9. **Wetland Protection.** Using wetland mapping developed under Checklist Section II.G, identify and discuss mitigative measures including the need to obtain permits for any encroachments on wetlands from the construction or operation of any proposed wastewater facilities. (Reference - 25 Pa. Code §71.21(a)(5)(i)(I)) Appendix B, Section II.I of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
10. **Protection of rare, endangered or threatened plant and animal species** as identified by the Pennsylvania Natural Diversity Inventory (PNDI). (Reference - 25 Pa. Code §71.21(a)(5)(i)(J)). Provide DEP with a copy of the completed *PNDI Manual Project Submission Form*. Also provide a copy of the response letters from the 4 jurisdictional agencies regarding the findings of the PNDI search. Appendix B, Section II.J of the Planning Guide.

\_\_\_\_\_ \_\_\_\_\_  
11. **Historical and archaeological resource protection** under P.C.S. Title 37, Section 507 relating to cooperation by public officials with the Pennsylvania Historical and Museum Commission (PHMC). (Reference - 25 Pa. Code §71.21(a)(5)(i)(K)). Provide DEP with a completed copy of a *Cultural Resource Notice* and a return receipt for its submission to PHMC. Provide a copy of the response letter or review stamp from the Bureau of Historic Preservation (BHP) indicating the project will have no effect on, or that there may be potential impacts on, known archaeological and historical sites and any avoidance and mitigation measures required. Appendix B, Section II.K of the Planning Guide.



- \_\_\_\_\_ f. Raise capital for construction and O & M of facilities. (Reference - 25 Pa. Code §71.61(d)(2)).
- \_\_\_\_\_ B. Provide an analysis and description of the various institutional alternatives necessary to implement the proposed technical alternatives including:
  - \_\_\_\_\_ 1. Need for new municipal departments or municipal authorities. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 2. Functions of existing and proposed organizations (sewer authorities, onlot maintenance agencies, etc.). (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 3. Cost of administration, implementability, and the capability of the authority/agency to react to future needs. (Reference - 25 Pa. Code §71.61(d)(2)).
- \_\_\_\_\_ C. Describe all necessary administrative and legal activities to be completed and adopted to ensure the implementation of the recommended alternative including:
  - \_\_\_\_\_ 1. Incorporation of authorities or agencies. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 2. Development of all required ordinances, regulations, standards and inter-municipal agreements. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 3. Description of activities to provide rights-of-way, easements and land transfers. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 4. Adoption of other municipal sewage facilities plans. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 5. Any other legal documents. (Reference - 25 Pa. Code §71.61(d)(2)).
  - \_\_\_\_\_ 6. Dates or timeframes for items 1-5 above on the project's implementation schedule.
- \_\_\_\_\_ D. Identify the proposed institutional alternative for implementing the chosen technical wastewater disposal alternative. Provide justification for choosing the specific institutional alternative considering administrative issues, organizational needs and enabling legal authority. (Reference - 25 Pa. Code §71.61(d)(2)).

**VIII. Implementation Schedule and Justification for Selected Technical & Institutional Alternatives**

- \_\_\_\_\_ A. Identify the technical wastewater disposal alternative which best meets the wastewater treatment needs of each study area of the municipality. Justify the choice by providing documentation which shows that it is the best alternative based on:
  - \_\_\_\_\_ 1. Existing wastewater disposal needs. (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 2. Future wastewater disposal needs. (5 and 10 year growth areas). (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 3. O & M considerations. (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 4. Cost-effectiveness. (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 5. Available management and administrative systems. (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 6. Available financing methods. (Reference - 25 Pa. Code §71.21(a)(6)).
  - \_\_\_\_\_ 7. Environmental soundness and compliance with natural resource planning and preservation programs. (Reference - 25 Pa. Code §71.21(a)(6)).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- B. Designate and describe the capital financing plan chosen to implement the selected alternative(s). Designate and describe the chosen back-up financing plan. (Reference - 25 Pa. Code §71.21(a)(6))
- C. Designate and describe the implementation schedule for the recommended alternative, including justification for any proposed phasing of construction or implementation of a SMP. (Reference – 25 Pa. Code §71.31(d))

**IX. Environmental Report (ER) generated from the UER Process**

- A. Complete an ER as required by the UER process and as described in the DEP Technical Guidance (381-5511-111). Include this document as “Appendix A” to the Act 537 Plan Update Revision. **Note: An ER is required only for Wastewater projects proposing funding through any of the funding sources identified in the UER.**

**ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS**

Municipalities that propose to implement their official sewage facilities plan updates with PENNVEST funds must meet 6 additional requirements to be eligible for such funds. See *A Guide for Preparing Act 537 Update Revisions* (362-0300-003), Appendix N for greater detail or contact the DEP regional office serving your county listed in Appendix J of the same publication.

DEP Use Only	Indicate Page #(s) in Plan	Item Required
_____	_____	1. Environmental Impact Assessment. (Planning Phase) The UER replaces the Environmental Impact Assessment that was a previous requirement for PENNVEST projects.
_____	_____	2. Cost Effectiveness (Planning Phase) The cost-effectiveness analysis should be a present-worth (or equivalent uniform annual) cost evaluation of the principle alternatives using the interest rate that is published annually by the Water Resources Council. Normally, for PENNVEST projects the applicant should select the most cost-effective alternative based upon the above analysis. Once the alternative has been selected the user fee estimates should be developed based upon interest rates and loan terms of the selected funding method.
_____	_____	3. Second Opinion Project Review. (Design Phase)
_____	_____	4. Minority Business Enterprise/Women's Business Enterprise (Construction Phase)
_____	_____	5. Civil Rights. (Construction Phase)
_____	_____	6. Initiation of Operation/Performance Certification. (Post-construction Phase)

## I/A TECHNOLOGIES

### PARTIAL LISTING OF INNOVATIVE AND ALTERNATIVE TECHNOLOGIES

#### TREATMENT TECHNOLOGIES

Aquaculture  
Aquifer Recharge  
Biological Aerated Filters  
Constructed Wetlands  
Direct Reuse (NON-POTABLE)  
Horticulture  
Overland Flow  
Rapid Infiltration  
Silviculture  
Microscreens  
Controlled Release Lagoons  
Swirl Concentrator

#### SLUDGE TREATMENT TECHNOLOGIES

Aerated Static Pile Composting  
Enclosed Mechanical Composting (In vessel)  
Revegetation of Disturbed Land  
Aerated Windrow Composting

#### ENERGY RECOVERY TECHNOLOGIES

Anaerobic Digestion with more than 90 percent  
Methane Recovery  
Cogeneration of Electricity  
Self-Sustaining Incineration

#### INDIVIDUAL & SYSTEM-WIDE COLLECTION TECHNOLOGIES

Cluster Systems  
Septage Treatment  
Small Diameter Gravity Sewers  
Step Pressure Sewers  
Vacuum Sewers  
Variable Grade Sewers  
Septic Tank Effluent Pump with  
Pressure Sewers

## **APPENDIX 2**

### **2021 West Norriton Township Chapter 94 Wasteload Management Report**



**WEST NORRITON TOWNSHIP  
MONTGOMERY COUNTY, PENNSYLVANIA**

**2022 Municipal Wasteload Management Report  
(Chapter 94 Report)  
For Calendar Year 2021**

**Prepared For:**

**West Norriton Township  
1630 W. Marshall Street  
Jeffersonville, PA 19403**

**February 2022**

**File No. 2022-01213**

**Prepared By:**

**Gilmore & Associates, Inc.  
Engineers ♦ Land Surveyors ♦ Planners ♦ GIS Consultants  
65 E. Butler Avenue, Suite 100  
New Britain, PA 18901  
215-345-4330**



**GILMORE & ASSOCIATES, INC.**  
ENGINEERING & CONSULTING SERVICES



1918 TO 2008: CELEBRATING NINETY YEARS OF ENGINEERING EXCELLENCE



## CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

**For Calendar Year: 2021**

- Permittee is owner and/or operator of a POTW or other sewage treatment facility  
 Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

GENERAL INFORMATION			
Permittee Name:	West Norriton Township	Permit No.:	PA (N/A)
Mailing Address:	1630 W. Marshall Street	Effective Date:	N/A
City, State, Zip:	Jeffersonville, PA 19403	Expiration Date:	N/A
Contact Person:	Jason M. Bobst	Renewal Due Date:	N/A
Title:	Township Manager	Municipality:	West Norriton Township
Phone:	(610) 631-0450	County:	Montgomery County
Email:	jbobst@wntwp.com	Consultant Name:	Gilmore & Associates, Inc.
CHAPTER 94 REPORT COMPONENTS			
<p>1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))</p> <p><b>Check the appropriate boxes:</b></p> <p><input type="checkbox"/> Line graph for flows attached (<b>Attachment</b> )</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (<b>Attachment</b> )</p> <p><input checked="" type="checkbox"/> Section 1 is not applicable (report is for a collection system).</p>			
<p>2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))</p> <p><b>Check the appropriate boxes:</b></p> <p><input type="checkbox"/> Line graph for organic loads attached (<b>Attachment</b> )</p> <p><input type="checkbox"/> DEP Chapter 94 Spreadsheet used (<b>Attachment</b> )</p> <p><input checked="" type="checkbox"/> Section 2 is not applicable (report is for a collection system).</p>			
<p>3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))</p> <p><b>All flow is treated by Norritown Municipal Waste Authority at their wastewater treatment plant. See Attachment E.</b></p>			

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

**Check the appropriate boxes:**

- Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment B**)
- List summarizing each extension or project attached (**Attachment A**)
- Schedules describing how each project will be completed over time and effects attached (**Attachment 1**)

**Comments:**

**No new sewer or manholes were installed in 2021.**

**The sewer in Markley Farms Phase 1 has been dedicated. 2,556 LF of 8" Sewer, 13 manholes)**

**22 new connections (24 EDUs) occurred in 2021. See below and Attachment A - Table 1**

**Markley Farms Phase 2 - 8 new connections**

**Reserve at Stoney Creek - 8 new connections**

**2495 General Armistead (VA Clinic), 48 Potts Ave, 2479 Stinson Ln, 1654 Williams Way, 1630 W. Main St - 1 new connection each**

**2550 Globus Medical - 1 new connection, 3 new EDUs**

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

**See Attachment C**

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

**Check the appropriate boxes:**

- System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

**The Township is currently in the process of televising the and repairing the system as budget allows. See attached map of work done to date.**

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

**Check the appropriate boxes:**

- The collection system does not contain pump stations  
 The collection system does contain pump stations (Number – 6)  
 Discussion of condition of each pump station attached (**Attachment D**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

- a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.
- b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.
- c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

- Industrial waste report as described in 8 a., b. and c. attached (**Attachment F**)  
 Industrial pretreatment report as required in an NPDES permit attached (**Attachment** )

9. Existing or Projected Overload.

**Check the appropriate boxes:**

- This report demonstrates an existing hydraulic overload condition.  
 This report demonstrates a projected hydraulic overload condition.  
 This report demonstrates an existing organic overload condition.  
 This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

- Corrective Action Plan attached (**Attachment** )

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

- Sewage Sludge Management Inventory attached (**Attachment** )

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

Annual CSO Report attached (**Attachment** )

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

Flow calibration report attached (**Attachment G**)

### RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

**Jason M. Bobst, Township Manager**

Name of Responsible Official

**(610) 631-0450**

Telephone No.



Signature

**March 25, 2022**

Date

### PREPARER CERTIFICATION

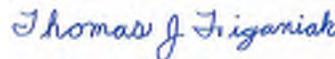
I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

**Thomas J. Figaniak, P.E.**

Name of Preparer

**(215) 345-4330**

Telephone No.



Signature

**March 25, 2022**

Date

**ATTACHMENT A**

**ACTIVE, APPROVED AND PLANNED DEVELOPMENT**

**TABLE 1  
ACTIVE, APPROVED AND PLANNED DEVELOPMENTS  
WEST NORRITON TOWNSHIP**

NAME		Drainage Basin	Status	Total Project Connections		Connections Prior to 2021		2021 Connections		Remaining EDUs		Projected Buildout Schedule											
Map Reference (1)	Approved Developments			EDUs		Flow		EDUs		Flow		Total		2022		2023		2024		2025		2026	
				EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow
1	The Reserve at Stoney Creek	Whitehall	Under Construction	51	14,535	25	7,125	8	2,280	18	5,130	10	2,850	8	2,280	0	0	0	0	0	0	10	2,850
2	Norristown School District	Whitehall	Approved	10	2,850	0	-	0	0	10	2,850	0	0	0	0	0	0	0	0	0	0	10	2,850
3	Apartments at Schuylkill & Main Street	Rittenhouse	Under Construction	22	6,270	0	-	0	0	22	6,270	0	0	0	0	10	2,850	12	3,420	0	0	0	0
4	Markley Farms	Whitehall	Under Construction	79	22,515	71	20,235	8	2,280	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	2495 General Armistead: VA Outpatient	Rittenhouse	Connected	1	285	0	-	1	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	48 Potts Avenue	Chestnut	Connected	1	285	0	-	1	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	2479 Stinson Lane	Rittenhouse	Connected	1	285	0	-	1	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1654 Williams Way (Lot 11)	Rittenhouse	Connected	1	285	0	-	1	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	2550 General Armistead (Globus)	Rittenhouse	Connected	3	855	0	-	3	855	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	1630 W. Main Street	Jackson	Connected	1	285	0	-	1	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Approved Sub Total EDUs / Flow</b>				<b>170</b>	<b>48,450</b>	<b>96</b>	<b>27,360</b>	<b>24</b>	<b>6,840</b>	<b>50</b>	<b>14,250</b>	<b>10</b>	<b>2,850</b>	<b>8</b>	<b>2,280</b>	<b>10</b>	<b>2,850</b>	<b>12</b>	<b>3,420</b>	<b>10</b>	<b>2,850</b>	<b>10</b>	<b>2,850</b>

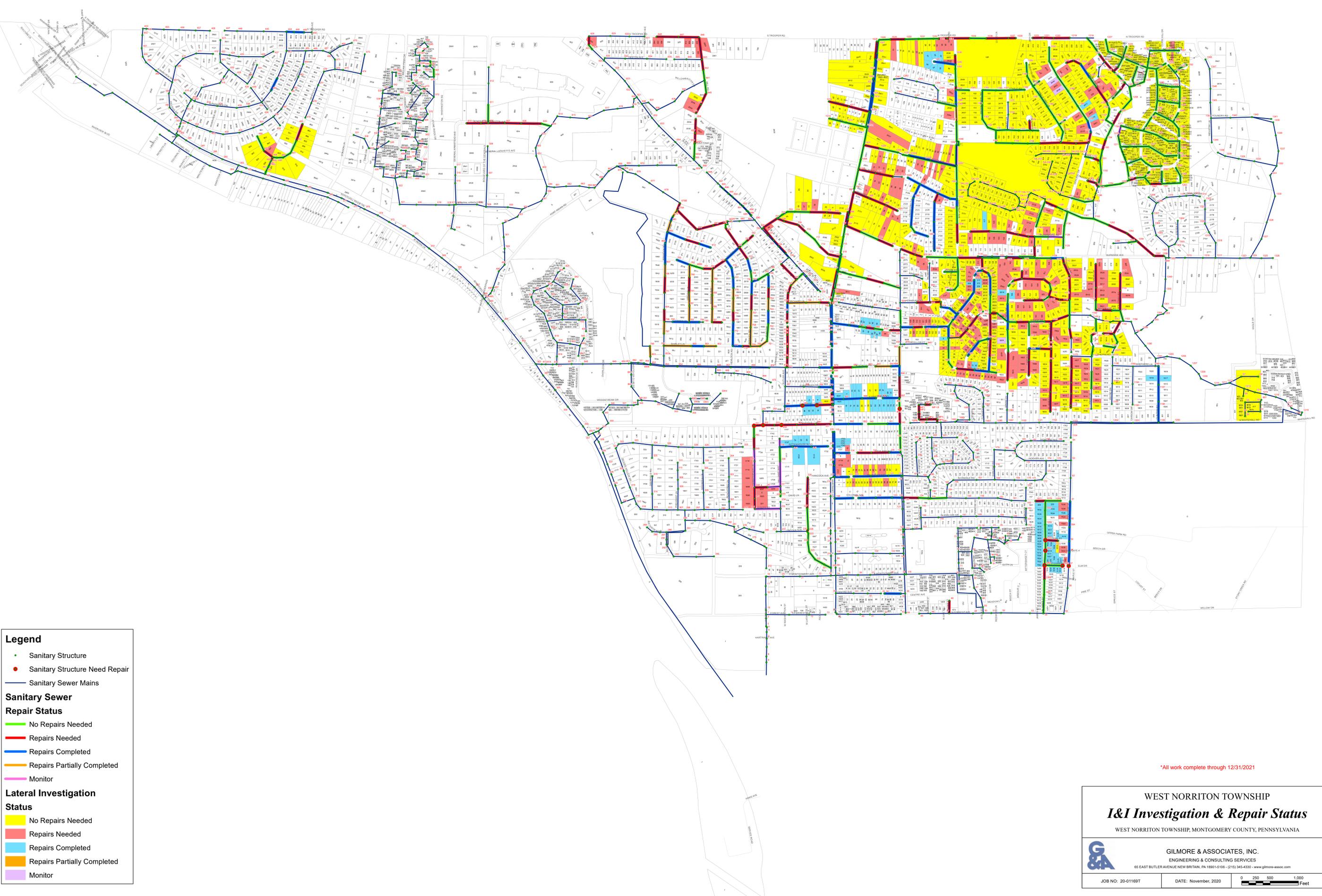
Map Reference (1)	Planned Developments	Drainage Basin	Status	Total Project Connections		Connections Prior to 2021		2021 Connections		Remaining EDUs		2022		2023		2024		2025		2026		
				EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	EDUs	Flow	
11	Office Building at 239 Egypt Road	Rittenhouse	In Planning Stages	11	3,135	0	-	0	-	11	3,135	0	0	0	0	0	0	0	0	11	3,135	
12	2580 Industry Lane	Whitehall	In Planning Stages	1	285	0	-	0	-	1	285	1	285	0	0	0	0	0	0	0	0	0
13	43 W. Indian Lane	Rittenhouse	In Planning Stages	1	285	0	-	0	-	1	285	1	285	0	0	0	0	0	0	0	0	0
	Fill in Lots and OLDs	-	-					-	-	5	1,425	1	285	1	285	1	285	1	285	1	285	
<b>Planned Sub Total EDUs / Flow</b>										<b>18</b>	<b>5,130</b>	<b>3</b>	<b>855</b>	<b>1</b>	<b>285</b>	<b>1</b>	<b>285</b>	<b>1</b>	<b>285</b>	<b>12</b>	<b>3,420</b>	

<b>TOTAL</b>	<b>68</b>	<b>19,380</b>	<b>13</b>	<b>3,705</b>	<b>9</b>	<b>2,565</b>	<b>11</b>	<b>3,135</b>	<b>13</b>	<b>3,705</b>	<b>22</b>	<b>6,270</b>
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**Notes:**  
(1) See Attachment B for Development locations  
(2) Total Flow based on 1 EDU = 285 gpd

**ATTACHMENT B**  
**SANITARY SEWER SYSTEM MAP**



**Legend**

- Sanitary Structure
- Sanitary Structure Need Repair
- Sanitary Sewer Mains

**Sanitary Sewer Repair Status**

- No Repairs Needed
- Repairs Needed
- Repairs Completed
- Repairs Partially Completed
- Monitor

**Lateral Investigation Status**

- No Repairs Needed
- Repairs Needed
- Repairs Completed
- Repairs Partially Completed
- Monitor

\*All work complete through 12/31/2021

WEST NORRITON TOWNSHIP  
***I&I Investigation & Repair Status***  
WEST NORRITON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

**GILMORE & ASSOCIATES, INC.**  
ENGINEERING & CONSULTING SERVICES  
65 EAST BUTLER AVENUE NEW BRITAIN, PA 18901-5106 - (215) 345-4330 - www.gilmore-assoc.com

JOB NO: 20-01169T      DATE: November, 2020      0 250 500 1,000 Feet

**ATTACHMENT C**  
**SANITARY SEWER SYSTEM**  
**MONITORING, MAINTENANCE, REPAIR & REHABILITATION**

## PUMP STATION INFORMATION

The Township owns and maintains six (6) pump stations within the existing collection system:

- Rittenhouse Pump Station
- Whitehall Pump Station
- Forrest Avenue Pump Station
- Port Indian Pump Station
- Chestnut Avenue Pump Station
- Halford Hills Pump Station

1. Rittenhouse Pump Station: Originally constructed in 1965, was comprised of three (3)-75 hp pumps, each capable of 1,750 gpm. The pump station was configured in a wet/well dry well orientation. This station was upgraded circa 1983 and 1995, each time with larger pumps to accommodate additional flow. A new submersible pump station with an emergency generator was constructed in 2015 on the same site. The firm pumping capacity for the new pump station is 3,680 gallons per minute (gpm) (5.3 mgd) with two pumps operating. The system has a standard alarm system with a dialer to notify the Township of any problems.
2. Whitehall Pump Station: Constructed in 1965, is comprised of three (3)-60 hp pumps, each capable of 950 gpm. This station was upgraded in 1995 with pumps relocated from Rittenhouse Pump Station, each pump is 100 hp and capable of 1,750 gpm as part of the upgrade. PA DEP Water Quality Management (WQM) permit application for Whitehall Pump Station is approved. Project is currently on hold until funding is available.
3. Forrest Avenue Pump Station: Constructed in the 1960s, was comprised of two (2)-50 hp pumps, each capable of 600 gpm. This station was upgraded in the 1980s with the addition of an emergency generator. Pumps have been rebuilt in 2013. The station was renovated in 2021 for safety concerns and replaced with two (2)-15 hp pumps, each capable of 600 gpm.
4. Port Indian Pump Station: Constructed in the 1990s, is comprised of two (2)-40 hp pumps, each capable of 1,000 gpm. Pumps have been rebuilt in 2013.
5. Chestnut Avenue Pump Station: Constructed in the 1970s, is comprised of two (2)-15 hp pumps, each capable of 150 gpm. This pump station was replaced in 2004 with a new station with two (2)-20 pumps, capable of 180 gpm and an emergency generator.
6. Halford Hills Pump Station: Constructed in the 1970s, is comprised of two (2)-5 hp pumps, each capable of 25 gpm.

The following tables represent pump run times and flows for the six (6) collection system pump stations operated by the Township. Flow data has been included in the appendices to show the five (5) year summary of Rittenhouse Pump Station and Jackson Street flows to NMWA.

**ATTACHMENT D**  
**PUMP STATION INFORMATION**

## PUMP STATION INFORMATION

The Township owns and maintains six (6) pump stations within the existing collection system:

- Rittenhouse Pump Station
- Whitehall Pump Station
- Forrest Avenue Pump Station
- Port Indian Pump Station
- Chestnut Avenue Pump Station
- Halford Hills Pump Station

1. Rittenhouse Pump Station: Originally constructed in 1965, was comprised of three (3)-75 hp pumps, each capable of 1,750 gpm. The pump station was configured in a wet/well dry well orientation. This station was upgraded circa 1983 and 1995, each time with larger pumps to accommodate additional flow. A new submersible pump station with an emergency generator was constructed in 2015 on the same site. The firm pumping capacity for the new pump station is 3,680 gallons per minute (gpm) (5.3 mgd) with two pumps operating. The system has a standard alarm system with a dialer to notify the Township of any problems.
2. Whitehall Pump Station: Constructed in 1965, is comprised of three (3)-60 hp pumps, each capable of 950 gpm. This station was upgraded in 1995 with pumps relocated from Rittenhouse Pump Station, each pump is 100 hp and capable of 1,750 gpm as part of the upgrade. PA DEP Water Quality Management (WQM) permit application for Whitehall Pump Station is approved. Project is currently on hold until funding is available.
3. Forrest Avenue Pump Station: Constructed in the 1960s, was comprised of two (2)-50 hp pumps, each capable of 600 gpm. This station was upgraded in the 1980s with the addition of an emergency generator. Pumps have been rebuilt in 2013. The station was renovated in 2021 for safety concerns and replaced with two (2)-15 hp pumps, each capable of 600 gpm.
4. Port Indian Pump Station: Constructed in the 1990s, is comprised of two (2)-40 hp pumps, each capable of 1,000 gpm. Pumps have been rebuilt in 2013.
5. Chestnut Avenue Pump Station: Constructed in the 1970s, is comprised of two (2)-15 hp pumps, each capable of 150 gpm. This pump station was replaced in 2004 with a new station with two (2)-20 pumps, capable of 180 gpm and an emergency generator.
6. Halford Hills Pump Station: Constructed in the 1970s, is comprised of two (2)-5 hp pumps, each capable of 25 gpm.

The following tables represent pump run times and flows for the six (6) collection system pump stations operated by the Township. Flow data has been included in the appendices to show the five (5) year summary of pump station flows for each pumping station.

**ATTACHMENT D  
TABLE 4  
PUMP STATION INFORMATION  
WEST NORRITON TOWNSHIP  
2021**

Name and Location of Pumping Station	Installation / Expansion Date	Number of Pumps	Pump Manufacturer	Drive Type	Capacity (gpm) each Pump	Maximum Pumping Capacity	Flow Meter	Standby Generator	Estimated Connected EDUs	Flow (mgd) 2021 Monthly Average / Peak	Additional EDUs Projected in Next 2 Years	Projected Flow in Next 2 Years (mgd) Average / Peak
Rittenhouse Boulevard	2015	3	Fairbanks-Morse	Variable	2500 gpm @124 ft. TDH	3,680 gpm - 5.3 mgd with 2 pumps	Yes	Yes	3,198	2.261 / 3.160	0 EDUs / 0 gpd / 0.000 mgd	2.261 / 3.160
Chestnut Avenue	2004	2	Hydromatic	Fixed	180 gpm @30 ft. TDH	180 gpm - 0.259 mgd	Yes	Yes	280	0.074 / 0.100	0 EDUs / 0 gpd / 0.000 mgd	0.074 / 0.100
Whitehall Road	1994	3	Fairbanks-Morse	Variable	1750 gpm @220 ft. TDH	2625 gpm - 3.78 mgd with 2 pumps	Yes	Yes	1,588	0.611 / 0.922	18 EDUs / 5,130 gpd / 0.005 mgd	0.616 / 0.927
Forest Avenue	2021	2	Fairbanks Nijhuis	Fixed	600 gpm @63 ft. TDH	600 gpm - 0.864 mgd	Yes	Yes	530	0.147 / 0.225	0 EDUs / 0 gpd / 0.000 mgd	0.147 / 0.225
Port Indian Road	1999	2	Fairbanks-Morse	Fixed	1000 gpm @113 ft. TDH	1000 gpm - 1.44 mgd	Yes	Yes	1,230	0.393 / 0.663	0 EDUs / 0 gpd / 0.000 mgd	0.393 / 0.663
Halford Hills	1995	2	Hydromatic	Fixed	25 gpm @50 ft. TDH	25 gpm - 0.036 mgd	No	No	10	0.0021 / 0.0025	0 EDUs / 0 gpd / 0.000 mgd	0.0021 / 0.0025

1 EDU = 285 gpd

**TABLE 5**  
**PUMP STATIONS MONTHLY AVERAGE DAILY FLOWS**  
**WEST NORRITON TOWNSHIP**  
**2021**

<b>Month</b>	<b>Rittenhouse Blvd (gpd)</b>	<b>Whitehall Road (gpd)</b>	<b>Port Indian Road (gpd)</b>	<b>Forest Avenue (gpd)</b>	<b>Chestnut Avenue (gpd)</b>	<b>Halford Hills (gpd)</b>
January	2,397,567	606,587	394,483	168,480	67,823	2,145
February	2,798,142	829,836	597,025	193,800	96,461	2,175
March	3,159,677	921,565	662,774	225,000	99,555	2,200
April	2,263,223	667,570	413,851	180,000	78,347	2,250
May	1,861,710	513,048	291,834	118,800	62,526	2,200
June	2,249,900	536,610	355,917	132,000	66,670	1,900
July	2,204,000	538,171	306,558	99,600	65,110	2,000
August	2,036,968	618,123	305,319	132,600	69,494	1,925
September	2,917,066	582,283	491,507	166,200	82,500	2,525
October	1,963,161	537,552	272,895	125,400	66,603	1,925
November	1,787,767	510,723	398,642	118,200	65,837	2,075
December	1,495,697	480,545	229,688	105,600	62,630	2,175
<b>Average</b>	2,261,240	611,884	393,374	147,140	73,630	2,125

# 2021 Chestnut Avenue Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2021 - 2/1/2021	109.75	3.66	129.97	4.33	2,034,700	67,823
2/1/2021 - 3/1/2021	133.25	4.77	184.20	6.58	2,700,900	96,461
3/1/2021 - 4/1/2021	154.37	4.98	213.20	6.88	3,086,200	99,555
4/1/2021 - 5/1/2021	112.24	3.73	157.13	5.23	2,350,400	78,347
5/1/2021 - 6/1/2021	94.80	3.07	129.60	4.18	1,938,300	62,526
6/1/2021 - 7/1/2021	96.43	3.22	133.80	4.47	2,000,100	66,670
7/1/2021 - 8/1/2021	101.68	3.28	128.23	4.13	2,018,400	65,110
8/1/2021 - 9/1/2021	104.27	3.35	137.70	4.43	2,154,300	69,494
9/1/2021 - 10/1/2021	127.33	4.25	170.79	5.68	2,475,000	82,500
10/1/2021 - 11/1/2021	104.47	3.37	135.20	4.35	2,064,700	66,603
11/1/2021 - 12/1/2021	103.45	3.45	134.10	4.47	1,975,100	65,837
12/1/2021 - 1/1/2022	104.58	3.17	140.52	4.25	2,066,800	62,630
					<b>Annual Average Month</b>	<b>73,630</b>
					<b>Peak Month</b>	<b>99,555</b>
					<b>Peaking Factor</b>	<b>1.35</b>

# 2021 Whitehall Road Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP #3		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2021 - 2/1/2021	226.70	7.56	238.90	7.96	249.40	8.31	18,197,600	606,587
2/1/2021 - 3/1/2021	235.80	8.42	232.00	8.28	253.80	9.07	23,235,400	829,836
3/1/2021 - 4/1/2021	117.10	3.78	567.80	18.32	103.10	6.87	28,568,500	921,565
4/1/2021 - 5/1/2021	1.20	0.20	358.20	11.93	396.90	13.23	20,027,100	667,570
5/1/2021 - 6/1/2021	147.00	7.35	236.40	7.63	316.40	10.20	15,904,500	513,048
6/1/2021 - 7/1/2021	290.52	9.68	244.20	8.13	133.10	4.43	16,098,300	536,610
7/1/2021 - 8/1/2021	267.90	8.60	257.00	8.65	245.10	7.92	16,683,300	538,171
8/1/2021 - 9/1/2021	269.80	8.70	294.80	9.50	319.70	10.32	19,161,800	618,123
9/1/2021 - 10/1/2021	203.00	6.77	373.60	12.45	141.70	8.33	17,468,500	582,283
10/1/2021 - 11/1/2021	245.10	7.90	433.90	14.00	64.20	7.13	16,664,100	537,552
11/1/2021 - 12/1/2021	241.40	8.05	480.00	16.00	0.00	0.00	15,321,700	510,723
12/1/2021 - 1/1/2022	531.50	16.10	0.00	0.00	259.50	7.85	15,858,000	480,545
<b>Annual Average Month</b>							611,884	
<b>Peak Month</b>							921,565	
<b>Peaking Factor</b>							1.51	

Months	Comments
January	Pump #2 returned to service. Comminutor out of service
April	Pump #1 taken out of service 4/6. New heater installed.
May	Pump #1 back online. Pump #3 fail, started next day. New comminutor is needed.
June	Pump #3 out of service 6/8 - 6/18. New air compressor installed on Pump #3 on 6/18.
July - October	New comminutor needed. Stairwell railings need to be fixed.
October	Pump #3 pulled for repair 10/9
November	Pump #3 out of service.
December	Pump #3 back in service 12/1. Pump #2 out of service.

# 2021 Port Indian Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLON	GAL/DAY
1/1/2021 - 2/1/2021	130.39	4.35	117.20	3.91	11,834,500	394,483
2/1/2021 - 3/1/2021	174.61	6.25	152.25	5.45	16,716,700	597,025
3/1/2021 - 4/1/2021	225.85	7.28	194.11	6.25	20,546,000	662,774
4/1/2021 - 5/1/2021	156.36	5.22	109.71	3.67	12,415,540	413,851
5/1/2021 - 6/1/2021	96.85	3.12	78.07	2.52	9,046,851	291,834
6/1/2021 - 7/1/2021	101.73	3.38	91.00	3.03	10,077,500	355,917
7/1/2021 - 8/1/2021	177.85	5.73	14.60	2.92	9,503,300	306,558
8/1/2021 - 9/1/2021	188.73	6.10	0	0	9,464,900	305,319
9/1/2021 - 10/1/2021	277.36	9.18	0	0	14,745,200	491,507
10/1/2021 - 11/1/2021	104.16	3.37	56.99	2.47	8,459,746	272,895
11/1/2021 - 12/1/2021	83.11	2.77	71.36	2.38	11,959,246	398,642
12/1/2021 - 1/1/2022	83.58	2.53	70.58	2.13	7,579,711	229,688
<b>Annual Average Month</b>						<b>393,374</b>
<b>Peak Month</b>						<b>662,774</b>
<b>Peaking Factor</b>						<b>1.68</b>

Date	Comments
July - October	Pump #2 out of service 7/7, return to service 10/8.

# 2021 Forest Avenue Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1			PUMP #2			PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	GALLON	GAL/DAY
1/1/2021 - 2/1/2021	140.40	4.68	168,480	0.00	0.00	0	5,054,400	168,480
2/1/2021 - 3/1/2021	150.60	5.38	193,800	0.00	0.00	0	5,421,600	193,800
3/1/2021 - 4/1/2021	194.00	6.25	225,000	0.00	0.00	0	6,984,000	225,000
4/1/2021 - 5/1/2021	143.40	4.78	172,200	6.50	0.22	7,800	5,396,400	180,000
5/1/2021 - 6/1/2021	102.10	3.30	118,800	0.00	0.00	0	3,675,600	118,800
6/1/2021 - 7/1/2021	109.70	3.67	132,000	0.00	0.00	0	3,949,200	132,000
7/1/2021 - 8/1/2021	53.70	1.73	62,400	10.30	1.03	37,200	2,304,000	99,600
8/1/2021 - 9/1/2021	53.10	1.70	61,200	61.30	1.98	71,400	4,118,400	132,600
9/1/2021 - 10/1/2021	70.80	2.33	84,000	69.40	2.28	82,200	5,047,200	166,200
10/1/2021 - 11/1/2021	53.70	1.73	62,400	51.10	1.75	63,000	3,772,800	125,400
11/1/2021 - 12/1/2021	49.60	1.65	59,400	49.20	1.63	58,800	3,556,800	118,200
12/1/2021 - 1/1/2022	48.70	1.48	53,400	48.20	1.45	52,200	3,488,400	105,600
<b>Annual Average Month</b>							<b>147,140</b>	
<b>Peak Month</b>							<b>225,000</b>	
<b>Peaking Factor</b>							<b>1.53</b>	

Months	Comments
January - May	Pump #2 out for service.
April	Pump #2 in service 4/9-4/11 while Pump #1 cleaned
July	New generator in service
September	Pumps tripped out with Hurricane Ida, but didn't call for pump failure alarm

# 2021 Halford Hills Estates Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1			PUMP #2			PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GAL/DAY	GALLON	GAL/DAY
1/1/2021 - 2/1/2021	27.85	0.93	1,395	14.94	0.50	750	64,185	2,145
2/1/2021 - 3/1/2021	25.99	0.93	1,400	14.41	0.52	775	60,600	2,175
3/1/2021 - 4/1/2021	29.05	0.93	1,400	16.55	0.53	800	68,400	2,200
4/1/2021 - 5/1/2021	29.24	0.97	1,450	16.12	0.53	800	68,040	2,250
5/1/2021 - 6/1/2021	29.15	0.95	1,425	15.83	0.52	775	67,475	2,200
6/1/2021 - 7/1/2021	26.38	0.78	1,175	14.27	0.48	725	60,975	1,900
7/1/2021 - 8/1/2021	27.08	0.87	1,300	14.70	0.47	700	62,675	2,000
8/1/2021 - 9/1/2021	25.45	0.82	1,225	14.44	0.47	700	59,835	1,925
9/1/2021 - 10/1/2021	30.26	1	1,500	21.68	0.68	1,025	77,910	2,525
10/1/2021 - 11/1/2021	25.98	0.83	1,250	14.33	0.45	675	60,465	1,925
11/1/2021 - 12/1/2021	26.64	0.88	1,325	15.26	0.50	750	62,850	2,075
12/1/2021 - 1/1/2022	30.60	0.93	1,400	17.10	0.52	775	71,550	2,175
<b>Annual Average Month</b>								<b>2,125</b>
<b>Peak Month</b>								<b>2,525</b>
<b>Peaking Factor</b>								<b>1.19</b>

# 2021 Rittenhouse Pump Station Annual Report

West Norriton Township  
Montgomery County, Pennsylvania

PERIODS	PUMP #1		PUMP #2		PUMP #3		PUMP STATION TOTAL FLOW	
	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	TOTAL RUN HOURS	AVE HOURS/DAY	GALLONS	GAL/DAY
1/1/2021 - 2/1/2021	233.00	7.77	232.60	7.75	224.40	7.48	71,927,000	2,397,567
2/1/2021 - 3/1/2021	279.10	9.97	266.10	9.50	272.30	9.72	78,348,000	2,798,142
3/1/2021 - 4/1/2021	334.20	10.78	315.30	10.17	312.70	10.08	97,950,000	3,159,677
4/1/2021 - 5/1/2021	128.40	6.77	293.00	9.77	282.30	9.42	67,896,700	2,263,223
5/1/2021 - 6/1/2021	0.00	0.00	309.60	9.98	299.70	9.67	57,713,000	1,861,710
6/1/2021 - 7/1/2021	0.00	0.00	334.70	11.17	329.30	10.98	67,497,000	2,249,900
7/1/2021 - 8/1/2021	0.00	0.00	350.80	11.32	337.40	10.88	68,323,000	2,204,000
8/1/2021 - 9/1/2021	0.00	0.00	322.9	10.42	321.5	10.37	63,146,000	2,036,968
9/1/2021 - 10/1/2021	0.00	0.00	386.4	12.85	392.6	13.05	87,512,000	2,917,066
10/1/2021 - 11/1/2021	0.00	0.00	323.60	10.43	318.60	10.28	60,858,000	1,963,161
11/1/2021 - 12/1/2021	0.00	0.00	326.40	10.88	412.00	13.73	53,633,000	1,787,767
12/1/2021 - 1/1/2022	0.00	0.00	221.50	6.70	513.20	15.55	49,358,000	1,495,697
<b>Annual Average Month</b>								<b>2,261,240</b>
<b>Peak Month</b>								<b>3,159,677</b>
<b>Peaking Factor</b>								<b>1.40</b>

Months	Comments
March	Pump #3 taken out of service on 3/15.
April	VFD fault and Pump #1 taken out of service 4/19
May-November	New comminutor is needed.

**ATTACHMENT E**  
**MONTHLY ADF TO NMWA**

**Table 6  
2021 TOTAL FLOW TO NORRISTOWN  
WEST NORRITON TOWNSHIP**

<b>Average Daily Flow</b>	<b>Rittenhouse Blvd Pump Station (gpd)</b>	<b>Jackson Street Pit (gpd)</b>	<b>Total Flow to Norristown (gpd)</b>
January	2,397,567	249,287	2,646,854
February	2,798,142	297,296	3,095,438
March	3,159,677	520,939	3,680,616
April	2,263,223	406,403	2,669,626
May	1,861,710	322,313	2,184,023
June	2,249,900	216,143	2,466,043
July	2,204,000	216,429	2,420,429
August	2,036,968	255,432	2,292,400
September	2,917,066	230,053	3,147,119
October	1,963,161	400,671	2,363,832
November	1,787,767	258,747	2,046,514
December	1,495,697	315,809	1,811,506
<b>Average total flow (gpd)</b>	<b>27,134,878</b>	<b>3,689,522</b>	<b>30,824,400</b>
<b>Average Daily Flow (gpd)</b>	<b>2,261,240</b>	<b>307,460</b>	<b>2,568,700</b>

**Table 7**  
**Average Daily Flow to NMWA (2008 to 2021)**  
**West Norriton Township**

**Rittenhouse Pump Station**

Month	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	1,140,058	1,456,990	1,463,313	829,881	1,631,760	1,708,296	1,847,377	1,765,629	1,418,064	1,316,032	1,545,870	3,335,826	2,397,567
February	1,766,872	559,437	1,722,096	1,505,254	1,204,106	1,603,490	3,119,342	1,649,457	2,902,034	1,270,321	3,219,714	3,161,036	2,798,142
March	1,846,990	515,907	2,755,964	2,072,793	1,304,838	1,684,645	233,590	2,617,167	1,724,129	1,829,354	3,624,032	3,391,649	3,159,677
April	977,496	544,155	1,361,187	1,515,407	1,724,400	1,310,723	2,577,086	3,009,310	1,401,366	1,710,233	2,449,800	2,535,270	2,263,223
May	1,196,496	540,160	778,958	1,063,490	1,660,581	1,212,654	2,603,622	1,071,816	1,766,419	1,650,709	2,658,733	2,920,500	1,861,710
June	858,186	576,791	637,826	551,286	1,411,733	2,491,360	1,517,076	1,598,126	1,128,400	1,748,633	2,992,933	3,015,833	2,249,900
July	1,008,148	571,476	806,335	503,868	1,160,841	1,681,932	1,037,000	1,751,812	1,043,032	1,770,258	2,438,613	2,190,839	2,204,000
August	611,941	1,197,658	764,652	1,320,574	1,297,906	1,549,880	931,329	1,026,774	887,709	1,719,645	3,143,258	1,741,565	2,036,968
September	1,086,073	1,130,403	696,443	2,465,300	1,538,583	980,463	966,586	1,425,910	986,100	1,399,866	3,051,066	1,366,483	2,917,066
October	953,025	1,310,132	955,535	1,613,858	1,481,161	1,054,687	971,709	1,240,903	897,483	1,380,613	2,607,935	1,663,258	1,963,161
November	1,012,316	1,013,466	753,803	1,322,593	1,372,833	1,012,422	1,245,956	953,266	1,054,833	1,607,500	3,822,066	2,001,922	1,787,767
December	1,922,929	2,076,363	896,903	2,257,632	1,686,839	1,855,090	1,643,680	1,680,290	1,350,677	1,486,967	3,146,064	2,705,495	1,495,697
<b>Total flow (gpd)</b>	<b>14,380,530</b>	<b>11,492,938</b>	<b>13,593,015</b>	<b>17,021,936</b>	<b>17,475,581</b>	<b>18,145,642</b>	<b>18,694,353</b>	<b>19,790,460</b>	<b>16,560,246</b>	<b>18,890,131</b>	<b>34,700,084</b>	<b>30,029,675</b>	<b>27,134,878</b>
<b>Average daily (gpd)</b>	<b>1,198,378</b>	<b>957,745</b>	<b>1,132,751</b>	<b>1,418,495</b>	<b>1,456,298</b>	<b>1,512,137</b>	<b>1,557,863</b>	<b>1,649,205</b>	<b>1,380,021</b>	<b>1,574,178</b>	<b>2,891,674</b>	<b>2,502,473</b>	<b>2,261,240</b>

**Jackson Street**

Month	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	790,335	769,226	957,096	926,654	774,271	501,065	549,006	465,968	321,458	465,968	380,893	167,535	249,287
February	778,410	702,625	984,242	1,181,932	627,951	324,078	381,053	357,029	370,917	357,029	358,636	228,871	297,296
March	939,700	634,481	1,199,387	1,382,040	441,216	293,412	455,265	413,816	357,858	413,816	305,284	264,713	520,939
April	891,593	787,590	1,057,330	1,107,757	404,566	293,516	363,277	418,336	391,640	418,336	282,746	226,526	406,403
May	976,874	799,035	844,048	821,629	315,281	422,419	333,000	401,526	366,465	401,526	454,340	264,794	322,313
June	737,986	818,420	810,590	910,306	42,916	422,650	402,150	374,006	422,190	374,006	291,976	234,052	216,143
July	572,561	711,158	721,716	780,844	359,752	314,109	427,270	382,194	299,829	382,194	278,948	280,426	216,429
August	730,770	919,719	604,587	965,958	318,684	509,303	437,970	392,509	427,322	392,509	338,738	268,497	255,432
September	519,453	841,158	749,493	921,690	198,200	494,650	368,222	405,593	399,580	405,593	293,736	270,903	230,053
October	605,374	914,658	944,132	629,923	264,568	387,968	393,510	292,897	311,125	292,897	223,765	256,116	400,671
November	723,646	865,060	899,283	1,031,928	356,193	348,340	336,196	321,070	314,900	321,070	309,236	122,233	258,747
December	839,361	1,062,719	962,383	599,409	381,393	405,984	416,813	287,471	405,265	287,471	276,477	138,516	315,809
<b>Total flow (gpd)</b>	<b>9,106,063</b>	<b>9,825,849</b>	<b>10,734,287</b>	<b>11,260,070</b>	<b>4,484,991</b>	<b>4,717,494</b>	<b>4,863,732</b>	<b>4,512,415</b>	<b>4,388,549</b>	<b>4,512,415</b>	<b>3,794,775</b>	<b>2,723,182</b>	<b>3,689,522</b>
<b>Average daily (gpd)</b>	<b>758,839</b>	<b>818,821</b>	<b>894,524</b>	<b>938,339</b>	<b>373,749</b>	<b>393,125</b>	<b>405,311</b>	<b>376,035</b>	<b>365,712</b>	<b>376,035</b>	<b>316,231</b>	<b>226,932</b>	<b>307,460</b>

**Rainfall**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Average daily to NMWA (gpd)</b>	1,957,216	1,776,566	2,027,275	2,356,834	1,830,048	1,905,261	1,963,174	2,025,240	1,745,733	1,950,212	3,207,905	2,729,405	2,568,700
<b>Total precipitation (inch)</b>	41.78	48.17	44.06	54.19	44.56	49.64	39.99	23.59	38.12	39.12	74.62	75.62	57.18

\* 2015 Precipitation from www.accuweather.com for 19403

\*\*2016-2020 precipitation from NMWA

**ATTACHMENT F**  
**INDUSTRIAL WASTES**

## **INDUSTRIAL WASTES**

All industrial wastes is required to meet the Industrial Pretreatment Standards of NWMA.

**ATTACHMENT G**  
**FLOW METER CALIBRATION REPORTS**

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

SERVICE DATE: 6/22/2021  
METER#: C2000 AA  
LOCATION: JACKSON STREET  
SERIAL #: 45048050/AKI000950  
MANUFACTURER: KROHNE/ PARTLOW  
RECORDER: MRC5000  
TRANSMITTER: OPTISOUND  
PRIMARY: 9" PARSHALL FLUME  
MAXIMUM CAPACITY: 3.5 MGD  
SERVICE CONTRACT: QUARTERLY

---

**\*WORK PERFORMED\***

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\***      CHECKED AT: 0, 25, 50 & 100%  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TOTALIZER CALIBRATION\***      CHECKED AT: 0, 25, 50 & 100%  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TRANSMITTER CALIBRATION\***

FLOW MEASUREMENTS  
ERROR: 0%      CORRECTED ACCURACY: ±1%

---

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: DAVID MOORE      PERSON SEEN: TONY TUSKI  
copies-

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

**SERVICE DATE:** 6/22/2021  
**METER#:** C2000 AB  
**LOCATION:** RITTENHOUSE PUMP STATION  
**SERIAL #:** 356807  
**MANUFACTURER:** SPARLING/CHESELL  
**RECORDER:** 392  
**TRANSMITTER:** FM656-185-1A3-0  
**PRIMARY:** MAG  
**MAXIMUM CAPACITY:** 10,000 GPM  
**SERVICE CONTRACT:** QUARTERLY

---

**\*WORK PERFORMED\***

**CLEANED EQUIPMENT:** X    **PRIMARY:** X

**\*RECORDER CALIBRATION\***    **CHECKED AT:** 0, 25, 50 & 100%  
**ERROR:** 0%    **CORRECTED ACCURACY:** ±1%

**\*TOTALIZER CALIBRATION\***    **CHECKED AT:** OPERATING RATE  
**ERROR:** 0%    **CORRECTED ACCURACY:** ±1%

**\*TRANSMITTER CALIBRATION\***  
INTERNAL SIMULATION  
**ERROR:** 0%    **CORRECTED ACCURACY:** ±1%

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**COMMENTS:** LEFT EQUIPMENT OPERATING PROPERLY.

**SERVICE REPRESENTATIVE:** DAVID MOORE    **PERSON SEEN:** TONY TUSKI  
copies-

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

**SERVICE DATE:** 6/22/2021  
**METER#:** C2000 AC  
**LOCATION:** WHITEHALL ROAD  
**SERIAL #:** 8503A0455  
**MANUFACTURER:** FISCHER & PORTER  
**RECORDER:** 51C1102DZ  
**TRANSMITTER:** 50PZ1112  
**PRIMARY:** MAG X  
**MAXIMUM CAPACITY:** 3,000 GPM  
**SERVICE CONTRACT:** QUARTERLY

---

**\*WORK PERFORMED\***

**CLEANED EQUIPMENT:** X      **PRIMARY:** X

**\*RECORDER CALIBRATION\***    **CHECKED AT:** 0, 15, 50 & 80%  
**ERROR:** 0%      **CORRECTED ACCURACY:** ±1%

**\*TOTALIZER CALIBRATION\***    **CHECKED AT:** 0, 15, 50 & 80%  
**ERROR:** 0%      **CORRECTED ACCURACY:** ±1%

**\*TRANSMITTER CALIBRATION\***  
0, 15, 50 & 80%  
**ERROR:** 0%      **CORRECTED ACCURACY:** ±1%

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**COMMENTS:** LEFT EQUIPMENT OPERATING PROPERLY.

**SERVICE REPRESENTATIVE:** DAVID MOORE    **PERSON SEEN:** TONY TUSKI  
copies-

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

SERVICE DATE: 6/22/2021  
METER#: C2000 AD  
LOCATION: PORT INDIAN  
SERIAL #: 160612-FA-18621692  
MANUFACTURER: F&P / OMEGA  
RECORDER: 1392  
TRANSMITTER: FDT-21W  
PRIMARY: 8 INCH  
MAXIMUM CAPACITY: 1500 GPM  
SERVICE CONTRACT: QUARTERLY

---

**\*WORK PERFORMED\***

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\***      CHECKED AT: 0, 25, 50 & 100%  
ERROR: 0%      CORRECTED ACCURACY:  $\pm 1\%$

**\*TOTALIZER CALIBRATION\***      CHECKED AT: 0, 50 & 100%  
ERROR: 0%      CORRECTED ACCURACY:  $\pm 1\%$

**\*TRANSMITTER CALIBRATION\***  
CHECKED OUTPUT AT ZERO FLOW  
ERROR: 0%      CORRECTED ACCURACY:  $\pm 1\%$

---

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: DAVID MOORE      PERSON SEEN: TONY TUSKI  
copies-

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

SERVICE DATE: 6/22/2021  
METER#: C2000 AE  
LOCATION: CHESTNUT STREET  
SERIAL #: N28401/20/4  
MANUFACTURER: ABB  
RECORDER: 1900 COMMANDER  
TRANSMITTER: MAGMASTER  
PRIMARY: 4 INCH  
MAXIMUM CAPACITY: 500 GPM  
SERVICE CONTRACT: QUARTERLY

---

**\*WORK PERFORMED\***

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\***      CHECKED AT: 0, 25, 50 & 100%  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TOTALIZER CALIBRATION\***      CHECKED AT: ZERO & FLOW RATE  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TRANSMITTER CALIBRATION\***  
CHECKED OUTPUT AT ZERO & FLOW RATE  
ERROR: 0%      CORRECTED ACCURACY: ±1%

---

COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: DAVID MOORE      PERSON SEEN: TONY TUSKI  
copies-

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 940-1987

**\*\*\*SERVICE REPORT\*\*\***

WEST NORRITON  
1630 WEST MARSHALL  
JEFFERSONVILLE, PA 19403

**SERVICE DATE:** 6/22/2021  
**METER#:** C2000 AF  
**LOCATION:** MONTGOMERY STREET  
**SERIAL #:** US21223-001-01-01-37-07  
**MANUFACTURER:** E & H/ CHESSELL  
**RECORDER:** 392  
**TRANSMITTER:** FMU 90  
**PRIMARY:** 90° V-NOTCH  
**MAXIMUM CAPACITY:** 1,000 GPM  
**SERVICE CONTRACT:** QUARTERLY

---

**\*WORK PERFORMED\***

**CLEANED EQUIPMENT:** X      **PRIMARY:** X

**\*RECORDER CALIBRATION\***    **CHECKED AT:** 0,25,50,75,& 100%  
**ERROR:** 0%      **CORRECTED ACCURACY:** ±1%

**\*TOTALIZER CALIBRATION\***    **CHECKED AT:** 0,25,50,75, & 100%  
**ERROR:** 0%      **CORRECTED ACCURACY:** ± 1%

**\*TRANSMITTER CALIBRATION\***  
FLOW MEASUREMENTS  
**ERROR:** 0%      **CORRECTED ACCURACY:** ± 1%

---

**COMMENTS:** LEFT EQUIPMENT OPERATING PROPERLY.

**SERVICE REPRESENTATIVE:** DAVID MOORE    **PERSON SEEN:** TONY TUSKI  
copies-

## **APPENDIX 3**

### **PNDI Documentation**

## 1. PROJECT INFORMATION

Project Name: **West Norriton Township Act 537 Planning Update**

Date of Review: **12/12/2022 09:02:45 AM**

Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewage module/Act 537 plan**

Project Area: **4,101.17 acres**

County(s): **Montgomery**

Township/Municipality(s): **BRIDGEPORT; EAST NORRITON TOWNSHIP; LOWER PROVIDENCE TOWNSHIP; NORRISTOWN; UPPER MERION TOWNSHIP; WEST NORRITON TOWNSHIP; WORCESTER TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **COLLEGEVILLE; LANSDALE; NORRISTOWN; VALLEY FORGE**

Watersheds HUC 8: **Schuylkill**

Watersheds HUC 12: **Mingo Creek-Schuylkill River; Plymouth Creek-Schuylkill River; Stony Creek**

Decimal Degrees: **40.130277, -75.379396**

Degrees Minutes Seconds: **40° 7' 48.9985" N, 75° 22' 45.8248" W**

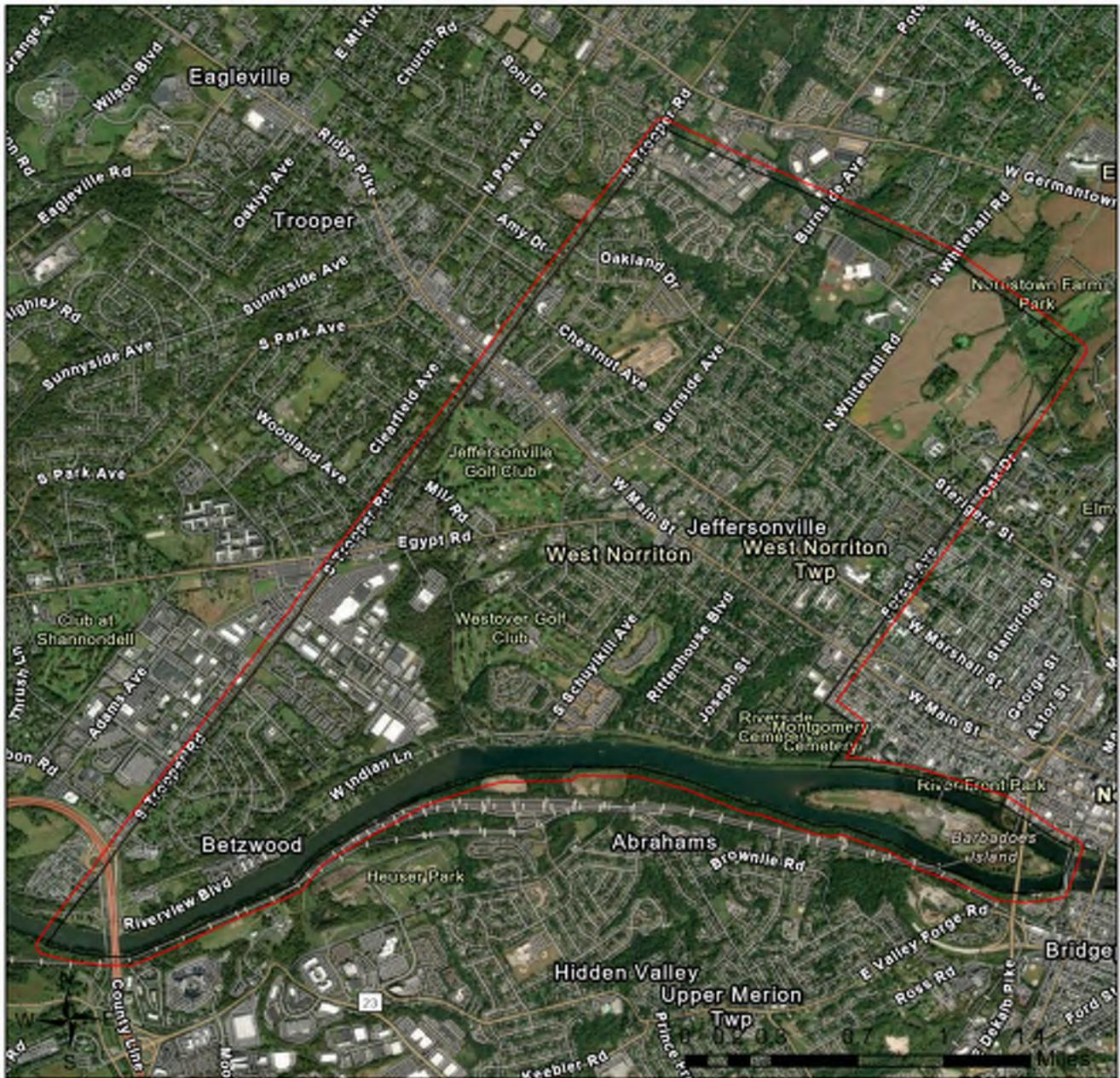
This is a draft receipt for information only. It has not been submitted to jurisdictional agencies for review.

## 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
PA Department of Conservation and Natural Resources	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
PA Fish and Boat Commission	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

### West Norriton Township Act 537 Planning Update

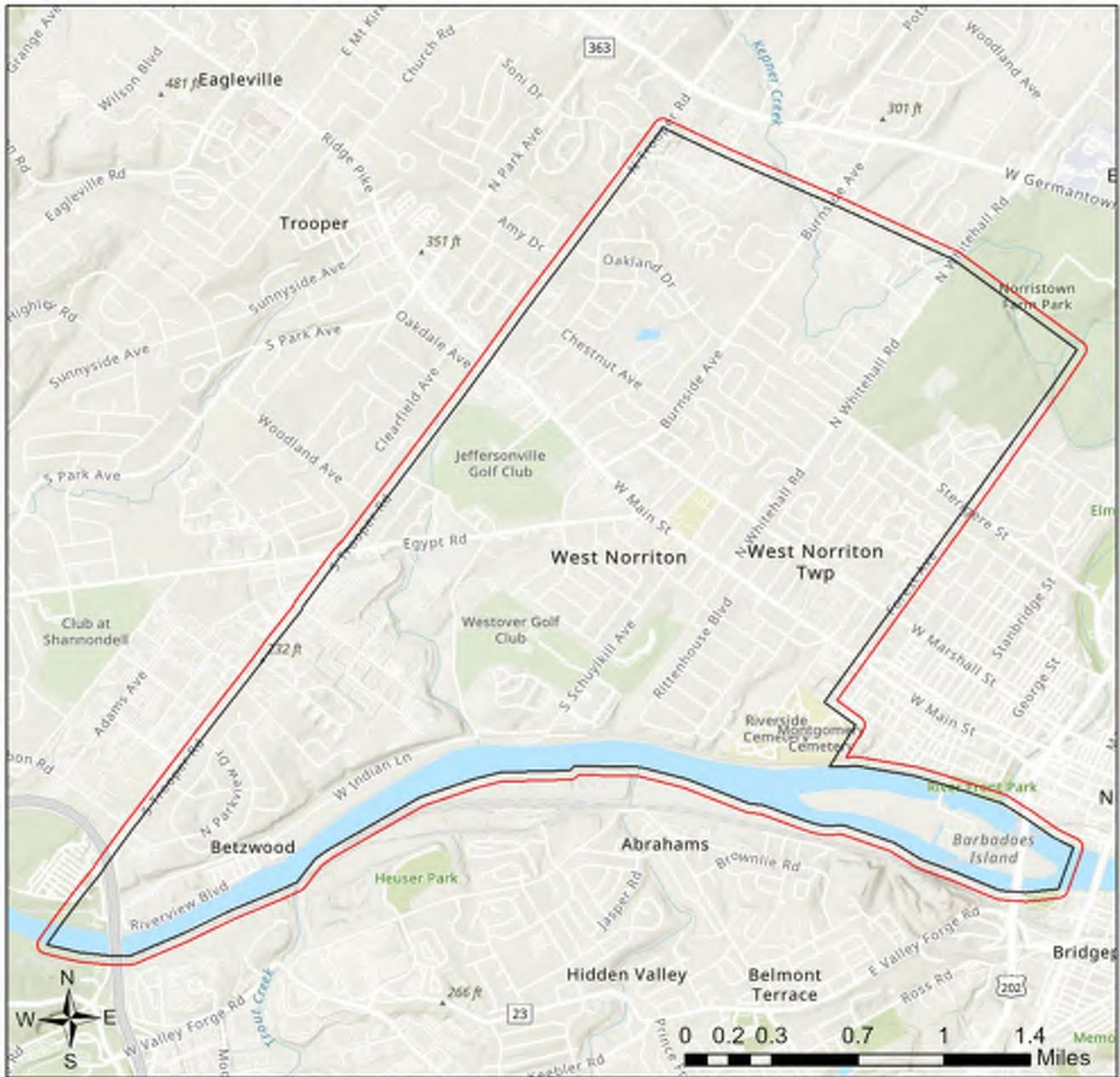


- Buffered Project Boundary
- Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, MMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

### West Norriton Township Act 537 Planning Update



- Buffered Project Boundary
- Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

## RESPONSE TO QUESTION(S) ASKED

**Q1:** Accurately describe what is known about wetland presence in the project area or on the land parcel. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

**Your answer is:** The project area (or land parcel) has not been investigated by someone qualified to identify and delineate wetlands (holding a natural resource degree or equivalent work experience), or it is currently unknown if the project or project activities will affect wetlands.

**Q2:** Aquatic habitat (stream, river, lake, pond, etc.) is located on or adjacent to the subject property and project activities (including discharge) may occur within 300 feet of these habitats?

**Your answer is:** Yes

### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

#### PA Game Commission

##### RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**PGC Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Falco peregrinus	Peregrine Falcon	Special Concern Species*

#### PA Department of Conservation and Natural Resources

##### RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**DCNR Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here:

<https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>)

Scientific Name	Common Name	Current Status	Proposed Status	Survey Window
Andropogon gyrans	Elliott's Beardgrass	Special Concern Species*	Special Concern Species*	Flowers September - October; flower structure September - May
Juncus biflorus	Grass-leaved Rush	Special Concern Species*	Special Concern Species*	Fruits July - early November
Scleria pauciflora	Few Flowered Nutrush	Threatened	Threatened	Fruits June - September

**PA Fish and Boat Commission**

**RESPONSE:**

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**PFBC Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Threatened

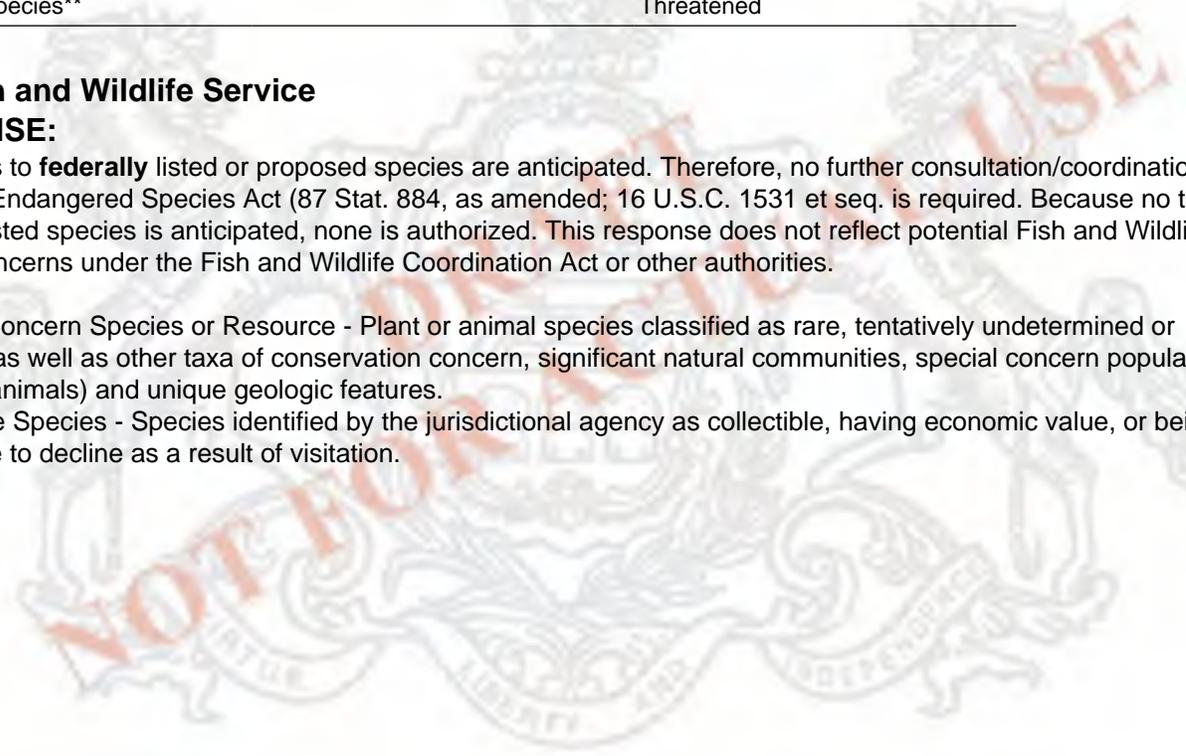
**U.S. Fish and Wildlife Service**

**RESPONSE:**

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

\* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

\*\* Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.



## WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload\* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

\*If information was requested by USFWS, applicants must email, or mail, project information to [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov) to initiate a review. USFWS will not accept uploaded project materials.

### Check-list of Minimum Materials to be submitted:

\_\_\_ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

\_\_\_ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

**In addition to the materials listed above, USFWS REQUIRES the following**

\_\_\_ **SIGNED** copy of a Final Project Environmental Review Receipt

### The inclusion of the following information may expedite the review process.

\_\_\_ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

\_\_\_ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

## 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

## 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page ([www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us)). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.



## **APPENDIX 4**

### **Opinion of Probable Costs**



GILMORE & ASSOCIATES, INC.  
ENGINEERING & CONSULTING SERVICES

**OPINION OF ALTERNATIVE PROJECT COSTS**

**Alternative 1**

**Continued Use of NMWA WWTP**

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Item No.	Construction Items	Units	Quantity	Unit Price	Total Amount
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*There are no proposed costs associated with construction improvements*

**NOTES:**

1. Prepared December 2022, with no revisions



**OPINION OF ALTERNATIVE PROJECT COSTS**  
**Alternative 2**  
**Regional WWTP in WNT**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Redirection of Rittenhouse Pump Station</b>					
1	Furnish & Install New Pumps	LS	1	\$ 750,000.00	\$ 750,000.00
2	Electrical Modifications	LS	1	\$ 250,000.00	\$ 250,000.00
3	Pump Station Site Modifications	LS	1	\$ 100,000.00	\$ 100,000.00
4	Prop. Force Main incl. Restoration (18" DIP)	LF	5,800	\$ 750.00	\$ 4,350,000.00
5	Abandonment of Existing Force Main	LS	1	\$ 50,000.00	\$ 50,000.00
				<b>Subtotal</b>	<b>\$ 5,500,000.00</b>
<b>Jackson Street Diversion Chamber</b>					
6	Jackson Street Diversion Chamber/Meter Pit Modifications/abandonment	LS	1	\$ 25,000.00	\$ 25,000.00
7	15" Dia. Pipe Replacement with 18" incl. Restoration (MH 277 to Diversion Chamber)	LF	1,200	\$ 650.00	\$ 780,000.00
8	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
9	Sanitary Manhole Replacement	EA	7	\$ 5,000.00	\$ 35,000.00
10	Montgomery Ave Meter Pit Abandonment	LS	1	\$ 25,000.00	\$ 25,000.00
				<b>Subtotal</b>	<b>\$ 965,000.00</b>
<b>Port Indian Pump Station</b>					
11	Sewage Pump Station Abandonment (complete)	LS	1	\$ 250,000.00	\$ 250,000.00
12	Force Main/Diversion Chamber Abandonment	LS	1	\$ 20,000.00	\$ 20,000.00
13	Sheridan Lane Meter Pit Abandonment	LS	1	\$ 5,000.00	\$ 5,000.00
14	Site Modifications from PS to gravity sewer	LS	1	\$ 50,000.00	\$ 50,000.00
				<b>Subtotal</b>	<b>\$ 325,000.00</b>
<b>Proposed WWTP</b>					
15	WWTP	LS	1	\$ 54,000,000.00	\$ 54,000,000.00
16	Easement/Property Acquisition (Estimate)	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
				<b>Subtotal</b>	<b>\$ 55,000,000.00</b>
				<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 61,790,000.00</b>
<b>Studeis, Engineering, Legal &amp; Administrative Costs</b>					
17	Phase 1 Archeological Study	LS	1	\$ 25,000.00	\$ 25,000.00
18	Turtle & Wetland Studies	LS	1	\$ 35,000.00	\$ 35,000.00
19	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 10,000,000.00	\$ 10,000,000.00
20	Construction Administration	LS	1	\$5,000,000.00	\$ 5,000,000.00
				<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>	<b>\$ 15,060,000.00</b>
				<b>10% Contingency</b>	<b>\$ 7,685,000.00</b>
				<b>Subtotal</b>	<b>\$ 84,535,000</b>
				<b>TOTAL PROBABLE PROJECT COST</b>	<b>\$ 85,000,000.00</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



**OPINION OF ALTERNATIVE PROJECT COSTS  
Alternative 3  
New/Expanded NMWA WWTP**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>WNT 100% Responsibility</b>					
<b>Rittenhouse Pump Station Force Main Extension</b>					
1	Existing 18" force main extension	LF	800	\$ 750.00	\$ 600,000.00
<b>Subtotal</b>					<b>\$ 600,000.00</b>
<b>WNT Shared Responsibility of WWTP</b>					
<b>New NMWA WWTP</b>					
2	New NMWA WWTP (10 MGD)	LS	1	\$ 120,000,000.00	\$ 120,000,000.00
3	Easement/Property Acquisition (Estimate)	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
<b>Subtotal</b>					<b>\$ 122,200,000.00</b>
<b>Studies, Engineering, Legal &amp; Administrative Costs</b>					
4	Phase 1 Archeological Study	LS	1	\$ 25,000.00	\$ 25,000.00
5	Turtle & Wetland Studies	LS	1	\$ 35,000.00	\$ 35,000.00
6	Design, Engineering, Legal, Administrative	LS	1	\$ 10,000,000.00	\$ 18,500,000.00
7	Construction Administration	LS	1	\$5,000,000.00	\$ 10,000,000.00
<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>					<b>\$ 28,560,000.00</b>
<b>10% Contingency</b>					<b>\$ 15,076,000.00</b>
<b>Subtotal</b>					<b>\$ 165,836,000</b>
<b>TOTAL PROBABLE PROJECT COST</b>					<b>\$ 166,000,000</b>
<b>WNT Cost</b>					<b>\$ 55,933,333</b>
<b>NMWA Cost</b>					<b>\$ 110,666,667</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes existing force main needs to be extended to discharge 800' to east of existing location to new site.
3. Assumes terms of current Agreement (WNT is responsible for 1/3 of all capital costs of NMWA WWTP plus force main extension)



**OPINION OF ALTERNATIVE PROJECT COSTS**  
**Alternative 4A**  
**Diversion to Bridgeport WWTP**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Jackson Street Pump Station</b>					
1	Proposed Pump Station and Valve Vault (complete	LS	1	\$ 750,000.00	\$ 750,000.00
2	Abandonment of Meter Pit	LS	1	\$ 15,000.00	\$ 15,000.00
3	10" DIP Force Main	LF	15,700	\$ 350.00	\$ 5,495,000.00
4	Bridgeport WWTP Headworks Upgrades	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
5	Stoney Creek Crossing - Directional Drilling	LS	1	\$ 250,000.00	\$ 250,000.00
6	Schuylkill River Crossing - Directional Drilling	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
7	Jack & Bore Under Railroad Crossings	EA	7	\$ 50,000.00	\$ 350,000.00
8	Clearing	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
9	Easement/Property Acquisition (Estimate)	LS	1	\$ 500,000.00	\$ 500,000.00
				<b>Subtotal</b>	<b>\$ 10,360,000.00</b>
				<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 10,360,000.00</b>
<b>Studies, Engineering, Legal &amp; Administrative Costs</b>					
10	Phase 1 Archeological Study	LS	1	\$ 30,000.00	\$ 30,000.00
11	Turtle & Wetland Studies	LS	1	\$ 35,000.00	\$ 35,000.00
12	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 1,500,000.00	\$ 1,500,000.00
13	Construction Administration	LS	1	\$1,000,000.00	\$ 1,000,000.00
				<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>	<b>\$ 2,565,000.00</b>
				<b>10% Contingency</b>	<b>\$ 1,292,500.00</b>
				<b>Subtotal</b>	<b>\$ 14,217,500</b>
				<b>TOTAL PROBABLE PROJECT COST</b>	<b>\$ 14,250,000</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



**OPINION OF ALTERNATIVE PROJECT COSTS**

**Alternative 4B**

**Diversion to Upper Merion Township - Trout Run WPCC**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Redirection of Rittenhouse Pump Station</b>					
1	Furnish and Install New Pumps	LS	1	\$ 750,000.00	\$ 750,000.00
2	Electrical Modifications	LS	1	\$ 15,000.00	\$ 15,000.00
3	Pump Station Site Modifications	LS	1	\$ 100,000.00	\$ 100,000.00
4	Prop. Force Main Incl. Resoration (18" DIP)	LF	10,100	\$ 750.00	\$ 7,575,000.00
5	Schuylkill River Crossing - Directional Drilling	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
6	Jack & Bore Under Railroad Crossings	EA	1	\$ 50,000.00	\$ 50,000.00
7	Clearing	LS	1	\$ 100,000.00	\$ 100,000.00
8	Abandonemnt of Existing Force Main	LS	1	\$ 50,000.00	\$ 50,000.00
9	UMT Trout Run WPCC Headworks Upgrade	LS	1	\$ 2,000,000.00	\$ 2,000,000.00
10	Easement/Property Acquisition (Estimate)	LS	1	\$ 500,000.00	\$ 500,000.00
<b>Subtotal</b>					<b>\$ 12,140,000.00</b>
<b>TOTAL CONSTRUCTION COST</b>					<b>\$ 12,140,000.00</b>
<b>Studies, Engineering, Legal &amp; Adminstrative Costs</b>					
11	Phase 1 Archeological Study	LS	1	\$ 15,000.00	\$ 15,000.00
12	Turtle & Wetland Studies	LS	1	\$ 25,000.00	\$ 25,000.00
13	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 2,000,000.00	\$ 2,000,000.00
14	Construction Administration	LS	1	\$1,250,000.00	\$ 1,250,000.00
<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>					<b>\$ 3,290,000.00</b>
<b>10% Contingency</b>					<b>\$ 1,543,000.00</b>
<b>Subtotal</b>					<b>\$ 16,973,000</b>
<b>TOTAL PROBABLE PROJECT COST</b>					<b>\$ 17,000,000</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



**OPINION OF ALTERNATIVE PROJECT COSTS**  
**Alternative 4C**  
**Diversion to Upper Merion Township - Matsunk WPCC**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Jackson Street Pump Station</b>					
1	Proposed Pump Station and Valve Vault (complete	LS	1	\$ 750,000.00	\$ 750,000.00
2	Abandonment of Meter Pit	LS	1	\$ 15,000.00	\$ 15,000.00
3	12" DIP Force Main	LF	20,655	\$ 500.00	\$ 10,327,500.00
4	UMT Matsunk WPCC Headworks Upgrades	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
5	Stoney Creek Crossing - Directional Drilling	LS	1	\$ 250,000.00	\$ 250,000.00
6	Schuylkill River Crossing - Directional Drilling	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
7	Jack & Bore Under Railroad Crossings	EA	6	\$ 50,000.00	\$ 300,000.00
8	Clearing	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
9	Easement/Property Acquisition (Estimate)	LS	1	\$ 500,000.00	\$ 500,000.00
<b>Subtotal</b>					<b>\$ 15,142,500.00</b>
<b>TOTAL CONSTRUCTION COST</b>					<b>\$ 15,142,500.00</b>
<b>Studies, Engineering, Legal &amp; Administrative Costs</b>					
10	Phase 1 Archeological Study	LS	1	\$ 15,000.00	\$ 15,000.00
11	Turtle & Wetland Studies	LS	1	\$ 25,000.00	\$ 25,000.00
12	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 2,250,000.00	\$ 2,250,000.00
13	Construction Administration	LS	1	\$1,500,000.00	\$ 1,500,000.00
<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>					<b>\$ 3,790,000.00</b>
<b>10% Contingency</b>					<b>\$ 1,893,250.00</b>
<b>Subtotal</b>					<b>\$ 20,825,750</b>
<b>TOTAL PROBABLE PROJECT COST</b>					<b>\$ 21,000,000</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



**OPINION OF ALTERNATIVE PROJECT COSTS**

**Alternative 4D**

**Diversion to LPVRSO - Oaks WWTP**

Item No.	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Redirection of Rittenhouse Pump Station</b>					
1	Furnish and Install New Pumps	LS	1	\$ 750,000.00	\$ 750,000.00
2	Complete Station Bypassing	LS	1	\$ 500,000.00	\$ 500,000.00
3	Wet Well Modifications (excluding pumps)	LS	1	\$ 100,000.00	\$ 100,000.00
4	Electrical Modifications	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
5	Pump Station Site Modifications	LS	1	\$ 125,000.00	\$ 125,000.00
6	Prop. Force Main Incl. Resoration (30" DIP)	LF	26,500	\$ 1,250.00	\$ 33,125,000.00
7	15" Dia. Pipe Replacement w/ 18" incl. Restoration	LF	1,250	\$ 650.00	\$ 812,500.00
8	Sanitary Manhole Replacement	EA	7	\$ 5,000.00	\$ 35,000.00
9	Montgomery Ave Meter Pit Abandonment	LS	1	\$ 25,000.00	\$ 25,000.00
10	Perkiomen Creek Crossing - Directional Drilling	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
11	Clearing	LS	1	\$ 500,000.00	\$ 500,000.00
12	Abandonemnt of Existing Force Main	LS	1	\$ 50,000.00	\$ 50,000.00
13	LPVRSO Oaks WWTP Headworks Upgrade	LS	1	\$ 15,000,000.00	\$ 15,000,000.00
14	Easement/Property Acquisition (Estimate)	LS	1	\$ 500,000.00	\$ 500,000.00
<b>Subtotal</b>					<b>\$ 53,522,500.00</b>
<b>TOTAL CONSTRUCTION COST</b>					<b>\$ 53,522,500.00</b>
<b>Studies, Engineering, Legal &amp; Administrative Costs</b>					
15	Phase 1 Archeological Study	LS	1	\$ 15,000.00	\$ 15,000.00
16	Turtle & Wetland Studies	LS	1	\$ 25,000.00	\$ 25,000.00
17	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 2,250,000.00	\$ 7,500,000.00
18	Construction Administration	LS	1	\$1,500,000.00	\$ 5,250,000.00
<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>					<b>\$ 12,790,000.00</b>
<b>10% Contingency</b>					<b>\$ 6,631,250.00</b>
<b>Subtotal</b>					<b>\$ 72,943,750</b>
<b>TOTAL PROBABLE PROJECT COST</b>					<b>\$ 72,000,000</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



**OPINION OF ALTERNATIVE PROJECT COSTS**

**Alternative 5**

**Converting Existing Pump Stations/Collection Points to Small WWTP**

Item No	Construction Items	Units	Quantity	Unit Price	Total Amount
<b>Conversion of Port Indian Pump Station to Package WWTP</b>					
1	Retrofit Pump Station to direct flows to WWTP	LS	1	\$ 400,000.00	\$ 400,000.00
2	Electrical Modifications	LS	1	\$ 75,000.00	\$ 75,000.00
3	Easement/Property Acquisition	LS	1	\$ 500,000.00	\$ 500,000.00
4	Small Package WWTP 0.4 MGD Avg	LS	1	\$ 5,000,000.00	\$ 5,000,000.00
5	Force Main to Jeffersonville Golf Course Pond	LF	4,300	\$ 250.00	\$ 1,075,000.00
				<b>Subtotal</b>	<b>\$ 7,050,000.00</b>
<b>Conversion of Whitehall Pump Station to Package WWTP</b>					
6	Retrofit Pump Station to direct flows to WWTP	LS	1	\$ 500,000.00	\$ 500,000.00
7	Electrical Modifications	LS	1	\$ 150,000.00	\$ 150,000.00
8	Easement/Property Acquisition	LS	1	\$ 500,000.00	\$ 500,000.00
9	Small Package WWTP 0.7 MGD Avg	LS	1	\$ 6,000,000.00	\$ 6,000,000.00
10	Force Main to Farm Park Lagoon/Pond	LF	1,500	\$ 250.00	\$ 375,000.00
11	Lagoon/Pond incl. aeration	LS	1	\$ 2,000,000.00	\$ 2,000,000.00
12	Irrigation System	LS	1	\$ 1,250,000.00	\$ 1,250,000.00
				<b>Subtotal</b>	<b>\$ 10,775,000.00</b>
				<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 17,825,000.00</b>
<b>Studeis, Engineering, Legal &amp; Adminstrative Costs</b>					
17	Phase 1 Archeological Study	LS	1	\$ 25,000.00	\$ 25,000.00
18	Turtle & Wetland Studies	LS	1	\$ 35,000.00	\$ 35,000.00
19	Design, Permitting, Engineering, Legal, Administrative	LS	1	\$ 2,500,000.00	\$ 2,750,000.00
20	Construction Administration	LS	1	\$1,750,000.00	\$ 1,800,000.00
				<b>TOTAL STUDIES, ENGINEERING, LEGAL &amp; ADMINISTRATIVE COSTS</b>	<b>\$ 4,610,000.00</b>
				<b>10% Contingency</b>	<b>\$ 2,243,500.00</b>
				<b>Subtotal</b>	<b>\$ 24,678,500</b>
				<b>TOTAL PROBABLE PROJECT COST</b>	<b>\$ 25,000,000</b>

**NOTES:**

1. Prepared January 2023, with no revisions
2. Assumes selected site is Port Indian Road or Egypt Road site.



GILMORE & ASSOCIATES, INC.  
ENGINEERING & CONSULTING SERVICES

**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

March 28, 2023

File No. 18-04027T

West Norriton Township Planning Commission  
1630 W. Marshall Street  
Jeffersonville, PA 19403

Reference: West Norriton Township Act 537 Plan Update  
West Norriton Township, Montgomery County, PA

Dear Commissioners:

On behalf of West Norriton Township, Gilmore & Associates, Inc. has prepared the enclosed Act 537 Plan Update. The Act 537 Plan Update presents the current projected sewer needs within West Norriton Township at 10 years and ultimate build out. The plan also evaluates current sanitary sewer conditions present in the Township.

Please complete the appropriate portions of Form 4A, Municipal Planning Agency Review and return this form to my attention within sixty (60) days for inclusion in the submission to Township Commissioners and ultimately the Pennsylvania Department of Environmental Protection.

Should you have any questions, please contact me. I may be reached at 267-914-7834 or via email at [tfiganiak@gilmore-assoc.com](mailto:tfiganiak@gilmore-assoc.com).

Sincerely,

A handwritten signature in blue ink that reads "Thomas J. Figaniak".

Thomas J. Figaniak, P.E.  
Project Manager  
Water Resources

TJF/zlj/ec

Enclosures: 1. Draft Act 537 Plan Update  
2. Component 4A – Municipal Planning Agency Review

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65 East Butler Avenue | Suite 100 | New Britain, PA 18901 | Phone: 215-345-4330 | Fax: 215-345-8606

Gilmore & Associates, Inc.  
Building on a Foundation of Excellence  
[www.gilmore-assoc.com](http://www.gilmore-assoc.com)



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF CLEAN WATER

DEP Code #:

**SEWAGE FACILITIES PLANNING MODULE  
COMPONENT 4A - MUNICIPAL PLANNING AGENCY REVIEW**

**Note to Project Sponsor:** To expedite the review of your proposal, one copy of your completed planning module package and one copy of this *Planning Agency Review Component* should be sent to the local municipal planning agency for their comments.

**SECTION A. PROJECT NAME** (See Section A of instructions)

Project Name

West Norriton Township - Act 537 Plan Update Sewage Facilities Planning

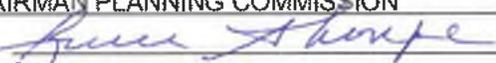
**SECTION B. REVIEW SCHEDULE** (See Section B of instructions)

1. Date plan received by municipal planning agency 4.17.23
2. Date review completed by agency 5.15.23

**SECTION C. AGENCY REVIEW** (See Section C of instructions)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Is there a municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, <i>et seq.</i> )?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Is this proposal consistent with the comprehensive plan for land use? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Is this proposal consistent with the use, development, and protection of water resources? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land Preservation?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impacts _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Will any known historical or archaeological resources be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will any known endangered or threatened species of plant or animal be impacted by this project? If yes, describe impacts _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Is there a municipal zoning ordinance?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is there a municipal subdivision and land development ordinance?

**SECTION C. AGENCY REVIEW (continued)**

- | Yes  | No                                  |  |
|--|-------------------------------------|--|
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | 13. Is this proposal consistent with the ordinance?<br>If no, describe the inconsistencies _____   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | 14. Is this plan consistent with the municipal Official Sewage Facilities Plan?<br>If no, describe the inconsistencies _____                               |
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> | 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?<br>If yes, describe _____ |
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> | 16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?                                 |
| <input type="checkbox"/>   | <input type="checkbox"/>            | If yes, is the proposed waiver consistent with applicable ordinances?<br>If no, describe the inconsistencies _____   |
| 17. Name, title and signature of planning agency staff member completing this section:<br>Name: <u>BRUCE SHOUBE</u><br>Title: <u>CHAIRMAN PLANNING COMMISSION</u><br>Signature: <u></u><br>Date: <u>6.2.23</u><br>Name of Municipal Planning Agency: <u>WEST NORRITON PLANNING COMMISSION</u><br>Address: <u>1630 W. MARSHAL STREET</u><br>Telephone Number: <u>610-631-0450</u> |                                     |  |

**SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)**

This component does not limit municipal planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The planning agency must complete this component within 60 days.

This component and any additional comments are to be returned to the applicant.

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Sent To **West Norriton Township Planning Commission**  
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PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> <i>Carl Hull</i> <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name)</p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>																
<p>1. Article Addressed to:</p> <p><b>West Norriton Township Planning Commission</b>  <b>1630 W. Marshall Street</b>  <b>Jeffersonville, PA 19403</b></p>  9590 9402 4420 8248 5781 27	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input checked="" type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
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for an electronic return receipt, see a retail associate for assistance. To receive a duplicate return receipt for no additional fee, present this USPS®-postmarked Certified Mail receipt to the retail associate.

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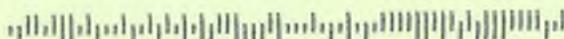
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**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

March 28, 2023

File No. 18-04027T

Montgomery County Planning Commission  
P.O. Box 311  
Norristown, PA 19404-0311

Reference: West Norriton Township Act 537 Plan Update  
West Norriton Township, Montgomery County, PA

Dear Commissioners:

On behalf of West Norriton Township, Gilmore & Associates, Inc. has prepared the enclosed Act 537 Plan Update. The Act 537 Plan Update presents the current projected sewer needs within West Norriton Township at 10 years and ultimate build out. The plan also evaluates current sanitary sewer conditions present in the Township.

Please complete the appropriate portions of Form 4B, County Planning Agency Review and return this form to my attention within sixty (60) days for inclusion in the submission to West Norriton Township Commissioners and ultimately the Pennsylvania Department of Environmental Protection.

Should you have any questions, please contact me. I may be reached at 267-914-7834 or via email at [tfiganiak@gilmore-assoc.com](mailto:tfiganiak@gilmore-assoc.com).

Sincerely,

A handwritten signature in blue ink that reads "Thomas J. Figaniak".

Thomas J. Figaniak, P.E.  
Project Manager  
Water Resources

TJF/zlj/ec

Enclosures: 1. Draft Act 537 Plan Update  
2. Component 4B – County Planning Agency Review

---

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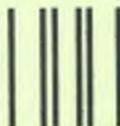
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SCOTT FRANCE, AICP

EXECUTIVE DIRECTOR

**SEWAGE FACILITIES PLANNING MODULE  
COMPONENT 4b - COUNTY PLANNING AGENCY REVIEW**

May 26, 2023

DEP Project Number:  
MCPC 537 Number: 23-2347  
West Norriton Township – Act 537 Plan  
Update Sewage Facilities Planning  
West Norriton Township  
Date revision received by the  
County Planning Commission:  
March 29, 2023

Jason Bobst, Township Manager  
West Norriton Township  
1630 W Marshall Street  
Jeffersonville, PA 19403

Dear Mr. Bobst:

We have reviewed this application for a revision to the municipality's Sewage Facilities Plan in accordance with regulations issued under Act 537, "The Pennsylvania Sewage Facilities Act," as requested. We are forwarding this letter as a report of our review and recommendations.

**BACKGROUND**

The applicant, West Norriton Township, has prepared an Act 537 Plan Update for the Township. The Update presents current and projected sewer needs within West Norriton Township at 10 years and at ultimate buildout. The Update evaluates current sewer conditions and presents options for serving the Township's sewage needs moving forward. The selected alternative, based on the presented analysis, call for West Norriton to continue discharging to the Norristown Municipal, Waster Authority's Wastewater Treatment Plant through its Intermunicipal Treatment Agreement.

**COMMENTS/ISSUES**

8. *Will any known endangered or threatened species of plant or animal be impacted by the development project? The application's PNDI showed multiple potential impacts throughout the service area. These impacts would only be relevant during project development in the service area and should be considered on a project-by-project basis.*



GILMORE & ASSOCIATES, INC.  
ENGINEERING & CONSULTING SERVICES

**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

March 28, 2023

File No. 18-04027T

Montgomery County Office of Public Health  
1430 DeKalb Street  
P.O. Box 311  
Norristown, PA 19404-0311

Reference: West Norriton Township Act 537 Plan Update  
West Norriton Township, Montgomery County, PA

Dear Sir or Ma'am:

On behalf of West Norriton Township, Gilmore & Associates, Inc. has prepared the enclosed Act 537 Plan Update. The Act 537 Plan Update presents the current projected sewer needs within West Norriton Township at 10 years and ultimate build out. The plan also evaluates current sanitary sewer conditions present in the Township.

Please complete the appropriate portions of Form 4C, County or Joint Health Department Review and return this form to my attention within sixty (60) days for inclusion in the submission to West Norriton Township Commissioners and ultimately the Pennsylvania Department of Environmental Protection.

Should you have any questions, please contact me. I may be reached at 267-914-7834 or via email at [tfiganiak@gilmore-assoc.com](mailto:tfiganiak@gilmore-assoc.com).

Sincerely,

A handwritten signature in blue ink that reads "Thomas J. Figaniak".

Thomas J. Figaniak, P.E.  
Project Manager  
Water Resources

TJF/zlj/ec

Enclosures: 1. Draft Act 537 Plan Update  
2. Component 4C – County or Joint Health Department Review

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Agent

Addressee

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PS Form 3800, April 2015 (Revise) PSN 7530-02-000-9047

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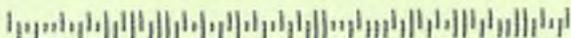
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FAX: 610-278-5167  
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CHRISTINA N. MILLER, M.S.S.  
ADMINISTRATOR  
RICHARD S. LORRAINE, MD, FACP  
MEDICAL DIRECTOR

April 17, 2023

West Norriton Township  
Jason Bobest, Manager  
1630 W. Marshall Street  
Jeffersonville, PA 19403-3236

Re: Act 537 Plan Update Sewage Facilities Planning  
Sewage Facilities Planning Module Component 4C  
West Norriton Township, Montgomery County, PA

Dear Mr. Bobest:

The Montgomery County Department of Health & Human Services, Office of Public Health (OPH) has reviewed the Sewage Facilities Planning Module for the Act 537 Update in West Norriton Township. The module was prepared by Gilmore Associates Inc. and a complete copy was received by OPH on April 5, 2023.

The Module is being prepared as part of an Update of West Norriton's Act 537 Plan.

OPH has no objections to the proposed Update to the Act 537 Plan.

If you have any further questions, please contact me at (610) 278-5117 extension 4218.

Sincerely,

Vincent Smith  
Environmental Health Specialist/SEO  
Division of Water Quality Management  
Vincent.smith@montgomerycountypa.gov

Enclosures

XC: Department of Environmental Protection  
Gilmore & Associates  
John Peffer, Field Supervisor  
File

OFFICE OF PUBLIC HEALTH LOCATIONS

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364 KING STREET • POTTSTOWN, PA 19464 • PHONE: 610-970-5040 • FAX: 610-970-5048  
102 YORK ROAD, SUITE 401 • WILLOW GROVE, PA 19090 • PHONE: 215-784-5415 • FAX: 215-784-5524



## SEWAGE FACILITIES PLANNING MODULE COMPONENT 4C - COUNTY OR JOINT HEALTH DEPARTMENT REVIEW

**Note to Project Sponsor:** To expedite the review of your proposal, one copy of your completed planning module package and one copy of this *Planning Agency Review Component* should be sent to the county or joint county health department for their comments.

### SECTION A. PROJECT NAME (See Section A of instructions)

Project Name

West Norriton Township-Act 537 Plan Update Sewage Facilities Planning

### SECTION B. REVIEW SCHEDULE (See Section B of instructions)

1. Date plan received by county or joint county health department April 5, 2023Agency name Montgomery County Department of Health & Human Services, Offices of Public Health (OPH)2. Date review completed by agency April 17, 2023

### SECTION C. AGENCY REVIEW (See Section C of instructions)

Yes No

1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?

If no, what are the inconsistencies? \_\_\_\_\_

2. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?

If yes, describe \_\_\_\_\_

3. Is there any known groundwater degradation in the area of this proposal?

If yes, describe \_\_\_\_\_

4. The county or joint county health department recommendation concerning this proposed plan is as follows: The Montgomery County Dept. of Health and Human Services (OPH) has no problem with the proposal.

5. Name, title and signature of person completing this section:

Name: Vincent SmithTitle: Environmental Health Specialist, Division of Water Quality SEOSignature: Date: 1/18/23Name of County Health Department: Montgomery County Dept of Health & Human Services (OPH)Address: P.O. Box 311, Norristown PA 19404-0311Telephone Number: 610-278-5117 Ex 4218

### SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)

This component does not limit county planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The county planning agency must complete this component within 60 days.

This component and any additional comments are to be returned to the applicant.

10. *Does the proposal meet the zoning requirements of the ordinance? Zoning is regulated by the municipality. We defer to the municipality for ensuring consistency with the ordinance.*
11. *Have all applicable zoning approvals been obtained? Zoning is regulated by the municipality. We defer zoning approval to the municipality.*
13. *Does the proposal meet the requirements of the ordinance? While we are not aware of any inconsistencies with the subdivision and land development ordinance, we defer to the municipality for ensuring consistency with the ordinance.*
17. *Does the county have a stormwater management plan as required by the Stormwater Management Act? A portion of the study area falls within the Stony Creek/Sawmill Run Watershed. Any future project that falls within this watershed should adhere to all the ordinance provisions from the adopted Stony Creek/Sawmill Run Watershed Act 167 Stormwater Management Plan ordinance.*

#### **ADDITIONAL COMMENTS**

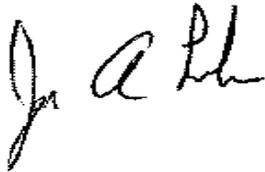
DEP Number - No DEP number was provided. If necessary, this should be provided before final approval.

On-Lot Sewered Properties – The Township should ensure that the properties currently using on-lot systems for sewage disposal have been incorporated into the potential gallons per day

#### **RECOMMENDATION**

Once these issues have been addressed to the satisfaction of the municipality and DEP, we have no objection to this 537 Planning Module. Should there be any questions regarding the content of this letter, please contact me at (610) 278-3750.

Sincerely,



Jon A Leshner  
Environmental Planning Assistant Manager  
(610) 278-3750  
[jlesher@montcopa.org](mailto:jlesher@montcopa.org)

c: Elizabeth Mahoney, DEP, SERO  
Thomas Figaniak, Gilmore & Associates, Inc.

DEP Code #



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SEWAGE FACILITIES PLANNING MODULE
COMPONENT 4B - COUNTY PLANNING AGENCY REVIEW
(or Planning Agency with Areawide Jurisdiction)

MCPC # 23-2347

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning package and one copy of this Planning Agency Review Component should be sent to the existing county planning agency or planning agency with areawide jurisdiction for their comments.

SECTION A. PROJECT NAME (See Section A of instructions)

Project Name
West Norriton Township – Act 537 Plan Update Sewage Facilities Planning – West Norriton Township

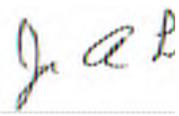
SECTION B. REVIEW SCHEDULE (See Section B of instructions)

- 1. Date plan received by county planning agency. March 29, 2023
2. Date plan received by planning agency with areawide jurisdiction
Agency name
3. Date review completed by agency May 26, 2023

SECTION C. AGENCY REVIEW (See Section C of instructions)

- Yes No
1. Is there a county or areawide comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101 et seq.)?
2. Is this proposal consistent with the comprehensive plan for land use?
3. Does this proposal meet the goals and objectives of the plan?
If no, describe goals and objectives that are not met
4. Is this proposal consistent with the use, development, and protection of water resources?
If no, describe inconsistency
5. Is this proposal consistent with the county or areawide comprehensive land use planning relative to Prime Agricultural Land Preservation?
If no, describe inconsistencies:
6. Does this project propose encroachments, obstructions, or dams that will affect wetlands?
If yes, describe impact
7. Will any known historical or archeological resources be impacted by this project?
If yes, describe impacts
8. Will any known endangered or threatened species of plant or animal be impacted by the development project? SEE ADDENDUM
9. Is there a county or areawide zoning ordinance?
10. Does this proposal meet the zoning requirements of the ordinance? SEE ADDENDUM
If no, describe inconsistencies

**SECTION C. AGENCY REVIEW (continued)**

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained? <b>SEE ADDENDUM</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. Is there a county or areawide subdivision and land development ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	13. Does this proposal meet the requirements of the ordinance? <b>SEE ADDENDUM</b> If no, describe which requirements are not met _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Is this proposal consistent with the municipal Act 537 Official Sewage Facilities Plan? If no, describe inconsistency _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
<input type="checkbox"/>	<input type="checkbox"/>	If yes, is the proposed waiver consistent with applicable ordinances? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Does the county have a stormwater management plan as required by the Stormwater Management Act? <b>SEE ADDENDUM</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	If yes, will this project plan require the implementation of storm water management measures?
		18. Name, Title and signature of person completing this section: Name: <u>Jon A Leshner</u>
		Title: <u>Environmental Planning Ast. Manager</u> Signature: 
		Date: <u>May 26, 2023</u>
		Name of County or Areawide Planning Agency: <u>Montgomery County Planning Commission</u>
		Address: <u>Court House - PO Box 311, Norristown, PA</u>
		Telephone Number: <u>610-278-3750</u>

**SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)**

This Component does not limit county planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The county planning agency must complete this Component within 60 days.  
This Component and any additional comments are to be returned to the applicant.



GILMORE & ASSOCIATES, INC.  
ENGINEERING & CONSULTING SERVICES

**OPINION OF ALTERNATIVE PROJECT COSTS**

**Alternative 6**

**No Action**

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Item No.	Construction Items	Units	Quantity	Unit Price	Total Amount
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*There are no proposed costs associated with construction improvements*

**NOTES:**

1. Prepared December 2022, with no revisions

## **APPENDIX 5**

### **Proof of Public Notice**

## **APPENDIX 6**

### **Reviewing Agency Comments**

## **APPENDIX 7**

### **Public Comments**

## **APPENDIX 8**

### **Responses to Comments**

## **APPENDIX 9**

### **West Norriton Township Resolution of Plan Adoption**