

Special Study

FOR

Meng Road Planning Area Sewage Facilities Planning

January 5, 2026

Last Revised April 22, 2026

Prepared For:

Lower Frederick Township
Montgomery County, Pennsylvania

Prepared in collaboration by



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Plan Summary

A. Proposed Service Areas and Major Problems Evaluated by the Plan

In Lower Frederick Township's 2014 Act 537 Plan, it was determined that extension of the public sewer collection system along Meng Road was cost prohibitive. The plan further noted that should problems with existing on-lot systems become evident for a limited number of parcels within the Meng Road planning area, the Township would re-evaluate the feasibility of connecting the homes to the nearby Schwenksville Borough Authority main using a low-pressure system.

Since the approval of that plan, to address issues with their on-lot sewage disposal systems, two properties in the Meng Road study area connected to the Schwenksville Borough Authority's public sewer system and one property constructed an individual stream discharge system. This prompted PADEP to request that the Township undertake further Act 537 planning for the Meng Road Special Study Planning Area.

This Special Study has been prepared to re-evaluate sewage disposal options, select a preferred alternative, and provide updated sewage planning for properties within the Meng Road Special Study Planning Area.

B. Selected Disposal Alternative

The selected disposal alternative (Option A) is continued use of existing on-lot sewage disposal systems, supplemented with public education emphasizing the importance of proper use, routine maintenance, and long-term system performance of on-lot systems.

This alternative was selected for the following reasons:

- No immediate needs were identified within the planning area.
- Proper operation and maintenance of on-lot systems can help prevent malfunctions and support the long-term use of these on-lot systems.
- This alternative is the most cost-effective.
- This alternative does not increase flow to the Delphi Pump Station and will not require additional sewer facilities for the Township to operate and maintain.
- The Township has the necessary staff to implement the selected alternative.

C. Estimated Costs (in 2026 dollars)

The cost for this alternative will be minimal as the existing Township administration personnel would be used to prepare mailings and add educational information to the existing Township website. Hard costs would include expenses for printing, and postage associated with creating and distributing the educational materials.

The Township Wastewater Engineer’s Office would provide directions and content for the website information and mailings.

	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
In-House Administrative Personnel	40	\$65	\$2,600*
Representative of the Township Engineer	8	\$110	\$880
Printing Supplies and Postage			\$80
	Estimated Total:		\$3,540

*Cost included in administrative salary in Township budget

D. Municipal Commitments to Implement Plan

To implement this plan, Township officials must authorize the Township’s administrative personnel to:

- Print and mail educational material
- Add an on-lot sewage management tab to the Township website
- Add on-lot septic educational material annually to the existing Township newsletter publication.

The Township Engineer must also be authorized to provide and review the content of educational materials and mailings.

E. Schedule of Implementation

Following PADEP approval of this Special Study, the educational mailings and additions to the Township’s website will be completed within 6 months.

I. Previous Wastewater Planning

Lower Frederick Township's current, township-wide Official Sewage Facilities Plan, entitled Lower Frederick Township Act 537 Plan 2013, as published May 2014, was approved by the PA Department of Environmental Protection on October 29, 2014. A Special Study Update for the Goshenhoppen Watershed planning area was subsequently completed and approved by the Pennsylvania Department of Environmental Protection (PADEP) on May 6, 2024.

This Special Study has been prepared to re-evaluate sewage disposal options, select a preferred alternative, and provide updated sewage planning for properties within the Meng Road Special Study Planning Area.

In the 2014 Act 537 Plan, it was determined that extension of the public sewer collection system along Meng Road was cost prohibitive. The plan further noted that should problems with existing on-lot systems become evident for a limited number of parcels within the Meng Road planning area, the Township would re-evaluate the feasibility of connecting the homes to the nearby Schwenksville Borough Authority main using a low-pressure system.

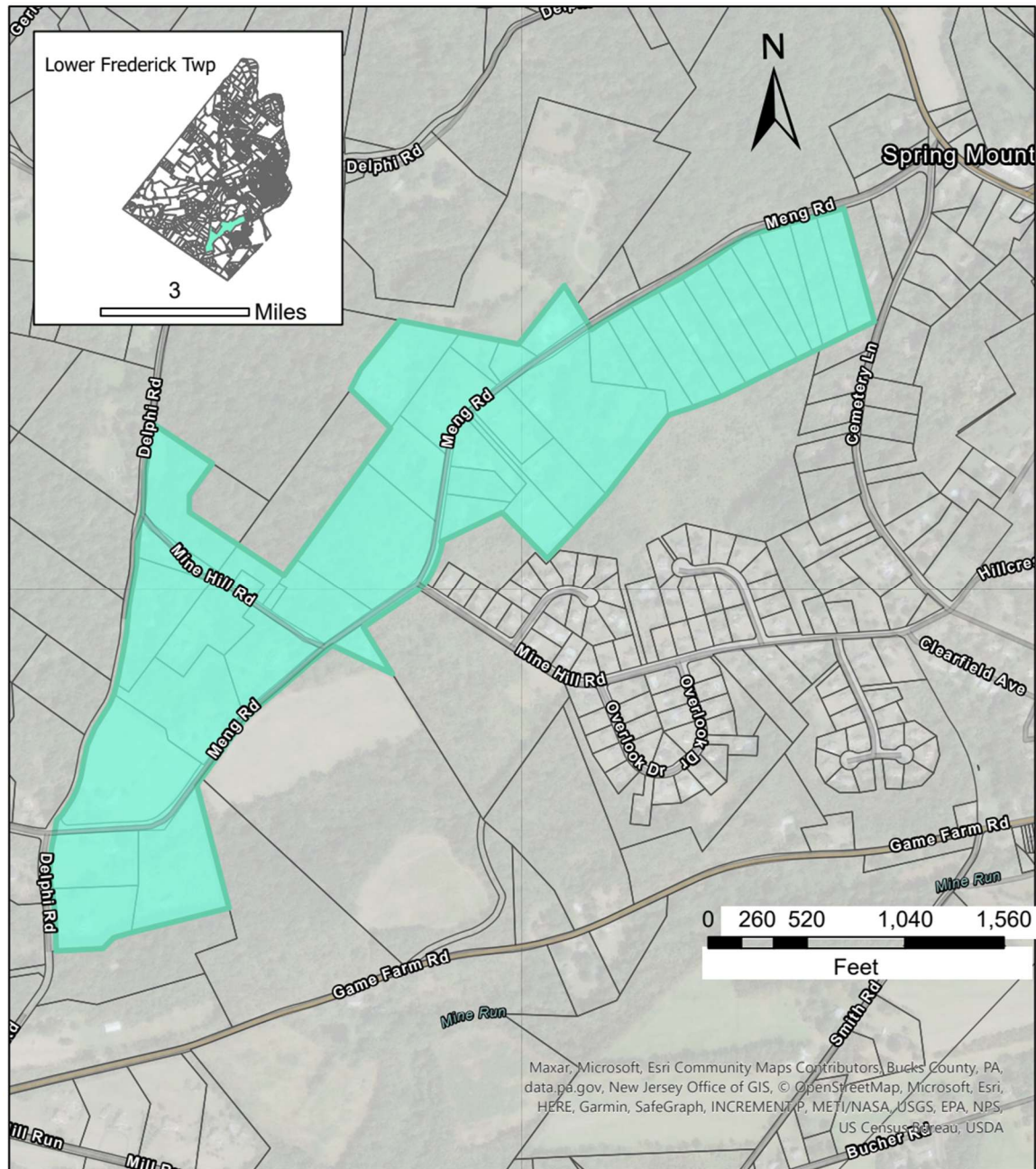
Since approval of the 2014 Act 537 Plan:

- On February 6, 2019, the PADEP granted a waiver for the connection of 104 Meng Road (Parcel #38-00-01561-00-3) to the Schwenksville Borough Authority's (SBA) collection system to correct the malfunctioning on-lot sewage disposal system serving the dwelling.
- On January 13, 2022, PADEP granted a waiver for the connection of 103 Meng Road (Parcel #38-00-01531-00-6) to the Schwenksville Borough Authority's (SBA) collection system to correct the malfunctioning on-lot sewage disposal system serving the dwelling.
- On September 27, 2022, PADEP approved an application mailer proposing a small flow treatment system to replace the failing on-lot system at 24 Meng Road (Parcel # 38-00-01570-00-3).

Based on requests concerning failing sewage disposal systems on the properties identified above, PADEP has requested that the Township undertake further Act 537 planning for the Meng Road Special Study Planning Area.

II. Physical and Demographic Analysis

The limits of the Meng Road Special Study Planning Area are depicted on the map below:



A. Demographics

Lower Frederick Township is in western Montgomery County. Land uses are mostly rural and agricultural, with an influx of residential development in the past four decades. Population statistics presented below were obtained from the Lower Frederick Township Act 537 Plan 2013 and updated with data from the U.S. Census Bureau.

Lower Frederick Township Population Statistics:

Year	1950	1960	1970	1980	1990	2000	2010	2020
Population	1,620	2,108	2,515	2,379	3,396	4,795	4,840	4,873

Based on the 2020 Census, Lower Frederick Township is a mature community, with a median age of 42 years. The Township population was comprised of 27% under the age of 19, 8% aged 20 to 29, 13% from 30 to 39, 13% from 40 to 49, 19% from 50 to 59, and 20% who were 60 years of age or older. The Township contained 1,928 households, with an average household size documented at 2.5 persons.

B. Physical

The physical analysis remains unchanged from the previously approved 2014 Act 537 Plan. See the previously approved plan for reference.

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

A. Existing Facilities within the Planning Area

The properties within the Special Study Planning Area are served by individual, on-lot, land-based sewage disposal systems, with the following exceptions:

- Two (2) properties, located at 103 Meng Road (Parcel #38-00-01531-00-6) and 104 Meng Road (Parcel #38-00-01561-00-3), each are served by individual grinder pumps and are connected to the Schwenksville Borough Authority (SBA) collection system via a low-pressure force main. The force main connects to the SBA system at a manhole in Mine Hill Road near the intersection with Meng Road.
- Four lots at 24 Meng Road (Parcel #38-00-01570-00-3), 114 Meng Road (Parcel #38-00-01558-03-3), 116 Meng Road (Parcel #38-00-01558-00-6) and 204 Delphi Road (Parcel #38-00-00238-06-6), are served by individual small flow treatment facilities (SFTF) with stream discharge disposal. The SFTF at 24 Meng Road was installed as the result of a failing onlot system; the remaining three (3) SFTF were the planned method of sewage disposal when the lots were created through subdivision.

Existing septic systems are owned and maintained by individual property owners. All existing sewage disposal systems in the Special Study Planning Area, including the small flow treatment facilities, are subject to the Township's Sewage Management Program pursuant to Chapter 123 – Article VIII of the Township Code. This ordinance requires routine maintenance and reporting for all systems and authorizes the Township to abate an imminent health hazard associated with an on-lot sewage disposal system when such a condition is identified and documented by the Montgomery County Health Department and the property owner fails to take corrective action.

In addition, Lower Frederick Township has adopted ordinances governing grinder pumps (Chapter 123 – Article IX) and the use and maintenance of holding/retaining tanks (Chapter 123 – Article VII). These ordinances are available on the Township's website at <https://lowerfrederick.org/>.

B. Existing Needs Identified within the Planning Area

1. Montgomery County Health Department Records

The Montgomery County Health Department reports no known active sewage malfunctions in the planning area that require immediate action.

2. Township Needs Evaluation

Of the 36 parcels within the study area, 28 properties are served by existing individual on-lot land-based sewage disposal systems. In 2024, on behalf of Lower Frederick Township, a licensed Pennsylvania Sewage Enforcement Officer (SEO) from Value Engineering Inc. inspected 27 of the 28 lots (96%) with on-lot land-based sewage disposal systems.

In the planning area, twelve (12) properties with onlot systems use more current sewage disposal technologies including elevated sand mounds, at grade, and micromound systems. Six (6) lots within the study area have previously tested, permitted, and replaced their original onlot systems with new onlot systems.

Each property was inspected for indicators of current or future septic malfunction including green/lush vegetation, surface wetness, spongy soil conditions, sewage odors, ponded water, and evidence of system overflow. No indicators of septic system malfunction were encountered on the inspected properties.

A summary of the inspection results, along with the completed field sheets for each property, are included in Appendix A.

3. Identified Needs

No active or suspected sewage malfunctions were identified during the site inspections.

C. Lower Frederick Township's Existing Public Wastewater Treatment Facilities

Various alternatives for serving the Special Study Planning Area include options for connecting the properties to the existing Lower Frederick Township public sanitary sewer system. The nearest potential point of connection point to the existing collection system is in Gravel Pike near the intersection with Cemetery Road, which flows to the Delphi Pump Station. A summary of the existing public sewer system is provided below, and a map of the Lower Frederick Township public sewer system is attached in Appendix B for reference.

1. Lower Frederick's Treatment Plant

Lower Frederick's Treatment Plant is located at 133 Spring Mount Road. The plant was upgraded in 2018 through Permit #PA50105 (Clean Streams Law #4697403) to have a 0.500 million gallons per day (mgd) capacity.

The plant utilizes sequencing batch reactor (SBR) processes, combined with filtration, post-equalization, and ultraviolet (UV) disinfection. The plant discharges treated effluent through a single outfall to Perkiomen Creek.

In the 2024 Chapter 94 Wasteload Management Report, the wastewater treatment plant averaged a flow of 143,000 gallons per day (GPD). The plant has no existing or projected hydraulic or organic overloads and is operating in compliance with all permit requirements. Currently, no upgrades or expansions are currently proposed.

Sludge generated at the treatment plant is removed by a contracted hauling contractor under an annual contract. The 2024 Chapter 94 Wasteload Management Report reports a monthly average removal of 91,599 gallons of sludge in 2024. The hauled sludge is processed at permitted treatment facilities.

2. Lower Frederick's Collection & Conveyance System

The bulk of the existing sanitary sewer system which collects and conveys raw wastewater to the new Lower Frederick Township Sewerage Treatment Plant was constructed in the early 1980s and is predominately 8" PVC. Delphi Pump Station and its tributary collection system were constructed in the late 1990s. There are no areas within the collection and conveyance system where capacity surcharge is a concern.

Based on information provided by Lower Frederick's Wastewater Engineer, Hydraterra Professionals, the Delphi Pump Station:

- Operates at a hydraulic design capacity of 175 GPM with a permitted annual average flow of 84,000 GPD with a peak instantaneous capacity of 252,000 GPD.
- The station is presently handling, based on 2024 metered flows, an annual average flow of 18,995 GPD, it is projected to reach an average flow of 20,559 GPD in 2028.

Future extensions to the sanitary sewer collection system to serve Cemetery Road will increase the flow to Delphi Pump Station. As land developments are proposed within the study area, the capacity of the Delphi Pump Station will be required to be evaluated through the planning module approval process. Currently, no expansions or upgrades are proposed that would alter the capacity of the Delphi Pump Station.

In December 2023, the Township completed an extension of the public sanitary sewer collection system to serve the existing homes along Fulmer Road, B Avenue, and Riverside Avenue. Construction of a new pump station along Riverside Avenue was also completed (Permit #WQG02461609). The Riverside Pump Station has a design pumping capacity of 188 GPM with a run cycle of 1/3 on and 2/3 off, providing a daily pumping capacity of 90,240 gallons per day (GPD). At continuous operation, the station can pump up to 270,720 GPD.

The projected average sewage flow of all properties draining to this pump station is 22,960 GPD, based on 82 units at 280 GPD per equivalent dwelling unit (EDU). This pump station has capacity to accommodate additional sewage flows.

Lower Frederick Township maintains an active Inflow and Infiltration (I&I) Reduction Program to minimize wet weather flows. The program includes manhole inspections, video inspection of sewer main, smoke testing, manhole lining, grouting etc. to identified and repair sources of I&I.

D. Schwenksville Borough Authority (SBA) Existing Public Wastewater Treatment Facilities

An alternative to serve the Special Study Planning Area is to connect the existing Schwenksville Borough Authority (SBA) public sewer system. The nearest connection point to the SBA system is a manhole on Mine Hill Road, near the intersection of Meng Road, where two properties within the study area currently connected using individual grinder pumps.

A summary of the existing public sewer system is provided below. A map of the SBA public sewer system is attached in Appendix C for reference.

1. SBA Treatment Plant

Schwenksville Borough Authority's Treatment Plant (WQM Permit No. 4615401) is located at Main and Church Street in Schwenksville, PA. The plant's NPDES Permit (PA0020303) was renewed by the Department in July 2022.

Based on the permit renewal documentation, the plant utilizes an activated sludge treatment process with chlorine gas disinfection. The facility discharges treated effluent through a single outfall to Perkiomen Creek.

The plant has a permitted annual average hydraulic capacity of 0.3 million gallons per day (MGD) and a hydraulic design capacity of 0.32 MGD. According to the 2024 Chapter 94 Spreadsheet, the plant recorded an average sewage flow of 176,000 GPD in 2024, and its load status is identified as Not Overloaded. The average daily flow is projected to increase to 218,721 GPD by 2028, with a projected maximum three consecutive month flow of 293,934 GPD.

2. SBA Collection & Conveyance System

Wastewater is conveyed to the SBA treatment plant through a combination of gravity sewers, three (3) pump stations, and associated force mains.

Pump station capacities and flows presented below are based on the 2023 Chapter 94 Report:

- Pheasant Knoll Pump Station
 - Maximum capacity: 123,840 gpd
 - Average Flow: 12,453 gpd
 - Maximum Daily Flow: 16,461 gpd
- Pellechio Pump Station
 - Maximum capacity: 167,040 gpd
 - Average Flow: 9,686 gpd
 - Maximum Daily Flow: 16,299 gpd
- Farm View Pump Station
 - Maximum capacity: 46,080 gpd
 - Average Flow: 2,724 gpd
 - Maximum Daily Flow: 3,489 gpd

The collection system has experienced sanitary sewer overflows (SSOs) at a manhole located on Gravel Pike near the intersection with Game Farm Road. The attached plan of the SBA system illustrates the service area upstream of this manhole. According to SBA, ongoing inflow and infiltration reduction efforts have significantly decreased the frequency of SSOs, from approximately 60 events in 2011 to two (2) events in 2023, which occurred during extreme flooding conditions.

IV. Future Growth and Land Development

A. Existing Planning Documents

1. Zoning, Land Use, and Comprehensive Plans

The Township Zoning Map identifies the Zoning Districts within the study area as Residential. Parcels located south of Meng Road and east of Mine Hill Road are zoned R-2 Low Density Residential, while all other parcels within the study area are zoned R-1 Rural Residential.

The Lower Frederick Township Comprehensive Plan was updated in 2022. The plan identifies a Future Growth Area that includes the R-2-zoned properties in the study area.

The Central Perkiomen Valley Regional Comprehensive Plan of 2014 recommends limiting use of sanitary sewer outside the growth area:

“Rural Resource Conservation Area. Being a non-growth area, the extension of public sewer and water will not be permitted in the Rural Resource Conservation Area. Only on-site sewer and water will be allowed, except under extenuating circumstances. The extension of sewer and water off-site whether public or private shall be considered for the purpose of protecting public health. With the intent of allowing for a transition area to occur between the growth and no-growth areas, rural cluster developments occurring on tracts that are located entirely within a ¼ mile of a growth boundary may connect to public sewer provided the development is connected to public water and provides a minimum of 60% open space.”

The Township Land Use Map (2020) identifies the parcels in the study area as primarily single-family detached residential uses. Several parcels are identified as County Residence, and the kennel parcel is identified as Agriculture. Parcels immediately adjacent to the study area are identified as privately held open space, single-family detached residential, agricultural lands, and some undeveloped land.

Copies of the Zoning, Future Growth Area, and Land Use Maps may be found in Appendix D.

2. Zoning and subdivision regulations that establish lot size predicated on sewage disposal methods

The minimum lot size for single family detached dwellings is two acres in the R-1 District and one acre in the R-2 District. The lot sizes are further restricted by §170-41, which requires calculation of the developable lot area. Environmental adjustment factors are applied for all tracts against wetlands, steep slopes and

floodplains. Lots proposing on-lot sewage disposal and/or well water, additional adjustment factors are applied for seasonal high-water tables, depth to bedrock, and diabase geology.

The R-1 and R-2 Zoning Districts each allow for “Neighborhood Lotting.” This is where a large tract is developed with smaller lots, contingent upon service by public water, sewer, and preserving a significant percentage of open space.

Neighborhood lotting is only available for tracts with a minimum area of 10 acres, in accordance with §170-43.A.(2)(a).

At least 10 acres of the tract must be located within ¼ mile of the Future Growth Area. §170-43.A.(2)(b).

Dwellings on all lots of less than one acre shall be served by centralized or public sewage disposal systems in accordance with §170-47.B.(1).

3. Floodplain and Stormwater Management

No portions of the study area are impacted by FEMA mapped floodplain.

The entire study area is subject to the Township’s municipal stormwater management regulations, which were developed in accordance with the requirements of the Municipal Separate Storm Sewer System (MS4) program.

The study area drains to the Perkiomen Creek, designated for Warm Water Fish (WWF). The Perkiomen Creek is identified for Recreational Uses, and as supporting aquatic life,

Portions of the study area also drain to the Swamp Creek, which is classified as an impaired stream. The Swamp Creek supports fish consumption and recreation uses and is designated as a Trout Stocked Fishery (TSF).

Portions of the study area also drain to the Mine Run, a tributary to the Perkiomen, designated as a Trout Stocked Fishery (TSF).

4. Special Resource Protection

The Township Zoning Code includes protections floodplains and steep slopes. In December 2021, the Code was amended to incorporate Natural Resource Protection Standards, significantly enhancing the protection of the following natural resources compared to the pre-December 2021 regulations.

- Heritage Trees
- Lakes, Ponds and Watercourses
- Riparian Buffers
- Soils, including hydric soils and topsoil.
- Wetlands
- Wetland Margins, and
- Woodlands

The Township also maintains a current Stormwater Management Code, which promotes groundwater recharge, protects wetlands, regulates stormwater runoff rates and volume, and requires implementation of water quality measures for development projects.

For larger projects, the NPDES permit program requires implementation of water quality measures, management of stormwater volume, and groundwater recharge where feasible.

5. Sewer Connection Regulation

Pennsylvania Law prohibits municipal government from requiring existing homes to connect to public sewer if the structures are located more than 150 feet from the sewer main. Of the 36 parcels in the study area, 18 have homes situated more than 150 feet from either Meng Road or Mine Hill Road, and therefore, could not be required to connect if public sewer were installed along these streets.

B. Land Use and Future Growth

1. Development Plans

There are no subdivisions or developments currently proposed in the study area. Just south of the study area is the Dise Farm project, consisting of single-family homes, built in the 1990's. All homes in the Dise Farm project convey sewage to the Schwenksville Borough Authority Wastewater System. West of the study area, the Diesinger Subdivision was a single-family home project constructed in the late 1990's, with all properties served by on-lot systems.

2. Land Use

The existing uses within the study area are primarily single-family residential or country residence, which is consistent with permitted zoning uses in both the R-1 and R-2 zoning districts. The existing agricultural use in the R-2 district is also permitted by zoning. Most of the existing residential properties are served by on-lot sewage disposal systems.

The exceptions are two parcels near the intersection of Mine Hill and Meng Roads. The residence at 103 Meng Road located on a 2.73-acre lot, and the residence at 104 Meng Road located on a 41,000square-foot lot (0.94 acre), both experienced failed on-lot systems and were permitted to connect to the Schwenksville Borough Authority system via grinder pump through a manhole on Mine Hill Road.

3. Future Growth

Future growth in the study area is limited by zoning. In the R-2 District, conventional lotting standards require a minimum developable lot area of one

acre and a minimum lot width of 150 feet for residential lots. Of the study area lots in the R-2 District, only one, 8-acre lot may be eligible subdividable. All other lots are restricted from further subdivision by lot size or lot width limitations.

Minimum dimensional requirements for the R-1 District, combined with Environmental Adjustment Factors, limit the potential for any subdivision of existing R-1 lots within the study area without public sewer.

There are no lots in the study area that are greater than 10 acres in size. However, there are two tracts along the study area boundary that warrant consideration. Each of these could conceivably be developed under neighborhood lotting if public sewer were to become available.

- One agricultural tract along the southern boundary of the study area, fronting both Meng Road and Game Farm Road, is 48 acres in size. More than 10 acres of this parcel is within $\frac{1}{4}$ mile of the R-2 Zoning District and Future Growth Area. Without detailed study, it appears reasonable that this tract could yield up to 25 new homes via neighborhood lotting, provided access to public sewer is made available.
- Along the northern boundary of the study area is a 31-acre parcel, addressed as 104 Delphi Road, with more than 10 acres located within $\frac{1}{4}$ mile of the R-2 Zoning District and Future Growth Area. Without detailed study, it appears reasonable that this tract could yield up to 10 new homes via neighborhood lotting, provided access to public sewer is available.

4. Zoning Regulations

The properties in the study area are Primarily Zoned R-1 and R-2. Parcels over 10 acres in size in the R-1 or R-2 zoning district may be developed under Neighborhood lotting. The maximum development potential computations assume application of neighborhood lotting on these parcels, incorporating the environmental adjustment factors of the Zoning Code.

V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities

A. Option A - Continued Use of Existing On-lot Sewage Systems with Public Education

The most effective means of extending the life of an on-lot sewage disposal system is through proper use and routine maintenance. Under this option, Lower Frederick Township will focus on resident education promoting best management practices.

- The Township will provide educational materials as follows:
 - An educational information packet focusing on proper use and routine maintenance of septic systems will be mailed to each property within the study area that is not served by public sewer.
 - An on-lot sewage disposal system section will be added to the information tab of Lower Frederick Township's website. The information provided will focus on the following:
 - Basic information on septic systems and how they function
 - Water conservation practices
 - Materials and substances that should not be introduced into a septic system
 - Routine maintenance and inspection requirements
 - Links to the PADEP and Montgomery County Health Department resources related to on-lot septic systems
- The Township will continue to implement the existing Sewage Management Ordinance.
- Homeowners will continue to be responsible for operating and maintaining their on-lot septic systems.
- In the event of a mechanical failure within an on-lot septic system (i.e. broken pipe, failed pump, etc.), the homeowner shall be responsible for completing all necessary repairs in accordance with all Montgomery County Health Department and PADEP regulations and procedures.
- In the event of a failure of an on-lot septic system disposal field:
 - The homeowner will be responsible for testing, permitting, and installation of a replacement conventional or alternative sewage disposal system through the Montgomery County Health Department.
 - If a suitable replacement disposal area cannot be identified, the homeowner may consider the use of a small flow treatment facility or connection to the available public sewer system (SBA). The appropriate sewage planning would be necessary for these options.
 - If no other sewage disposal option is available to a property experiencing an active sewage malfunction, a retaining tank would be used to abate the nuisance.

B. Option B - Combination of Low Pressure & Gravity Connection to Existing Lower Frederick Public Sewer System

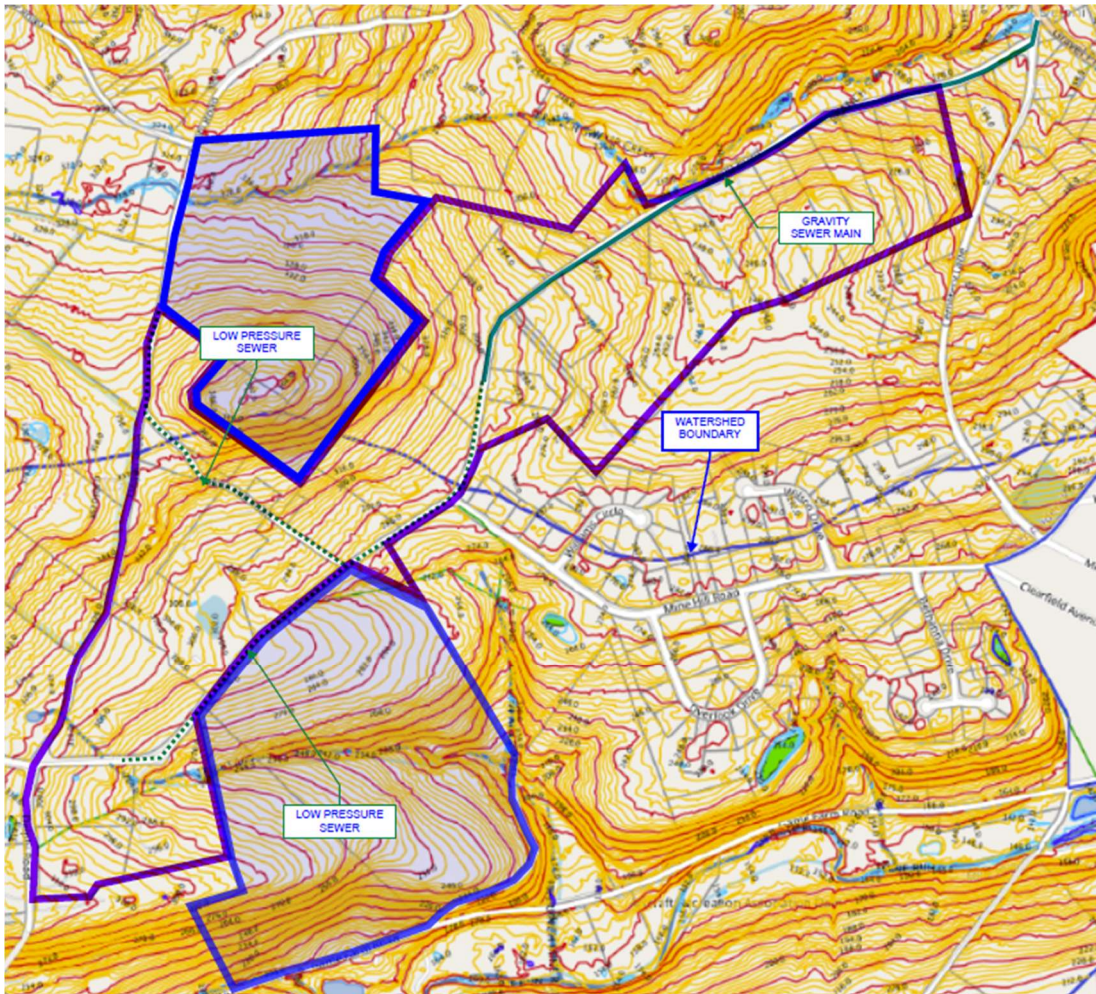
This option proposes to install 4,856 linear feet of 3" low pressure force main on Delphi Road, Mine Hill Road, and Meng Road.

The low-pressure force main will terminate at a proposed manhole at a high point on Meng Road where the proposed 3,268 LF gravity sanitary sewer collects and conveys raw wastewater to the existing gravity sewer on Gravel Pike. From this point, the wastewater will flow via gravity to the existing Delphi Pump Station, adding approximately 10,080 GPD of flow. Based on projected future flows and permitted capacity, Delphi Pump Station has sufficient capacity to accommodate additional flows.

This option could serve all 36 parcels within the study area. The two lots in the study area currently served by SBA could be removed from the SBA system and connected to Lower Frederick Township's sanitary system.

Properties in the force main area would be required to install grinder pumps to connect to the system.

A sketch of Option B is shown below:



Total Properties Served: 36

Average Sewage Flow (All Properties): 10,080 GPD

Properties Required to Connect: 16 (18 >150', 2 vacant)

Average Sewage Flow (Required Properties): 4,480 GPD

C. Option C - Low Pressure Sewer Connection to the SBA Collection System in Mine Hill Road

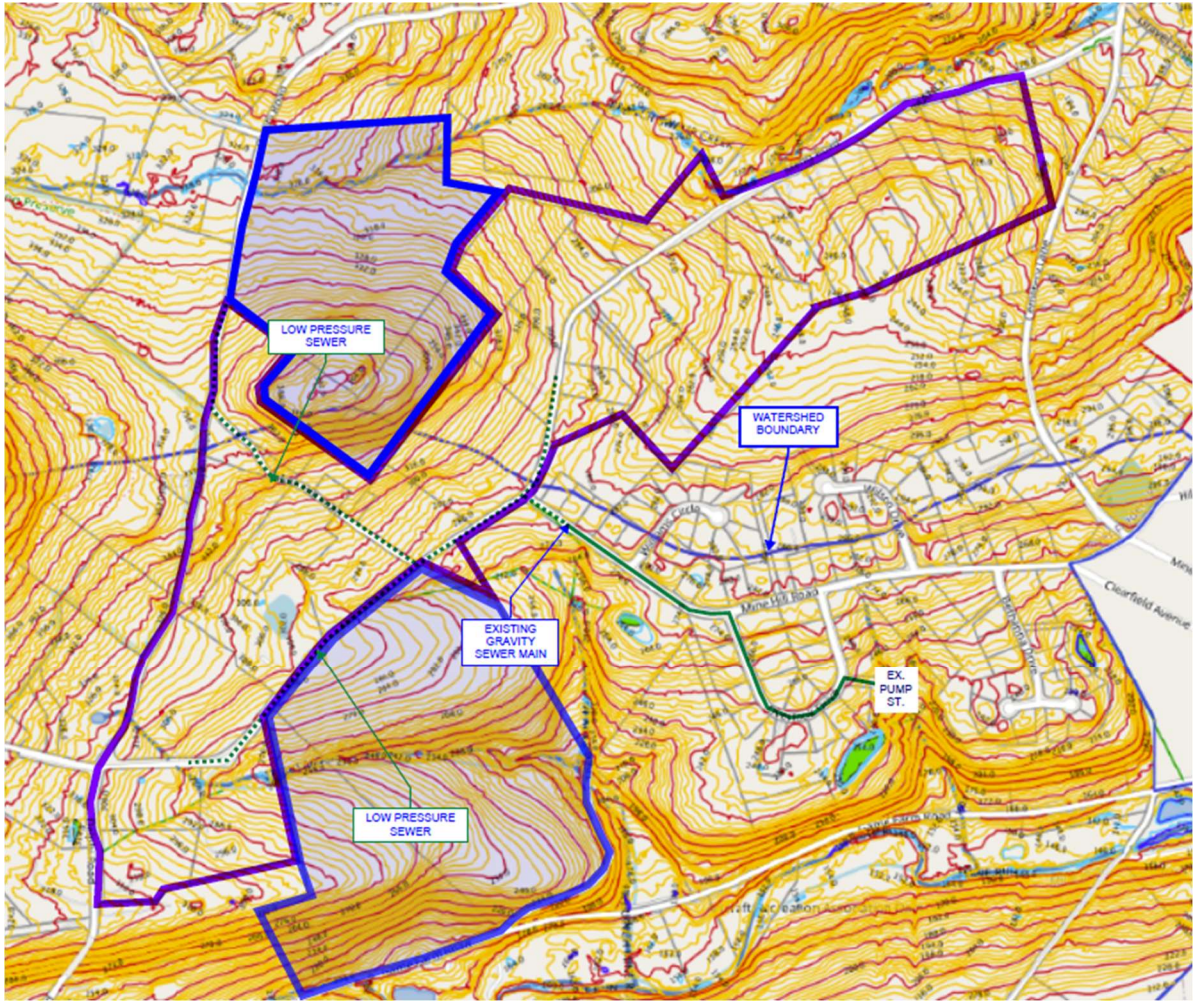
This option proposes to install a 3" low-pressure force main along Delphi Road, Mine Hill Road, and Meng Road.

The low-pressure force main will terminate at an existing SBA manhole on Mine Hill Road. From this location, wastewater will flow through SBA's Pheasant Knoll and Farmview Pump Stations before being treated at the SBA Treatment Plant. The additional flow at the SBA treatment plant and pump stations will increase by up to 4,760 gpd.

This option would serve 17 parcels within the study area. One (1) parcel is vacant and would not be required to connect and five (5) of these parcels would be exempt due to the distance of the homes from the proposed sewer line, resulting in 11 mandatory connections.

Properties would be required to install grinder pumps to connect to the low-pressure system.

A sketch of Option C is shown below:



Meng Area Properties Served: 17

Meng Area Average Sewage Flow (All Properties): 4,760 GPD

Meng Area Properties Required to Connect: 11 (5 >150', 1 vacant)

Meng Area Average Sewage Flow (Required Properties): 3,080 GPD

D. Option D - Low Pressure Sewer Connection to Existing Lower Frederick Public Sewer System

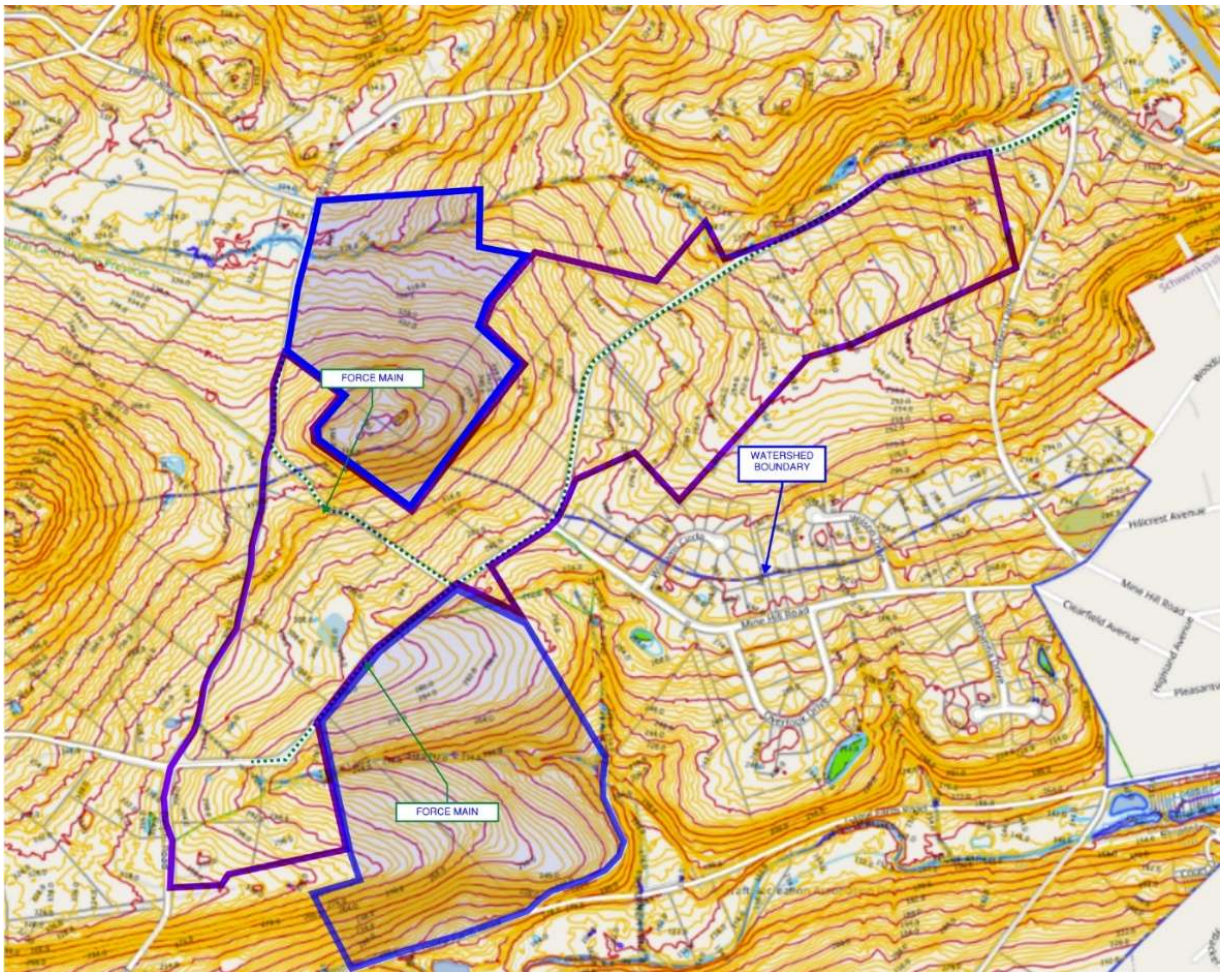
This option proposes to install a 3” low-pressure force main along Delphi Road, Mine Hill Road, and Meng Road.

The low-pressure force main will convey raw wastewater to the existing Lower Frederick collection system on Gravel Pike. From this point, the raw wastewater will flow to the existing Delphi Pump Station, increasing flows by approximately 10,080 gpd. Based on projected future flows and permitted capacity provided by the Township’s Wastewater Engineer, the Delphi Pump Station has adequate capacity to accommodate the additional flows.

This option could provide service to all 36 parcels within the study area. Two (2) parcels currently served by SBA could be removed from the SBA system and connected to Lower Frederick Township’s sanitary system.

All properties would be required to install grinder pumps to connect to the system.

A sketch of Option D is shown below:



Total Properties Served: 36

Average Sewage Flow (All Properties): 10,080 GPD

Properties Required to Connect: 16 (18 >150', 2 vacant)

Average Sewage Flow (Required Properties): 4,480 GPD

E. Option E - Low Pressure Sewer Connection to the SBA Collection System in Mine Hill Road and Directing Lower Frederick Properties Currently Served by SBA to a New Pump Station in the Existing Lower Frederick System

This option proposes to install a 3" low-pressure force main along Delphi Road, Mine Hill Road, and Meng Road.

The low-pressure force main will terminate at an existing SBA manhole on Mine Hill Road. From this location, wastewater will flow through SBA's Pheasant Knoll and Farmview Pump Stations, to a new pump station to be constructed by Lower Frederick Township at the corner of Mine Hill Road and Cemetery Lane.

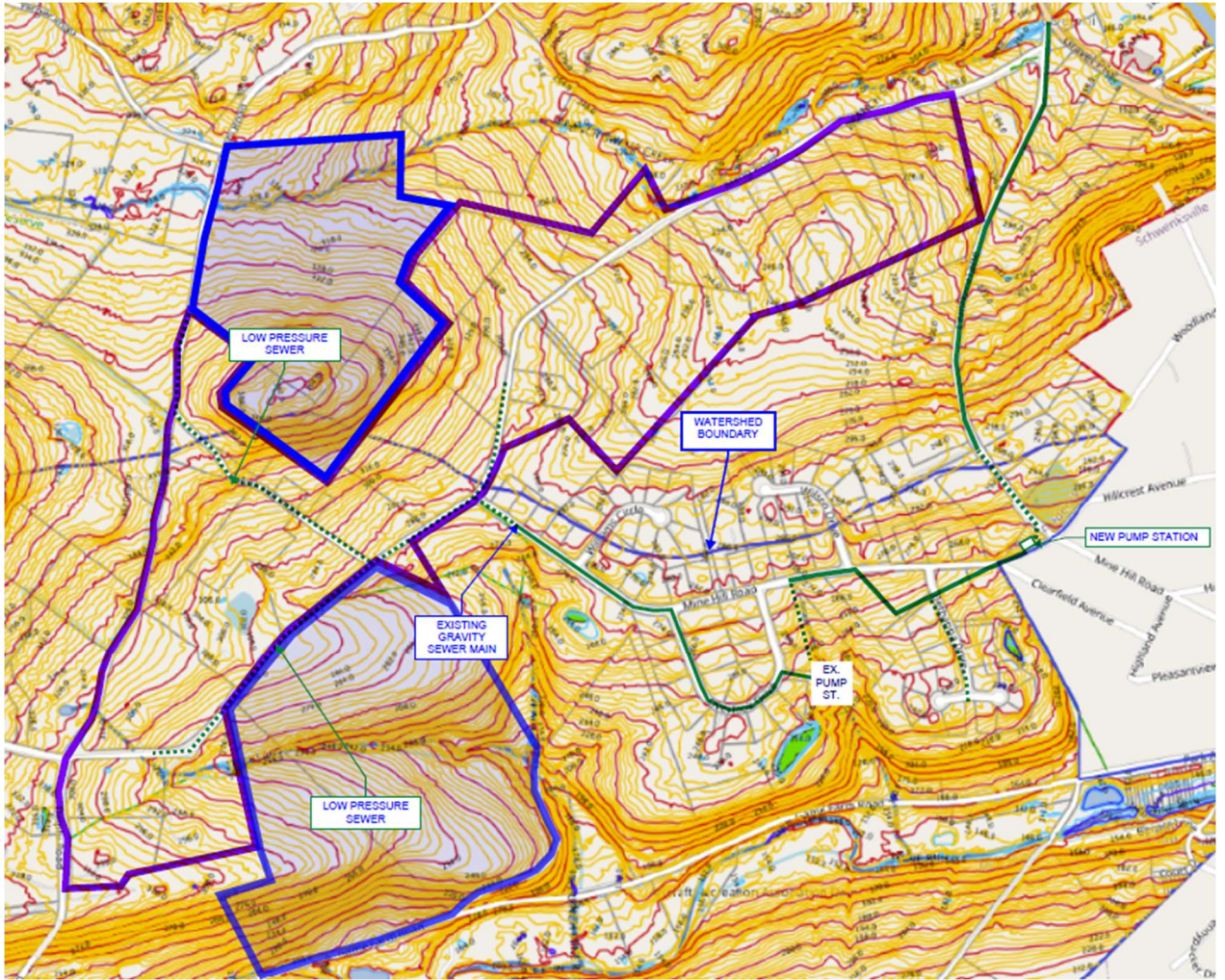
The low-pressure force main would serve 17 parcels within the Meng Road Planning Area. One (1) parcel is vacant and would not be required to connect and five (5) of these parcels would not be required to connect due to the distance of the homes from the proposed sewer line, resulting in 11 mandatory grinder pump connections from the Meng Road Area.

The new pump station would be located on the western corner of Mine Hill Road and Cemetery Lane. The new pump station would convey flows to a high point in Cemetery Lane, from which raw wastewater would flow by gravity to the existing Lower Frederick collection system on Gravel Pike. The gravity section can serve 12 properties on Cemetery Lane, ten (10) of which are within the required connection distance and were previously planned to be served by the Lower Frederick public sewer system.

From the connection point on Gravel Pike, the raw wastewater will flow to the existing Delphi Pump Station, increasing flows by approximately 23,297gpd. Based on projected future flows and permitted capacity provided by the Township's Wastewater Engineer, the Delphi Pump Station has capacity to accommodate these additional flows.

This option would result in the removal of the flows currently being treated by the SBA treatment plant, creating additional treatment capacity for SBA.

A sketch of Option E is shown below:



Meng Area Properties Served: 17

Meng Area Average Sewage Flow (All 17 Properties): 4,760 GPD

Meng Area Properties Required to Connect: 11 (5 >150', 1 vacant)

Meng Area Average Sewage Flow (Required 11 Properties): 3,080 GPD

Cemetery Road Properties Served: 12

Cemetery Road Average Sewage Flow (All 12 Properties): 3,360 GPD

Cemetery Road Properties Required to Connect: 10 (2 >150')

Cemetery Road Average Sewage Flow (Required 10 Properties): 2,800 GPD

SBA Average Flows from Pheasant Knoll Pump Station: 12,453 GPD

SBA Average Flows from Farmview Pump Station: 2,724 GPD

Total Average Flows from SBA: 15,177 GPD

Total New Properties Served: 29

Total Average Sewage Flow (SBA + All Properties): 23,297 GPD

Total New Properties Required to Connect: 21

Total Average Sewage Flow (SBA + Required Properties): 21,057 GPD

F. Retaining Tanks

Lower Frederick Township has a holding/retaining tank ordinance that permits the use of retaining tanks under the following circumstances:

- Institutional, recreational, or commercial establishments and which have a sewage flow of 800 gallons per day or less; or
- Situations in which the Sewage Enforcement Officer (SEO) has certified that an existing residential system has failed and that the site is unsuitable for any replacement system, thereby necessitating a holding tank to remedy the failure or abate a nuisance or public health hazard; or
- Where the property will be connected to a community sewage system within one (1) year of the installation of the holding tank, such that said holding tank will be for a temporary measure only. If connection does not occur within one (1) year, the permit may be extended by the SEO, with Board approval, for an additional one (1) year period. In no case shall the permit be extended more than three times.

The ordinance specifies maintenance requirements for holding tanks and penalties for violating the ordinance. The ordinance allows the Township to perform any work necessary to abate public nuisance.

While retaining tanks can be an effective means of abating public health hazards, they are maintenance-intensive systems requiring frequent pumping and not a preferred long-term sewage disposal solution when other feasible options are available.

G. Sewage Management Plans

Lower Frederick Township implemented a Sewage Management Ordinance in March of 2011, which remains in effect. The ordinance requires routine maintenance and reporting for all systems. It also grants the Township the authority to abate an imminent health hazard from an on-lot septic system if the owner fails to address the issue when identified and documented by the Montgomery County Health Department. The Township reviews pumping receipts, and inspection reports and sends reminders to property owners when more than three years have elapsed since the last pumping.

In addition to the Sewage Management Ordinance referenced above, Lower Frederick Township has established sewage management priority rankings for the R-1 and R-2 through Articles V and VI of the Zoning Ordinance (Chapter 170), effective October 3, 2023. This ordinance requires that, for new construction, the highest-ranking, feasible, on-lot sewage disposal system type be utilized and that justification for the selected sewage system type be provided to the township for approval.

H. No Action Alternative

Under a “no action” alternative:

- Homeowners will continue to be responsible for operating and maintaining their on-lot septic systems.

VI. Evaluation of Alternatives

Each of the potential alternatives described above has been evaluated for consistency with applicable planning documents, water quality standards, effluent limitations, and other technical, legislative or legal requirements. A table summary of the consistency evaluations is provided for each alternative.

The total cost for Township construction was estimated for each alternative as well as the direct costs to each property owner. For per property cost estimates, one connection per property was assumed to not underestimate the per property costs as there are no developments currently proposed.

Cost-estimating spreadsheets prepared by the Township’s Wastewater Engineer, Hydraterra Professionals are provided for each option in Appendix E.

A. Option A - Continued Use of Existing On-lot Systems with Public Education

OPTION A Continued Use of Existing On-lot Sewage Systems with Public Education Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Alternative does not involve use of a wastewater collection, conveyance, or treatment facility.
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Alternative is no way inconsistent with the Clean Water Act and Titles II & VI of the Water Quality Act.
4	The Lower Frederick Township’s Comprehensive Plan	✓		Part of the planning area is in the Rural Resource Conservation Area where only on-site sewer will be allowed, except under extenuating circumstances.
5	Antidegradation Requirements	✓		Alternative is no way inconsistent with antidegradation requirements.
6	State Water Plans	✓		Alternative is no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		No construction proposed
8	County Stormwater Management Plan	✓		No construction proposed
9	Wetland Protection	✓		No construction proposed
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species			No construction proposed
11	Historic and archaeological resource protection.			No construction proposed

1. Technical Feasibility

Based on the site inspections conducted for the needs analysis, no active or suspected on-lot septic malfunctions were identified in the study area. Since no public hazard or immediate system needs were observed, extending the service life of existing systems is considered as a feasible alternative for the study area.

According to the PADEP website on On-lot System Operation and Maintenance, under the section Preventing Malfunctions, “Homeowners can help prevent malfunctions and ensure the long-term use of their on-lot system by doing the following:

- *Conserving water and reducing waste flow into the septic tank.*
- *Having the septic tank pumped every 3 years, depending upon tank size and household size.*
- *Avoiding putting chemicals in the septic system.*
- *Not using the toilet to dispose of bulky, slowly decomposing wastes.*
- *Inspecting the septic tank, pipes and drainage field annually.*
- *Maintaining accurate records of the septic system (design, installation, location, inspections, pumpings, malfunctions, repairs.)*
- *Preventing run-off from downspouts, sump pumps, and paved surfaces from getting into the septic system.*
- *Keeping heavy vehicles, equipment and livestock away from the septic system.*
- *Not planting trees and shrubs over or close to the septic system”*

2. Costs

The cost for this alternative will be minimal as the existing Township administration personnel would be used to:

- Print and mail educational material
- Add an on-lot sewage management tab to the Township website
- Add on-lot septic educational material annually to the existing Township newsletter publication

Hard costs would be minimal and would include expenses for printing, and postage associated with creating and distributing the educational materials.

The Township Wastewater Engineer’s Office would provide directions and content for the website information and mailings.

	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
In-House Administrative Personnel	40	\$65	\$2,600*
Representative of the Township Engineer	8	\$110	\$880
Printing Supplies and Postage			\$80
	Estimated Total:		\$3,540
	Estimate Cost Per Property (36 properties):		\$98

*Cost included in administrative salary in Township budget

3. Summary

The Option A evaluation is summarized as follows:

- It has the least expensive cost.
- Will NOT increase the flow at the Delphi pump station.
- Will improve homeowner knowledge of their on-lot sewage disposal systems and how to operate and maintain the systems.

Option A was determined to be the best alternative to address the sewage disposal needs of the Meng Road Planning Area.

B. Option B - Combination of Low-Pressure & Gravity Connection to Existing Lower Federick Public Sewer System

OPTION B Combination of Low-Pressure & Gravity Connection to Existing Lower Federick Public Sewer System Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Township’s Comprehensive Plan		✓	A portion of the planning area is designated as a Rural Resource Conservation Area. Being a non-growth area, the extension of public sewer will not be permitted in the Rural Resource Conservation Area.
5	Antidegradation Requirements	✓		Alternative is in no way inconsistent with antidegradation requirements.
6	State Water Plans	✓		Alternative is in no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection	✓		Construction will be limited to work with existing road rights-of-way
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species			Construction will be limited to work with existing road rights-of-way
11	Historic and archaeological resource protection.			A stream crossing is proposed. A PHMC submission will be necessary.

1. Technical Feasibility

The Lower Frederick Wastewater Treatment Facility has ample capacity to support the proposed connections.

This option would increase flows to the Delphi pump station by approximately 10,080 gpd. Based on projected future flows and permitted capacity provided by the Township’s Wastewater Engineer, the Delphi Pump Station has adequate capacity to accommodate these additional flows.

2. Costs

Total Properties Served: 36

Average Sewage Flow (All Properties): 10,080 gpd

Properties Required to Connect: 16 (18 >150', 2 vacant)

Average Sewage Flow (Required Properties): 4,480 gpd

Township Construction Cost: \$5,243,126

Township Cost per Property (All Properties): **\$145,642/parcel**

Township Cost per Property (Required Properties): **\$327,695/parcel**

Estimated Property Owner Direct Costs:

- Connection Cost \$17,000 for grinder pump or \$7,000 for gravity connection
- Tapping Fee \$7,405.26 per connection
- Total: \$14,405-\$24,405 per connection

3. Summary

The Option B evaluation is summarized as follows:

- Does not have the least expensive cost per property.
- Will increase the flow at the Delphi pump station.
- Involves construction within a PennDOT road.

Option B was not determined to be the best alternative to address the sewage disposal needs of the Meng Road Planning Area.

C. Option C - Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road

OPTION C Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Township's Comprehensive Plan		✓	A portion of the planning area is designated as a Rural Resource Conservation Area. Being a non-growth area, the extension of public sewer will not be permitted in the Rural Resource Conservation Area.
5	Antidegradation Requirements	✓		Alternative is in no way inconsistent with antidegradation requirements.
6	State Water Plans	✓		Alternative is in no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection	✓		Construction would be limited to the area within existing road rights-of-way
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species			Construction would be limited to the area within existing road rights-of-way
11	Historic and archaeological resource protection.			Construction would be limited to the area within existing road rights-of-way

1. Technical Feasibility

The proposed alternative would increase the sewage flow to the Pheasant Knoll Pump Station, Farmview Pump Station, and SBA Treatment Plant by approximately 3,080 - 4,760 gpd.

The pump stations have ample capacity for additional sewage flows.

The SBA Treatment Plant's average daily flow in 2028 is projected to be 219,721 gpd and the projected maximum 3 consecutive months flow is 293,934 gpd. The treatment plant has a permitted maximum capacity of

300,000 gpd. The addition of the Meng Road Area properties would bring the projected maximum 3 consecutive months flow to just under the permit limit.

Two properties on Meng Road currently have individual grinder pumps connected to the manhole in Mine Hill Road. SBA allowed these individual connections to resolve failing on-lot systems.

For this alternative to be technically feasible, SBA would need to be willing to accept additional flows outside of their current service area.

2. Costs

Total Properties Served: 17

Average Sewage Flow (All Properties): 4,760 gpd

Properties Required to Connect: 11 (5 >150', 1 vacant)

Average Sewage Flow (Required Properties): 3,080 gpd

Township Construction Cost: \$2,765,107.29

Township Cost per Property (All Properties): **\$162,653/parcel**

Township Cost per Property (Required Properties): **\$251,373/parcel**

Estimated Property Owner Direct Costs:

- Connection Cost \$17,000 for grinder pump connection
- SBA Tapping Fee \$3,330 per connection
- Total: \$20,330 per connection

3. Summary

The Option C evaluation is summarized as follows:

- Does not have the least expensive cost per property.
- Does not address all of the properties in the Meng Road planning area.
- SBA would need to be willing to accept additional flows from Lower Frederick Township.
- Will increase the flow at the Pheasant Knoll Pump Station, Farmview Pump Station, and the SBA Treatment Plant.
- Will bring SBA treatment plant close to the permit limit.
- Does not involve construction within a PennDOT road.

Option C was not determined to be the best alternative to address the sewage disposal needs of the Meng Road Planning Area.

D. Option D - Low-Pressure Sewer Connection to Existing Lower Frederick Public Sewer System

OPTION D Low-Pressure Sewer Connection to Existing Lower Frederick Public Sewer System Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Township's Comprehensive Plan		✓	A portion of the planning area is designated as a Rural Resource Conservation Area. Being a non-growth area, the extension of public sewer will not be permitted in the Rural Resource Conservation Area.
5	Antidegradation Requirements	✓		Alternative is in no way inconsistent with antidegradation requirements.
6	State Water Plans	✓		Alternative is in no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection	✓		Construction would be limited to the area within existing road rights-of-way
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species			Construction would be limited to the area within existing road rights-of-way
11	Historic and archaeological resource protection.			Construction would be limited to the area within existing road rights-of-way

1. Technical Feasibility

The Lower Frederick Township Wastewater Treatment Facility has ample capacity to support the proposed connections.

This option would increase flows to the Delphi pump station by approximately 10,080 gpd. Based on projected future flows and permitted capacity provided by the Township's Wastewater Engineer, the Delphi Pump Station has adequate capacity to accommodate these additional flows.

2. Costs

Total Properties Served: 36

Average Sewage Flow (All Properties): 10,080 gpd

Properties Required to Connect: 16 (18 >150', 2 vacant)

Average Sewage Flow (Required Properties): 4,480 gpd

Township Construction Cost: \$4,533,059

Township Cost per Property (All Properties): **\$125,918/parcel**

Township Cost per Property (Required Properties): **\$283,316/parcel**

Estimated Property Owner Direct Costs:

- Connection Cost \$17,000 for grinder pump connection
- Tapping Fee \$7,405.26 per connection
- Total: \$24,405 per connection

3. Summary

The Option D evaluation is summarized as follows:

- Does not have the least expensive cost per property.
- Will increase the flow at the Delphi pump station.
- Involves construction within a PennDOT road.

Option D was not determined to be the best alternative to address the sewage disposal needs of the Meng Road Planning Area.

E. Option E - Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road and Directing Lower Frederick Properties Currently Served by SBA to a New Pump Station in the Existing Lower Frederick System

OPTION E				
Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road and Directing Lower Frederick Properties Currently Served by SBA to a New Pump Station to the Existing Lower Frederick System				
Consistency Analysis Summary				
	Evaluation Category	Consistency		Comments
		Yes	No	
1	Sections 4 & 5 of the Clean Streams Law/ Section 208 of the Clean Water Act	✓		Alternative is consistent with the objectives and requirements of the Clean Streams Law and Clean Water Act.
2	Wasteload Management	✓		Capacity is available within the existing sewer system; no overload is projected; alternative complies with Wasteload Management Requirements (Chapter 94 requirements)
3	Plans developed under Title II of the Clean Water Act and Titles II & VI of the Water Quality Act.	✓		Design and construction will be consistent with the Clean Water Act and Water Quality Act. Necessary permits will be obtained.
4	The Lower Frederick Township's Comprehensive Plan		✓	A portion of the planning area is designated as a Rural Resource Conservation Area. Being a non-growth area, the extension of public sewer will not be permitted in the Rural Resource Conservation Area.
5	Antidegradation Requirements	✓		Alternative is in no way inconsistent with the antidegradation requirements.
6	State Water Plans	✓		Alternative is in no way inconsistent with the state water plan.
7	Prime Agricultural Land Policy	✓		Proposed measures will have no impact on Agricultural Land; All construction will occur within existing road rights-of-way and on property not classified as prime farmland.
8	County Stormwater Management Plan	✓		Alternative is consistent with the Stormwater Management Plan.
9	Wetland Protection	✓		If there are wetlands present in the project area, the necessary permits will be obtained.
If the alternative includes excavation or construction and that construction would occur outside of existing road rights-of-way, the alternatives will also be evaluated for:				
10	Protection of rare, endangered or threatened species	✓		The proposed pump station would be constructed outside of existing road rights-of-way. A PNDI database search would be performed, and all necessary clearances obtained.
11	Historic and archaeological resource protection.	✓		The proposed pump station would be constructed outside of existing road rights-of-way. A PHMC submission will be necessary.

1. Technical Feasibility

The Lower Frederick Wastewater Treatment Facility has ample capacity to support the proposed connections.

This option would increase flows to the Delphi pump station by approximately 23,297 gpd. Based on projected future flows and permitted capacity provided by the Township's Wastewater Engineer, the Delphi Pump Station has adequate capacity to accommodate these additional flows.

2. Costs

Total New Properties Served: 29

Total Average Sewage Flow (SBA + All Properties): 23,297 gpd

Total New Properties Required to Connect: 21

Total Average Sewage Flow (SBA + Required Properties): 21,057 gpd

Township Construction Cost: \$8,992,360

Township Cost per Property (All Properties): **\$310,012/parcel**

Township Cost per Property (Required Properties): **\$428,112/parcel**

Estimated Property Owner Direct Costs:

- Connection Cost \$17,000 for grinder pump or \$7,000 for gravity connection
- Tapping Fee \$7,405.26 per connection
- Total: \$14,405-\$24,405 per connection

3. Summary

The Option E evaluation is summarized as follows:

- Does not have the least expensive cost per property.
- Will increase the flow at the Delphi pump station.
- Involves construction within a PennDOT road.
- Only serves a portion of the Meng Rd Planning Area
- It also serves homes on Cemetery Road.
- Involves taking ownership of collection system components currently owned and operated by SBA.
- Adds 3 pump stations for Lower Frederick to operate and maintain.
- Will remove flows from the SBA Treatment Plant.

Option E was not determined to be the best alternative to address the sewage disposal needs of the Meng Road Planning Area.

VII. Institutional Evaluation

A. Public Sewer Alternatives

The township's collection and treatment facilities are owned and operated by Lower Frederick Township. Four Township employees perform daily maintenance and plant operations in addition to their other public works duties which include maintaining roads, parks, and other Township facilities. The Township sets users fees, negotiates agreements, and raises capital for construction and maintenance projects. Additionally, the Township also has an employee that devotes much of their time to sewer billing and collections.

The Township engages a consulting firm to assist with plant testing and operations compliance, and the Township wastewater engineer prepares the annual Chapter 94 report. The Township has a history of operating the system in compliance with the permit requirements. Township employees perform routine maintenance, while other operation and maintenance tasks such as sludge hauling, manhole lining, etc. are contracted through approved bidding processes.

Income and expenses for the collection, conveyance and wastewater treatment system are tabulated separately in the township budget. Revenue for 2026 is projected at \$1,066,300, generated primarily by quarterly sewer rental fees. Sewer account expenditures in 2026 are budgeted at \$1,147,930 including a debt service of \$518,825.

The selected alternative does not involve any expenses related to the Township's public sewer system.

B. Selected Alternative (Option A)

The selected alternative involves continued use of the existing on-lot septic systems and will not affect the existing public sewer system or its funds.

Lower Frederick Township enforces a sewage management ordinance that requires routine maintenance and reporting for all sewage disposal systems. The ordinance authorizes the Township to abate an imminent health hazard from an on-lot septic system if the owner fails to address and issue identified and documented by the Montgomery County Health Department. The Township currently reviews pumping receipts, inspection reports, and sends reminders to property owners when more than three years have elapsed since their last pumping. No new ordinances are required to be developed to implement the selected alternative.

The Township has the required administrative staff and retains a professional engineer necessary to implement the selected alternative.

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

A. Selected Wastewater Disposal Alternative (Option A)

The selected disposal alternative is continued use of existing on-lot sewage disposal systems, supplemented with public education emphasizing the importance of proper use, routine maintenance, and long-term system performance of on-lot systems.

This alternative was selected for the following reasons:

- No immediate needs were identified within the planning area.
- Proper operation and maintenance of on-lot systems can help prevent malfunctions and support the long-term use of these on-lot systems.
- This alternative is the most cost-effective.
- This alternative does not increase flows to the Delphi Pump Station and will not require additional sewer facilities for the Township to operate and maintain.
- The Township has the necessary staff to implement the selected alternative.

B. Selected Capital Financing Plan

The selected alternative will be paid through the Township's general fund.

C. Implementation Schedule

Following PADEP approval of this Special Study, the educational mailings and additions to the Township's website will be completed within 6 months.

APPENDIX A
FIELD SURVEY SUMMARY AND FIELD SHEETS

FIELD SEPTIC SURVEY EVALUATION

A field survey was conducted of the septic systems within the study area in March and April 2024 to identify any existing or suspected septic malfunctions. There are 36 lots located within the study area. Properties excluded from the field survey included:

- 103 and 104 Meng Road (Parcels 380001531006 & 380001561003), which are served by the Schwenksville Borough Authority (SBA) sewer system using individual grinder pumps.
- Parcel 380001615003 on Mine Hill Road and Parcel 380001628008 on Delphi Road, which are vacant.
- 24 Meng Road (Parcel 380001570003) which was approved by DEP in 2022 for the construction of a small flow treatment facility with stream discharge to correct a failing onlot system.

Notices were sent to the remaining 31 properties within the study area. A second notice was sent to all properties that did not respond to the initial notice. Inspector Jamie Sundermier, SEO of Value Engineering Inc., obtained permission from the owners that responded to the notice for site inspections. When possible, the inspector met with the property owner during the inspection. Each property inspected was evaluated for indicators of current or future septic malfunction including green/lush grass, wetness or spongy areas, odors, ponded water, and system overflow.

The following properties did not respond to the notices, but the disposal areas were observed from the public road right-of-way:

- 30 Meng Road (Parcel 380001564009) – This property is used as an animal boarding facility. The elevated sand mound disposal field and the area downslope of the field is visible from the public roadway. No indications of system failure were seen from the road.
- 31 Meng Road (Parcel 380001543003) – This is a residential property. The elevated sand mound septic system is visible from the public roadway. The tanks, disposal area, and area downslope of the disposal field are visible, and no evidence of system failure is noted.

The following notified properties were not inspected:

- 109 Meng Road (Parcel 380001528009) – property owner did not respond to the notices.
- 114 Meng Road (Parcel 380001558033) – In speaking with the property owner, it was determined that this lot was created in a subdivision where his lot is served by an individual small flow treatment facility with stream discharge. As there is no land-based disposal area, it was agreed that a site inspection was not necessary.

No indicators of septic malfunction were identified as part of the field inspections completed. The results of the inspection are summarized as follows:

- 2 lots are vacant
- 2 lots are served by SBA
- 4 lots are served by SFTF with stream discharge – 3 of these are the result of a subdivision proposing the use of SFTF; only 1 SFTF is the result of an onlot system failure
- 25 lots served by onlot land-based disposal systems were inspected and no indications of malfunction were found
- 2 lots served by onlot land-based disposal systems were observed from the road and no indications of malfunction were found
- 1 lot served by an onlot land-based disposal system was not inspected

Of the 27 lots inspected that are served by onlot land-based disposal systems, 15 lots use original in-ground septic systems and 12 use more current technology like elevated sand mounds and alternate sewage disposal systems. The system types are as follows:

- 10 Elevated Sand Mounds
- 15 In-Ground Systems
- 1 At-Grade System
- 1 Micromound System

On 6 parcels within the study area, the original onlot septic systems were successfully tested, permitted, and replaced with new on-lot systems.

The individual lot inspection results are summarized below, and field inspection forms are attached.

8 Meng Road	Tax Parcel #	380001591009
Inspector:	Jamie Sundermier	
Date of Inspection:	3/22/24	
Weather Conditions:	30F, Sunny, No rain in 24 hours	
Property Size (ac):	2.17	
Owner/Representative Present:	Bob Hauser	
Type of Septic System:	In-Ground	
Age of System:	Original to the house, ~1974	
Problem/Repairs Reported:	No	
Indications of Failure:	No	
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Owner reports having septic tanks pumped every 3 years 	

10 Meng Road		Tax Parcel #	380001588003
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	2.28		
Owner/Representative Present:	Barry McFarland		
Type of Septic System:	In-Ground		
Age of System:	Original to the house, ~1974		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

12 Meng Road		Tax Parcel #	380001585006
Inspector:	Jamie Sundermier		
Date of Inspection:	3/28/24		
Weather Conditions:	45F, Overcast, 0.3" rain in 24 hours		
Property Size (ac):	2.3		
Owner/Representative Present:	Ron Ketzwitz		
Type of Septic System:	In-Ground		
Age of System:	Original to the house, ~1974		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

14 Meng Road		Tax Parcel #	380001582009
Inspector:	Jamie Sundermier		
Date of Inspection:	4/19/24		
Weather Conditions:	50F, Overcast, No rain in 24 hours		
Property Size (ac):	1.8		
Owner/Representative Present:	Kelly Burnell		
Type of Septic System:	At-Grade - Replacement for original system		
Age of System:	4 years ~2020		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

18 Meng Road		Tax Parcel #	380001579003
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	4.7		
Owner/Representative Present:	Rainer Keown		
Type of Septic System:	In-Ground		
Age of System:	Original to the house, ~1969		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports pumping septic tank every other year 		

20 Meng Road		Tax Parcel #	380001576006
Inspector:	Jamie Sundermier		
Date of Inspection:	4/9/24		
Weather Conditions:	60F, partly cloudy, No rain in 24 hours		
Property Size (ac):	2.2		
Owner/Representative Present:	George Adamson		
Type of Septic System:	In-Ground		
Age of System:	Original to the house, ~1973		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

22 Meng Road		Tax Parcel #	380001573009
Inspector:	Jamie Sundermier		
Date of Inspection:	3/26/24		
Weather Conditions:	57F, overcast, 1.8" 3 days prior		
Property Size (ac):	2.25		
Owner/Representative Present:	Father of owner		
Type of Septic System:	Elevated Sand Mound – Replacement for original system		
Age of System:	unknown		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Representative reports the septic tanks pumped every 3 years 		

26 Meng Road		Tax Parcel #	380001567006
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	1.5		
Owner/Representative Present:	Rick Schmidt		
Type of Septic System:	Elevated Sand Mound – Replacement for original system		
Age of System:	Constructed 2010 – 14 years old		
Problem/Repairs Reported:	After the new sand mound system was installed, site grading directed stormwater runoff towards basement window. Additional grading corrected issue. No problems noted with the functioning of the septic system.		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Owner reports the septic tanks pumped every 2 years 		

27 Meng Road		Tax Parcel #	380001546009
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	1.45		
Owner/Representative Present:	Gabe & John Ott		
Type of Septic System:	In-Ground		
Age of System:	Unknown – possibly late 1960s per owner		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • Property contains a 3-bedroom residential home and a commercial greenhouse/nursery business. Only the home is served by the onlot system. • Owners report the septic tanks are pumped every 3 years 		

34 Meng Road		Tax Parcel #	380001562506
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	1.5		
Owner/Representative Present:	Carmella Gimber		
Type of Septic System:	Elevated Sand Mound		
Age of System:	Original to house, ~1981		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

35 Meng Road		Tax Parcel #	380001537009
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	2.5		
Owner/Representative Present:	Bill Wenninger		
Type of Septic System:	In-Ground		
Age of System:	unknown		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • During the inspection, the property owner thought there was no drain field associated with his system and that a pipe in a swale was his method of disposal. He said water rarely comes out of the pipe; there was no odor or black sludge in the swale. The inspector thought the pipe appeared to be a foundation drain and based on grading there appeared to be a drain field below the septic tank. Montgomery County SEO, Dan Oskiera was contacted. He found a plan of the property showing a drain field below the septic tank. Out of an abundance of caution, the SEO dyed the septic tank, no dye came out of the pipe. The SEO indicated that there was no evidence of malfunction and does not believe the pipe is associated with septic system. • Owner stated that he has his septic tank pumped every 3 years. 		

36 Meng Road		Tax Parcel #	380001562407
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	2.41		
Owner/Representative Present:	Casey Righter		
Type of Septic System:	In-Ground		
Age of System:	Believes is original to house, ~1986		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 2-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

38 Meng Road		Tax Parcel #	380001562407
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	1.3		
Owner/Representative Present:	Will Hurtubise		
Type of Septic System:	Split Micromound – Replacement for original system		
Age of System:	System installed at time of property transfer in 2018		
Problem/Repairs Reported:	Owner reported they had a problem with drip tubing freezing a few years back. I recommended leaving the grass long (~6”) over the disposal fields at the last mowing of the season to provide additional insulation to tubing over winter		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years and having the drip components as required per their maintenance agreement 		

39 Meng Road		Tax Parcel #	380001562407
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	3.65		
Owner/Representative Present:	Melissa & Dom Pileggi		
Type of Septic System:	In-ground		
Age of System:	unknown		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential; convenience toilet in small pool house is also connected to the system. • Owner reports having septic tanks pumped every 2 years. • At the initial inspection in March 2024, there was a very small, very shallow puddle at the topography change between the turf and the wooded area where the septic drain field was reported to be. There was no color or odor associated with the puddle, and it appeared to be stormwater trapped at the topography change. A follow-up inspection was performed in September 2024 and no evidence of ponding or malfunction was found. 		

40 Meng Road		Tax Parcel #	380001562308
Inspector:	Jamie Sundermier		
Date of Inspection:	3/25/24		
Weather Conditions:	40F, Sunny, 1.8" rain on 3/23		
Property Size (ac):	1.9		
Owner/Representative Present:	Doug Meyers		
Type of Septic System:	In-Ground		
Age of System:	Original to house, ~1985		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

41 Meng Road	Tax Parcel #	380001535002
Inspector:	Jamie Sundermier	
Date of Inspection:	4/15/24	
Weather Conditions:	38F, partly cloudy, 0.13" rain overnight	
Property Size (ac):	3	
Owner/Representative Present:	Dave Rutter	
Type of Septic System:	Elevated Sand Mound	
Age of System:	Original to house, ~1979	
Problem/Repairs Reported:	Previously repaired broken pipe at the connection with the pump tank	
Indications of Failure:	No	
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 2 years 	

42 Meng Road	Tax Parcel #	380001562101
Inspector:	Jamie Sundermier	
Date of Inspection:	4/9/24	
Weather Conditions:	43F, partly cloudy, no rain in 24 hours	
Property Size (ac):	1	
Owner/Representative Present:	Elizabeth Freeman	
Type of Septic System:	Elevated Sand Mound - gravity	
Age of System:	Original to house, ~1981	
Problem/Repairs Reported:	15 years ago, there was a plumbing leak in the house that was repaired and not associated with the septic system	
Indications of Failure:	No	
Notes:	<ul style="list-style-type: none"> • 2-bedroom residential. • Owner reports having septic tanks pumped every 3 years 	

44 Meng Road	Tax Parcel #	380001562002
Inspector:	Jamie Sundermier	
Date of Inspection:	3/22/24	
Weather Conditions:	30F, Sunny, No rain in 24 hours	
Property Size (ac):	1	
Owner/Representative Present:	Joan Chambers	
Type of Septic System:	Elevated sand mound	
Age of System:	Original to house, ~1981	
Problem/Repairs Reported:	No	
Indications of Failure:	No	
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 	

47 Meng Road		Tax Parcel #	380001534003
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	7.24		
Owner/Representative Present:	Geoff Randall		
Type of Septic System:	Elevated sand mound – Replacement for original system		
Age of System:	1997		
Problem/Repairs Reported:	Pump tank was replaced		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 2-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

105 Meng Road		Tax Parcel #	380001627306
Inspector:	Jamie Sundermier		
Date of Inspection:	4/9/24		
Weather Conditions:	43F, partly cloudy, no rain in 24 hours		
Property Size (ac):	3		
Owner/Representative Present:	Not present – permission to access property given by Thomas Marke		
Type of Septic System:	Elevated Sand Mound – Replacement for original system		
Age of System:	unknown		
Problem/Repairs Reported:	unknown		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • There is a stormwater swale not far from the disposal area with water in it, >5” of rain last week, water in stormwater swale upslope and downslope of system, no odor or color in water – does not appear related to the septic system, no evidence of malfunction 		

114 Meng Road		Tax Parcel #	380001558033
Inspector:	Jamie Sundermier		
Date of Inspection:	No inspection performed – 4/2/24 phone interview with owner Mark Bessette		
Weather Conditions:	-		
Property Size (ac):	4		
Owner/Representative Present:	No inspection performed		
Type of Septic System:	SFTF - small flow treatment facility with stream discharge – This property is a lot in a 3-subdivision that was approved proposing the use of SFTF – The SFTF is not a result of onlot system failure		
Age of System:	1999		
Problem/Repairs Reported:	unknown		
Indications of Failure:	No – stream discharge – no disposal field		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Lot is part of a subdivision where lots were created using small flow treatment facilities with stream discharge • Inspector agreed with owner that as there is no disposal field – a field inspection was not required • Tanks and filters visible on aerials– no evidence of failure noted • Owner reports having the system routinely maintained and pumped 		

115 Meng Road		Tax Parcel #	380001529008
Inspector:	Jamie Sundermier		
Date of Inspection:	3/25/24		
Weather Conditions:	40F, Sunny, 1.8" rain on 3/23		
Property Size (ac):	6.56		
Owner/Representative Present:	Colin Witman		
Type of Septic System:	In-Ground		
Age of System:	Original to house, ~1976		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years 		

116 Meng Road		Tax Parcel #	380001558006
Inspector:	Jamie Sundermier		
Date of Inspection:	3/28/24		
Weather Conditions:	45F, Overcast, 0.3" rain in 24 hours		
Property Size (ac):	3		
Owner/Representative Present:	Brian Lambert		
Type of Septic System:	SFTF - small flow treatment facility with stream discharge – This property is a lot in a 3-subdivision that was approved proposing the use of SFTF – The SFTF is not a result of onlot system failure		
Age of System:	Late 1990s		
Problem/Repairs Reported:	Sand filter requires excessive maintenance to prevent clogging, sand replaced in filter in 2021		
Indications of Failure:	No – no disposal area		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports having septic tanks pumped every 3 years • Owner noted he would be happy to connect to public sewer if it was extended • I recommended that he may want to reach out to a septic consultant to see if there is a more modern, less maintenance intensive type filter that could be used in place if the existing sand filter – proper permits must be obtained before replacing any part of the system 		

116 Delphi Road		Tax Parcel #	380000217006
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	3.75		
Owner/Representative Present:	Dave Pennepacker		
Type of Septic System:	In-Ground		
Age of System:	Original 1963 with expansion of disposal field in 1992		
Problem/Repairs Reported:	Odors before disposal field was expanded in 1992		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Owner reports pumping septic tank every 3 years 		

204 Delphi Road		Tax Parcel #	380000238066
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	3		
Owner/Representative Present:	Craig Forwood		
Type of Septic System:	SFTF - small flow treatment facility with stream discharge – This property is a lot in a 3-subdivision that was approved proposing the use of SFTF – The SFTF is not a result of onlot system failure		
Age of System:	1998		
Problem/Repairs Reported:	Aerator has been replaced		
Indications of Failure:	No – no disposal area		
Notes:	<ul style="list-style-type: none"> • 4-bedroom residential. • Lot is part of a subdivision where lots were created using small flow treatment facilities with stream discharge • Owner works at a nearby municipal wastewater plant – her performs routine chlorine testing and maintenance himself on his SFTF • Owner reports pumping septic tank every 3 years 		

220 Mine Hill Road		Tax Parcel #	380001627207
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	3		
Owner/Representative Present:	Rich Huser		
Type of Septic System:	In-Ground – pressure dosed		
Age of System:	1988		
Problem/Repairs Reported:	Routine pump replacement		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports pumping septic tank every 3 years 		

223 Mine Hill Road		Tax Parcel #	380001612006
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	1.1		
Owner/Representative Present:	No one present – permission to enter property and phone interview given by Lisa Parker, daughter in law of recently deceased owner		
Type of Septic System:	In-Ground – no components visible		
Age of System:	unknown		
Problem/Repairs Reported:	No		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Interviewee unaware of past maintenance 		

226 Mine Hill Road		Tax Parcel #	380001627009
Inspector:	Jamie Sundermier		
Date of Inspection:	3/22/24		
Weather Conditions:	30F, Sunny, No rain in 24 hours		
Property Size (ac):	0.9		
Owner/Representative Present:	John Weston		
Type of Septic System:	In-Ground		
Age of System:	unknown		
Problem/Repairs Reported:	Tank replaced in 2001/2002		
Indications of Failure:	No		
Notes:	<ul style="list-style-type: none"> • 3-bedroom residential. • Owner reports pumping septic tank every 3 years 		

Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	8 MENG RD
Lot Size:	2.17 AC
Date of Inspection:	5/22/24
Inspector:	Jamie Sundermier
Property Rep.:	BOB HAUSER
Weather Conditions:	31°F, SUNNY, NO RAN 24+HOURS

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO
Year Built:	1974

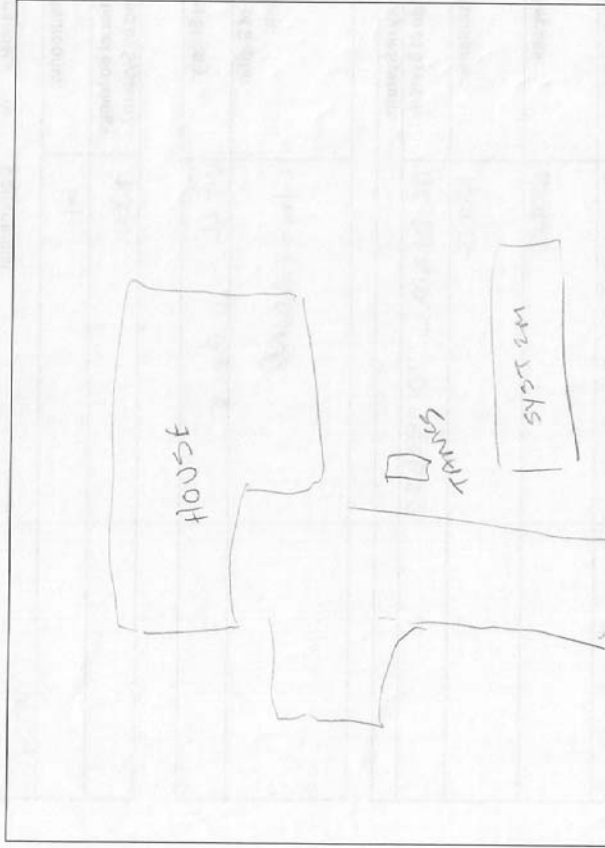
Water Supply:	WELL IN BACK
Type of Septic System:	IN-GROUND

History of System:	
Age of System:	ORIGINAL TO HOUSE
Problems:	NONE
Repairs:	NONE
Maintenance:	ROUTINELY PUMPING EVERY 3 YEARS

Address: 8 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	10 MENG RD
Lot Size:	2.28 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNNY
Property Rep.:	BARRY McFARLAND
Weather Conditions:	NO RAIN 24H HRS
Inspector:	JAMIE SUNDERMIER

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential <input checked="" type="checkbox"/> or Commercial <input type="checkbox"/>	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO
Year Built:	BUILT 1974

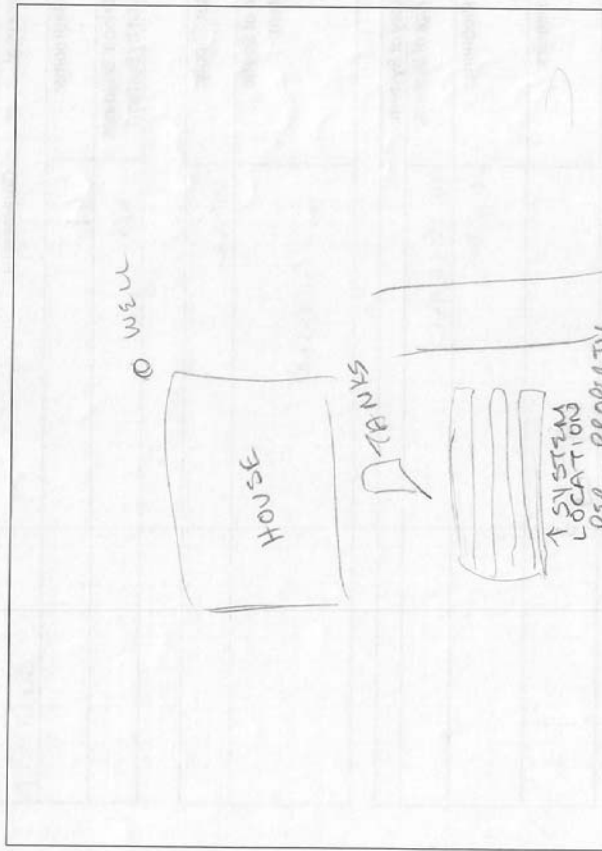
Water Supply:	WELL
Type of Septic System:	IN-GROUND

History of System:	
Age of System:	ORIGINAL
Problems:	NONE
Repairs:	
Maintenance:	ROUTINELY PUMPING

Address: 10 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	12 MENG
Lot Size:	2.3 AC
Date of Inspection:	3/28/24
Inspector:	Jamie Sundermier
Property Rep.:	RON KETWITZ
Weather Conditions:	45° F OVERCAST 0.3" RAIN

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

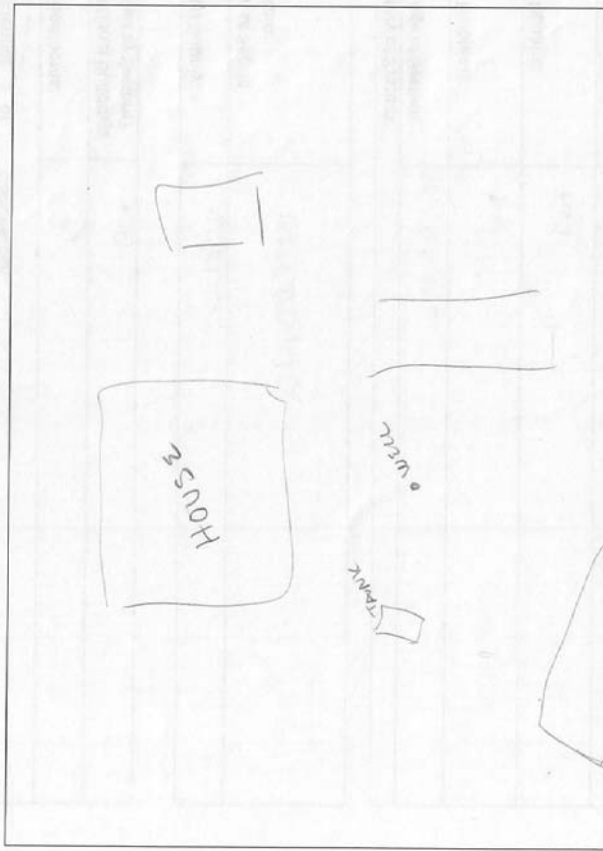
Water Supply:	WELL
Type of Septic System:	IN-GROUND

History of System:	
Age of System:	ORIGINAL
Problems:	NO
Repairs:	NO
Maintenance:	PUMPING EVERY 3 YEARS

Address: 12 MENG

Observations of Inspector:	
Yes	No
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	14 MENG
Lot Size:	1.8 AC
Date of Inspection:	Weather Conditions: 4/19/24 CLOUDY 50°F
Inspector:	Jamie Sundermier
Property Rep.:	KELLY BURNELL

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

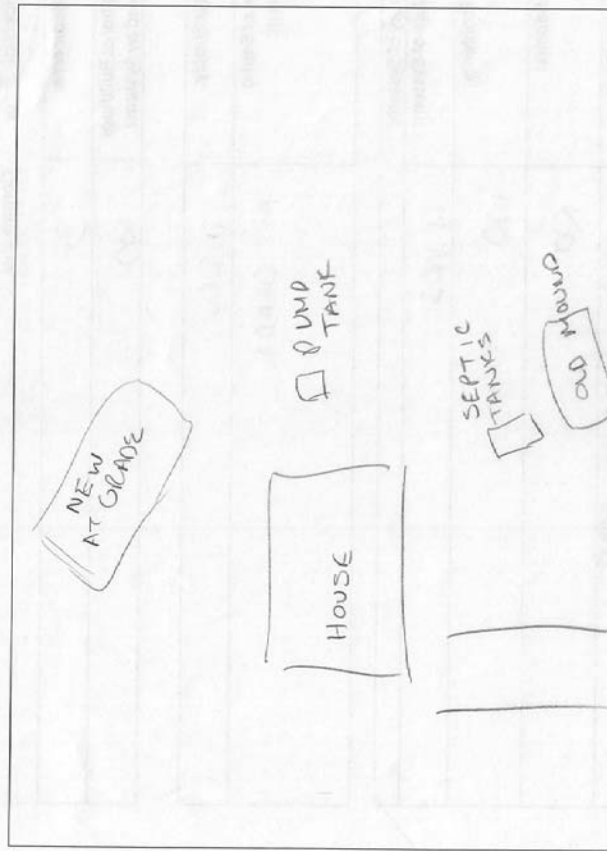
Water Supply:	WELL
Type of Septic System:	AT GRADE

History of System:	
Age of System:	4 YRS
Problems:	NO
Repairs:	NO
Maintenance:	10/2023 - PUMPING DONE WILL DO EVERY 3 YEARS

Address: 14 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	18 MENG RD
Lot Size:	4.7 AC
Date of Inspection:	Weather Conditions: 3/22/24 31° F SUNNY, NO RAIN 24+HR
Inspector:	Jamie Sundermier
Property Rep.:	RAINER KEOWN

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential <input checked="" type="checkbox"/> or Commercial <input type="checkbox"/>	BUILT 1969
# of Bedrooms:	3
Additional Buildings Served by System?	NO

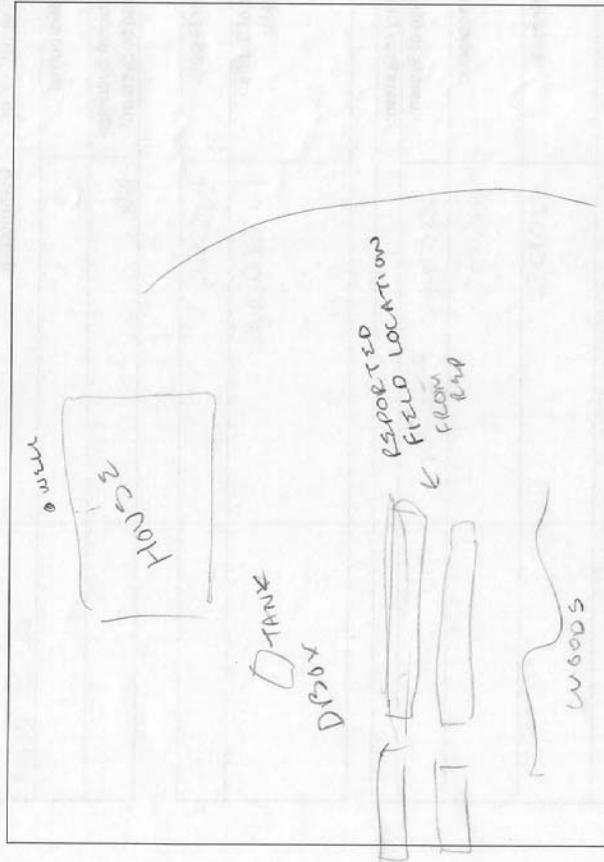
Water Supply:	WELL
Type of Septic System:	IN GROUND

History of System:	
Age of System:	ORIGINAL
Problems:	NONE
Repairs:	NONE
Maintenance:	DUMP EVERY OTHER YEAR

Address: 18 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	20 MENG
Lot Size:	2.2 AC
Date of Inspection:	Weather Conditions: 4/19/24 60% PARTLY CLOUDY
Inspector:	Jamie Sundermier
Property Rep.:	GEORGE ADAMSON

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Year Built:	1973

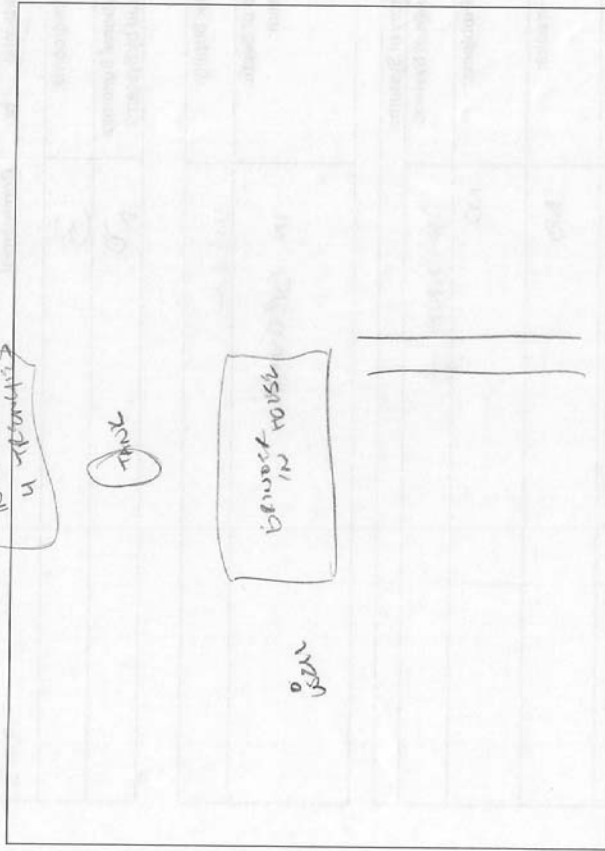
Water Supply:	WELL
Type of Septic System:	IN GROUND

History of System:	ORIGINAL
Age of System:	NO
Problems:	NO
Repairs:	NO
Maintenance:	EASTWENT PUMPING

Address: 20 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	22 MENG RD
Lot Size:	2.25 AC
Date of Inspection:	3/26/24
Inspector:	STF, OVERCAST
Property Rep.:	DAD OF OWNER
Weather Conditions:	1.8" ON 3/23

AS REPORTED BY PROPERTY REPRESENTATIVE:

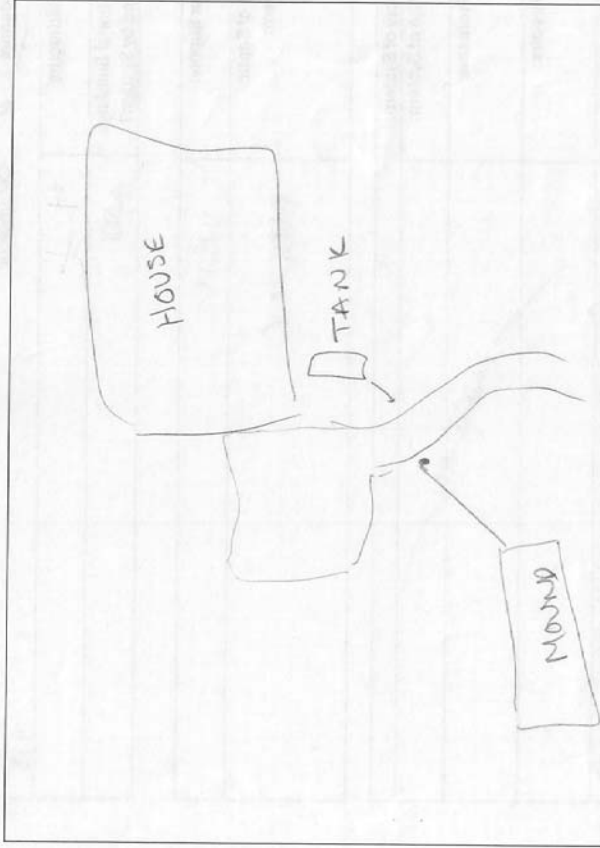
Residential or Commercial	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO
Water Supply:	WELL
Type of Septic System:	MOUND

History of System:	
Age of System:	1978
Problems:	UNCOMMON
Repairs:	
Maintenance:	BELIEVES TANK IS PUMPED ROUTINELY

Address: 22 MENG

Observations of Inspector:	
Yes	No
	Green, Lush Grass
	Wetness or Spongy Areas
	Odors
	Water Ponding of Surfacing
	System Overflow
Notes:	REP DOES NOT LIVE HERE - NOT KNOWLEDGEABLE ABOUT SYSTEM

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	26 MENG RD
Lot Size:	1.5 AC
Date of Inspection:	3/16/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	BOB SCHMIDT
Weather Conditions:	35°F SUNNY NO RAIN 24+ MS

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO
Built	BUILT 7/3/2015

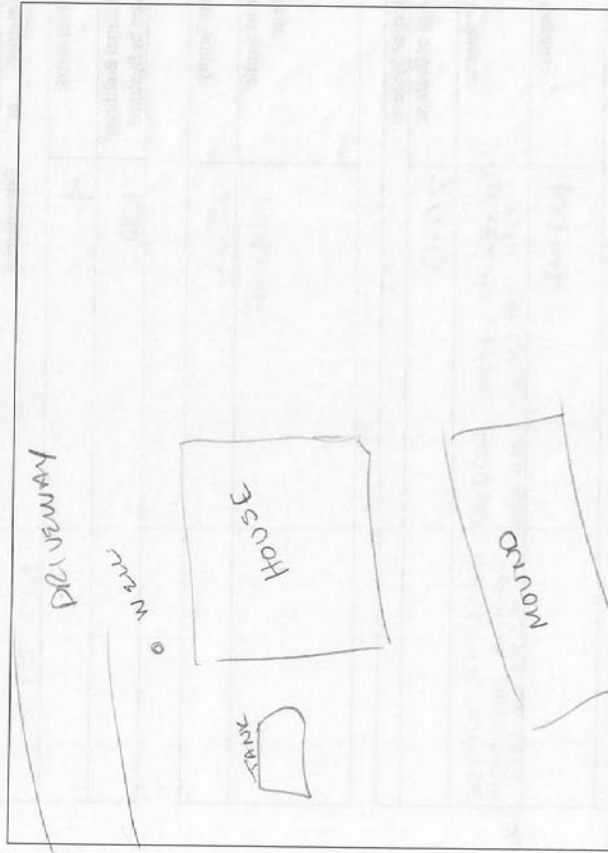
Water Supply:	WELL
Type of Septic System:	MOUND

History of System:	
Age of System:	2010
Problems:	GRADING FROM MOUND DIRECTING WATER INTO BASEMENT WINDOW, HAVING ADDITIONAL GRADING DONE SOON
Repairs:	NONE
Maintenance:	EVERY 2 YEARS PUMPING

Address: 26 MENG RD

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	27 MENG RD
Lot Size:	1.45 AC
Date of Inspection:	3/22/24
Inspector:	3106 SUMNER NO RAIN 24+ HR Jamie Sundermier
Property Rep.:	GABE & JOHN OTT

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential <input checked="" type="checkbox"/> Commercial	
# of Bedrooms:	3
Additional Buildings Served by System?	NO - ONLY HOUSE CONNECTED

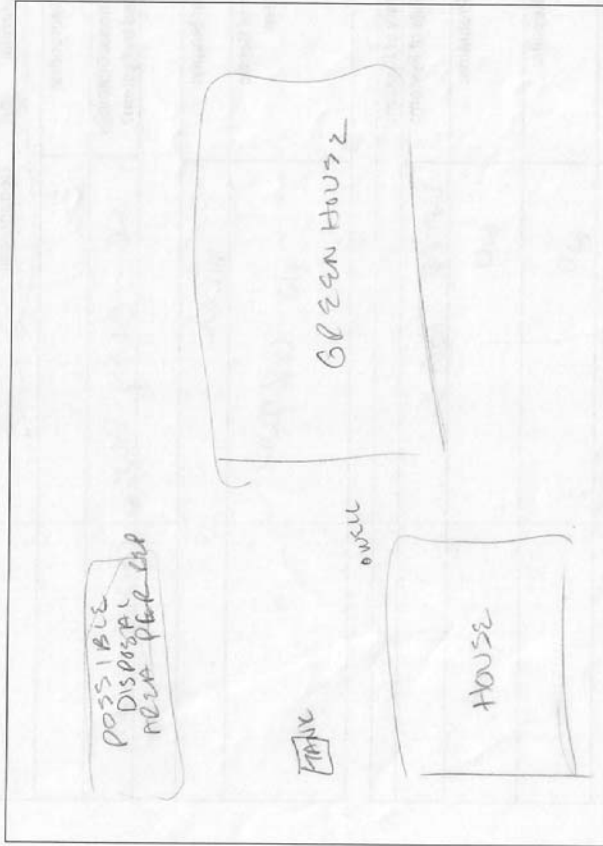
Water Supply:	WELL
Type of Septic System:	IN-GROUP

History of System:	
Age of System:	LATE 60'S
Problems:	NO
Repairs:	NO
Maintenance:	JUST PUMPED 3 YR CYCLE

Address: 27 MENG

Observations of Inspector:	
Yes	No
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notes: NO AREA FOR REPLACEMENT	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	34 MENG RD
Lot Size:	~1.5 AC
Date of Inspection:	Weather Conditions: 3/22/24 31°F / SUNNY, NO RAIN 24+ HD'S
Inspector:	Jamie Sundermier
Property Rep.:	CARMENA GIMBEL

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial	1981
# of Bedrooms:	3	
Additional Buildings Served by System?	NO	

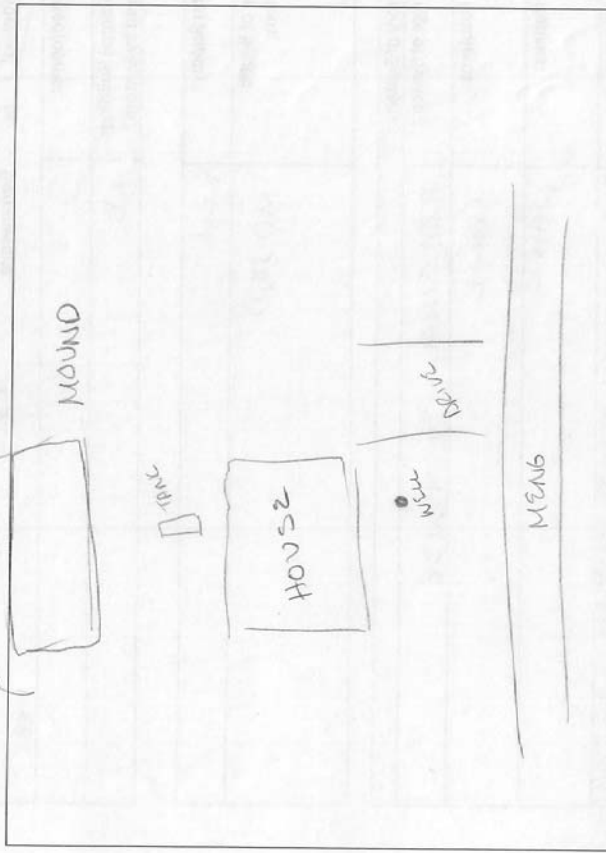
Water Supply:	WSU
Type of Septic System:	MOUND

History of System:	
Age of System:	ORIGINAL TO HOUSE
Problems:	NONE
Repairs:	NONE
Maintenance:	CARMENA GIMBEL REPORTS SYSTEM IS ROUTINELY MAINTAINED & RECENTLY PUMPED 11/2023

Address: 34 MENG

Observations of Inspector:	
Yes	No
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	35 MENG RD
Lot Size:	2.5 AC
Date of Inspection:	Weather Conditions: 3/22/24 35°F, SUNNY
Inspector:	Jamie Sundermier
Property Rep.:	BILL WEANNINGER

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
	BUILT 1910

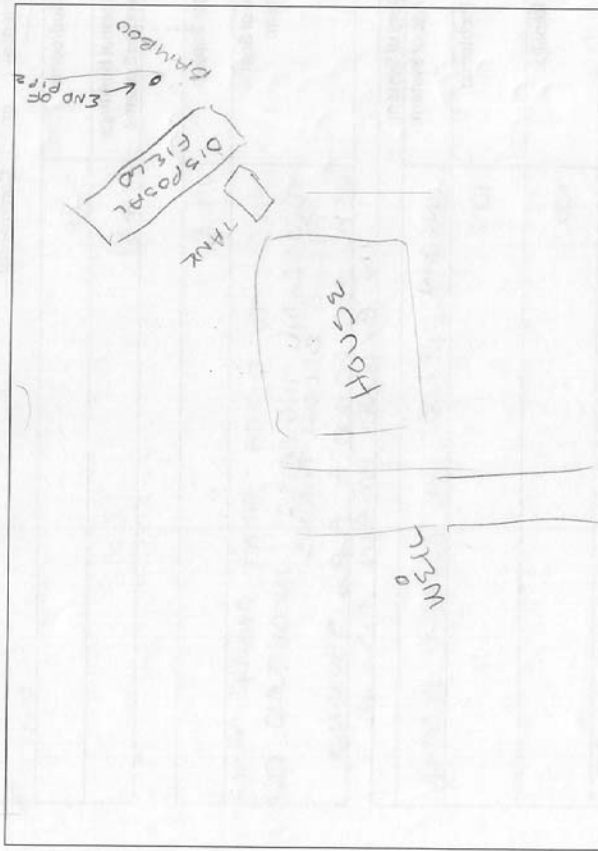
Water Supply:	WELL
Type of Septic System:	PIPE TO DITCH - WHAT OWNER THOUGHT TOPOGRAPHY INDICATES IN-GROUND DRAIN FIELD BELOW TANKS MCHD SEO FOUND A PLAN SHOWING IN-GROUND DRAIN FIELD

History of System:	
Age of System:	UNKNOWN, BEFORE HE OWNED PROPERTY
Problems:	NO
Repairs:	NO
Maintenance:	PUMPED EVERY 3 YEARS

Address: 35 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes: SAYS PIPE FROM TANK - DISCHARGES TO SWALE VERY INFREQUENTLY MCHD SEO DANOSKIEVA WAS CONTACTED - SEE NOTE BELOW	

Sketch:



4/11/6 - DAN O SEO MCHD FOUND WELL PERMIT SHOWING DRAIN FIELD - DYED TANK NO DYE HAS COME OUT OF PIPE - BELIEVES OWNER WAS INCORRECT ABOUT PIPE BEING PART OF THE SEPTIC SYSTEM

Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	36 MENG RD
Lot Size:	2.41 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	CASEY FIGHTER
Weather Conditions:	31° F SUNNY NO RAIN Z4+AR

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	2
Additional Buildings Served by System?	NO
Year Built:	1980

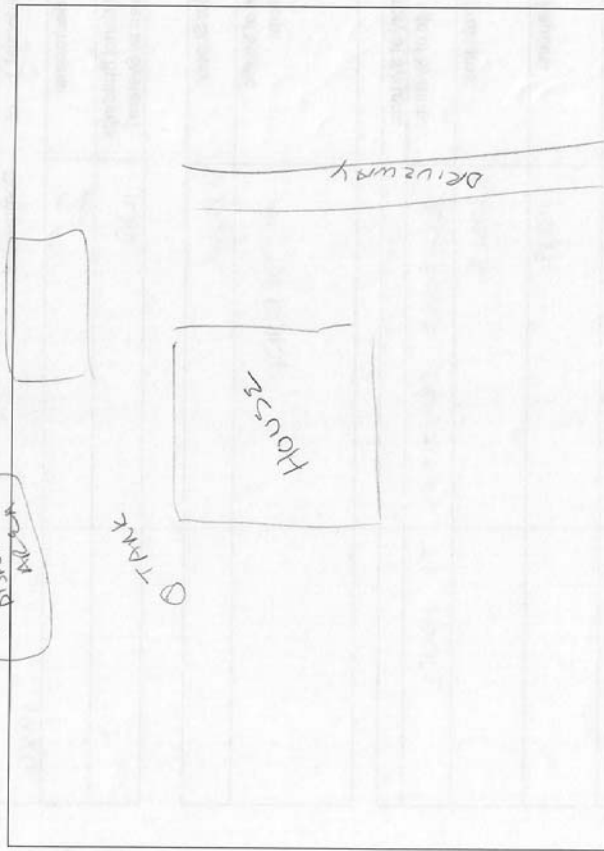
Water Supply:	WELL
Type of Septic System:	IN-GROUND

History of System:	
Age of System:	BELIEVES ORIGINAL TO HOUSE
Problems:	NONE
Repairs:	NONE
Maintenance:	ROUTINE PUMPING

Address: 36 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	38 MENG RD
Lot Size:	1.3 AC
Date of Inspection:	Weather Conditions: 3/22/24 31°F, SUNNY, NO RAIN 24+HR
Inspector:	Jamie Sundermier
Property Rep.:	WILL HUETUBISE

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	2 MICROMOUNDS

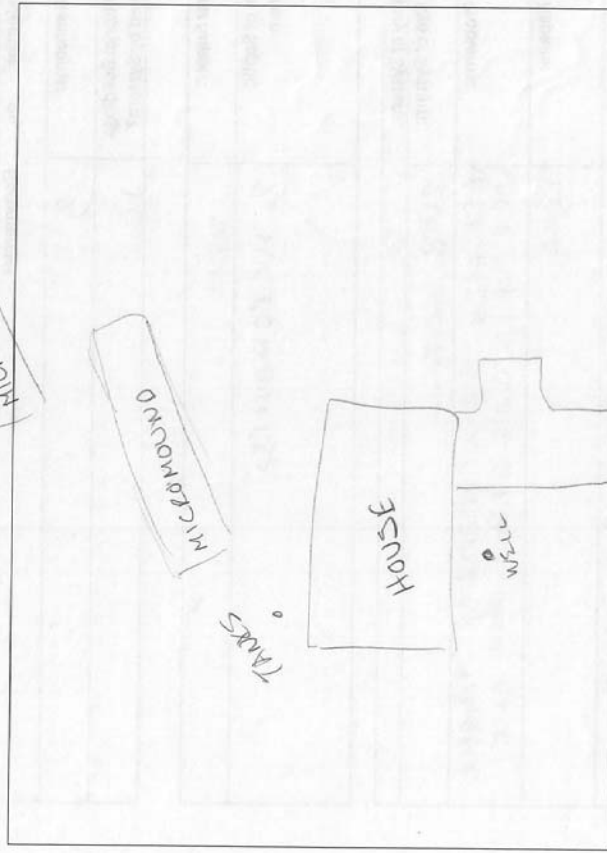
History of System:	2018 INSTALL
Problems:	REPLACED DURING PROPERTY TRANSFER DIP TUBING FROZE A FEW YEARS BACK
Repairs:	NONE
Maintenance:	RUNSD REGULARLY, DRIP COMPONENTS INSPECTED

Address: 38 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>

Notes:
IN RESPONSE TO COMMENTS ON DRIP TUBING FREEZING I RECOMMENDED LEAVING GRASS LONG AT LAST PART OF THE SEASON FOR ADDITIONAL INSULATION

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	39 M206 RD
Lot Size:	3.65 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	MELISSA & DOMA PILZGGI
Weather Conditions:	35F SUNNY NO RAIN 24+ HRS

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NEW POOL HOUSE

Water Supply:	WELL
Type of Septic System:	IN-GROUND

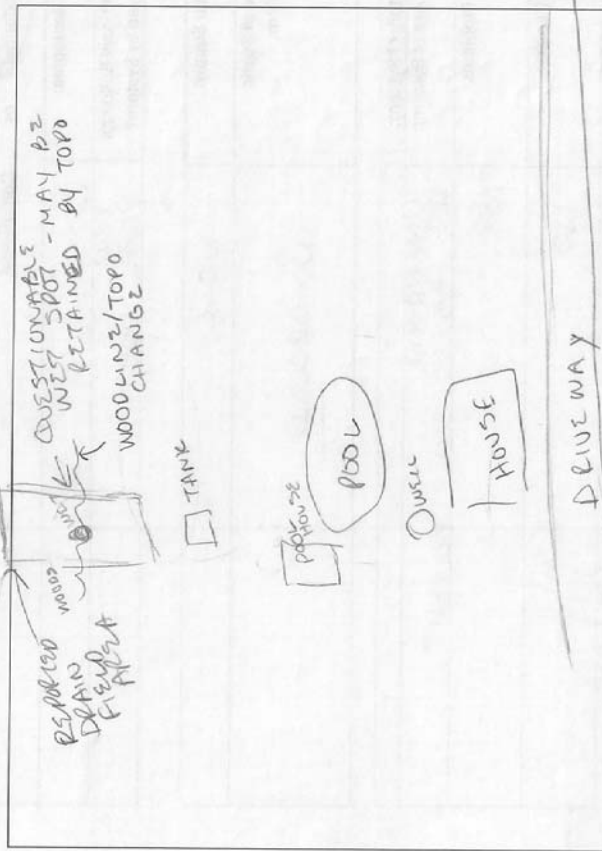
History of System:	UNKNOWN
Age of System:	NOT CHANGED SINCE BOUGHT
Problems:	NO
Repairs:	NO
Maintenance:	EVERY 2 YEARS

Address: 39 M206

Observations of Inspector:	
Yes	No
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Notes: SMALL PUDDLE AT TOPO CHANGE BTWN TURF & WOODS WILL RETURN IN DRYER CONDITIONS - NO SMELL - SEE NOTE BELOW

Sketch:



9/18/24 FOLLOW-UP INSPECTION OF PREVIOUSLY WET AREA
 56 OF PARTLY CLOUDY, NO RAIN IN 24 HOURS
 PREVIOUS PUDDLE IS NOT PRESENT -
 NO INDICATIONS OF MALFUNCTION

Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	40 MENG RD
Lot Size:	1.9 AC
Date of Inspection:	Weather Conditions: 3/25/24 40°F SUNNY 1.8" RAIN ON 3/23
Inspector:	Jamie Sundermier
Property Rep.:	DOUG MEYERS

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial	1984
# of Bedrooms:	3	
Additional Buildings Served by System?	NO	

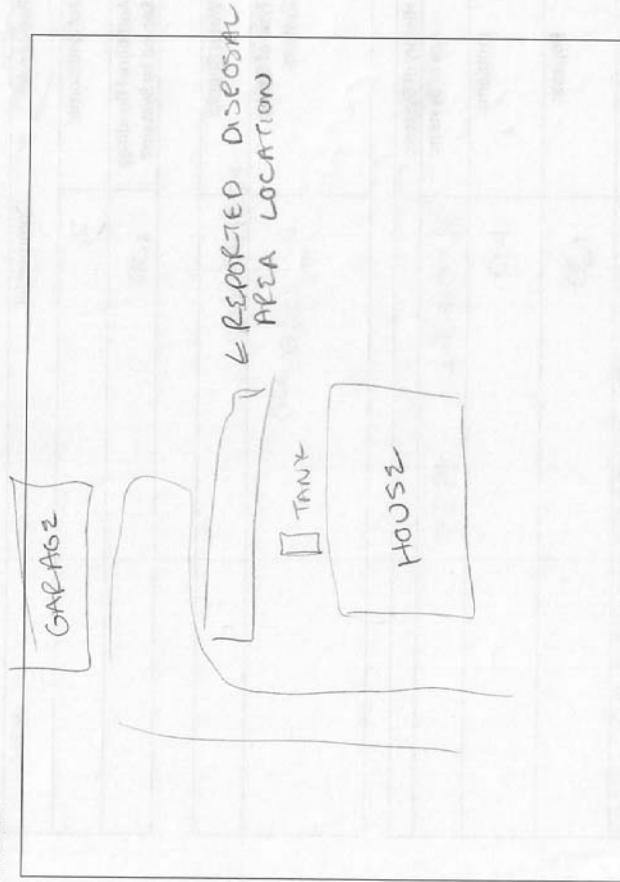
Water Supply:	WELL
Type of Septic System:	IN GROUND

History of System:	
Age of System:	ORIGINAL 1985
Problems:	NO
Repairs:	NO
Maintenance:	EVERY 3 YEARS PUMPING

Address: 40 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	41 MENG
Lot Size:	3 AC
Date of Inspection:	4/15/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	DAVE RUTHER
Weather Conditions:	38°F, PARTLY CLOUDY, 0.13" RAIN OVERNIGHT

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Year Built:	1979

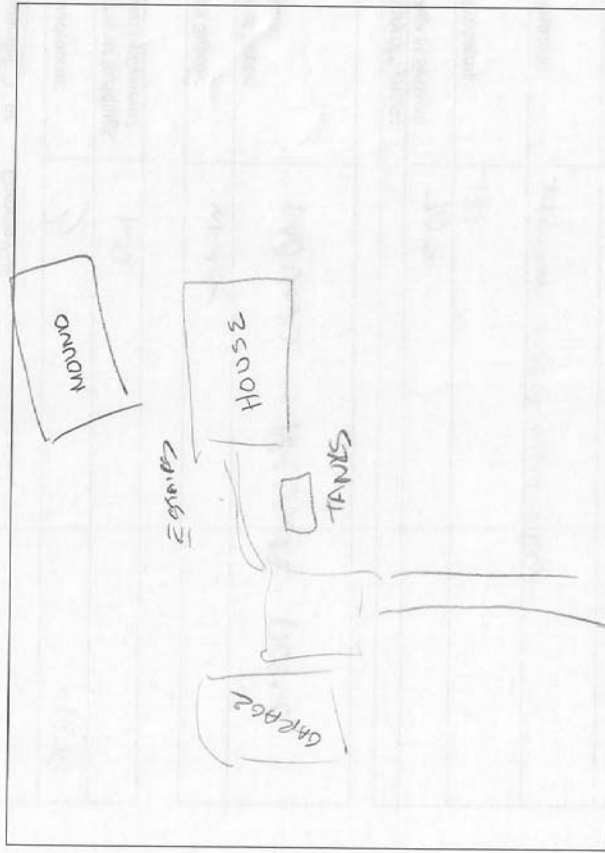
Water Supply:	WELL
Type of Septic System:	MOUND - PRESSURE DOSING

History of System:	
Age of System:	70'S
Problems:	NO
Repairs:	BROKEN PIPE @ PUMP AREA
Maintenance:	EVERY 2 YEARS PUMPING

Address: 41 MENG

Observations of Inspector:	
Yes	<input type="checkbox"/> Green, Lush Grass
	<input checked="" type="checkbox"/> Wetness or Spongy Areas
	<input checked="" type="checkbox"/> Odors
	<input checked="" type="checkbox"/> Water Ponding or Surfacing
	<input checked="" type="checkbox"/> System Overflow
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address: 412 MENG RD
 Lot Size: 1 AC
 Date of Inspection: 4/9/24
 Weather Conditions: 43°F, Partly cloudy, NO RAIN IN 24 HRS
 Inspector: Jamie Sundermier
 Property Rep.: ELIZABETH FREEMAN

10.15

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial: Commercial
 # of Bedrooms: 2
 Additional Buildings Served by System?: NO
 Year Built: 1981

Water Supply: WELL
 Type of Septic System: GRANITE MOUND

History of System:
 Age of System: ORIGINAL
 Problems: 15 YEARS AGO HAD PUMPING LEAK IN HOUSE
 Repairs: NO
 Maintenance: PUMPING EVERY 3 YEARS

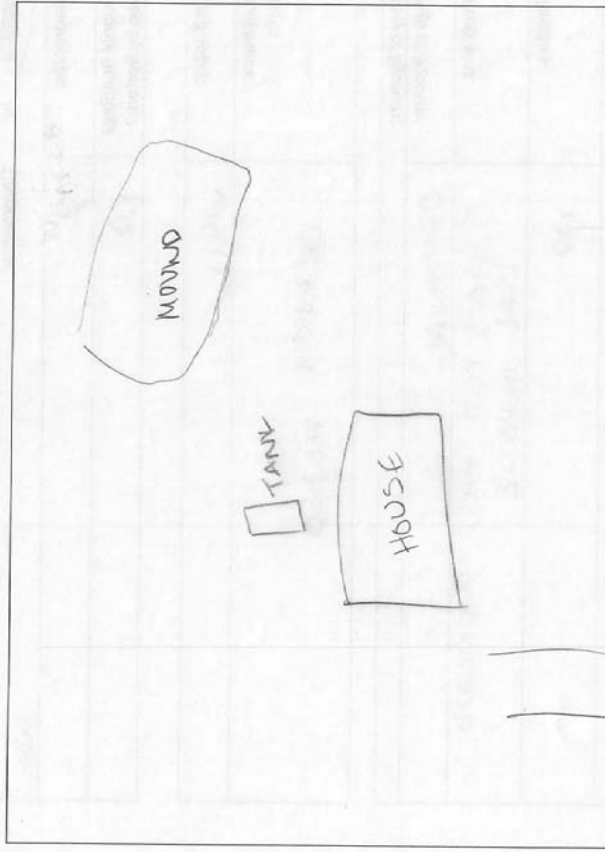
Address: 412 MENG

Observations of Inspector:

Yes	NA	Green, Lush Grass
	X	Wetness or Spongy Areas
	X	Odors
	X	Water Ponding of Surfacing
	X	System Overflow

Notes:

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	44 MENG RD
Lot Size:	1 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	JOHN CHAMBERS
Weather Conditions:	31°F, SUNNY, NO RAIN 24+ HR

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Built	BUILT 1981

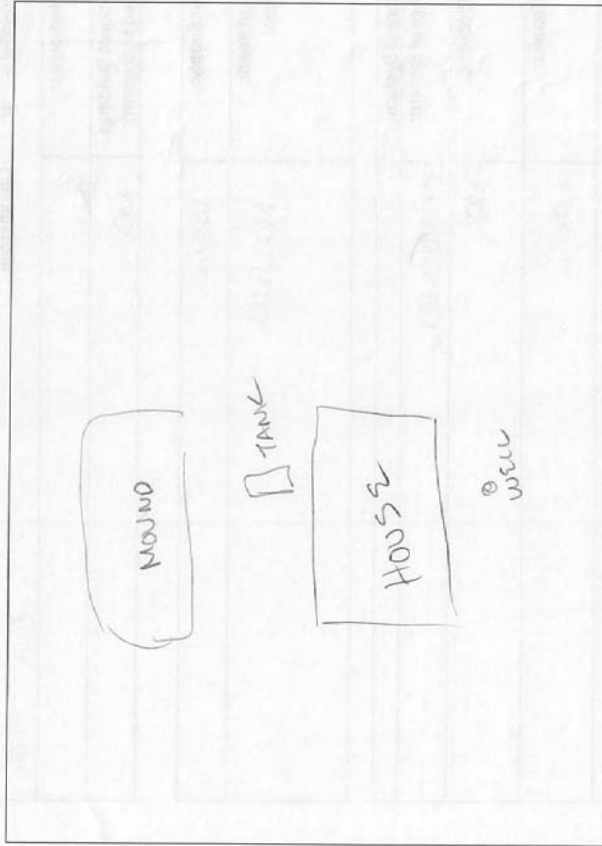
Water Supply:	WELL
Type of Septic System:	MOUND

History of System:	
Age of System:	ORIGINAL
Problems:	NO
Repairs:	NONE
Maintenance:	3 YEAR PUMPING

Address: 44 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
Green, Lush Grass	
	<input checked="" type="checkbox"/>
Wetness or Spongy Areas	
	<input checked="" type="checkbox"/>
Odors	
	<input checked="" type="checkbox"/>
Water Ponding or Surfacing	
	<input checked="" type="checkbox"/>
System Overflow	
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	47 MENG RD
Lot Size:	7.24 AC
Date of Inspection:	Weather Conditions: 31°F / SUNNY, NO RAIN 244 HR
Inspector:	Jamie Sundermier
Property Rep.:	5/21/24 GEOFF RANDALL

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	2
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	SAND MOUND

History of System:	
Age of System:	1997
Problems:	NONE
Repairs:	NONE - ROSTINE PUMP REPLACEMENT
Maintenance:	ROUTINE MAINTAINING & PUMP

Address: 47 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	105 MENG
Lot Size:	3 AC
Date of Inspection:	Weather Conditions:
4/9/24	
Inspector:	Jamie Sundermier
Property Rep.:	THOMAS NALKE - NOT PRESENT

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	SAND MOUND

History of System:	
Age of System:	
Problems:	OWNER NOT PRESENT
Repairs:	
Maintenance:	

Address: 105 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
Green, Lush Grass	
Wetness or Spongy Areas	<input checked="" type="checkbox"/>
Odors	<input checked="" type="checkbox"/>
Water Ponding of Surfacing	<input checked="" type="checkbox"/>
System Overflow	<input checked="" type="checkbox"/>
Notes:	
	SMUDGE ADJACENT TO MOUND - NO SMALL APPEARS TO BE STORMWATER
	UPSOLE PUNOFF ~ 5" RAIN LAST WEEK

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	114 MENG
Lot Size:	5.29 AC
Date of Inspection:	Weather Conditions: N/A 4/2/02 PHONE INTERVIEW
Inspector:	Jamie Sundermier
Property Rep.:	MARK BESSETTE

AS REPORTED BY PROPERTY REPRESENTATIVE: (BY PHONE)

Residential or	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	SFTF W/STREAM DISCHARGE

History of System:	
Age of System:	1999
Problems:	NONE
Repairs:	NONE
Maintenance:	REPORTS ROUTINE MAINTENANCE AND PUMPING

Address: 114 MENG

Observations of Inspector:	
Yes	No
Notes: OWNER DOES NOT WANT PUBLIC SEWER	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	115 MENG
Lot Size:	6.56 AC
Date of Inspection:	3/25/24
Inspector:	Jamie Sundermier
Property Rep.:	COLIN WITMAN
Weather Conditions:	40° of SUNNY 1.8" RAIN ON 3/23

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Year Built:	1976

Water Supply:	WELL
Type of Septic System:	IN-GROUND

History of System:	ORIGINAL
Problems:	NO
Repairs:	NO
Maintenance:	PUMPING EVERY 3 YEARS

Address: 115 MENG

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	116 MENG RD
Lot Size:	3 AC
Date of Inspection:	3/28/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	BRIAN LAMBERT
Weather Conditions:	45°F, OVERCAST, 0.3" RAIN

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	SFTF

History of System:	
Age of System:	LATE 1990s
Problems:	FILTER CLOS FREQUENTLY
Repairs:	121 FILTER REPLACEMENT MEDIA
Maintenance:	PUMPS EVERY 3 YEARS

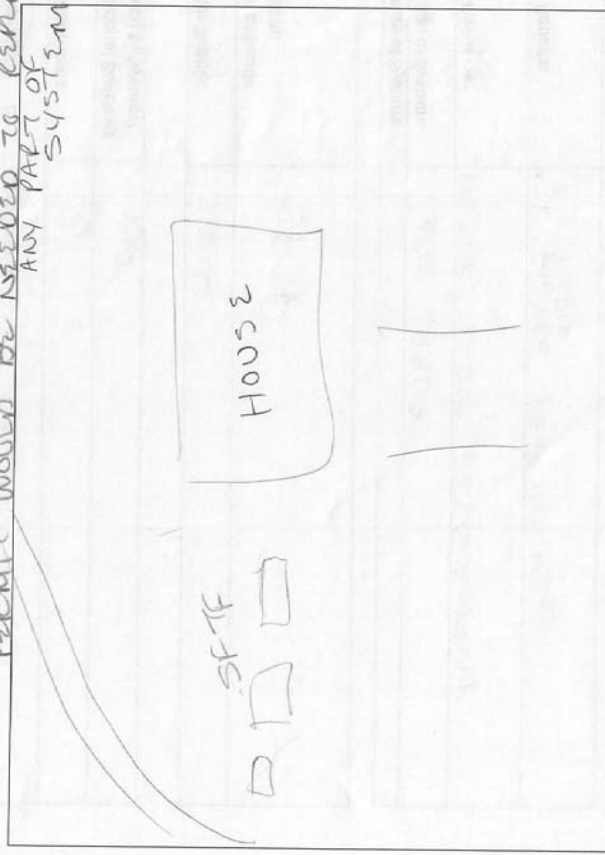
Address: 116 MENG

Observations of Inspector:	
Yes	No
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Green, Lush Grass	
Wetness or Spongy Areas	
Odors	<input checked="" type="checkbox"/> FILTER/TANKS
Water Ponding of Surfacing	
System Overflow	

Notes:

OWNER WOULD LIKE IF PUBLIC SEWER CAME THROUGH
 - RECOMMENDED TALKING TO A CONSULTANT TO SEE IF THERE IS A BETTER FILTER THAT REQUIRES LESS MAINTENANCE - PERMIT WOULD BE NEEDED TO REPLACE ANY PART OF SYSTEM

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	116 DELPHI RD
Lot Size:	3.75 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	DAVE PENNEPACKER

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential <input checked="" type="checkbox"/> or Commercial <input type="checkbox"/>	1963
# of Bedrooms:	4
Additional Buildings Served by System?	NO

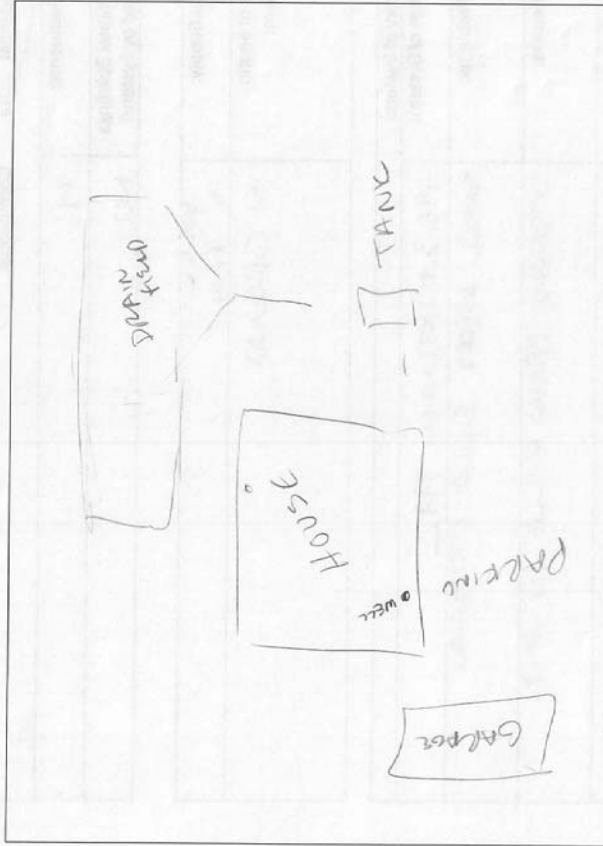
Water Supply:	WELL IN FRONT
Type of Septic System:	IN GROUND

History of System:	1903 + EXTENSION 1992
Age of System:	
Problems:	SMELL BEFORE FIELD EXTENSION
Repairs:	EXTENDED DRAIN FIELD IN 1992
Maintenance:	PUMPING EVERY 3 YEARS

Address: 116 DELPHI

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
Green, Lush Grass	
Wetness or Spongy Areas	<input checked="" type="checkbox"/>
Odors	<input checked="" type="checkbox"/>
Water Ponding of Surfacing	<input checked="" type="checkbox"/>
System Overflow	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	204 DELPHI RD
Lot Size:	3 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUMDNER
Property Rep.:	CRAIG FARWOOD
Weather Conditions:	35°F OVERCAST

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	4
Additional Buildings Served by System?	NO
Built	BUILT 1998

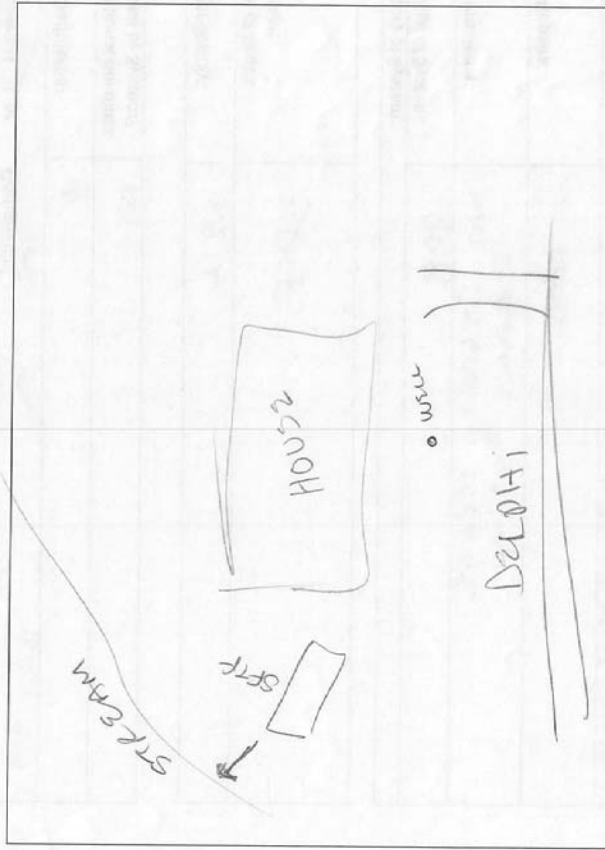
Water Supply:	WELL
Type of Septic System:	SFTF

History of System:	
Age of System:	1998
Problems:	HAS PURCHASED PERATOR TO REPAIR EXISTING
Repairs:	SEE ABOVE
Maintenance:	3 YR SCHEDULE - TESTS CHLORINE HIMSELF OPERATIONS USA FLD MANAGE

Address: 204 DELPHI RD

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
Green, Lush Grass	
Wetness or Spongy Areas	
Odors	
Water Ponding of Surfacing	
System Overflow	
Notes:	SFTF

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	220 MINEZ HILL RD
Lot Size:	3 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	RICH HUSZEL
Weather Conditions:	30% SUNNY NO RAIN IN 24 HRS

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Year Built	BUILT 1988

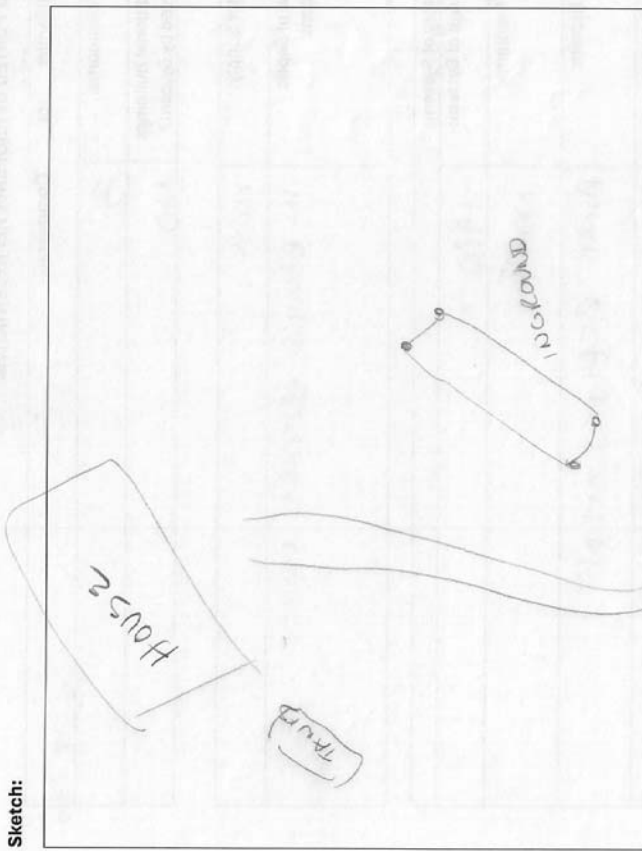
Water Supply:	WELL
Type of Septic System:	IN GROUND PRESSURE DOSED

History of System:	
Age of System:	1980'S
Problems:	NONE
Repairs:	PUMP REPLACEMENT
Maintenance:	ROUTINE EVERY 3 YEARS

Address: 220 MINEZ HILL

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:



Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	223 MINE HILL	
Lot Size:	1.1 AC	
Date of Inspection:	3/22/24	
Inspector:	Jamie Sundermier	
Property Rep.:	NONE ON SITE	CALL LISA PARKER ON APPOINT 215-206-6783
	LISA ON PHONE	

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO

Water Supply:	WELL
Type of Septic System:	NO COMPONENTS VISIBLE IN-GROUND

History of System:	
Age of System:	NOT KNOWN
Problems:	NONE
Repairs:	NONE
Maintenance:	NOT KNOWN

Address: 223 MINE HILL RD

Observations of Inspector:	
Yes	<input checked="" type="checkbox"/> Green, Lush Grass
	<input checked="" type="checkbox"/> Wetness or Spongy Areas
	<input checked="" type="checkbox"/> Odors
	<input checked="" type="checkbox"/> Water Ponding or Surfacing
	<input checked="" type="checkbox"/> System Overflow
Notes:	NO COMPONENTS VISIBLE

Sketch:

NOT VISIBLE

Lower Frederick - Meng Road Area - On-Lot Sewage Survey

Address:	226 MINE HILL RD
Lot Size:	0.9 AC
Date of Inspection:	3/22/24
Inspector:	JAMIE SUNDERMIER
Property Rep.:	JOHN WESTON
Weather Conditions:	35°F, SUNNY, NO RAIN 24+HR

AS REPORTED BY PROPERTY REPRESENTATIVE:

Residential or Commercial	Commercial
# of Bedrooms:	3
Additional Buildings Served by System?	NO
Year Built:	1995

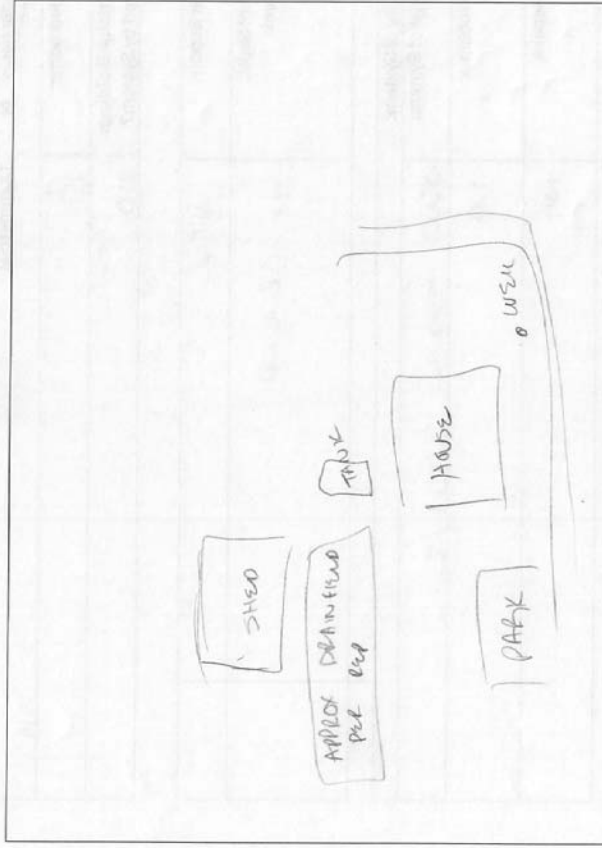
Water Supply:	WELL
Type of Septic System:	IN GROUND

History of System:	
Age of System:	NEW TANK 2001/2
Problems:	NO
Repairs:	NO
Maintenance:	PUMPED ROUTINELY

Address: 226 MINE HILL

Observations of Inspector:	
Yes	No
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
Notes:	

Sketch:

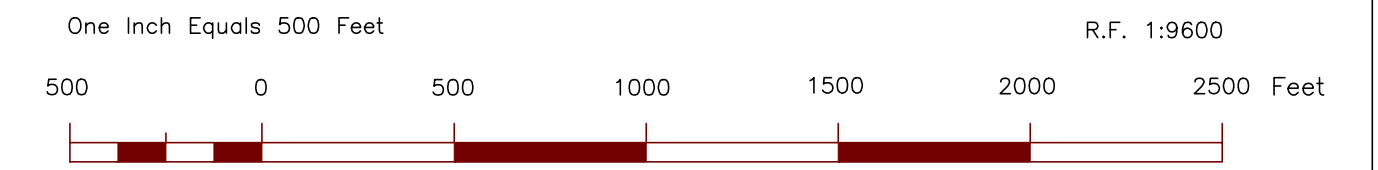


APPENDIX B
LOWER FREDERICK TOWNSHIP SEWER MAP

LOWER FREDERICK TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA SANITARY MANHOLE LOCATION PLAN

JANUARY 18, 2021, REVISED 2/6/2023

LF0513 / LFTW22001



BASE MAP PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION
PROPERTY LINES AS OF MARCH 2002

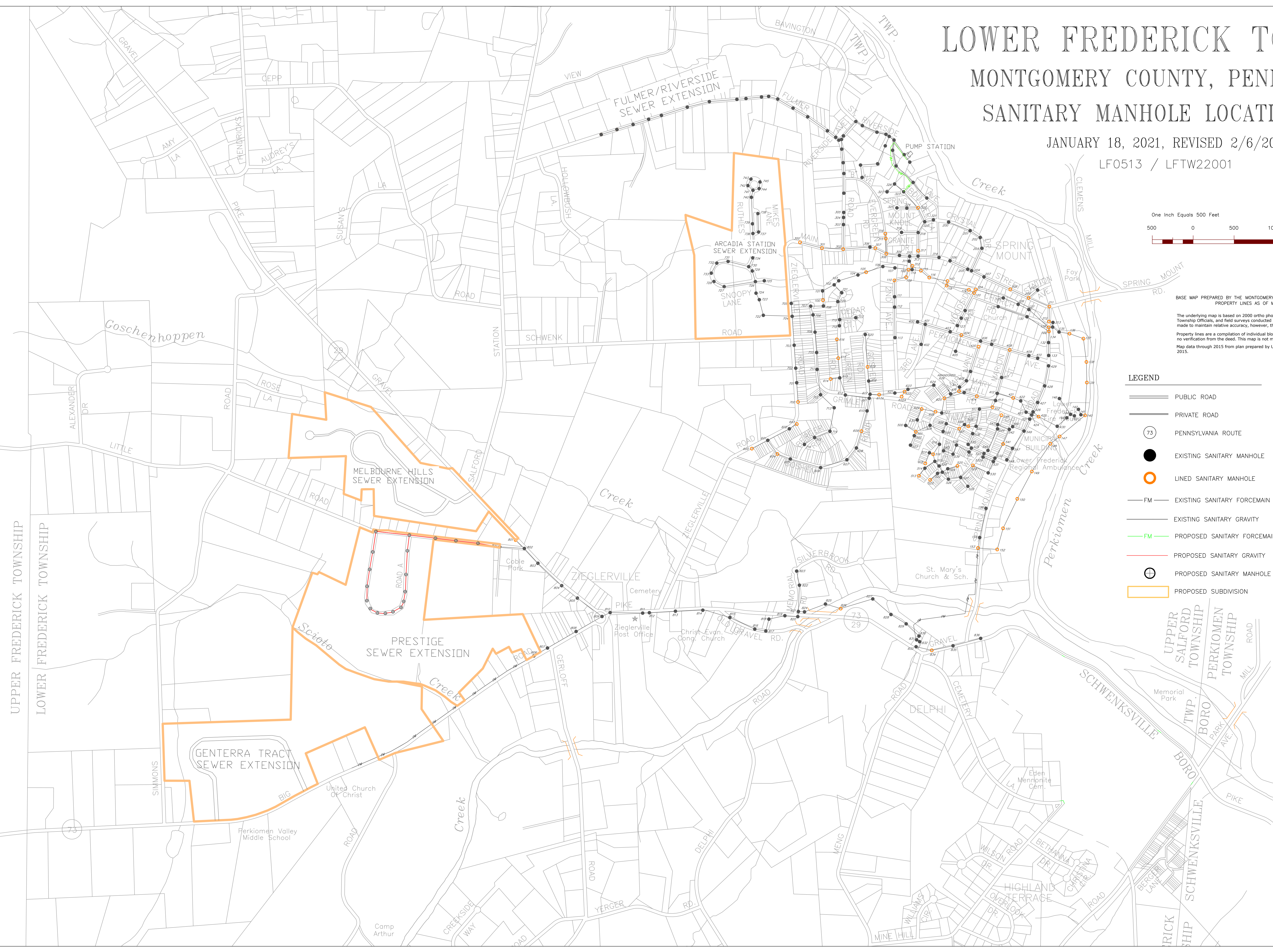
The underlying map is based on 2000 ortho photographs, Montgomery County Board of Assessment Appeals tax maps, Township Officials, and field surveys conducted by the Montgomery County Planning Commission. All attempts were made to maintain relative accuracy, however, this map should not be used for engineering purposes.

Property lines are a compilation of individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties.
Map data through 2015 from plan prepared by Urwiler & Walter, Inc dated February 15, 2006, last revised November 12, 2015.

LEGEND

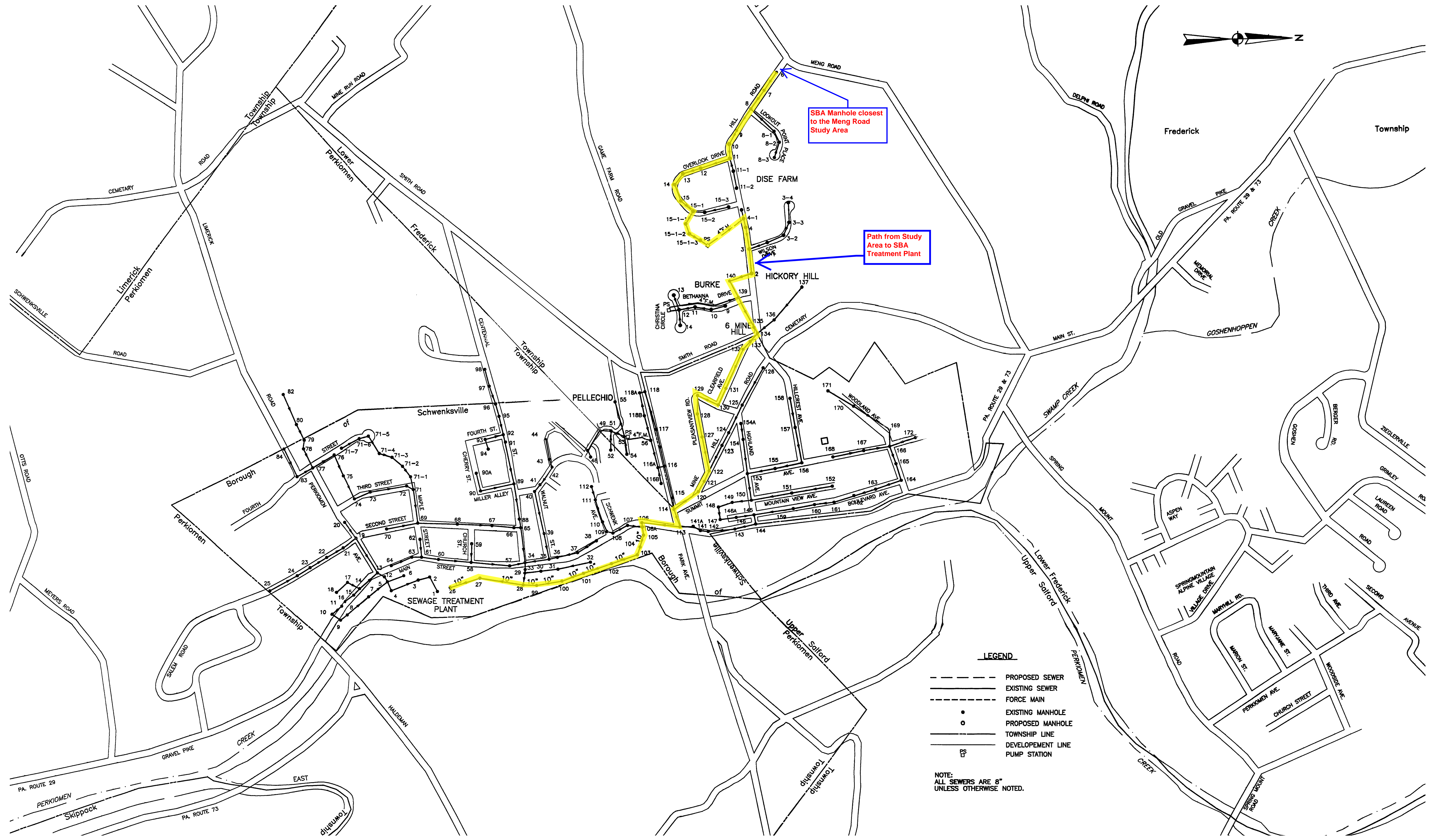
- PUBLIC ROAD
- PRIVATE ROAD
- PENNSYLVANIA ROUTE
- EXISTING SANITARY MANHOLE
- LINED SANITARY MANHOLE
- EXISTING SANITARY FORCEMAIN
- EXISTING SANITARY GRAVITY
- PROPOSED SANITARY FORCEMAIN
- PROPOSED SANITARY GRAVITY
- PROPOSED SANITARY MANHOLE
- PROPOSED SUBDIVISION

MH#	YEAR	MH LINED	CONTRACTOR
110	2007		TIERRE HILL
116	2007		TIERRE HILL
140	2007		TIERRE HILL
208	2007		TIERRE HILL
302	2007		TIERRE HILL
322	2007		TIERRE HILL
529	2007		TIERRE HILL
603	2007		TIERRE HILL
622	2007		TIERRE HILL
625	2007		TIERRE HILL
108	2008		TIERRE HILL
109	2008		TIERRE HILL
117	2008		TIERRE HILL
118	2008		TIERRE HILL
119	2008		TIERRE HILL
120	2008		TIERRE HILL
124	2008		TIERRE HILL
128	2008		TIERRE HILL
129	2008		TIERRE HILL
211	2008		TIERRE HILL
212	2008		TIERRE HILL
425	2008		TIERRE HILL
826	2008		TIERRE HILL
834	2008		TIERRE HILL
152	2010		SWERP
209	2010		SWERP
300	2010		SWERP
307	2010		SWERP
317	2010		SWERP
414	2010		SWERP
421	2010		SWERP
801	2010		SWERP
136	2011		TIERRE HILL
137	2011		TIERRE HILL
138	2011		TIERRE HILL
139	2011		TIERRE HILL
308	2011		TIERRE HILL
418	2011		TIERRE HILL
507	2011		TIERRE HILL
600	2011		TIERRE HILL
629	2011		TIERRE HILL
404	2015		ADV REHAB TECH
408	2015		ADV REHAB TECH
420	2015		ADV REHAB TECH
501	2015		ADV REHAB TECH
516	2015		ADV REHAB TECH
615	2015		ADV REHAB TECH
616	2015		ADV REHAB TECH
619	2015		ADV REHAB TECH
622A	2015		ADV REHAB TECH
102	2016		ADV REHAB TECH
105	2016		ADV REHAB TECH
115	2016		ADV REHAB TECH
148	2016		ADV REHAB TECH
150	2016		ADV REHAB TECH
151	2016		ADV REHAB TECH
153	2016		ADV REHAB TECH
301	2016		ADV REHAB TECH
312	2016		ADV REHAB TECH
315	2016		ADV REHAB TECH
316	2016		ADV REHAB TECH
512	2016		ADV REHAB TECH
541	2016		ADV REHAB TECH
147	2019		ADV REHAB TECH
149	2019		ADV REHAB TECH
509	2019		ADV REHAB TECH
513	2019		ADV REHAB TECH
518	2019		ADV REHAB TECH
523	2019		ADV REHAB TECH
525	2019		ADV REHAB TECH
546	2019		ADV REHAB TECH
604	2019		ADV REHAB TECH
609	2019		ADV REHAB TECH
614	2019		ADV REHAB TECH
617A	2019		ADV REHAB TECH
628	2019		ADV REHAB TECH
700	2019		ADV REHAB TECH



APPENDIX C
SBA SEWER SYSTEM MAP





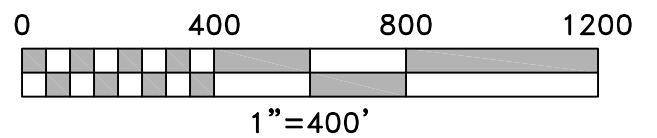
SBA Manhole closest to the Meng Road Study Area

Path from Study Area to SBA Treatment Plant

LEGEND

- PROPOSED SEWER
- EXISTING SEWER
- - - FORCE MAIN
- EXISTING MANHOLE
- PROPOSED MANHOLE
- TOWNSHIP LINE
- - - DEVELOPMENT LINE
- PS PUMP STATION

NOTE: ALL SEWERS ARE 8" UNLESS OTHERWISE NOTED.



NOTE: BASE DRAWING BASED ON INFORMATION FROM PLAN ENTITLED "SEWER PLOT PLAN" BY ARRO CONSULTING, INC. DATED 01/12/02 LAST REVISED 04/27/04.

GENERAL PLAN
OF THE
SANITARY SEWER SYSTEM
PREPARED FOR
SCHWENKSVILLE BOROUGH AUTHORITY

Ebert Engineering, Inc.

Water and Wastewater Engineering
PO Box 540 Phone (610) 584 6701
4092 Skippack Pike, Suite 202 Fax (610) 584 6704
Skippack, PA 19474 E-mail febert@ebertengineering.com

Number	Description	Date	Drawn By	Project Engr.	Checked By	Scale	Job No.	Date	Drawing No.
			EMK	FEE	FEE	1"=400'	047-001	01/22/09	1 of 1

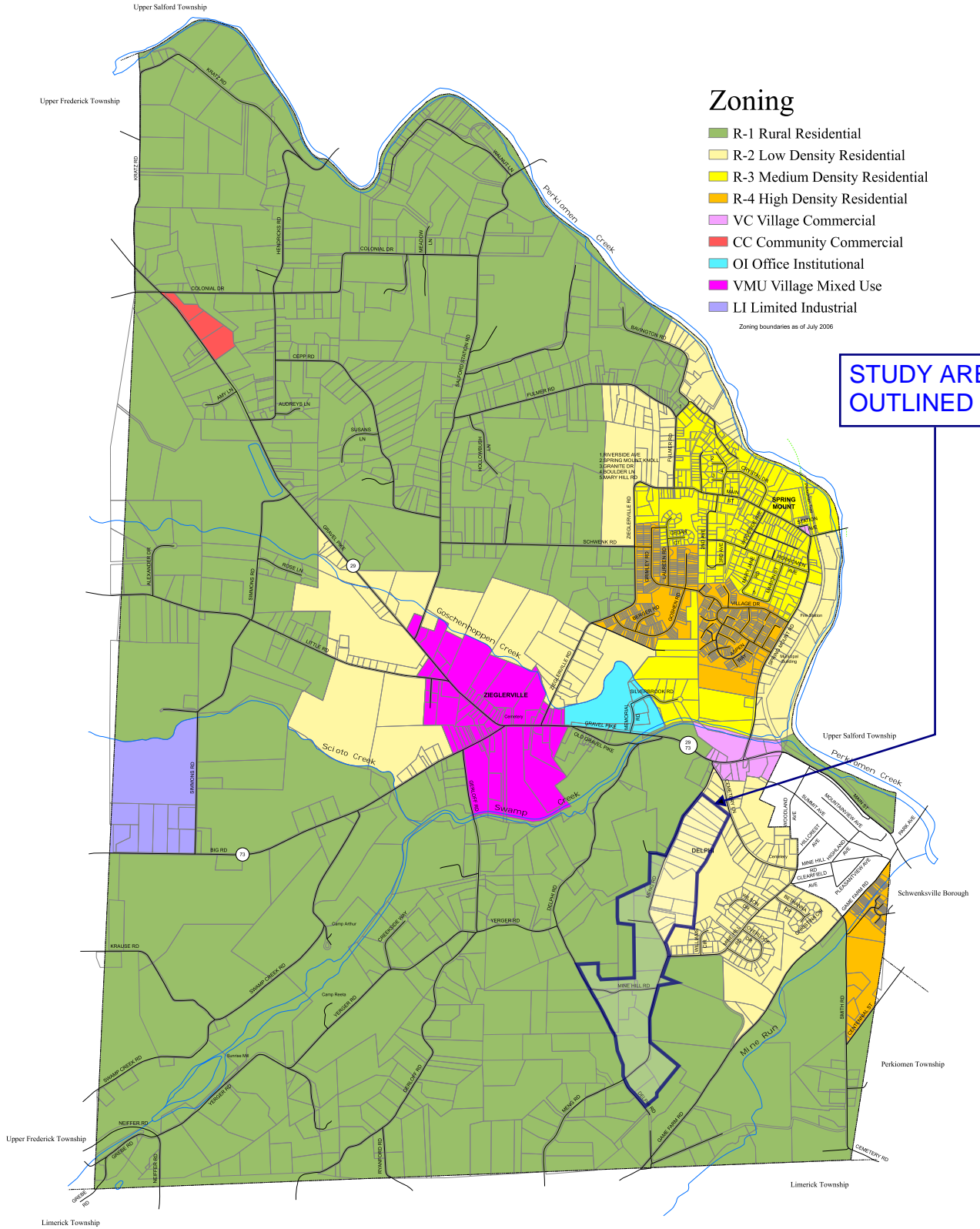
04/20/09-1.dwg

APPENDIX D

PLANNING MAPS (ZONING, FUTURE GROWTH, AND LAND USE)



Lower Frederick Township Montgomery County, Pennsylvania



Zoning

- R-1 Rural Residential
- R-2 Low Density Residential
- R-3 Medium Density Residential
- R-4 High Density Residential
- VC Village Commercial
- CC Community Commercial
- OI Office Institutional
- VMU Village Mixed Use
- LI Limited Industrial

Zoning boundaries as of July 2006

**STUDY AREA
OUTLINED**

MCPC Montgomery County Planning Commission
 Montgomery County Courthouse - Planning Commission
 PO Box 311 • Norristown PA 19404-0311
 (p) 610.278.3722 • (f) 610.278.3941
 www.montgomeryplanning.com



Base map prepared January 2007



Series Number: 1586

23 Pennsylvania Route

This map is based on 2005 aerial photography and official sources. Property lines were compiled from individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.



Future Land Use

As a member of the Central Perkiomen Valley Regional Planning Commission, Lower Frederick’s land use policies are guided by the Future Land Use Plan described in the *Central Perkiomen Valley Regional Comprehensive Plan*. The existing land use patterns in Lower Frederick and the five other member municipalities inform the future land use plan which helps them coordinate to preserve open space, encourage sustainable development, and maintain the rural character that is so important to residents throughout the region. The Land Use Plan designates appropriate areas for new growth and directs revitalization, new development, and infrastructure improvements into those areas. Outside of the designated growth areas, the primary land use objective is preservation of the rural landscape and its natural and cultural resources, with only lower density development that is sensitive to such resources.

The planning region’s Future Land Use designations must be updated periodically to correspond with changing land uses and the local plans in each member community. In Lower Frederick, the current boundaries of the Future Growth Area mostly corresponds with areas where public sewer service is available, however proposed land developments may require revisions to the Future Land Use map. The following are the Future Land Use Areas in Lower Frederick Township.

Figure 5.10 | Current CPVRPC Future Land Use Areas

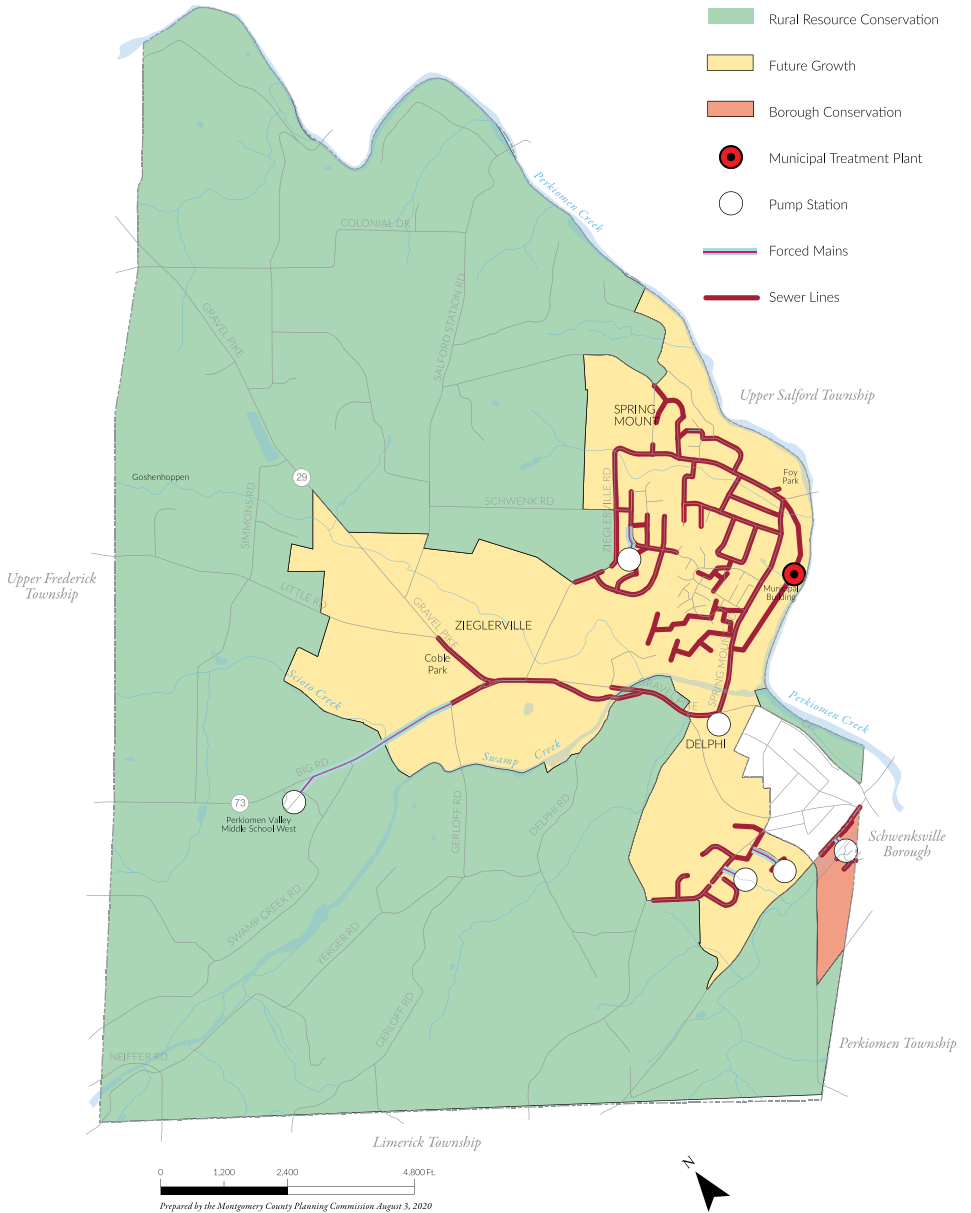
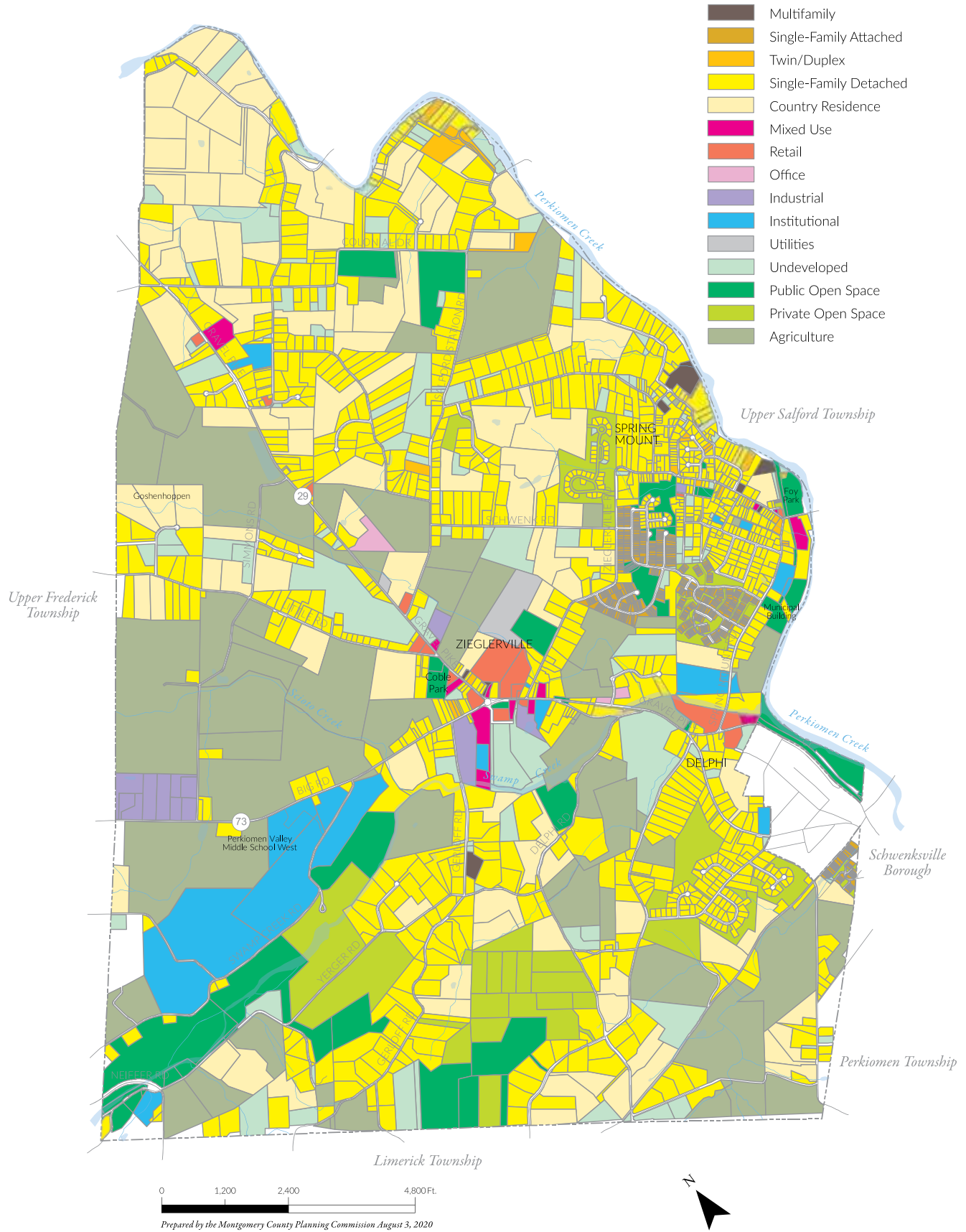


Figure 1.18 | Land Uses, July 2020



APPENDIX E
COST ESTIMATING SUMMARY AND CALCULATIONS

Meng Road Area Sewage Planning Study

Option	Description	Projected Township Costs						Property Owner Costs					
		Projected Construction Cost	Properties Served	Project Cost per property served	Required Connections	Project Cost per required connection	Individual Grinder Pumps	Gravity Connect	Tapping Fee	Projected Property Owner direct costs			
A	Continued Use of Existing On-lot Systems with Public Education	\$ 3,540.00	36	\$98			\$ 17,000				\$ 14,405.26	-	\$ 24,405.26
B	Combination of Low-Pressure & Gravity Connection to Existing Lower Frederick Public Sewer System	\$ 5,243,126.08	36	\$145,642	16	\$327,695	\$ 17,000	\$ 7,000	\$7,405.26		\$ 14,405.26	-	\$ 24,405.26
C	Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road	\$ 2,765,107.29	17	\$162,653	11	\$251,373	\$ 17,000		\$3,330.00		\$ 20,330.00		\$ 20,330.00
D	Low-Pressure Sewer Connection to Existing Lower Frederick Public Sewer System	\$ 4,533,059.28	36	\$125,918	16	\$283,316	\$ 17,000		\$7,405.26		\$ 24,405.26		\$ 24,405.26
E	Low-Pressure Sewer Connection to the SBA Collection System in Mine Hill Road and Directing Lower Frederick Properties Currently Served by SBA to a New Pump Station to the Existing Lower Frederick System	\$ 8,990,360.50	29	\$310,012	21	\$428,112	\$ 17,000	\$ 7,000	\$7,405.26		\$ 14,405.26	-	\$ 24,405.26

PRELIMINARY COST ESTIMATE (Map Option "B")

PROJECT NAME: Meng Road Special Study
MUNICIPALITY: Lower Frederick Township
PREPARED BY: RFPjr

DATE: 09/04/25
PROJECT NO. LFTW22007
REVIEWED BY:

ITEM NO	DESCRIPTION	APPROX.		UNIT	TOTAL
		QTY	UNIT	PRICE	
General Requirements					
1	Mobilization/Demobilization	1	LS	\$ 165,758.44	\$ 165,758.44
2	Construction Stakeout	1	LS	\$14,210.41	\$14,210.41
3	Locate Existing Utilities	10	EA	\$532.48	\$5,324.80
4	Sawcut -Sanitary	17,848	LF	\$3.70	\$66,037.60
5	Tie In - Existing Sanitary (Excludes Modifications to Existing Manhole)	1	EA	\$5,078.90	\$5,078.90
6	Modifications to existing manholes (Spray Rock)	10	VF	\$1,300.00	\$13,000.00
7	Force Main - 3" - Township Road	4,856	LF	\$112.55	\$546,542.80
8	Jack & Bore below creek at Gravel Pike	80	LF	\$1,171.34	\$93,707.20
9	8" SDR-26 Sewer Main (4'-12' depth)	3,268	LF	\$163.29	\$533,631.72
10	Force Main Lateral (1 1/4" DR-11)	17	EA	\$7,844.83	\$133,362.11
11	6" Sewer Lateral (SDR-26)	19	EA	\$3,267.38	\$62,080.22
12	Air Release Valve w/manhole	3	EA	\$23,922.21	\$71,766.63
13	Cleanout/flushing manhole (forcemain -placed ~600' apart)	8	EA	\$22,675.15	\$181,401.20
14	Gravity Sanitary manhole w/PVC liner (Place ~300' apart)	12	EA	\$19,077.01	\$228,924.12
15	Test Sanitary Main	1	LS	\$32,068.86	\$32,068.86
16	Flush & CCTV gravity main only	3,348	LF	\$2.94	\$9,843.12
17	Stone Backfill - Sanitary	20,669	TN	\$22.55	\$466,085.95
18	R/W Rest - Sanitary	535	SY	\$23.07	\$12,342.45
19	Trench Pavement Restoration (Temp 2" Binder)	4,958	SY	\$64.59	\$320,237.22
20	Trench Pavement Restoration (Perm 6" Base 2.5" Binder 1.5" wearing)	7,878	SY	\$160.37	\$1,263,394.86
21	Mill Roadway (Half Width Roadway 12' lane)	10,832	SY	\$6.00	\$64,992.00
22	Sweep & Tac Coat	10,832	SY	\$1.52	\$16,464.64
23	Wearing 1.5" (half width Roadway 12' lane)	10,832	SY	\$13.12	\$142,115.84
24	Line Painting (Double Yellow)	8,284	LF	\$1.11	\$9,195.24
25	Traffic Control (Single Lane Closure)	1	LS	\$308,911.92	\$308,911.92
				Estimated Construction Cost	\$ 4,766,478.25
				10% Contingency Cost	\$476,647.83
				Total Project Cost	\$5,243,126.08

Note: This is a preliminary estimate, unit prices, quantities and lump sum prices have been based on conceptual layout. Unit prices and Lump Sum prices were obtained from prior experience.

PRELIMINARY COST ESTIMATE (Map Option "C")

PROJECT NAME: Meng Road Special Study
MUNICIPALITY: Lower Frederick Township
PREPARED BY: RFPjr

DATE: 09/04/25
PROJECT NO. LFTW22007
REVIEWED BY:

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
General Requirements					
1	Mobilization/Demobilization	1	LS	\$ 97,532.54	\$ 97,532.54
2	Construction Stakeout	1	LS	\$7,988.21	\$7,988.21
3	Locate Existing Utilities	10	EA	\$532.48	\$5,324.80
4	Sawcut -Sanitary	10,066	LF	\$3.70	\$37,244.20
5	Tie In - Existing Sanitary (Excludes Modifications to Existing Manhole)	1	EA	\$5,078.90	\$5,078.90
6	Modifications to existing manholes (Spray Rock)	10	VF	\$1,300.00	\$13,000.00
7	Force Main - 3" -Township Road	5,024	LF	\$112.55	\$565,451.20
8	Force Main Lateral (1 1/4" DR-11)	17	EA	\$7,844.83	\$133,362.11
9	Air Release Valve w/manhole	3	EA	\$23,922.21	\$71,766.63
10	Cleanout/flushing manhole (forcemain -placed ~600' apart	9	EA	\$22,675.15	\$204,076.35
11	Stone Backfill - Sanitary	7,947	TN	\$22.55	\$179,204.85
12	Test Sanitary Main	1	LS	\$15,383.33	\$15,383.33
13	R/W Restoration - Sanitary	300	SY	\$23.07	\$6,921.00
14	Trench Pavement Restoration (Temp 2" Binder)	2,980	SY	\$64.59	\$192,478.20
15	Trench Pavement Restoration (Perm 6" Base 2.5" Binder 1.5" wearing)	4,172	SY	\$160.37	\$669,063.64
16	Mill Roadway (Half Width Roadway 12' lane)	6,699	SY	\$6.00	\$40,194.00
17	Sweep & Tac Coat	6,699	SY	\$1.52	\$10,182.48
18	Wearing 1.5" (half width Roadway 12' lane)	6,699	SY	\$13.12	\$87,890.88
19	Line Painting (Double Yellow)	5,024	LF	\$1.11	\$5,576.64
20	Traffic Control (Single Lane Closure)	1	LS	\$166,013.94	\$166,013.94
				Estimated Construction Cost	\$ 2,513,733.90
				10% Contingency Cost	\$251,373.39
				Total Project Cost	\$2,765,107.29

Note: This is a preliminary estimate, unit prices, quantities and lump sum prices have been based on conceptual layout. Unit prices and Lump Sum prices were obtained from prior experience.

PRELIMINARY COST ESTIMATE (Map Option "D")

PROJECT NAME: Meng Road Special Study
MUNICIPALITY: Lower Frederick Township
PREPARED BY: RFPjr

DATE: 09/04/25
PROJECT NO. LFTW22007
REVIEWED BY:

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
General Requirements					
1	Mobilization/Demobilization	1	LS	\$ 140,838.67	\$ 140,838.67
2	Construction Stakeout	1	LS	\$14,210.41	\$14,210.41
3	Locate Existing Utilities	10	EA	\$532.48	\$5,324.80
4	Sawcut -Sanitary	17,848	LF	\$3.70	\$66,037.60
5	Tie In - Existing Sanitary (Excludes Modifications to Existing Manhole)	1	EA	\$5,078.90	\$5,078.90
6	Modifications to existing manholes (Spray Rock)	10	VF	\$1,300.00	\$13,000.00
7	Force Main - 3" - Township Road	8,124	LF	\$112.55	\$914,356.20
8	Force Main - 3" - (HDD Below Creek & Gravel Pike)	80	LF	\$625.58	\$50,046.40
9	Force Main Lateral (1 1/4" DR-11)	36	LF	\$7,844.83	\$282,413.88
10	Air Release Valve w/manhole	3	EA	\$23,922.21	\$71,766.63
11	Cleanout/flushing manhole (forcemain -placed ~600' apart)	14	EA	\$22,675.15	\$317,452.10
12	Test Sanitary Main	1	EA	\$26,917.81	\$26,917.81
13	Stone Backfill - Sanitary	13,220	EA	\$22.55	\$298,111.00
14	R/W Restoration - Sanitary	535	EA	\$23.07	\$12,342.45
15	Trench Pavement Restoration (Temp 2" Binder)	4,958	LS	\$64.59	\$320,237.22
16	Trench Pavement Restoration (Perm 6" Base 2.5" Binder 1.5" wearing)	6,878	LF	\$160.37	\$1,103,024.86
17	Mill Roadway (Half Width Roadway 12' lane)	10,832	TN	\$6.00	\$64,992.00
18	Sweep & Tac Coat	10,832	SY	\$1.52	\$16,464.64
19	Wearing 1.5" (half width Roadway 12' lane)	10,832	SY	\$13.12	\$142,115.84
20	Line Painting (Double Yellow)	8,284	LF	\$1.11	\$9,195.24
21	Traffic Control (Single Lane Closure)	1	LS	\$247,036.33	\$247,036.33
				Estimated Construction Cost	\$ 4,120,962.98
				10% Contingency Cost	\$412,096.30
				Total Project Cost	\$4,533,059.28

Note: This is a preliminary estimate, unit prices, quantities and lump sum prices have been based on conceptual layout. Unit prices and Lump Sum prices were obtained from prior experience.

PRELIMINARY COST ESTIMATE (Map Option "E")

PROJECT NAME: Meng Road Special Study
MUNICIPALITY: Lower Frederick Township
PREPARED BY: RFPjr

DATE: 09/04/25
PROJECT NO. LFTW22007
REVIEWED BY:

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
General Requirements					
1	Mobilization/Demobilization	1	LS	\$ 218,500.00	\$ 218,500.00
2	Construction Stakeout	1	LS	\$20,500.00	\$20,500.00
3	Locate Existing Utilities	22	EA	\$532.48	\$11,714.56
4	Sawcut -Sanitary	13,230	LF	\$3.70	\$48,951.00
5	Tie In - Existing Sanitary (Excludes Modifications to Existing Manhole)	1	EA	\$5,078.90	\$5,078.90
6	Modifications to existing manholes (Spray Rock)	25	VF	\$1,300.00	\$32,500.00
7	LP-Force Main - 3" - Township Road	9,000	LF	\$112.55	\$1,012,950.00
8	Force Main - 4" - Township Road	650	LF	\$1,171.34	\$761,371.00
8	Jack & Bore below Creek at Gravel Pike	80	LF	\$1,171.34	\$93,707.20
9	Force Main Lateral (1 1/4" DR-11)	40	EA	\$7,844.83	\$313,793.20
10	Air Release Valve w/manhole	5	EA	\$23,922.21	\$119,611.05
11	Cleanout/flushing manhole (forcemain -placed ~600' apart)	14	EA	\$22,675.15	\$317,452.10
12	8" SDR-26 Gravity Sewer - Township Road (4-12' depth)	3,500	LF	\$112.55	\$393,925.00
13	4' dia Manhole	7	EA	\$6,250.00	\$43,750.00
14	4' dia PVC Lined Manhole	4	EA	\$19,077.01	\$76,308.04
15	6" SDR-26 Gravity Laterals	17	EA	\$3,267.38	\$55,545.46
16	Municipal Pump Station	1	EA	\$750,000.00	\$750,000.00
12	Test Sanitary Main	1	LS	\$26,917.81	\$26,917.81
13	Stone Backfill - Sanitary	13,230	TN	\$22.55	\$298,336.50
14	R/W Restoration - Sanitary	535	SY	\$23.07	\$12,342.45
15	Trench Pavement Restoration (Temp 2" Binder)	13,230	LF	\$64.59	\$854,525.70
16	Trench Pavement Restoration (Perm 6" Base 2.5" Binder 1.5" wearing)	13,230	LF	\$160.37	\$2,121,695.10
17	Mill Roadway (Half Width Roadway 12' lane)	15,682	SY	\$6.00	\$94,092.00
18	Sweep & Tac Coat	15,682	SY	\$1.52	\$23,836.64
19	Wearing 1.5" (half width Roadway 12' lane)	15,682	SY	\$13.12	\$205,747.84
20	Line Painting (Double Yellow)	13,230	LF	\$1.11	\$14,685.30
21	Traffic Control (Single Lane Closure)	1	LS	\$247,036.33	\$247,036.33
				Estimated Construction Cost	\$ 8,174,873.18
				10% Contingency Cost	\$817,487.32
				Total Project Cost	\$8,992,360.50

Note: This is a preliminary estimate, unit prices, quantities and lump sum prices have been based on conceptual layout. Unit prices and Lump Sum prices were obtained from prior experience.

APPENDIX F
PLANNING AGENCY REVIEWS

This special study was submitted to the Lower Frederick Township Planning Commission, Montgomery County Planning Commission, and Montgomery County Health Department for comments. Comments from the county agencies are attached. Minutes are provided showing the Lower Frederick Township Planning Commission comments.

In response to the Lower Frederick Township Planning Commission's review, the following revisions were made to Section III of this study and the Field Survey in Appendix #A:

- It was noted that 3 of the existing small flow treatment facility (SFTF) systems with stream discharge were the result of a property subdivision that created the lots proposing the use of SFTF and not as the result of onlot system failures. The lots created using SFTF were noted in the individual lot summaries.
- It was noted that 12 of the existing onlot systems use more current technology such as elevated sand mound, at grade, and micromound systems.
- It was also noted that 6 properties successfully tested, permitted, and replaced their original onlot systems. This was added to the summary information of those lots.

A letter response was provided to the Montgomery County Planning Commission review (attached). No changes were made to the study because of the comments.

As the Montgomery County Health Department had no comments, no revisions were made to the special study because of this review.

LOWER FREDERICK TOWNSHIP PLANNING COMMISSION

53 Spring Mount Rd. Schwenksville, Pa. 19473

Meeting Minutes of March 19, 2026

Meeting called to order at 7:00 pm.

Attendance Roll Call:

Members:

Mr. Greg Pocius - Chair
Ms. Crystal Gilchrist – Vice Chair
Ms. Linda Jansson – Recording Secretary
Mr. Rainer Keown
Mr. Tarek Osman
Mr. Richard Parke (attended via Zoom)
Mr. Ernie Schmitt

Associated Township Staff:

Ms. Carol Schuehler, Township Engineer

MCPC Community Planner:

Mr. John Miklos, MCPC Community Planner

LFT Manager:

Mr. Jason Wager

Note: The March 19, 2026, LFTPC meeting was held in person at the Lower Frederick Township Municipal Building and available on Zoom.

Approval of Minutes -

Chairperson, Mr. Greg Pocius, informed the PC members he still did not have drafts of PC's meeting minutes from the October 16, 2025, and November 20, 2025, meetings. He is working on getting these minutes drafted and hopes to have them available for the next PC meeting. Sadly, this lapse was created with the passing of long-time PC Recording Secretary Phil Smith, whose decades long service to our township will be missed.

Motion to adopt February 19, 2026, Lower Frederick Township Planning Commission meeting minutes.

Motion: Mr. Schmitt

Second: Mr. Pocius

The motion carried unanimously

Business Items -

1. Subdivision Plan – 104 Delphi Road (Collins)

This applicant has submitted a subdivision plan to create two building lots from one existing lot (approx. 33 acres in size) located in the R-1 Rural Residential zoning district. This lot is located on the east side of Delphi Rd and contains one existing home on a densely wooded lot. The applicant is proposing to subdivide off approximately 5 acres where the existing home is now and construct a new home on the remaining 28 acres.

A presentation was given by the applicant, Mr. Zaine Collins and his engineer, Ms. Julie Parish, of All County and Associates, Inc. They provided the LFTPC membership with an 8 page plan set consisting of: a site plan, an existing features plan, a proposed building plan, a grading & stormwater plan, a grading & stormwater detail page, an E & S plan, an E & S notes page, and an E & S details page.

Mr. Collins explained it was his desire to keep the newly created building lot (approx.. 28 acres) in its natural state, removing as few trees as possible needed for construction. On this lot he plans to build a new single family home for his growing family and expressed his desire for privacy & the environment. The existing home is to remain (approx.. 5 acres) and be utilized as a guest house for visiting family.

Discussion then ensued between LFTPC, the applicant & his engineer. There was no public comment.

Notable comments and discussion points:

- Ms. Gilchrist stated, in her opinion, the LFTPC didn't need to go through LFT engineer, Ms. Schuehler's, 16 page review letter for the project. She asked the applicant and his engineer if they planned to comply with all the ordinances/comments outlined in this letter, to which they agreed. They will work with Ms. Schuehler to revise the plan.
- Ms. Parish, the applicant's engineer, did note that others, not her, would be responsible for the final design of the on-lot septic system. Both the applicant and his engineer agreed they will obtain all the necessary permits required by LFT, the Montgomery County Conservation District, and the PA Department of Environmental Protection to construct this project.
- Ms. Jansson complimented the applicant for his desire to keep this parcel in its natural state, without plans for future subdivision. This sentiment was shared by the entirety of the LFTPC.
- Ms. Jansson then expressed, in her opinion, if the applicant would request waivers in the future from SALDO requirements §145-41 – Sidewalks & §145-42. B. (1) – Street Trees, she would be in favor of recommending to LFT's BoS they grant these waivers. Presently there are no sidewalks in that area, and the existing wooded lot already met the street tree requirements. Again, this sentiment was shared by the entirety of the LFTPC, along with Ms. Schuehler in her review letter dated March 12, 2026, on page 9 of 16.
- The LFTPC thanked the applicant and his engineer for their presentation, complimented his desire to keep these parcels in their natural states as much as possible, and looked forward to seeing them again with final plan submission and/or any waiver requests.

Public Comment:

None

2. EAC Requested Discussion Regarding Outdoor Lighting Code Updates/Amendments

Mr. Gary Bonner, chairperson of LFT's Environmental Advisory Council (EAC), and Ms. Dyanne Jurin, vice-chairperson of LFT's EAC, gave a presentation and distributed literature from Dark Sky International, pertaining to reducing harmful artificial nighttime illumination. This artificial illumination can cause negative impacts to wildlife and ecosystems, including disruption to human sleep, human health, nighttime pollination, along with nighttime migrations of both birds and beneficial insects.

It is the hope of the LFT EAC to work with the LFTPC to develop a model ordinance, based on principals outlined by Dark Sky International, along with instituting an outreach and educational program for the community to help dissuade many misconceptions on this topic. The purpose is not to eliminate nighttime illumination, but to control its impact with directional placement (downward rather than shining upward), utilizing warmer color schemes, and institute brightness/wattage standards.

Notable comments and discussion points:

- Ms. Jansson asked if the EAC hadn't already drafted an ordinance on this same topic a few years prior? Ms. Jurin answered in the affirmative there was originally a section on this topic contained within the Natural Resource Protection Ordinance, but it was removed prior to the ordinance's adoption. It's the desire of the EAC to start anew with a new draft ordinance incorporating the principals outlined by Dark Sky International, a non-profit organization founded to preserve and protect our nighttime environment.
- Ms. Jurin explained these included the Five Principles for Responsible Outdoor Lighting. Is it useful? Is it targeted? Is it low level? Is it controlled? Is it warm colored?
- Mr. Bonner noted that the "color temp" was important in promoting healthy lighting and that a shorter blue wavelength light casts more light than warmer colors.
- Mr. Pocius referenced two recent LFT housing developments, Arcadia & Farm View. Although he was not as familiar with the lighting at Arcadia, he noted Farm View seemed to incorporate "shielding" on their light fixtures, casing the light in a downward direction. He did note that in his opinion the fixtures were not very attractive
- A discussion then ensued as to would these standards apply only to developments/streetlights or individual homeowners, or both. Also would existing lighting be grandfathered. It was agreed it would be difficult to enforce existing lighting, unless it was deemed a nuisance, yet desired standards could be expressed or encouraged.
- Ms. Schuehler noted that standards would need to be added to the SALDO as they were not currently in our existing codes, and only briefly mentioned in zoning under § 170-19. Her suggestion was to add LED lighting to our SALDO, along with language an HOA would maintain lighting.
- Mr. Keown agreed with Ms. Schuehler regarding HOAs responsibilities and suggested certain lighting style standards be incorporated. This would help to promote uniformity. He also noted including lighting standards in both SALDO and zoning would help with enforcement.
- Ms. Gilchrist agreed with Mr. Keown recommending lighting styles be incorporated into our codes. She also noted that placement of lighting and street trees be considered.
- Mr. Schmitt recounted his experience as a long time PECO employee that streetlights were high pressure sodium and/or mercury vapor in the past, but now trending towards LED.

- Ms. Jansson suggested with the ongoing zoning discussions regarding LFT's VMU area, perhaps lighting standards should also be incorporated into that section's language since commercial businesses would be more prone to having 24/7 lighting.
- In response to both Mr. Keown's & Ms. Jansson's comments regarding additions to zoning, Ms. Schuehler suggested it first be introduced into SALDO, then added to zoning for uniformity.
- Mr. Pocius agreed that updating our SALDO first would be a good starting point.
- Mr. John Milkos, MCPC, was asked if Montgomery County had a model ordinance for lighting standards, to which he replied it was in the process of being updated. He suggested LFT check out Douglas Township's lighting ordinance as they already have one in place.
- Ms. Gilchrist asked if the EAC could provide our PC with a written "draft ordinance" so we'd have some sort of a guide or starting point to work from.
- Ms. Jurin stated she will provide the PC with updates and noted the EAC meets the second Tuesday of the month at 7:15 PM. These meetings are held in person at the township building and also available via Zoom if LFTPC members wished to attend.

The discussion on this topic then ended, but it was agreed we all look forward to future discussions and hope to have something in the near future to present to the Board of Supervisors for consideration. There was no public comment.

3. Act 537 Special Study – Meng Road

At the LFTPC's February meeting, due to a short review time for this document, the PC was given the option of tabling this topic until our March 2026 meeting. Mr. Keown stated did have items he'd like to discuss/address, yet said he would hold his comments until our March 2026 meeting.

At our March meeting, Mr. Keown provided the PC membership and Ms. Schuehler with a 2-page document outlining his comments/concerns regarding this study. This document is included as an attachment to these meeting minutes. Mr. Keown has an intimate knowledge of this area, being a lifelong resident of Meng Rd, and his anecdotal and historical knowledge of past and present sewerage systems is a valued contribution to this study.

Due to the topography of parcels on Meng Road, in recent years there have been a few failed or failing on-lot septic systems. This issue prompted the DEP's request for LFT to perform a "special study" to address how it will deal with future failed or failing systems in this area.

Ms. Schuehler and Mr. Preston completed this study offering the DEP Options A thru E, with Option A being the desired choice. Option A chose not to install public sewers in this location at this time due to the prohibitive costs to the township and homeowners and the availability of alternative systems. Although public sewerage options were explored within some of the other options (B thru E), at the present time alternative on-lot systems and the ability to connect to Schwenksville Borough Authorities' public system have provided viable solutions. LFT has also engaged in a public education program for maintaining on-lot systems, along with instituting an ordinance requiring on-lot systems to be pumped out every three years.

This study encompassed 36 properties along Meng Rd, with many of these parcels more than 150' from the road, which are not required to connect to a public system. Every parcel was inspected for evidence of failed or failing systems and none were found, prompting "Option A" as the best option.

The LFTPC discussed Mr. Keown's concerns and comments. His main point of concern was future treated effluent discharge (from alternative systems) into an existing UNT of the Swamp Creek, which runs parallel to the lower portion of Meng Rd. Presently there are four stream discharge systems within the study area, with at least one system that discharges into this UNT. The LFTPC was in agreement with Mr. Keown's concerns and his suggestion language be added to the study to discourage any further future discharges into this UNT.

Ms. Schuehler reminded PC membership that LFT does not have the final say as to what alternative system a homeowner can install. That jurisdiction falls on the County Sewage Enforcement Officer (SEO), the Montgomery County Board of Health, and the DEP.

Mr. Keown also suggested verbiage be added to the study's narrative that of the 36 properties in the study area, six have recently installed new replacement systems and twelve have newer systems, less prone to failure. The LFTPC was also in agreement this language should be added to the special study narrative to further garnish DEP support of Option A.

Mr. Pocius suggested these changes be added, and providing Ms. Schuehler makes these changes, LFTPC voted unanimously for the special study to be advanced to BoS for consideration and approval, with Mr. Keown abstaining from the vote.

There was no public comment on this topic.

General Public Comments/PC Member Comments:

- Mr. Schmitt – LFTPC/Silverbrook Drive Resident – Mr. Schmitt provided LFTPC membership with three photos of a stand of bamboo adjacent to his property. He noted bamboo is an invasive species that sends out runners/roots which encroach upon neighboring properties if not controlled. Additionally, due to our especially cold winter this year, many of the bamboo leaves have died, blowing onto his property. Both he and his wife have aged in place and their ability to clean up this leaf debris is limited if not impossible. In his opinion this is a nuisance. He asked the PC to explore drafting an ordinance outlawing the planting of bamboo within the township.
- Mr. Pocius replied he was aware of the invasive nature of bamboo and how hard it is to control its spread. He cited his assistance to Mr. Terry Bird when removing the bamboo in the front of the former Fowler Strang property. He indicated that you have to completely remove the roots and/or put a metal or plastic barrier underground to stop the spread.
- Ms. Schuehler noted LFT's landscaping ordinance does have bamboo listed as an invasive species, not to be planted, yet does not address existing bamboo within the township.
- Ms. Jansson noted during the heavy snows this winter, many municipalities reported "road obstructions" where bamboo was planted too close to road shoulders. The bendable nature of bamboo stalks, coupled with heavy snow, created a hazard for both drivers and plow trucks.
- Mr. Miklos, MCPC, was asked to see if he could find examples of ordinances controlling or prohibiting bamboo from other municipalities.

Seeing no further comments Mr. Pocius, LFTPC Chairperson declared the March 19, 2026, PC meeting adjourned at 8:50 pm.

Meng Road Special Study Notes for the P.C. Meeting
Ranier Keown – March 19, 2026

My Relationship to the Study Area:

My family owns two properties on Meng Road.

- One property is in the study area on the south side of Meng. It has a traditional on-lot system that my father installed in the late 1960's. We don't have problems with it, but we're careful with water usage. The home is more than 150' off the road.
- The second is an undeveloped property adjacent to the study area on the north side of Meng. This property includes a small stream that drains a significant portion of the study area. The property has frontage on both Meng Road and Route 29. It already has access to public sewer per the current 537 plan. It would connect to the sewer via Route 29, and not Meng Road. Therefore, adding sewer to Meng Road would not affect the development potential or the value of this property.

My Position:

I don't know whether Meng Road should be sewerred or not.

However, there needs to be a plan for systems that fail in the future, and that plan should not include discharging treated effluent to the stream.

Discussion Points:

1. Option A only makes sense if we're confident that . . .
 - the existing on-lot disposal fields won't fail in the future
 - or the properties would pass the required soil testing to allow repair or replacement of the disposal fields
2. There are some indications that repairing or replacing on-lot disposal fields in this area may be a problem:
 - 3 recently failed systems in the study area were not replaced with on-lot disposal systems. All 3 of these properties previously had typical on-lot systems that seemingly functioned for many years.
 - 24 Meng (2021) – "Property is unsuitable for any type of land-based sewage disposal"
 - 103 Meng (2021) – "Not possible to have an on-lot septic system"
 - 104 Meng (2019) – Connected to SBA. I don't know if soil testing was done.
 - There are 6 stream discharge systems in the entire township. 4 of them are in this study area
 - 12% of on-lot systems in the study area are stream discharge vs. 0.3% for the rest of the township (40X).
3. The special study doesn't address the feasibility of repairing or replacing failed disposal fields in the study area. If I were the DEP, I would want to understand why LFT is confident that Option A is a viable plan for the future despite some indications to the contrary.
 - Based on soil type, geology, woodland coverage, recent system failures, recent soil test results, and the current soil test standards, do we expect that future failed systems could be repaired or replaced with new on-lot disposal systems? If so, the study should provide information supporting that view.
 - Were the soil test failures at 24 Meng and 103 Meng unique to those properties for some reason, and therefore we don't expect other properties in the area to have this same problem? If so, the study should explain why.

Consistency with the Zoning Ordinance:

1. Current LFT zoning (170-53.B.3) says all sewage disposal shall conform to the 537 plan, and may include the following alternatives:
 - Public sewer where available.
 - Individual on-lot systems, employing subsurface disposal or spray irrigation on open land.
 - Centralized or community systems employing subsurface disposal or spray irrigation on open land, or stream discharge.

Individual on-lot system with stream discharge is not listed as allowed in this zoning section. Also, the current 537 plan doesn't mention stream discharge systems as an alternative for failed systems. Maybe this is intentional so special approval is required?

2. The special study (page 25) states that the current zoning ordinance (170-53.B.4) requires that, **for new construction**, the highest ranking, feasible on-lot system type be utilized and justified for approval by the township.

The phrase, "for new construction", could be understood as only new lots or lots with new homes need to meet this section.

I think the zoning code says that all lots, existing or proposed with an on-lot system must meet this section even if it is replacing a failed system on an existing lot. Only repairs of existing systems don't need to meet this section.

To me, repairs are replacing a pipe, pump, tank, or drain field but keeping the same system type. Replacing a failed traditional on-lot system with a Small Flow Treatment Facility with stream discharge is not a repair.

If that's correct, this should be clarified in the special study.

MONTGOMERY COUNTY

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**Montgomery County
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Scott France, AICP
Executive Director

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

DEP Project Number: Not Determined
MCPC 537 Number: 26-2422
Project Name: Meng Road Sewer Study
Municipality: Lower Frederick Township
Date revision received by the
County Planning Commission: 02/05/26

March 2, 2026

Jason Wager
Lower Frederick Township
53 Spring Mount Road
Schwenksville, PA 19473

Dear Mr. Wager:

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 Meng Road Special Study is a review of options for the Meng Road planning area in the Lower Frederick Township that reevaluates the possibility of extending sewer service to 36 properties. Of these 36 properties, 28 of them currently receive sewer service by existing on-lot systems which have no reports of failure or overflow capacity issues. There were five engineering options considered for sewer service within the planning area. Four of the options were deemed to be not consistent with the Lower Frederick Township Comprehensive Plan and would require significant upgrades to the existing sewer

infrastructure. The study also considers a 'no-build' option (Option A) which proposes to keep the existing on-lot sewer systems in place without the extension of sewer flow for future growth, eliminating a need for additional costs for sewer upgrades and eliminates potential growth into an area that is considered a 'non-growth area' where public sewer is not permitted due to the existing Rural Resource Conservation Area.

The findings of the Meng Road Planning Study consider Option A as the preferred alternative because the study found no active or suspected sewage malfunctions within the Meng Road Planning Area, making the need for public sewer infrastructure improvements unnecessary at this time. As a result, the study recommends that the Township educate residents on proper septic system maintenance, continue the enforcement of the Sewage Management Ordinance, and the institution of better practices from Montgomery County Health Department and PA Department of Environment. Instrumentally, Option A avoids adding flow to the Delphi Pump Station, does not require new sewer facilities for the Township to operate or maintain, and can be implemented using existing Township staff and programs.

COMMENTS/ISSUES

1. Option A relies on continued proper operation and maintenance of existing on-lot sewage disposal systems and is compliant under current regulatory conditions; however, it does not address long-term changes in system performance, land use, or environmental constraints. Over time, aging systems, recurring malfunctions, development pressures, or limitations in available replacement areas may reduce the effectiveness of on-lot solutions. Future sewer studies may become necessary to evaluate emerging public health or environmental risks, assess the feasibility of alternative or centralized treatment options, and ensure continued compliance with Act 537 planning requirements. Such studies will allow the Township to proactively plan for conditions that cannot be resolved through education, maintenance, or individual system replacement alone.
2. If the existing homes are not already connected to public water, and public water is available, they should be connected to the public water system to have concurrent systems.

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 tim.deschepper@montgomerycountypa.gov

Best,

Timothy DeSchepper

Tim DeSchepper

Sr. Environmental Planner

Montgomery County Planning Commission

Tim.deschepper@montgomerycountypa.gov

(302)278-3733

c: Elizabeth Mahoney, DEP, SERO

Consultant

Owner

March 13, 2026

Montgomery County Planning Commission
PO Box 311
Norristown, PA 19404

Attn: Tim DeSchepper, Environmental Planner (Tim.DeSchepper@montgomerycountypa.gov)

RE: Response to MCPC 3/2/26 Review
Special Study for the Meng Road Planning Area
Update to Official Act 537 Sewage Facilities Plan
Lower Frederick Township, Montgomery County
LF21200

Dear Mr. DeSchepper:

Thank you for your review of the Special Study for the Meng Road Planning Area dated March 2, 2026. These comments will be included in the study and will be considered by the Township before adopting the special study and submitting study to DEP for review and approval.

Each comment in the review is provided below, and a response is provided to each comment.

MCPC Comment:

- 1. Option A relies on continued proper operation and maintenance of existing on-lot sewage disposal systems and is compliant under current regulatory conditions; however, it does not address long-term changes in system performance, land use, or environmental constraints. Over time, aging systems, recurring malfunctions, development pressures, or limitations in replacement areas may reduce the effectiveness of on-lot solutions. Future sewer studies may become necessary to evaluate emerging public health or environmental risks, assess the feasibility of alternative or centralized treatment options, and ensure continued compliance with Act 537 planning requirements. Such studies will allow the Township to proactively plan for conditions that cannot be resolved through education, maintenance, or individual system replacement alone.*

Response:

For replacement sewage disposal systems, individual on-lot alternative sewage disposal systems are considered on a lot-by-lot basis through site and soil evaluation similar to conventional on-lot sewage disposal systems. On page 15 of the study, it is noted that in the event a replacement system is necessary, the first consideration is replacement with a conventional or alternative sewage disposal system.

Given the distance the homes are from the road and from each other, a small, centralized treatment system is generally cost prohibitive and not feasible.

MCPC Comment:

2. *If the existing homes are not already connected to public water, and public water is available, they should be connected to the public water system to have concurrent systems.*

Response:

Public water is not currently available within the study area.

Please do not hesitate to contact me should you have any questions.

Sincerely,



Jamie Sundermier

jamie@value.engineering

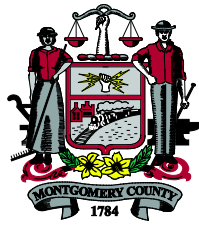
267-664-9965

cc: Jason Wager, Lower Frederick Township, (manager@lowerfrederick.org)
Robert F. Preston Jr., Hydraterra Professionals (rpreston@hydraterrapro.com)

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NADINE MILLER
INTERIM DIRECTOR

February 24, 2026

Value Engineering, Inc.
1578 State Road
Coopersburg, PA 18036

Re: Special Study for Meng Road Planning Area
Lower Frederick Township, Montgomery County, PA

Dear Ms. Sundermier:

The Montgomery County Department of Health & Human Services, Office of Public Health (OPH) has reviewed the Act 537 Special Study in Lower Frederick Township. The study was prepared by Value Engineering, Inc. and a complete copy was received by OPH on Feb 05, 2026.

OPH has no objections to the proposed Act 537 Special Study.

If you have any further questions, please contact me at (610)970-5040 ext. 4217.

Sincerely,

Daniel Oskiera
Environmental Health Specialist/SEO
Division of Water Quality Management
Daniel.oskiera@montgomerycountypa.gov

Enclosures

XC: Department of Environmental Protection
Lower Frederick Township

OFFICE OF PUBLIC HEALTH

PUBLICHEALTH@MONTGOMERYCOUNTYPA.GOV

364 EAST KING STREET • POTTSTOWN, PA 19464
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102 NORTH YORK ROAD • WILLOW GROVE, PA 19090
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FAX: 215-784-5524

**APPENDIX G
PUBLIC COMMENTS**

In this section insert:

- Proof of Public Notice
 - Any comments received during the public comment period or a statement that no comments were received
 - Responses to any public comments received
-

NOTICE

In accordance with Pennsylvania Department of Environmental Protection regulations, Section 71.31(c) of PA Code, Title 25, Act 537, Lower Frederick Township, Montgomery County is accepting comments for the next thirty (30) days on the proposed adoption of an Act 537 Special Study for the Meng Road Planning Area in Lower Frederick Township. This special study updates the sewage planning for the Meng Road Planning Area which includes 36 parcels in the southern region of Lower Frederick Township along and near Meng Road, generally between Delphi Road and Cemetery Lane and identified on a map within the study.

Notice is hereby given that an application to the Pennsylvania Department of Environmental Protection for approval of an Act 537 Special Study for the Meng Road Planning Area in Lower Frederick Township has been prepared by Value Engineering Inc. and Hydraterra Professionals, LLC on behalf of Lower Frederick Township.

The plan proposes continued use of existing onlot sewage disposal systems in the Meng Road Planning Area with public education on the proper use and routine maintenance of onlot systems to extend the life of those systems. Proposed work will be funded with Lower Frederick Township's general fund.

There is a thirty-day period during which the Act 537 Special Study for the Meng Road Planning Area in Lower Frederick Township is available to be viewed at the Lower Frederick Township Municipal Building at 53 Spring Mount Rd., Schwenksville, PA 19473 during the normal hours of operation. The review period shall extend until the close of business on the thirtieth day after the date of public notice. Written comments on the proposed Act 537 Official Sewage Facilities Plan for Lower Frederick Township may be submitted to Township Manager, Jason Wager at the above address.

**APPENDIX H
RESOLUTION OF PLAN APPROVAL**

RESOLUTION OF ADOPTION

RESOLUTION OF THE SUPERVISORS OF LOWER FREDERICK TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the **Pennsylvania Code**, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Value Engineering Inc. and Hydraterra Professionals, LLC, on behalf of Lower Frederick Township, has prepared Act 537 Special Study for the Meng Road Planning Area. The study evaluates the sewage facilities needs for the Meng Road Planning Area of Lower Frederick Township which includes 36 parcels in the southern region of Lower Frederick Township along and near Meng Road, generally between Delphi Road and Cemetery Lane and identified on a map within the study.

WHEREAS, the alternative of choice is continued use of existing onlot sewage disposal systems in the Meng Road Planning Area with public education on the proper use and routine maintenance of onlot systems to extend the life of those systems.

WHEREAS, Lower Frederick Township finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Supervisors of the Township of Lower Frederick hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

I, _____, Secretary, Lower Frederick Township Board of Supervisors hereby certify that the foregoing is a true copy of the Township's Resolution No. _____, adopted _____, 20 ____.

AUTHORIZED SIGNATURE

TOWNSHIP SEAL