

STORMWATER POLLUTION CONTROL FEE RATE STUDY

For

North Lebanon Township

Lebanon County, Pennsylvania

September 19, 2017

DRAFT COPY



Steckbeck Engineering & Surveying, Inc.
279 N. Zinns Mill Road, Suite A
Lebanon, PA 17042
Phone: 717-272-7110
Fax: 717-272-7348

TABLE OF CONTENTS

1. Introduction	1
2. Program Goals and Objectives	3
3. Overview of Common Fee Structures	4
4. Selection and Implementation of the Fee Structure	7
5. ERU Calculation	9
6. Program Costs	12
7. Credits	18
8. Fee Charges and Recommendations	19
9. Sources	26
Appendix A: Land Use Codes	
Appendix B: Impervious Area Calculations, Single-Family Residential Random Sample	
Appendix C: Non-Single Family Residential ERUs	
Appendix D: Credit Manual	
Appendix E: Operation and Maintenance Agreement	
Appendix F: Appeal Form	

1. INTRODUCTION

In undeveloped areas, stormwater that is generated from rain or snowmelt events is able to either slowly soak into the earth's surface or flow in a dispersed manner to the nearest river, stream, lake, pond, or other surface water. The ability of the earth's surface to absorb stormwater or deliver it slowly to streams is highly dependent on the natural vegetative cover of forests and tall-grass meadows. As development occurs, forests and meadows are converted into buildings, roads, driveways, parking lots, and short-grass lawns. The effect of development on natural surface waters is three-fold. First, the capacity of the earth to absorb stormwater is reduced which means more water from every storm event ends up in surface waters. This causes more frequent flooding and higher water levels. Secondly, stormwater runs off the land more quickly than it did pre-development. This increases the flow rate in streams and leads to the erosion of streambeds and streambanks. Finally, stormwater picks up trash, debris, sediment, oil, fertilizers, pesticides, and other chemicals as it travels to surface waters. These man-made pollutants degrade water quality and harm the aquatic wildlife species that live in surface waters.

These problems have been recognized for decades and have led to stringent federal and state laws governing the release of stormwater from developed areas into surface waters. The Federal Water Pollution Control Act and its amendments (in particular the 1972 amendments which are commonly referred to as the "Clean Water Act") authorize the federal Environmental Protection Agency (EPA) to regulate point-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) permitting program. Permitting responsibilities may also be delegated to state agencies such as the Pennsylvania Department of Environmental Protection (DEP).

Discharges of stormwater from Municipal Separate Storm Sewer Systems (MS4s) are regulated under this NPDES program. An MS4 is a system of catch basins, inlets, pipes, ditches, open conveyances, roads, gutters, and other man-made structures that is used for collecting and/or conveying stormwater runoff to surface waters. North Lebanon Township owns and operates an MS4 and is one of 955 municipalities in Pennsylvania that are required to obtain NPDES permit coverage from DEP. The NPDES permit for small MS4s requires municipalities to, among other

things, educate the public about the MS4 program, involve the public in decision-making aspects of the MS4 program, maintain maps of the MS4, screen the MS4 for illicit discharges, enforce ordinances regulating construction projects and the post-construction maintenance of stormwater facilities, conduct regular employee MS4 training, and construct Best Management Practices (BMPs) such as stormwater retention basins, wetlands, vegetated swales, and streambank restorations to reduce the pollutant load to local surface waters. Add these costs of compliance to the costs of the actual, physical maintenance of the MS4, and the strain on the average municipal general fund becomes unsustainable.

Many municipalities not only in Pennsylvania but nationwide have adopted stormwater fees to defray the costs of complying with the NPDES program for MS4s and maintaining their stormwater systems. Second Class Townships in Pennsylvania are authorized under Act 62 of 2016 to assess fees for the purposes of funding the construction, maintenance, and operation of storm water management facilities, systems, and management plans. Fees collected may not exceed the amount necessary to meet the minimum standards of the Federal Water Pollution Control Act and its amendments. Fees may be assessed on all properties in the Township, on all properties benefited by a specific storm water project, or by establishing a storm water management district and assessing the fee on all property owners in the district. This report provides a framework for a stormwater pollution control fee in North Lebanon Township.

2. PROGRAM GOALS AND OBJECTIVES

The goals of the Township's stormwater pollution control fee program are to improve the health of local waterways, operate and maintain the Township's MS4, and comply with federal NPDES program requirements. The implementation of a stormwater pollution control fee which is fair, equitable, and self-sustaining will generate the revenue that will be used to meet each of those goals. This report will outline the objectives necessary to implement the fee, including:

- review commonly-used fee structures,
- select a fee structure,
- calculate the value of an equivalent residential unit (ERU),
- determine the total number of single-family residential (SFR) ERUs in the Township,
- determine the number of ERUs to be assigned to each non-SFR parcel,
- determine the total number of ERUs in North Lebanon Township,
- estimate the MS4 program costs to be paid from the fund established by the stormwater pollution control fee,
- categorize the costs into minimum, moderate, and high levels of service,
- calculate the stormwater pollution control fee per ERU for each level of service,
- select a level of service,
- create a billing structure,
- create procedures for reviewing and responding to appeals, applications for credits, and changes to property owners, parcel identification, and impervious areas,
- implementing the fee using an ordinance,
- begin collection of the fee, and
- conduct annual reviews of the stormwater pollution control fee program.

3. OVERVIEW OF COMMON FEE STRUCTURES

There are three common models for determining the amount that each property owner is charged. While the actual model implemented in a municipality may vary slightly from the descriptions listed here, the basic framework should be similar to one of the three models.

Equivalent Residential Unit (ERU)

The Equivalent Residential Unit (ERU) method is the most widely used model. This model establishes an ERU as the average impervious area on a single-family residential (SFR) parcel, and the fee charged to property owners is set per ERU. Each SFR parcel in the municipality is charged the fee for one ERU. For a non-SFR parcel, the impervious area on the parcel is measured, and the fee charged to that parcel is determined by dividing the impervious area on the parcel by the ERU. For example, if the ERU in a municipality were 1,000 square feet, and a non-SFR parcel had 10,000 square feet of impervious area, that parcel would be charged for ten (10) ERUs. The charge is rounded to the nearest whole number of ERUs.

The ERU method has many advantages. The fee is simple, equitable, and fair because it is based on the impervious area of a parcel where most of the parcel's stormwater runoff is generated. This idea of billing based on impervious area is conceptually simple and easily understood by the public. The fee for non-SFR parcels is fair because it is based on a specific, measurable impervious area. Pervious areas on each parcel are not considered, which simplifies the calculation of fees for non-SFR parcels. Billing for SFR parcels is simple because all SFR parcels are assessed the same fee. The work required to determine the charge for SFR parcels is lower than other methods because impervious areas are only calculated for a sample of SFR parcels instead of every SFR parcel in the municipality. The primary disadvantage of the ERU method is that parcels with no impervious area are not assessed a fee. Stormwater runoff is still generated from pervious areas, but the amount of runoff is significantly less than that which is generated by an impervious area of the same size. The ERU method does not account for that runoff since it is based solely on impervious area.

As with all fee structures, the fee for individual parcels will change over time as impervious areas are added or removed. Changes to the fees charged to non-SFR parcels are to be expected when using the ERU method. However, since all SFR parcels are charged one rate, changes will not need to be made for SFR parcels when a homeowner adds a small amount of impervious area such as a shed or a driveway.

Intensity Development (ID)

A second type of model is the Intensity Development (ID) model. Fees in the ID model are based on the percentage of impervious ground cover on each parcel. Typically, several tiers of fees are set so that parcels with higher percentages of impervious cover are charged more. The parcels in each tier are charged a specific rate per total parcel area. The following table was taken from the EPA’s *Funding Stormwater Programs* publication and provides an example fee structure for an ID Model.

Table 1: Example Fee Structure for an ID Model

Category (impervious percentage range)	Rate per month per 1,000 square feet of total served area (impervious plus pervious)
Vacant/Undeveloped (0%)	\$0.08
Light Development (1% to 20%)	\$0.12
Moderate Development (21% to 40%)	\$0.16
Heavy Development (41% to 70%)	\$0.24
Very Heavy Development (71% to 100%)	\$0.32

The ID model is slightly more equitable than the ERU model because it accounts for both pervious and impervious areas on every parcel. However, the ID model is more complex and more costly to maintain. Whenever impervious area is added to a parcel, an analysis must be completed to determine if the parcel will jump into a higher impervious percentage category. The chances of the parcel moving are slim because the categories are broad, but the analysis must be completed anyway. This applies to all properties in the municipality, whereas in the ERU model, additional impervious areas only needed to be tracked for non-SFR properties.

Equivalent Hydraulic Area (EHA)

A third and final model is the Equivalent Hydraulic Area (EHA) Model. This model is similar to

the ERU model in that a standard rate is charged per a unit of impervious area. In the EHA model, a standard rate is also charged per unit of pervious area. There are effectively two different ERUs being charged to each parcel, one for the impervious area and one for the pervious area. The charge for the impervious area would be much larger than the charge for the pervious area, since impervious areas generate most of a parcel's runoff.

The EHA model is the most equitable of the three models because it charges every property in the Township for the exact square footage of all surfaces on the property, both pervious and impervious. However, this method requires much more work to determine the fees for each property because both impervious and pervious surfaces must be measured for every property in the municipality. While all models will require updates for construction, this model would be most affected since the fee for a parcel would need to be changed every time impervious areas are added or removed, however small the areas are. This model would also be met with resistance from owners of large, pervious, undeveloped parcels. It may be difficult to justify why these parcels are charged a fee when the landscape is in a more natural state or is engaged in agricultural activities.

4. SELECTION AND IMPLEMENTATION OF THE FEE STRUCTURE

After considering the advantages and disadvantages of each model described previously, the Equivalent Residential Unit (ERU) model was selected to be the structure for North Lebanon Township's stormwater pollution control fee. The ERU model provides North Lebanon Township with the most efficient system to deliver a proper stormwater utility. Information on existing lots, such as property owner, situs address, tax parcel number, and land use code, were required to set up the fee study. High-resolution aerial images of the entire Township were also required. This information was provided to Steckbeck Engineering & Surveying by the Lebanon County GIS Department and the Lebanon County Assessment Office.

In this fee structure, all single-family residential parcels in the Township are charged the same fee, one (1) ERU. As described before, one ERU is equivalent to the average impervious area on a SFR parcel. Impervious surfaces are defined in the Lebanon County Stormwater Management Ordinance as "a surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, streets, sidewalks and vehicle and pedestrian areas that are gravel and crushed stone."

The Stormwater Pollution Control Fee Rate Study was implemented using the following steps:

1. All properties in North Lebanon Township were sorted into single-family residential (SFR) and non-SFR parcels based on the Land Use Code assigned by the Lebanon County Assessment Office.
2. Using the most recent high resolution aerial mapping available, impervious areas were delineated and measured with ArcMap software for a random computer-generated sample of 10% of the SFR parcels.
3. The average impervious area of this SFR sample was used to determine the numerical value of one (1) ERU in square feet.
4. The impervious areas of all non-SFR parcels were delineated and measured individually.
5. The number of ERUs assigned to each non-SFR parcel was determined by dividing the measured impervious area by the number of square feet per ERU.

6. Combining the SFR and non-SFR ERU's resulted in the total ERU amount.
7. Eligible MS4 costs to be covered by the pollution control fee were estimated for several levels of service, from the minimum MS4 compliance measures to a robust maintenance and replacement schedule for storm structures.
8. A credit structure was outlined in order to provide incentives for property owners to implement green stormwater infrastructure to assist in stormwater management and in meeting federal NPDES pollution reduction requirements.
9. Potential income losses from credits given and non-payment were factored into the potential MS4 costs, and fee amounts per ERU were calculated for various levels of service.
10. Recommendations were tabulated in this report, and the report was presented to the North Lebanon Township Board of Supervisors.

Additional steps to be implemented following the approval of this stormwater pollution control fee rate study are as follows:

11. The Township Solicitor must draft a new ordinance to be approved by the Board of Supervisors in order to implement the stormwater pollution control fee.
12. The Township will create a billing structure to collect the fee. This may necessitate hiring additional staff or contracting to a third-party billing entity.
13. Public information and education meetings will need to be held before the fee is implemented. Residents of the Township need to understand why they are being charged a fee, what authority the Township has to collect the fee, and what the revenues of the fee will be used for.
14. The Township will need to review billing information on a regular basis and address changes in parcel data including property owner, land use code, and ERUs billed.
15. The Township will need to review the fee on a regular basis to determine if rates need to be changed to create a balanced stormwater budget.

5. ERU CALCULATION

Single-Family Residential (SFR) Parcels

The most recent aerial imagery for North Lebanon Township was produced in 2016. This imagery was provided to Steckbeck Engineering & Surveying by the Lebanon County GIS Department. Tax parcel information including property owner, situs address, tax parcel number, and land use code were also provided and were current as of May 30, 2017.

The Lebanon County Assessment Office assigns a land use code to every parcel based on the primary use of the parcel. A copy of the codes used is provided in Appendix A. All parcels having the “Residential 1 Family (101),” “Condominium (Fee Simple) (107),” and “Mobile Home (108)” land use codes were designated single family residential (SFR) for the purposes of this rate study. A total of 3,743 parcels had one of these three land use codes and were designated SFR.

A sample of 386 of these parcels (10.3%) were randomly selected to be analyzed for their impervious area coverage using the random number generator in Microsoft Excel. Once these parcels were selected, the impervious coverage of each was manually traced using ArcMap GIS Software. The high-resolution aerial images were used to determine which parts of the parcel were impervious. In accordance with Article II of the Lebanon County Stormwater Management Ordinance, impervious surfaces included “roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, streets, sidewalks and vehicle and pedestrian areas that are gravel and crushed stone.” Many older properties had public roads within the property boundary; public roads were not included in the calculation of impervious area for the purposes of the fee study. A sample impervious area calculation map is presented in Appendix B, and the impervious areas of each of these parcels are also tabulated in Appendix B. An initial mean and standard deviation were calculated for this data. Outliers more than two standard deviations away from the mean were removed and the mean was recalculated. This new adjusted mean is 3,755 square feet and is the final value for the ERU in North Lebanon Township.

Western Kentucky University conducted a nationwide study of stormwater utilities in 2011. The study identified 1,174 stormwater utilities nationwide, of which at least 610 (or 52%) were ERU-based fee structures. The average ERU for these ERU-based fee structures was 2,957 square feet with a standard deviation of 1,559 square feet. At 3,755 square feet, North Lebanon Township's ERU is above-average but is still well within the range of one standard deviation above the national average ERU cited in the Western Kentucky University study.

A flat rate is to be established for all detached single-family residential lots that have one of the three requisite land use codes. As stated above, there were 3,743 such parcels in North Lebanon Township at the time of the analysis. This number can be expected to increase over time as development occurs and new single family homes are built. For the purposes of this rate study, it is assumed that North Lebanon Township will bill at least 3,743 ERUs total to owners of single-family residential lots.

Non-Single Family Residential (Non-SFR) Parcels

All parcels with land use codes other than 101, 107, and 108 were determined to be Non-Single Family Residential parcels. A total of 731 Non-Residential parcels were designated in North Lebanon Township. Impervious area delineations and calculations were completed for each of these properties in the same way that the impervious area calculations were performed for the sample of residential properties. The total impervious area on a non-SFR parcel was divided by the impervious area per ERU to determine the number of ERUs to assign to the parcel. ERUs are only assigned in whole numbers. For example, take a hypothetical parcel with 40,000 square feet of impervious area. Dividing the 40,000 square feet figure by 3,755 square feet per ERU yields 10.65 ERUs for the property, which are rounded to an even 11 ERUs. One exception to the rounding method was for parcels with low impervious areas. A non-SFR parcel with less than 1,878 square feet of impervious area would be assigned no ERUs in the ordinary rounding method. In order to prevent these parcels from escaping the stormwater pollution control fee, a floor of 300 square feet was set whereby no non-SFR parcels with greater than or equal to 300 square feet would be charged less than one ERU. This rounding method affected 98 parcels.

ERU calculations for all non-SFR properties in North Lebanon Township are tabulated in Appendix C, and a sample impervious area calculation map is presented in Appendix C. In total, the 731 non-SFR properties account for 6,607 ERUs. A significant number of properties had no impervious area or very little impervious area; this is to be expected for a municipality that is not built out. As with the total number of SFR ERUs, the total number of non-SFR ERUs can be expected to increase over time due to additional development. The 6,607 ERU figure is current as of May 30, 2017, when tax parcel and land use data were obtained from the Lebanon County GIS Department. The total number of ERUs in North Lebanon Township as of May 30, 2017 is displayed in Table 2, below.

Table 2: North Lebanon Township ERUs

Parcel Category	Number of Parcels	Number of ERUs
Single-Family Residential	3,743	3,743
Non-Single Family Residential	731	6,607
Total	4,474	10,350

6. PROGRAM COSTS

The total cost of the MS4 services to be provided by North Lebanon Township must be calculated to establish a fee per ERU. North Lebanon Township identified 28 items that may be funded by the implementation of this stormwater pollution control fee. These costs were developed using data on past expenditures supplied by the Township and its engineer, North Lebanon Township labor rates for employees, known values for future expenditures, and estimates of future time and materials costs. These costs are eligible to be paid from revenues generated by the stormwater pollution control fee. The costs are provided later in this section in Table 3, and a short description of each eligible cost is below.

1. **Pollutant Reduction Plan:** the requirement of a Pollutant Reduction Plan (PRP) is included in the 2018 version of the PAG-13 General National Pollutant Discharge Elimination System Permit for Small MS4s. The PRP is required to identify Best Management Practice (BMP) projects such as the construction of stormwater retention basins, wetlands, vegetated swales, and streambank restorations that will reduce by 10% the discharge of total suspended solids (TSS) to local waterways. This costly requirement is the primary driving force behind the stormwater pollution control fee. North Lebanon Township has joined with five other Lebanon County municipalities to form the Lebanon County Stormwater Consortium and complete and implement a joint PRP. The municipalities agreed to a cost-sharing schedule in 2017 for the implementation of this PRP, and the figure provided in Table 3 is North Lebanon Township's portion of the cost-sharing schedule.
2. **PRP Administration:** the Consortium has hired the Lebanon County Redevelopment Authority to be the administrator of the Consortium. The LCRA will charge a pro-rated fee to each municipality based on the Consortium's cost-sharing agreement. Service provided by the LCRA include the collection and disbursement of funds, BMP project administration, grant application assistance, and meeting organization. This amount is approximately 8% of the base PRP cost.
3. **Administration:** this refers to additional general administrative tasks that Township staff will need to complete when the stormwater pollution control fee is implemented. Tasks

include record keeping, correspondence, receiving appeals, responding to complaints, etc. This item was calculated based on known labor rates for administrative staff and an estimate of the time needed to complete the tasks.

4. Record Storage: additional office storage space required for filing information related to the stormwater pollution control fee. This item was calculated based on known storage space rental fees and an estimate of the storage space needed.
5. Billing and Collection: the Township will either need to contract with a third party or incur additional costs in-house in order to create and mail the quarterly bills and to collect the fee payments from customers. This cost represents the amount which would be required to bill using either method at a rate of approximately \$2.50 per customer per bill. This cost closely matches the rate charged by the City of Lebanon Authority under its contract billing agreement with authorities and municipalities for sewer billing service.
6. Credits: the Township will allow a maximum of \$65,000 worth of credits to be granted each year to qualifying property owners in accordance with the credit manual. This expenditure must be accounted for as these credits will result in lost revenue for the Township.
7. Non-Payment: a degree of non-payment of stormwater bills is assumed, and an allowance for this non-payment is made here. The degree of non-payment is projected to average about 5% depending on the level of service selected.
8. Asset Maintenance (Public): refers to the day-to-day maintenance of the publicly-owned MS4 including the cleaning and removal of debris from catch basins, inlets, and pipes. This is calculated from maintenance costs incurred by the Township in prior years.
9. Asset Repair (Public): this item covers repairs to public MS4 assets such as catch basins, inlets, and pipes. Repairs in this category are performed as a reaction to failures or observed deficiencies. This item was calculated based on Township highway employee labor rates, estimated time to complete repairs, and estimated material and equipment costs.
10. Curbs and Gutters (Public): the repair of publicly-owned curbs and gutters is part of the MS4 expense category since the curb/gutter system is designed to convey stormwater during storms. These repairs were estimated using Township highway employee labor rates, estimated time to complete repairs, and estimated material and equipment costs.

11. BMP Maintenance (Public): the Township must maintain publicly-owned stormwater BMPs located on properties such as the Township Building property and parks. This item includes the mowing, brush cleanup, and minor repair of these Township-owned BMPs and was estimated using data from prior years.
12. Storm Cleanup: this item refers to clean-ups of roadways and the MS4 following heavy storms and/or flooding. This item was calculated based on Township highway employee labor rates, estimated time to complete the clean ups for an average number of storms per year, and estimated material and equipment costs.
13. Yard Waste Collection: this item includes the semi-annual curbside yard waste collections that the Township conducts in the spring and fall of each year and the fall leaf collections. The cost was estimated using Township highway employee labor rates, estimated time to complete the collections, and estimated material and equipment costs.
14. Street Sweeping: North Lebanon Township owns a street sweeper and cleans all Township roads every spring, picking up anti-skid and other debris from winter road maintenance. This category represents the 10-year amortized cost of the sweeper (which was purchased in 2015), the time, materials, and labor costs to run the street sweeper, and disposal costs for the sweepings.
15. Annual Report: the cost for the Township Engineer to prepare the annual MS4 report due to the Department of Environmental Protection. Cost data was estimated from prior years.
16. Education and Outreach: a Minimum Control Measure (MCM) requirement of the MS4 permit, this item could refer to the publication of educational material, the hosting of a public outreach event, or any other activity that educates the public about stormwater. Cost data was estimated from prior years.
17. IDDE: illicit discharge detection and elimination is another MCM. The Township is required to screen all MS4 outfalls for illicit discharges once per permit term, and investigate and follow up on any illicit discharge found. The cost was estimated from the last round of IDD&E inspections and is amortized over five years.
18. Map Updates: the MS4 maps will need to be updated to include new construction, new MS4 assets, and any old assets discovered during the course of the year. The cost was estimated based on the labor rate for a GIS specialist.

19. BMP Inspections: inspections of privately-owned BMPs are required as needed to ensure that the privately-owned BMPs are functioning correctly. North Lebanon Township's ordinance specifies inspections a minimum of once every five years. The cost was estimated using labor rates for the Township Engineer and is amortized over five years.
20. Employee Training: annual MS4 training for public works employees is another MCM requirement. The cost for the brief annual training session was estimated from prior years.
21. LCCWA: the Township participates in the Lebanon County Clean Water Alliance, a local watershed group that provides support to MS4 municipalities and assists with public education and outreach requirements. The cost provides for attendance at quarterly meetings and a small contribution to the organization's public education advertisement fund.
22. Miscellaneous Technical Services: this category accounts for annual technical services costs that may be incurred on an as-needed basis. The cost was estimated from prior years and was increased marginally to account for additional permitting requirements starting in 2018.
23. Asset Inspections (Public): the Township would like to undertake a robust program for the inspection and televising of MS4 assets in order to identify the condition of the MS4 and target areas where the replacement of assets are most necessary. Ideally, the Township will develop a multi-year program of planned asset repairs and replacements. This cost category is based on known televising costs and the estimated cost to interpret the televising reports and develop the asset replacement plan.
24. Planned Asset Replacement (Public): this is the estimated cost per year to implement the proactive asset replacement plan developed from the asset televising and inspections. This category also includes the construction of new systems in areas with flooding problems.
25. Asset Maintenance (Private): North Lebanon Township may consider accepting responsibility for privately-owned stormwater assets in the future. This figure refers to the day-to-day maintenance, cleaning, and removal of debris from privately-owned catch basins, inlets, and pipes within the Township. This cost was estimated from the number

of privately-owned assets currently mapped and the known maintenance costs of publicly-owned MS4 assets.

26. Asset Repair (Private): North Lebanon Township may consider accepting responsibility for privately-owned stormwater assets in the future. This item would help cover repairs to privately-owned stormwater assets such as catch basins, inlets, and pipes. Repairs in this category would be performed as a reaction to failures or observed deficiencies. This cost was estimated from the number of privately-owned assets currently mapped and the known maintenance costs of publicly-owned MS4 assets.
27. Curbs and Gutters (Private): North Lebanon Township may consider accepting responsibility for privately-owned stormwater assets in the future, including privately-owned curbs and gutters since the curb/gutter system is designed to convey stormwater during storms. This is projected to be a small expense category.
28. BMP Maintenance (Private): North Lebanon Township may consider accepting responsibility for privately-owned stormwater assets in the future, including privately-owned stormwater BMPs. There are currently 88 tracked privately-owned BMPs in North Lebanon Township which include detention and retention basins, rain gardens, infiltration trenches, and other types of BMPs. This figure would represent the Township's cost to maintain each of these BMPs on behalf of the landowners who own the BMPs and would include activities such as mowing, brush cleanup, outlet structure repairs, soil rehabilitation, and revegetation. Maintenance cost data for these types of BMPs are provided in the Pennsylvania Stormwater BMP manual.

Included in the bottom portion of Table 3 are the total yearly estimated costs for three levels of service described in greater detail in the "Fee Charges and Recommendations" section of this report. Also included are the calculations for the yearly stormwater pollution control fee per ERU and the corresponding quarterly fee for each level of service, again described in greater detail in the "Fee Charges and Recommendations" section of this report. The first year represented in Table 3 is 2018, and the table provides a five-year outline with all costs increasing at a 3% rate per year. Table 3 appears on the following page.

TABLE 3: NORTH LEBANON TOWNSHIP STORMWATER MANAGEMENT COSTS AND POLLUTION CONTROL FEE RATES

No.	Item	Description	2018	2019	2020	2021	2022
1	Pollutant Reduction Plan	Base contribution to the Lebanon County Stormwater Consortium	\$212,801.20	\$219,185.24	\$225,760.79	\$232,533.62	\$239,509.63
2	PRP Administration	Administrator fee to the Lebanon Co. Redevelopment Authority	\$17,024.10	\$17,534.82	\$18,060.86	\$18,602.69	\$19,160.77
3	Administration	Record keeping, Q&A, correspondence by Township staff	\$10,000.00	\$10,300.00	\$10,609.00	\$10,927.27	\$11,255.09
4	Record Storage	Annual leasing of office space	\$5,000.00	\$5,150.00	\$5,304.50	\$5,463.64	\$5,627.54
5	Billing and Collection	To be paid to third party or additional in-house staff	\$45,000.00	\$46,350.00	\$47,740.50	\$49,172.72	\$50,647.90
6	Credits	Allowance for credits up to a \$65,000 maximum Township-wide	\$65,000.00	\$66,950.00	\$68,958.50	\$71,027.26	\$73,158.07
7	Non-Payment	Allowance for non-payment of some ERUs	\$25,000.00	\$25,750.00	\$26,522.50	\$27,318.18	\$28,137.72
8	Asset Maintenance (Public)	Cleaning, O&M of public catch basins, inlets, pipes	\$16,000.00	\$16,480.00	\$16,974.40	\$17,483.63	\$18,008.14
9	Asset Repair (Public)	Repair of public catch basins, inlets, pipes	\$10,000.00	\$10,300.00	\$10,609.00	\$10,927.27	\$11,255.09
10	Curbs and Gutters (Public)	Repair of public curbs and gutters	\$5,000.00	\$5,150.00	\$5,304.50	\$5,463.64	\$5,627.54
11	BMP Maintenance (Public)	Maintenance of Township-owned BMPs	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73	\$1,125.51
12	Storm Cleanup	Clean up following storms and flooding	\$2,500.00	\$2,575.00	\$2,652.25	\$2,731.82	\$2,813.77
13	Yard Waste Collection	Curbside yard waste and leaf pickups, disposal	\$25,000.00	\$25,750.00	\$26,522.50	\$27,318.18	\$28,137.72
14	Street Sweeping	Sweeper depreciation, disposal, labor, equipment O&M	\$51,000.00	\$52,530.00	\$54,105.90	\$55,729.08	\$57,400.95
15	Annual Report	MS4 annual reporting to DEP	\$2,000.00	\$2,060.00	\$2,121.80	\$2,185.45	\$2,251.02
16	Education and Outreach	Publications and events to educate the public about MS4	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73	\$1,125.51
17	IDDE	Illicit Discharge Detection and Elimination inspections	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73	\$1,125.51
18	Map Updates	Updates to the MS4 map and database maintenance	\$1,500.00	\$1,545.00	\$1,591.35	\$1,639.09	\$1,688.26
19	BMP Inspections	Inspections of privately-owned BMPs	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73	\$1,125.51
20	Employee Training	Annual MS4 training for public works employees	\$500.00	\$515.00	\$530.45	\$546.36	\$562.75
21	LCCWA	Lebanon Co. Clean Water Alliance participation and meetings	\$500.00	\$515.00	\$530.45	\$546.36	\$562.75
22	Misc. Technical Services	General engineering costs and permit compliance	\$15,000.00	\$15,450.00	\$15,913.50	\$16,390.91	\$16,882.63
23	Asset Inspections (Public)	MS4 inspections and televising of public assets	\$10,000.00	\$10,300.00	\$10,609.00	\$10,927.27	\$11,255.09
24	Planned Asset Replacement (Public)	Proactive replacements and upgrades of public assets	\$35,000.00	\$36,050.00	\$37,131.50	\$38,245.45	\$39,392.81
25	Asset Maintenance (Private)	Cleaning, O&M of private catch basins, inlets, pipes	\$12,000.00	\$12,360.00	\$12,730.80	\$13,112.72	\$13,506.11
26	Asset Repair (Private)	Repair of private catch basins, inlets, pipes	\$10,000.00	\$10,300.00	\$10,609.00	\$10,927.27	\$11,255.09
27	Curbs and Gutters (Private)	Repair of private curbs and gutters	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73	\$1,125.51
28	BMP Maintenance (Private)	Maintenance of privately-owned BMPs	\$61,600.00	\$63,448.00	\$65,351.44	\$67,311.98	\$69,331.34
		Total, minimum level of service (items 1 through 7)	\$379,825.30	\$391,220.05	\$402,956.66	\$415,045.36	\$427,496.72
		Total, moderate level of service (items 1 through 22)	\$512,825.30	\$528,210.05	\$544,056.36	\$560,378.05	\$577,189.39
		Total, high level of service (items 1 through 28)	\$642,425.30	\$661,698.05	\$681,549.00	\$701,995.47	\$723,055.33
	Yearly stormwater pollution control fee per ERU, minimum level of service		\$36.70	\$37.80	\$38.93	\$40.10	\$41.30
	Yearly stormwater pollution control fee per ERU, moderate level of service		\$49.55	\$51.03	\$52.57	\$54.14	\$55.77
	Yearly stormwater pollution control fee per ERU, high level of service		\$62.07	\$63.93	\$65.85	\$67.83	\$69.86
	Quarterly stormwater pollution control fee per ERU, minimum level of service		\$9.17	\$9.45	\$9.73	\$10.03	\$10.33
	Quarterly stormwater pollution control fee per ERU, moderate level of service		\$12.39	\$12.76	\$13.14	\$13.54	\$13.94
	Quarterly stormwater pollution control fee per ERU, high level of service		\$15.52	\$15.98	\$16.46	\$16.96	\$17.47

7. CREDITS

Credits for qualifying stormwater Best Management Practices (BMPs) are a vital component of every stormwater fee structure. Act 62 of 2016 specifically states that “the Township shall consider and provide appropriate exemptions or credits for properties which have installed and are maintaining storm water facilities that meet best management practices and are approved or inspected by the Township.” Granting credits for the installation and maintenance of BMPs gives all property owners the incentive to install such BMPs on their own or permit the Township to install BMPs on the property. These BMPs reduce pollutants and improve the health of local waterways. The construction of many new privately-owned BMPs will be necessary in order to meet the stringent requirements for Pollutant Reduction Plans. Therefore, it is in the Township’s best interest to incentivize the construction of privately-owned BMPs by granting credits on the stormwater pollution control fee.

Programs for crediting stormwater BMPs in fee structures range in complexity. Often, the simpler fee structures are the ones that entice the most public participation, so efforts were made to keep the proposed credit program as simple as possible while still providing a scientifically valid background for the credits. The full credit program is described in the Credit Manual presented in Appendix D.

North Lebanon Township has instituted an annual credit cap of \$65,000. Credits will be distributed on a first-come, first-served basis until the credit cap is reached. The Board of Supervisors may consider expanding the credit cap in future years if the demand for credits warrants an expansion. Since the construction of new BMPs can be credited fully in the Consortium’s PRP, the Board of Supervisors is encouraged to expand the credit cap if a significant number of new BMPs are proposed that are not part of new development.

8. FEE CHARGES AND RECOMMENDATIONS

This section will outline the fees to be charged per ERU for three different levels of service. An analysis of the potential fees is also included, as are a few recommendations and final thoughts for North Lebanon Township to consider as the stormwater pollution control fee is implemented.

Minimum Level of Service

The minimum level of service includes only the costs necessary to comply with the additional federal and state NPDES requirements that will come into effect in 2018. The minimum level of service would include items 1 through 7 from Table 3. Included are the costs to implement the Pollutant Reduction Plan and administer the pollution control fee billing program. Allowances are also made for credits to be granted to qualified property owners in accordance with the Township's credit policy, and for a degree of non-payment by property owners. The remaining services, items 8 through 28, would be paid out of the Township's general fund or a Pennsylvania liquid fuels tax reimbursement (as applicable) if the Township decides to provide them. The charge per ERU for the minimum level of service in 2018 is calculated in Table 4 below.

Table 4: Charges for a Minimum Level of Service (2018)

Cost for Items 18 through 24	\$379,825.30
Number of ERUs	10,350
Charge per ERU per year	\$36.70
Charge per ERU per quarter	\$9.17

Moderate Level of Service

The moderate level of service includes all items in the minimum level of service plus items 8 through 22 from Table 3. Additional items included in the moderate level of service are costs for the reactionary maintenance and repair of stormwater structures, maintenance of Township-owned BMPs, storm cleanup, yard and leaf waste collections, street sweeping, costs to comply with the six existing Minimum Control Measures (MCMs) required by the Township's NPDES permit, participation in the Lebanon County Clean Water Alliance watershed group, and as-

needed technical services expenditures. These services are all currently provided by the Township in some capacity but are paid for of the Township’s general fund or a Pennsylvania liquid fuels tax reimbursement. These items would be moved to the stormwater management fund provided by the stormwater pollution control fee to take strain off the general fund. The charge per ERU for the moderate level of service in 2018 is calculated in Table 5 below.

Table 5: Charges for a Moderate Level of Service (2018)

Cost for Items 4 through 24	\$512,825.30
Number of ERUs	10,350
Charge per ERU per year	\$49.55
Charge per ERU per quarter	\$12.39

High Level of Service

The highest level of service includes all items in the minimum and moderate levels of service plus items 23 through 28 from Table 3. Additional items included in the high level of service are the costs to perform MS4 asset inspections and pipe televising, the costs to plan and perform asset replacements and upgrades based on the results of the asset inspections, and the costs for the Township to take over the responsibility for maintaining privately-owned stormwater assets and BMPs. The items in the high level of service are not currently provided by the Township. The high level of service is based on a proactive approach to asset management and stormwater control where investigative work and asset replacements are performed in advance of costly failures. This differs from the moderate level of service significantly in that the moderate level is focused on reactionary maintenance where assets are only repaired or replaced when a problem develops. Additionally, the Township would take over maintenance responsibilities for privately-owned assets and BMPs in the high level of service. Maintenance costs for privately-owned BMPs are particularly high due to the number of BMPs in the Township and the individualized maintenance required for each. The tradeoff for taking on this expense is that the Township will have control over whether the BMPs are operated and maintained properly, and will be better able to improve the pollutant reduction efficiencies of these BMPs. The charge per ERU for the high level of service in 2018 is calculated in Table 6 below.

Table 6: Charges for a High Level of Service (2018)

Cost for Items 1 through 24	\$642,425.30
Number of ERUs	10,350
Charge per ERU per year	\$62.07
Charge per ERU per quarter	\$15.52

Level of Service Selection

North Lebanon Township should choose the level of service which most closely fits with its goals for stormwater management and pollution control. All levels of service will ensure that the Township meets the new minimum requirements of its NPDES permit. The primary advantage of the moderate level of service is that it takes strain off the general fund while still providing the stormwater services that the public is used to receiving from the Township. The advantages of the high level of service are that a proactive approach is taken to asset maintenance, which lessens the potential for costly system failures, road closures, and emergency expenditures, and that the Township will be able to ensure that privately-owned BMPs are maintained properly and achieving the maximum pollutant reductions possible. The tradeoff for these higher levels of service is obviously a larger burden on landowners. No matter which level of service is selected, the stormwater pollution control fee will likely be met with resistance from the public and property owners. Heightened resistance will likely come from owners of large non-SFR parcels who will end up paying the most. It will be important to respond to public concerns at every juncture and provide the public with educational materials explaining why the fee is necessary and what the benefits of the fee will be. Despite the public education efforts, legal challenges may be posed to the stormwater fee. The Township should be prepared to address these legal challenges as part of the process of introducing the fee.

Implementation of Fee

After the fee structure is approved, the actual fee will need to be implemented by ordinance. The Municipal Solicitor will be a key player in the processes of drafting and advertising the ordinance, and scheduling any public hearings that are necessary. The public education process will continue even up to the final adoption of the ordinance as more and more people become

aware of the stormwater pollution control fee and its impact on their personal finances. The ordinance will specify the start date for collection of the fee.

Billing

The Township will need to either hire a third-party service to send out bills and collect fees, or perform these tasks in-house. It may be necessary to hire another full or part-time staff member if the Township decides to perform the billing in-house. The revenue generated from the fee should go into a separate bank account dedicated to the stormwater management program, and should not be added to the general fund revenues. The process of determining how to bill and collect the fee can and should begin before the adoption of the ordinance.

Appeals

The methodology used to determine the impervious areas of non-SFR parcels relies on measurements and estimates of the boundaries of impervious areas. The methodology used to determine if a parcel is SFR or non-SFR relies on data from another source (the Lebanon County Assessment Office) which the Township has no control over. Both methodologies may be subject to human error, and landowners may wish to file appeals if they believe an error has occurred.

The most common appeals that can be expected are those from owners of non-SFR parcels who wish to contest the amount of impervious area that is on their property, presumably contending that there is less impervious area than what they were billed for. This may legitimately occur if a significant reduction in impervious area was undertaken by the landowner after the year 2016, as the aerial imagery used in this study is from that year. Landowners filing this type of appeal will be required to supply information to the Township that supports their claim. This information should include, at minimum, current pictures of the area in question and an estimate of the impervious area that was removed since the 2016 imagery was produced. The supporting information would preferably include a survey of the area or the entire property and calculations of the impervious area. The Township would then conduct a site visit to confirm the claim, and then choose to accept or reject the appeal.

Appeals may also be filed by landowners whose properties have been classified as non-SFR and who believe that the property should be classified as SFR. Presumably, such a landowner is being charged more than one ERU based on the actual impervious area on the property and believes that they should only be charged one ERU under the blanket policy for billing SFR properties. Often, the land use code for these types of properties represents a multi-family home (102 or 103), auxiliary improvement (109), agricultural land (112), or apartments (201). This type of appeal is difficult to support and even more difficult for the Township to accept because the land use code for all properties come directly from the Lebanon County Assessment Office and in order to grant the appeal, the Township would have to take the landowner's word that the property is a single-family residence. The good news is that often, the impervious area is within the range for a non-SFR parcel to be charged one ERU. Therefore, the classification of SFR or non-SFR does not matter. The real issue comes into play when the property is assessed more than one ERU. The Township is cautioned against arbitrarily granting a reduction of ERUs for this type of appeal, as granting a reduction for one property owner could open the door to the Township needing to consider ERU reductions for all properties with a particular non-SFR land use code.

A third common type of appeal, and one which is usually legitimate, is referred to as an auxiliary property appeal. Situations may arise where two adjacent SFR lots are owned by the same individual, but there is only one house between the two lots. The property line between the two lots may even cross through the house. Since both properties would be classified as SFR, the property owner would be assessed a single ERU fee for each property. In this scenario, the Township may grant the appeal and charge the property owner one ERU that covers both lots.

Appeals should be expressed in writing and addressed to the Township Board of Supervisors for consideration. An appeal form has been developed for this purpose and is included in Appendix F. Following receipt of the appeal form, the Board of Supervisors will consider the appeal, perform a site visit if necessary, consult with the Township Engineer and Solicitor if necessary, and issue an acceptance or rejection of the appeal. The filer of a rejected appeal may then take the appeal to the Court of Common Pleas of Lebanon County if desired.

Reviews and Changes to the Model

The North Lebanon Township Board of Supervisors should review the fee amount annually and, if necessary, adjust the fee for the following year. Program costs will deviate, perhaps substantially, from year to year and it is important that the fee charged to property owners is consistent with the actual expenditures paid from the stormwater management fund. Potential sources of variation include project cost overruns or underruns, the need for emergency repairs, inflation (the costs in Table 3 are escalated by 3% each year to help account for this), and credits granted to property owners.

Changes in the ownership of parcels occur over time, and the Township will need to keep a record of property transfers and owner information so that bills are sent to the correct place. In addition to changes in ownership, changes to the number and classification of SFR and non-SFR parcels can be expected. The most classic example is the subdivision of an undeveloped property and the conversion of that property into single family homes. In this example, a developer purchases a property that has no impervious area and is not currently charged a stormwater pollution control fee. The developer obtains all necessary permits to build a 10-lot subdivision. While the roads and houses are being built and the land is still under the ownership of the developer, the developer will be charged for a non-SFR parcel based on the impervious area constructed to date. When a new lot is sold to a homeowner, the new homeowner will begin getting charged for one ERU. Since that lot is no longer owned by the developer, the impervious area of the non-SFR parent tract would be recalculated and the developer's fee would change if the change in impervious area results in a change in ERUs. The developer would continue to be responsible for the fee of the non-SFR parent tract until all lots are sold and all streets have been dedicated to the Township. This methodology was employed in the calculation of the initial ERUs for this report, and is current as of May 30, 2017. The Board of Supervisors may wish to simplify this methodology by waiving the fee for developers and assessing the fees to homeowners as houses are purchased, by charging a flat fee to developers before construction starts based on the number of lots in the subdivision, or by other means. For example, a developer of a 10-lot subdivision could be initially charged 1.5 ERUs for each lot, or 15 ERUs. The developer's charge would decrease by 1 ERU each time a house is sold (and the ERU is transferred to a new homeowner). The developer would continue being charged the remaining 5

ERUs until the streets are accepted for dedication. This would eliminate the need to constantly re-calculate the impervious area on the parent tract as houses and streets are constructed.

Changes such as the ones described in the preceding paragraph will need to be tracked and entered into the billing system as they occur so that the property owner, SFR/non-SFR, and impervious area information is correct on each upcoming quarterly billing cycle. This will require a regular refreshment of the tax parcel layer generated by the Lebanon County GIS Department and a tracking of the impervious areas added to non-SFR parcels. This administrative work will be necessary to make the stormwater pollution control fee successful.

9. SOURCES

- C. Warren Campbell. “Western Kentucky University Stormwater Utility Survey 2011.” Accessed September 13, 2017.
- “Funding Stormwater Programs.” *United States Environmental Protection Agency*. Updated April 2009. Accessed September 13, 2017.
- “Municipal Stormwater.” *Pennsylvania Department of Environmental Protection*. Accessed September 13, 2017.
- “National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems BMP Effectiveness Values.” *Pennsylvania Department of Environmental Protection*. Updated May 2016. Accessed September 13, 2017.
- Second Class Township Code – Storm Water Management Ordinances and Fees. P.L. 439. Pennsylvania No. 2016-62. July 1, 2016.
- “Stormwater Discharges from Municipal Sources.” *United States Environmental Protection Agency*. Updated July 21, 2017. Accessed September 13, 2017.
- “Summary of the Clean Water Act.” *United States Environmental Protection Agency*. Updated August 7, 2017. Accessed September 13, 2017.

Appendix A
Land Use Codes

Land Use Code (Use): Enter a three-digit numeric code indicating the present use of each parcel of real estate. When there are multiple land uses on a parcel, enter the primary land use code. Please refer to the *Cross-Reference Chart* in the appendix to confirm which Use code to use for a particular property type code. Land use codes and property types must be compatible. Following is a listing of land use codes:

Residential	
Living Oriented	
Residential Vacant Land	100
Residential 1 Family	101
Residential 2 Family	102
Residential 3 Family	103
Mixed Residential/Commercial	105
Condominium (Common Element)	106
Condominium (Fee Simple)	107
Mobile Home	108
Auxiliary Improvements	109
Unsound Residential Structure	110
Residential - Apartment Over Garage, Barn, Stable	111
Agricultural (with buildings)	112
Agricultural - Vacant Land	113
Agricultural - Apartment Over Garage, Barn, Stable	114
Non-Agricultural (10+ acres, with buildings)	115
Non-Agricultural - Vacant Land (10+ acres)	116
Mountain (10+ acres - with buildings)	117
Mountain - Vacant (10+ acres)	118
Ten Plus Acres - Unsound (with unsound bldgs.)	119
Large Vacant Tracts with Unknown Potential	123
Apartments (Commercial)	
Apartments (4 or more units)	201
Apartments - Residential Conversion (4 +)	202
Apartments Garden (3 story and under)	211
High Rise Apartments	212
Apartment - Townhouse Style	214
Commercial	
General Commercial Vacant Land	300
Residential Structure on Comm. Value Land	301
Mobile Home Park	302
General (any commercial not elsewhere coded)	303
Campground	304
Unsound Commercial Structure	310
Hotel/Motel High Rise	314
Hotel/Motel Low Rise	315
Nursing Home	316
Retirement Community	317
Boarding/Rooming House (Bed and Breakfast), Fraternity, Sorority	318
Mixed Commercial/Residential Use	319
Food and Beverages	
Restaurant - General	321
Restaurant - National Chain	322
Food Stand	323
Fast Food - National Chain	324
Fast Food - General	325
Ice House	326
Bar/Lounge/Tavern	327
Night Club/Dinner Theater	328
Automotive Oriented	
Auto Dealer - Sales Only	330
Auto Dealer Full Service	331
Auto Service Garage (C)	332

Service Station with Bays (CG)	333
Service Station without Bays (CG)	334
Truck Stop	335
Car Wash (Manual)	336
Car Wash (Automatic)	337
Parking Garage/Deck	338
Parking Lot	339
Miscellaneous	
Regional Shopping Mall	341
Community Shopping Center	342
Neighborhood Shopping Center	343
Strip Shopping Center	344
Discount Department Store	345
Department Store	346
Supermarket	347
Convenience Food Market	348
Medical Office	349
Commercial Airport	350
Bank	351
Savings Institution	352
Office Building Low Rise (1 - 4 stories)	353
Office Building High Rise (5 stories or more)	354
Office Condominium	355
Retail Condominium	356
Funeral Home	361
Veterinary Clinic	362
Legitimate Theater	363
Motion Picture Theater	364
Cinema/Theater	365
Radio, TV, or Motion Picture Studio	366
Social/Fraternal Hall	367
Hangar	368
Day Care Center	369
Greenhouse/Florist	370
Multi-Purpose	
Downtown Row Type	371
Retail - Single Occupancy	373
Retail - Multiple Occupancy	374
Sport and Health	
Bowling Alley	381
Skating Rink	382
Health Spa	383
Sports Complex Facility (indoor)	384
Sports Complex Facility (outdoor)	385
Community Center	386
Country Club (without Golf Course)	387
Club House	388
Country Club (with Golf Course)	389
Amusement Park	390
Miscellaneous Storage	
Cold Storage Facility	391
Lumber Storage	392
Auxiliary Improvement C/I	393
Truck Terminal/Transit Warehouse/Distribution Warehouse	395
Mini-Warehouse	396
Office/Warehouse	397
Warehouse	398
Warehouse, Prefabricated	399

Land Use Codes, continued . . .

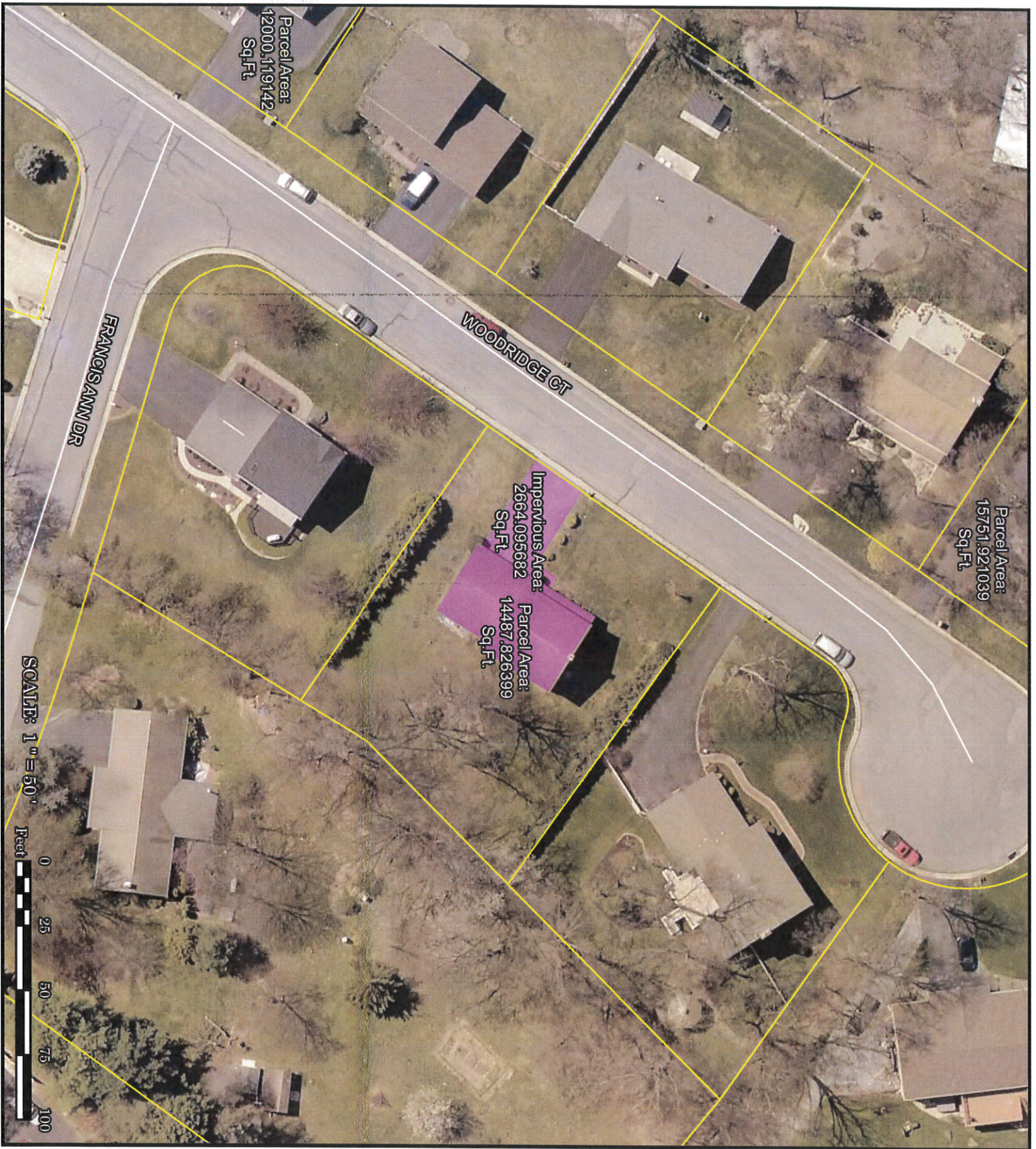
Industrial	
Vacant Industrial	400
Manufacturing/Processing	401
Research and Development	405
Aircraft Engine	411
Aluminum and Foil Manufacturing	412
Asphalt Plant	413
Automobile Parts Manufacturing	414
Bakery	415
Bottling Plant	416
Broom Manufacturing	417
Candy Manufacturing	418
Cement Manufacturing	419
Concrete Manufacturing	420
Chemical Plant	421
Clay Products	422
Clothing Manufctg. (excluding leather/rubber)	423
Coal Processing Plant	424
Compressor Station (not public utility)	425
Dairy	426
Dental and Medical Lab Manufacturing	428
Electronic Components Products Manufctg.	429
Electrical Equipment Manufacturing	430
Feed and Flour Manufacturing	431
Foundry Products	432
Food Processing	433
Glass Manufacturing	434
Glass Manufacturing - Special Tools	435
Grain and Milling Products Manufacturing	436
Ice Plant	437
Leather Products Manufacturing	438
Liquified Natural Gas Plant	439
Logging, Cutting of Timber	440
Machinery and Equipment Manufacturing	441
Meat Packing and Slaughterhouse	442
Metal Working	443
Mining, Deep	444
Mining, Strip	445
Natural Gas Extracting Facility	446
Nickel Manufacturing	447
Newspaper Plant	448
Oil and Gas Pipeline (not public utility)	449
Optical Manufacturing	450
Paint Manufacturing	451
Paper Finishing and Converting	452
Petroleum Refinery	453
Pipeline Manufacturing	454
Plastics Products Manufacturing	455
Plastics Products Manufacturing with Special Tools	456
Print Shop	457
Pulp and Paper	458

Quarries - Stone and Gravel, Limestone, Sandstone, Shale and Clay	459
Railroad Car Manufacturing	460
Rubber Manufacturing - Tire Recapping	461
Shoe Manufacturing	462
Steel Mill	463
Steam Generating Plant	464
Saw Mills - Permanent	465
Saw Mills - Temporary	466
Textile Manufacturing	467
Tobacco Products Manufacturing	468
Woodworking Shop	469
Wire Products Manufacturing	470
Miscellaneous Manufacturing: Jewelry, Silverware and Plated Wire, Musical Instruments, Toys, Amusements, Sporting and Athletic Goods, Pens, Pencils, and Other Office and Artist's Materials, Costumed Jewelry, Notions, etc.	471
Institutional/Special Purpose Buildings	
Vacant, Exempt Land	600
Cemetery	601
Post Office	602
Federal/State Building	603
Other Miscellaneous, Exempt	604
Recreational/Health	610
Library	611
School	612
College and University	613
Religious	620
Auditorium	630
Hospital	640
Police or Fire Station	660
Correctional	670
Cultural Facilities	680
Rail/Bus/Air Terminal	690
Communication	
Utility - Vacant Land	700
Water System	701
Gas Distribution System	702
Electric Company	703
Telephone Company	704
Railroad	705
Pipeline	706
Telephone Equipment Building	710
Telephone SRV Garage	715
Radio/TV Transmitter Building	720
WSF on Leased Land	721
WSF with Land	722
Land Leased to WSF	723

Note: To view a lookup file of land use codes, position the cursor in the Use field and press <F6>. Using the arrow keys, highlight the desired code and press <Enter> to select; press <Delete> or <Ctrl> C to leave the field unchanged.

Appendix B

Impervious Area Calculations
Single Family Residential Random Sample



SESI
 Steckbeck Engineering & Surveying, Inc.
 279 N. Zinns Mill Road, Suite A
 Lebanon, PA 17042
 Phone: 717-272-7110
 Fax: 717-272-7348

North Lebanon Township Fee Rate Study
 Single Family Residential
 Sample Impervious Area Calculation

B-2 DRAFT -
 9/18/17

Impervious



NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Addresss	Impervious Area (Sqare Feet)	Outlier?
2337461-375764	1264 N 8TH ST	970	No
2336230-376481	1005 MECHANIC ST	1,042	No
2351421-376992	19 PENNY LN	1,183	No
2347731-371970	1237 E OLD CUMBERLAND ST	1,186	No
2351313-376905	7 PENNY LN	1,231	No
2347428-371680	1151 E OLD CUMBERLAND ST	1,254	No
2351645-376877	30 PENNY LN	1,308	No
2351600-376863	26 PENNY LN	1,332	No
2329986-373154	740 N 25TH ST	1,352	No
2338413-375656	629 PINE ST	1,413	No
2338715-375296	603 ELIZABETH ST	1,424	No
2351366-376756	6 PENNY LN	1,448	No
2346835-372144	1104 E LEHMAN ST	1,465	No
2340162-375981	900 MILLER ST	1,528	No
2351514-377084	29 PENNY LN	1,549	No
2338419-375340	625 ELIZABETH ST	1,593	No
2331709-374060	2013 HILL ST	1,625	No
2331924-384251	1722 GRACE AVE	1,688	No
2335638-375578	1039 KATHLEEN ST	1,729	No
2351484-377026	25 PENNY LN	1,743	No
2337321-376069	1403 N 8TH ST	1,792	No
2338986-375085	1120 FOREST ST	1,815	No
2347414-371671	1149 E OLD CUMBERLAND ST	1,819	No
2332417-384269	1721 QUARRY RD	1,859	No
2330605-373430	2147 W MAPLE ST	1,886	No
2328755-377951	130 W BROOKFIELD DR	1,943	No
2336515-377742	1388 SHOLLY AVE	1,963	No
2336511-377415	1370 SHOLLY AVE	1,979	No
2338517-375327	617 ELIZABETH ST	2,001	No
2329701-379578	80 E BROOKFIELD DR	2,006	No
2339197-378731	813 MAPLE LN	2,031	No
2354535-385041	70 STRACK DR	2,050	No
2336508-377784	1390 SHOLLY AVE	2,073	No
2330603-379454	56 E BROOKFIELD DR	2,105	No
2329683-378208	22 E BROOKFIELD DR	2,165	No
2336601-378083	876 JAY ST	2,168	No
2344976-377236	826 BRIAR EDGE CT	2,200	No
2335291-378138	1113 JAY ST	2,217	No
2345003-374359	810 N 8TH AVE	2,221	No
2336858-376881	845 JAY ST	2,221	No
2342708-379840	820 PATMAR DR	2,235	No
2337470-376156	1406 N 8TH ST	2,247	No
2339283-378534	806 MAPLE LN	2,259	No
2342625-374803	320 LIGHT ST	2,262	No
2335487-375813	1113 SANDHILL RD	2,270	No
2347317-372347	1149 E LEHMAN ST	2,273	No
2330241-379755	66 E BROOKFIELD DR	2,279	No
2336335-378022	1399 SHOLLY AVE	2,296	No
2329688-378480	23 E BROOKFIELD DR	2,301	No
2328803-375190	301 EBENEZER RD	2,310	No
2337670-375861	1304 N 8TH ST	2,311	No
2336744-379277	1541 SHOLLY AVE	2,354	No
2345259-377114	902 LANTERN DR	2,387	No
2335796-376361	1022 MECHANIC ST	2,392	No
2344788-377174	821 BRIAR EDGE CT	2,394	No
2345832-374051	731 SUZANNE DR	2,402	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Addresss	Impervious Area (Sqare Feet)	Outlier?
2336216-377657	412 GARY AVE	2,403	No
2339126-376782	1605 JODY AVE	2,405	No
2347264-372339	1145 E LEHMAN ST	2,408	No
2351574-376864	24 PENNY LN	2,412	No
2338446-375535	624 PINE ST	2,442	No
2337806-378697	921 SYCAMORE LN	2,446	No
2330770-377131	1813 LAKE DR	2,456	No
2345035-374717	813 CALICO CT	2,457	No
2330136-378564	1816 MARTIN DR	2,465	No
2329308-378897	1 FAWNWOOD DR	2,467	No
2329080-378407	9 ASPEN WAY	2,472	No
2336705-379211	1539 SHOLLY AVE	2,481	No
2328976-375975	2109 WATER ST	2,483	No
2335612-377605	1403 SANDHILL RD	2,487	No
2336910-377086	849 JAY ST	2,497	No
2339221-378034	1626 GREENWOOD DR	2,525	No
2342765-374333	310 E MAPLE ST	2,528	No
2343750-386238	190 HEFFELFINGER RD	2,534	No
2345138-377330	918 LANTERN LN	2,536	No
2328985-377305	1853 MARTIN DR	2,571	No
2345064-377372	924 LANTERN LN	2,582	No
2336350-377565	1375 SHOLLY AVE	2,591	No
2329008-379505	2016 WATER ST	2,593	No
2337446-376265	1414 N 8TH ST	2,596	No
2346920-374485	1137 SUN DR	2,607	No
2336693-377329	1402 SHOLLY AVE	2,628	No
2346038-373282	922 E CANAL ST	2,648	No
2329491-379322	87 E BROOKFIELD DR	2,648	No
2349896-376605	2040 MALLARD LN	2,653	No
2333133-383799	1388 MEADOWBROOK LN	2,661	No
2336260-378223	966 JAY ST	2,662	No
2341407-376944	955 MILLER ST	2,662	No
2341868-380702	1804 WOODRIDGE CT	2,664	No
2338873-375887	593 DORIS DR	2,673	No
2345542-374189	739 BARBARA ANN DR	2,676	No
2336726-380133	1130 KOCHENDERFER RD	2,691	No
2339008-376258	615 CHERRY ST	2,694	No
2331363-377137	1767 ASHTON DR	2,696	No
2343586-372997	502 E CANAL ST	2,697	No
2332430-381367	1137 HUNTERS CHASE LN	2,701	No
2342527-374701	312 LIGHT ST	2,714	No
2337818-377402	408 BIRCH LN	2,724	No
2338462-379518	922 KOCHENDERFER RD	2,725	No
2337891-377209	117 CEDAR LN	2,735	No
2332407-384206	1719 QUARRY RD	2,741	No
2325350-371794	3018 JOYCE ST	2,746	No
2338881-377693	1616 GREENWOOD DR	2,753	No
2338030-379080	926 MAPLE LN	2,754	No
2338429-379697	1005 KOCHENDERFER RD	2,756	No
2358635-381567	51 ARBOR DR	2,761	No
2345506-374862	865 PRIMROSE CT	2,779	No
2344453-376554	737 E MAPLE ST	2,787	No
2336677-377825	1416 SHOLLY AVE	2,798	No
2328683-379816	19 WINCHESTER CIR	2,799	No
2336523-377547	1376 SHOLLY AVE	2,801	No
2339546-378325	1673 N 7TH ST	2,808	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Addresss	Impervious Area (Sqare Feet)	Outlier?
2345809-374835	915 MELODY LN	2,809	No
2336614-376916	1104 WATSON ST	2,815	No
2341833-380094	1762 N 8TH AVE	2,836	No
2337612-379097	935 OAK LN	2,851	No
2345960-375240	1020 WEAVERTOWN RD	2,861	No
2345940-375371	1025 HARMONY HILL DR	2,865	No
2345558-374116	737 BARBARA ANN DR	2,882	No
2329845-378671	34 E BROOKFIELD DR	2,884	No
2345619-374786	885 MELODY LN	2,891	No
2346940-374008	1132 CEDAR CREST DR	2,897	No
2336548-380236	1137 KOCHENDERFER RD	2,908	No
2329713-377821	1834 MARTIN DR	2,914	No
2345120-374506	810 MELODY LN	2,915	No
2339497-375877	569 DORIS DR	2,915	No
2333375-381176	1123 HARVEST DR	2,926	No
2339418-376761	1585 JODY AVE	2,931	No
2336621-379904	1133 ALPHA AVE	2,945	No
2346387-375368	1402 WEAVERTOWN RD	2,948	No
2336791-377688	864 JAY ST	2,968	No
2345251-377062	900 LANTERN DR	2,973	No
2340887-380445	1850 OAKRIDGE CT	2,981	No
2346517-375222	1325 OLD HICKORY LN	2,987	No
2329655-378404	21 E BROOKFIELD DR	2,988	No
2330901-373822	2116 HILL ST	2,991	No
2331088-377056	1808 LAKE DR	3,005	No
2338885-379508	919 KOCHENDERFER RD	3,019	No
2323818-379992	1660 HEILMANDALE RD	3,043	No
2345619-375262	975 WEAVERTOWN RD	3,049	No
2332111-380997	1144 HUNTERS CHASE LN	3,057	No
2335744-376985	1322 SANDHILL RD	3,066	No
2346777-375088	1301 OLD HICKORY LN	3,075	No
2329072-377913	3 E BROOKFIELD DR	3,080	No
2339673-379168	821 KOCHENDERFER RD	3,113	No
2358727-380847	71 ARBOR DR	3,127	No
2336076-378082	425 GARY AVE	3,132	No
2346011-375119	1010 MELODY LN	3,138	No
2323385-371555	3310 TUNNEL HILL RD	3,162	No
2358754-380634	77 ARBOR DR	3,166	No
2322088-371299	800 EAGLE AVE	3,168	No
2346270-375171	1355 OLD HICKORY LN	3,174	No
2333477-381623	1117 HUNTERS CHASE LN	3,187	No
2358737-380773	73 ARBOR DR	3,188	No
2345551-375501	960 HARMONY HILL DR	3,206	No
2329826-373288	749 N 25TH ST	3,216	No
2337771-377001	114 CEDAR LN	3,216	No
2358681-381209	61 ARBOR DR	3,237	No
2332691-383897	1396 RIDGE RD	3,238	No
2330207-372599	701 N 24TH ST	3,254	No
2337338-376839	207 REDWOOD LN	3,256	No
2329785-378331	26 E BROOKFIELD DR	3,266	No
2331851-384132	1721 GRACE AVE	3,268	No
2347278-374090	1148 CEDAR CREST DR	3,278	No
2339065-379108	903 WILLOW LN	3,282	No
2331877-380451	1158 HARVEST DR	3,293	No
2333385-381373	1120 HUNTERS CHASE LN	3,293	No
2330008-373626	2406 TUNNEL HILL RD	3,294	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES

GPIN	Situs Address	Impervious Area (Square Feet)	Outlier?
2328637-377464	2137 LONG LN	3,298	No
2336356-377385	1371 SHOLLY AVE	3,316	No
2337324-377032	211 REDWOOD LN	3,320	No
2339329-378841	810 WILLOW LN	3,361	No
2330878-376991	1812 LAKE DR	3,365	No
2331795-380857	1154 HUNTERS CHASE LN	3,369	No
2336056-375853	1010 LINDEN ST	3,377	No
2331108-373972	2103 HILL ST	3,377	No
2338324-377771	152 CEDAR LN	3,379	No
2323770-371614	764 N 33RD ST	3,387	No
2349131-379067	780 NARROWS DR	3,400	No
2343308-374665	355 WEAVERTOWN RD	3,408	No
2333502-384768	1383 JESSICA DR	3,412	No
2328207-377759	2153 CLOVERFIELD DR	3,416	No
2346845-372299	1107 E LEHMAN ST	3,444	No
2339364-376040	540 CHERRY ST	3,451	No
2336222-377475	318 GARY AVE	3,453	No
2329683-376802	1835 LAKE DR	3,464	No
2328467-379397	13 LAUREL LN	3,493	No
2346690-374265	1122 SUN DR	3,496	No
2329281-379565	90 E BROOKFIELD DR	3,496	No
2328576-378893	1 LAUREL LN	3,506	No
2330773-376959	1814 LAKE DR	3,508	No
2339396-378964	811 WILLOW LN	3,515	No
2331322-377584	1779 ASHTON DR	3,525	No
2338124-377482	128 CEDAR LN	3,533	No
2357485-379114	120 HALFWAY DR	3,555	No
2332137-373928	1952 HILL ST	3,559	No
2333828-381081	1114 HARVEST DR	3,572	No
2324308-371482	3200 JOYCE ST	3,583	No
2339248-376686	1590 PLEASANT VIEW DR	3,587	No
2342395-374752	309 LIGHT ST	3,596	No
2342503-379620	810 PATMAR DR	3,619	No
2344627-377742	827 WALNUT CREST DR	3,625	No
2342950-374839	805 PERSHING ST	3,633	No
2323814-371436	762 N 33RD ST	3,653	No
2346386-381274	900 KIMMERLINGS RD	3,659	No
2332386-373993	1946 HILL ST	3,685	No
2355404-385684	155 STRACK DR	3,687	No
2344220-385941	1701 LORETTA DR	3,697	No
2346832-374461	1133 SUN DR	3,706	No
2345064-378593	905 WALNUT CREST DR	3,744	No
2337366-376772	205 REDWOOD LN	3,755	No
2339665-378853	803 WILLOW LN	3,760	No
2355095-385392	130 STRACK DR	3,790	No
2344538-378030	836 WALNUT CREST DR	3,796	No
2345687-380021	913 BRIAR ROSE AVE	3,803	No
2329831-377533	1828 ASHTON DR	3,811	No
2346062-374757	940 MELODY LN	3,822	No
2335721-376621	1310 SANDHILL RD	3,837	No
2337533-376376	751 MECHANIC ST	3,844	No
2345163-374982	826 WEAVERTOWN RD	3,863	No
2344208-375832	714 E MAPLE ST	3,868	No
2346333-373842	1100 CEDAR CREST DR	3,878	No
2350418-377867	2104 MALLARD LN	3,878	No
2338141-377926	905 REDWOOD LN	3,894	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Addresss	Impervious Area (Sqaare Feet)	Outlier?
2338974-378352	812 OAK LN	3,951	No
2336314-379821	1141 ALPHA AVE	3,952	No
2338359-375235	628 ELIZABETH ST	3,975	No
2356050-377083	2598 E CUMBERLAND ST	3,978	No
2323288-378574	2441 ELIAS AVE	3,997	No
2335723-375292	1101 LAUREL ST	3,998	No
2346375-373634	632 N 11TH AVE	4,008	No
2338912-377922	1617 GREENWOOD DR	4,022	No
2333842-378891	1411 JAY ST	4,030	No
2328378-379995	127 BUCK RUN	4,031	No
2329504-377187	1836 ASHTON DR	4,051	No
2335547-378426	1511 SANDHILL RD	4,051	No
2344589-378006	827 SHORE LANDING DR	4,063	No
2350668-377361	2000 MALLARD LN	4,065	No
2329829-372759	2441 UNION CANAL DR	4,067	No
2342532-380292	830 MARCON DR	4,072	No
2335967-377272	312 GIBBLE AVE	4,076	No
2331955-380927	1148 HUNTERS CHASE LN	4,098	No
2345884-375461	1015 HARMONY HILL DR	4,106	No
2351157-374406	2003 E CUMBERLAND ST	4,129	No
2343740-385956	507 LINDA DR	4,131	No
2342439-378273	1629 JOSEPHINE ANN DR	4,138	No
2347096-379592	930 HESS DR	4,143	No
2338808-378109	812 SYCAMORE LN	4,152	No
2333081-381273	1128 HUNTERS CHASE LN	4,153	No
2343486-378016	1638 N 8TH AVE	4,170	No
2344188-376106	719 E MAPLE ST	4,171	No
2342872-374465	303 E MAPLE ST	4,199	No
2338856-377380	103 KATHY DR	4,232	No
2337938-379269	929 MAPLE LN	4,266	No
2329973-376702	1830 LAKE DR	4,268	No
2337756-379196	932 MAPLE LN	4,275	No
2329722-377626	1827 ASHTON DR	4,277	No
2345640-373492	840 SKYLINE DR	4,306	No
2341608-380594	1793 WOODRIDGE CT	4,329	No
2332692-381405	1133 HUNTERS CHASE LN	4,336	No
2337465-377151	206 REDWOOD LN	4,342	No
2347270-379089	920 SOLAR DR	4,356	No
2337001-379826	1554 SHOLLY AVE	4,372	No
2354702-386743	123 NETTIE DR	4,380	No
2342783-377344	982 MILLER ST	4,383	No
2341287-380329	1810 OAKRIDGE CT	4,384	No
2356318-386339	100 RUTH DR	4,403	No
2339951-379019	701 KIMMERLINGS RD	4,429	No
2331238-378097	1791 ASHTON DR	4,431	No
2336063-380340	1612 REAR SANDHILL RD	4,487	No
2339573-376685	1570 JODY AVE	4,530	No
2345655-378904	878 RICHARD DR	4,531	No
2335940-379664	1152 ALPHA AVE	4,531	No
2336351-378888	1530 BETA AVE	4,541	No
2334176-381284	1106 HARVEST DR	4,548	No
2350184-377156	2019 MALLARD LN	4,562	No
2329973-373372	750 N 25TH ST	4,639	No
2344327-377943	819 SHORE LANDING DR	4,648	No
2354483-386163	780 HALFWAY DR	4,649	No
2343713-380215	844 KIMMERLINGS RD	4,677	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Address	Impervious Area (Square Feet)	Outlier?
2358079-378409	2815 E CUMBERLAND ST	4,694	No
2339097-375217	593 DODGE ST	4,738	No
2346958-374672	1144 GARDEN AVE	4,747	No
2337942-377982	913 REDWOOD LN	4,755	No
2353329-385112	689 PRESCOTT DR	4,782	No
2330213-377725	1823 JANET AVE	4,784	No
2325895-376770	2430 LONG LN	4,789	No
2330619-377429	1813 CRESTON DR	4,796	No
2353467-384950	675 PRESCOTT DR	4,802	No
2353482-381540	692 E KERCHER AVE	4,819	No
2329032-373431	2613 TUNNEL HILL RD	4,827	No
2339318-376931	1620 JODY AVE	4,828	No
2325151-371834	762 N 31ST ST	4,877	No
2339477-375724	568 DORIS DR	4,887	No
2345340-381352	886 KIMMERLINGS RD	4,923	No
2341477-380458	1805 OAKRIDGE CT	4,936	No
2357374-387106	290 STRACK DR	4,955	No
2328929-373384	2619 TUNNEL HILL RD	4,989	No
2320810-372476	110 SHERRI DR	4,996	No
2329224-377332	1848 MARTIN DR	5,033	No
2343360-374813	344 E MAPLE ST	5,047	No
2353394-385024	679 PRESCOTT DR	5,054	No
2328463-378774	2 LAUREL LN	5,057	No
2351921-386813	859 PRESCOTT DR	5,070	No
2329631-375647	2014 JAY ST	5,087	No
2344876-374906	790 N 8TH AVE	5,102	No
2321712-373815	116 SANDRA DR	5,176	No
2352282-386425	830 PRESCOTT DR	5,197	No
2329912-378022	1828 MARTIN DR	5,212	No
2342765-379900	824 PATMAR DR	5,227	No
2323600-371637	3300 TUNNEL HILL RD	5,304	No
2353388-381514	688 E KERCHER AVE	5,318	No
2335867-375996	1026 LINDEN ST	5,339	No
2348016-379677	1045 CIDER LN	5,368	No
2342915-374918	815 PERSHING ST	5,423	No
2328783-379039	2025 WATER ST	5,487	No
2348357-379934	1037 CIDER LN	5,499	No
2337863-378375	915 POPLAR LN	5,502	No
2348404-379453	826 NARROWS DR	5,532	No
2328369-379858	15 WINCHESTER CIR	5,590	No
2335890-375819	1022 LINDEN ST	5,655	No
2323355-383244	202 MOUNTVILLE DR	5,675	No
2344216-381030	861 KIMMERLINGS RD	5,768	No
2331828-374167	2001 HILL ST	5,772	No
2333185-384577	1381 JESSICA DR	5,850	No
2345389-381615	885 KIMMERLINGS RD	5,889	No
2349317-378988	750 NARROWS DR	5,975	No
2342833-377552	989 MILLER ST	5,996	No
2324559-380210	1644 HEILMANDALE RD	6,162	No
2343583-383459	199 E KERCHER AVE	6,171	No
2355199-383464	135 TROUTMAN DR	6,240	No
2341582-378565	1690 CHRISTINE DR	6,253	No
2347064-374703	1150 GARDEN AVE	6,349	No
2335299-378492	1516 WEAVER LN	6,356	No
2324038-371833	3226 TUNNEL HILL RD	6,406	No
2324730-379979	1642 HEILMANDALE RD	6,431	No

NORTH LEBANON TOWNSHIP RANDOM SAMPLE OF SINGLE-FAMILY RESIDENTIAL PROPERTIES			
GPIN	Situs Addresss	Impervious Area (Sqare Feet)	Outlier?
2335026-378088	1125 JAY ST	6,520	No
2328530-375794	347 EBENEZER RD	6,554	No
2337959-377542	904 CYPRESS LN	6,591	No
2338468-376383	1503 N 7TH ST	6,670	No
2342646-378493	1635 JOSEPHINE ANN DR	6,688	No
2333485-384363	1382 JESSICA DR	6,711	No
2342644-377836	1615 JOSEPHINE ANN DR	6,812	No
2321560-374209	105 SANDRA DR	6,909	No
2346788-377423	845 MOUNT ZION RD	6,947	No
2345541-378898	876 RICHARD DR	7,074	No
2331719-382578	1345 TWIGG AVE	7,084	No
2321675-374642	2550 LONG LN	7,097	No
2346963-377442	846 MOUNT ZION RD	7,132	No
2335572-378637	1515 SANDHILL RD	7,209	No
2355568-385571	170 STRACK DR	7,254	No
2340596-380467	1801 N 7TH ST	7,297	No
2349435-377648	2026 WEAVERTOWN RD	7,381	No
2332074-383547	26 GLENN LEBANON DR	7,454	No
2326438-372388	3002 TUNNEL HILL RD	7,457	No
2332761-384497	1374 JESSICA DR	7,546	No
2344004-382304	244 E KERCHER AVE	7,569	No
2326188-379622	5 BRANDTHAVEN DR	7,785	No
2330455-378680	1802 MARTIN DR	7,861	No
2341736-379695	803 MARCON DR	7,916	No
2346778-377596	849 MOUNT ZION RD	8,008	No
2348334-376873	1721 WEAVERTOWN RD	8,257	No
2320902-373011	135 SHERRI DR	8,338	No
2350365-381764	550 E KERCHER AVE	8,473	No
2346111-375298	1302 WEAVERTOWN RD	8,967	Yes
2353649-387196	895 HALFWAY DR	8,973	Yes
2350265-381825	544 E KERCHER AVE	8,983	Yes
2326333-378146	1504 ORANGE LN	9,170	Yes
2346729-379353	931 MOUNT ZION RD	9,334	Yes
2353293-384242	645 PRESCOTT DR	9,422	Yes
2322286-375424	2531 LONG LN	9,429	Yes
2353208-384830	665 PRESCOTT DR	9,475	Yes
2320772-372859	125 SHERRI DR	9,539	Yes
2323263-371301	3400 TUNNEL HILL RD	9,612	Yes
2340289-379976	1745 N 7TH ST	10,257	Yes
2354995-385814	135 STRACK DR	10,269	Yes
2331847-383365	34 GLENN LEBANON DR	10,274	Yes
2353377-383844	615 PRESCOTT DR	10,443	Yes
2342448-379531	808 PATMAR DR	10,581	Yes
2354128-385560	715 HALFWAY DR	11,181	Yes
2350198-382092	535 E KERCHER AVE	11,359	Yes
2353767-385378	670 PRESCOTT DR	11,741	Yes
2321574-371571	3635 KINGS DR	12,485	Yes
2346348-381081	902 KIMMERLINGS RD	13,284	Yes
2344259-380825	860 KIMMERLINGS RD	14,714	Yes
2351127-379260	2180 WEAVERTOWN RD	14,794	Yes

Mean (Sq. Ft.)	4,148
Standard Deviation (Sq. Ft.)	2,217
Mean - 2*SD (Sq. Ft.)	0
Mean + 2*SD (Sq. Ft.)	8,581
Adjusted Mean with outliers removed (Sq. Ft.)	3,755

Appendix C

Non-Single Family Residential ERUs



SESI
 Steckbeck Engineering & Surveying, Inc.
 279 N. Zinns Mill Road, Suite A
 Lebanon, PA 17042
 Phone: 717-272-7110
 Fax: 717-272-7348

North Lebanon Township Fee Rate Study
 Non-Single Family Residential
 Sample Impervious Area Calculation

C-2 DRAFT –
 9/18/17

Impervious

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

Table with columns: GPIN, Property Owner, SITUS ADDRESS, Property Occupant / Land Use, Parcel Area (Sq.Ft., Acres), Impervious Area (Sq.Ft., Acres), and ERUs @ 3755 sf per ERU. The table lists numerous property entries with their corresponding details across these six categories.

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2346888-381777	St Jacobs Kimberlings Church	1 SAINT JACOBS DR	St. Jacobs Kimberlings Church & Cemetery	705,625	16.2	91,120	2.1	24
2340156-383063	Roberts, Earl G	1915 N 7TH ST	Farm	5,807,788	133.3	90,219	2.1	24
2328349-369336	Hanford Family L P	2499 W CUMBERLAND ST	Ladd-Hanford Dodge Chrysler Jeep Ram Farm	90,054	2.1	90,054	2.1	24
2324651-377251	Melly, Joseph S	2457 LONG LN	Farm	1,703,158	39.1	89,479	2.1	24
2323694-377730	Reazer, Robert J	SS ELIAS AVE	Reazer's Auto Sales & Parts	169,059	3.9	88,968	2.0	24
2332916-382669	Youth For Christ Inc	1691 GRACE AVE	Youth Advocate Program Inc.	292,621	6.7	88,508	2.0	24
2329930-369360	Hanford Family L P	2247 W CUMBERLAND ST	Ladd-Hanford Dodge Chrysler Jeep Ram	88,173	2.0	87,238	2.0	23
2328552-369897	Hanford Family L P	SS N 25TH ST	Ladd-Hanford Dodge Chrysler Jeep Ram	205,112	4.7	84,282	1.9	22
2323067-374085	God's Missionary Church	1230 STATE ROUTE 72 N	God's Missionary Church	120,797	2.8	83,238	1.9	22
2348043-373794	March, Robert A Etal	510 N 15TH AVE	IMC Insulation Materials	221,267	5.1	82,856	1.9	22
2328227-369927	Leshier, Gregory S	113 N 25TH ST	Leshier Mack Sales & Service	84,445	1.9	82,446	1.9	22
2343695-378710	Open Door Baptist Church	875 ACADEMY DR	Kochenderfer's United Methodist Church	416,531	9.6	81,240	1.9	22
2323403-377952	Reazer, Robert J	2449 ELIAS AVE	Reazer's Auto Sales & Parts	150,521	3.5	80,595	1.9	21
2331331-376907	Simpson, William L Jr	2570 EWMA RD	Farm	5,366,986	123.2	79,169	1.8	21
2331084-380284	Mt Pleasant Ventures Llc	WS GRACE AVE	Development Roadway	683,182	15.7	79,018	1.8	21
2331612-375437	Bishop Of Diocese Of Harrisbrg	1515 E CUMBERLAND ST	White's Harley Davidson	106,617	2.4	77,561	1.8	21
2325481-382069	Horst, Paul N	N OF N 20TH ST	Cemetery	941,814	21.6	77,375	1.8	21
2328935-374963	Collins, Donald W	1844 STATE ROUTE 72 N	All Things Chew LLC / Farm	4,794,963	110.1	74,962	1.7	20
2352350-375348	Salvation Army	289 EBENEZER RD	Collins Trucking Inc.	162,193	3.7	74,031	1.7	20
2341408-381234	Mount Lebanon Camp Meeting Assoc	1 MOUNT LEBANON DR	Salvation Army Family Store	156,862	3.6	73,955	1.7	20
2347896-374881	Weavertown Fire Co #1	1538 SUZY ST	Blue Max Bingo	866,879	19.9	72,752	1.7	19
2339358-377405	Shiva Puja Enterprises Llc	1610 N 7TH ST	Kreiser Gas Station/Mini Mart	165,093	3.8	71,572	1.6	19
2328008-377060	Township Of North Lebanon	2154 LONG LN	New Covenant Christian School Sports Fields	247,499	5.7	71,389	1.6	19
2354402-380779	Marlin, Leon M	320 PRESCOTT DR	Farm	412,099	9.5	71,228	1.6	19
23304415-382913	Fisher, Donald J Etal	1910 WATER ST	Farm	4,882,091	112.1	70,231	1.6	19
2331958-384469	Marks, Gary L	1718 GRACE AVE	Marks Contracting Ltd.	196,568	4.5	67,809	1.6	18
2340425-378360	Steward, Thomas A Sr	1720 N 7TH ST	Steward Masonry Inc.	106,465	2.4	66,114	1.5	18
2327281-372241	Lebanon County Historical	SS TUNNEL HILL RD	Union Canal Tunnel Park	3,212,101	73.7	65,916	1.5	18
2352781-378437	Arnold Acres Inc	1675 GRACE AVE	Residential Home/Farm Field	1,546,103	35.5	65,746	1.5	18
2351596-375158	East Lebanon Storage Inc	2200 WEAVERTOWN RD	Farm	3,677,711	84.4	64,771	1.5	17
2348278-374450	Weaver, Ray L	2080 BROOK DR	Storage Units	120,541	2.8	63,798	1.5	17
2332040-379437	Putt, Jere A	1505 JAY ST	Weaver's Carpet & Tile	420,310	9.6	61,982	1.4	17
2329861-376116	Township Of North Lebanon	2080 WATER ST	Farm	3,046,212	69.9	58,809	1.4	16
2356036-381871	Weaver, James H	790 E KERCHER AVE	Lion's Lake Park	1,140,735	26.2	58,456	1.3	16
2352039-375164	Pray Hospitality Inc	2205 E CUMBERLAND ST	Farm	1,831,975	42.1	57,927	1.3	15
2337339-3693915	Noit Family Farms Llc	1700 HAIN AVE	Holiday Inn Express & Suites	108,259	2.5	57,728	1.3	15
2351066-374300	Hargobind Inc	1999 E CUMBERLAND ST	Farm	5,537,760	127.1	57,419	1.3	15
2324126-383159	Johnson, Michael C	1915 STATE ROUTE 72 N	USA Gas Station / Cider Sub Express Inc.	60,068	1.4	56,732	1.3	15
2351151-375018	Yingst, Dale E	N OF E CUMBERLAND ST	Lebanon Auto Dealers Exchange	434,719	10.0	56,095	1.3	15
2357566-378141	Marlin, Willis Z	2799 E CUMBERLAND ST	North Crest Acres Mobile Home Park	174,203	4.0	55,681	1.3	15
2329733-370708	Susquehanna Association For Heisey, Gary R	2550 HANFORD DR	Martin's Fabric Barn	97,377	2.2	55,479	1.3	15
2326765-378195	Heisey, Gary R	1740 STATE ROUTE 72 N	Vision Corp	222,600	5.1	54,300	1.2	14
2331082-376666	Township Of North Lebanon	NS JAY ST	Lion's Lake Park	56,183	1.3	54,051	1.2	14
2334543-381438	St Stephens United Church Of Christ	1100 HUNTERS CHASE LN	St. Stephens United Church of Christ	380,564	8.7	52,971	1.2	14
2326638-379881	Bomgardner, Harvey E	2957 TUNNEL HILL RD	Farm	5,950,622	136.6	51,003	1.2	14
2337981-375669	Zidik, Joseph J	1313 N 7TH ST	Sunset Designs & Landscaping	4,723,707	108.4	49,278	1.1	13
2337180-381971	Heagy, Allen D	1640 W KERCHER AVE	Farm	65,260	1.5	49,250	1.1	13
2346695-381195	Hoffert Partnership	981 MOUNT ZION RD	H & M Diversified Enterprises	65,260	1.5	48,644	1.1	13
2328917-370146	Leshier, Gregory S	137 N 25TH ST	Leshier Mack Sales & Service	49,940	1.1	48,421	1.1	13
2327901-376253	Yancey, Robert D	435 EBENEZER RD	Yancey's Auto Sales	76,814	1.8	48,421	1.1	13
2350145-384511	Brensinger, Edward A	195 GRUBB AVE	Farm	660,027	15.2	48,290	1.1	13
2338944-375636	Calvary Church	1330 PENNSYLVANIA AVE	Calvary Church	339,002	7.8	47,874	1.1	13
2340118-381244	Shepps, Floyd D	1795 N 7TH ST	Farm	1,300,372	29.9	47,607	1.1	13
2351755-374856	Scipioni, Robert L	2195 E CUMBERLAND ST	East Lebanon Auto Co.	110,406	2.5	47,451	1.1	13
2347599-378882	Clkovic, Jarnie L	908 MOUNT ZION RD	Farm	531,221	12.2	47,129	1.1	13
2330325-374375	God's Missionary Church	1230 ADJ STATE ROUTE 72 N	God's Missionary Church	65,190	1.5	46,882	1.1	12
2344034-381399	Koehler, Michael J	869 KIMMERLINGS RD	Aerial Communications Systems	455,148	10.4	46,795	1.1	12
2328919-376649	Deer Lake Associates L P	2075 WATER ST	Deer Lake Apartments	161,346	3.7	46,444	1.1	12

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area Sq.Ft.	Acres	ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres			
2325878-379870	Ebenezer United Methodist	1776 STATE ROUTE 72 N	Ebenezer United Methodist Church	238,839	5.5	45,052	1.0	12
2330109-370220	Spirit Master Funding VII Llc	2201 REAR W CUMBERLAND ST	Regal Cinemas	48,523	1.1	44,423	1.0	12
2343113-381295	Northeastern Mennonite Conference	252 E KERCHER AVE	Keystone Builders LLC	378,197	8.7	44,108	1.0	12
2351536-386643	Quitite Woods Inc	432 GRUBB AVE	Quitite Woods Inc.	362,328	8.3	44,009	1.0	12
2330074-375837	Reider, Scott	2002 JAY ST	Lakeside Mobile Home Park	91,480	2.1	43,693	1.0	12
2351029-381817	Martin, Willis Z	595 E KERCHER AVE	Farm	2,200,226	50.5	43,555	1.0	12
2331741-383696	Glenn Lebanon Fire Co	42 GLENN LEBANON DR	Glenn Lebanon Fire Company	63,625	1.5	43,206	1.0	12
2350176-373760	Anato, Salvatore	1705 E CUMBERLAND ST	A&M PIZZA	42,750	1.0	42,750	1.0	11
2345895-377362	Hoover, Martin Lee	1021 E MAPLE ST	Automan Diagnostics	362,639	8.3	42,739	1.0	11
2345038-378104	Hursh, James S	935 E MAPLE ST	Farm	292,819	6.7	42,469	1.0	11
2360467-375689	Amerman, Brian G	205 NARROWS DR	Anterman: Ginder & Co. LLC / Phoenix Services Inc.	637,524	14.6	42,008	1.0	11
2364439-377597	Seyfert, Thomas C	2485 E CUMBERLAND ST	Farm	4,578,704	105.1	41,121	0.9	11
2345203-374095	Soliday, Raymond R	801 CEDAR CREST DR	Apartment Complex	95,453	2.2	40,866	0.9	11
2335366-375530	French, Carl Jr	WS SANDHILL RD	Storage Units	110,752	2.5	40,243	0.9	11
2327950-376502	Ebenezer Fire Co	442 EBENEZER RD	Ebenezer Fire Co.	73,426	1.7	39,934	0.9	11
2324157-374309	Melly, Richard H Etux	3181 TUNNEL HILL RD	Farm	5,519,132	126.7	38,916	0.9	10
2354275-382436	Martin Acres Llc	130 N 25TH ST	Farm	3,267,462	75.0	38,675	0.9	10
2329695-369894	Hanford Family LP	325 RUTH DR	Ladd-Hanford Dodge Chrysler Jeep Ram	187,054	4.3	38,595	0.9	10
2365502-386996	Sitrack, John F	100 PRESCOTT DR	Farm	3,609,028	82.9	37,905	0.9	10
2328183-389539	Frederick Real Estate Inc	2629 W CUMBERLAND ST	Farm	1,943,420	44.6	37,348	0.9	10
2328976-369840	Leshner, Gregory S	121 N 25TH ST	Leshner Mack Sales & Service	175,144	4.0	36,781	0.8	10
2347568-382507	Christ, William F	1050 MOUNT ZION RD	Farm	36,945	0.8	36,319	0.8	10
2347149-371514	Steiner, James A	1121 E OLD CUMBERLAND ST	Farm	2,784,884	63.9	35,926	0.8	10
2348405-372714	Blouch, David M Sr	1499 E CUMBERLAND ST	Carquest Auto Parts	5,068,700	116.4	35,577	0.8	9
2348598-372881	Key Investment Partners LP	1501 E CUMBERLAND ST	Mobil Gas Station/Mini Mart	75,878	1.7	35,358	0.8	9
2347927-372977	Woelffling, Joseph G	504 E CANAL ST	Various Offices	41,364	0.9	34,268	0.8	9
2327170-3730857	County Of Lebanon	NS TUNNEL HILL RD	Lebanon Pattern Shop Inc. / Lebanon County Woodworkers	53,728	1.2	34,195	0.8	9
2335803-377984	BI & B Associates	1044 STATE ROUTE 72 N	Union Canal Tunnel Park	67,640	1.6	33,785	0.8	9
2326623-377860	Hess, R Arlene	1412 SANDHILL RD	EH Williams & Sons	37,177	0.9	33,655	0.8	9
2340427-378558	Jonestown Bank & Trust Co	1725 STATE ROUTE 72 N	Mobile Home Park	67,640	1.6	33,497	0.8	9
2320340-373558	Marks, Jeffrey L	708 KIMMERLINGS RD	Jonestown Bank & Trust Co.	583,681	13.4	32,570	0.7	9
2348775-372677	Ebersole, Randall I	2572 LONG LN	T J's Body Shop	72,015	1.7	32,410	0.7	9
2348131-373034	Wal-Mart Stores Inc	1504 E CUMBERLAND ST	Ebersole Bros.	43,101	1.0	32,045	0.7	9
2348251-378194	Township Of North Lebanon	1375 E LEHMAN ST	Fuel Center Gas Station/Mini Mart	1,262,490	29.0	31,697	0.7	8
2347451-374482	Fifth Ward Athletic Club	723 NARROWS DR	ParK	227,236	5.2	31,612	0.7	8
2323640-376432	County Of Lebanon	750 N 15TH AVE	Fifth Ward Athletic Club	428,400	9.8	30,962	0.7	8
2344741-374740	Cobie, Norman B	N OF TUNNEL HILL RD	Strip of Woods with Driveway	38,180	0.9	30,359	0.7	8
2324223-382874	Bachman, Kenneth M	779 N 8TH AVE	Cobie's bait Shop / Storage Unit Facility	88,429	2.0	29,428	0.7	8
2345430-381332	Gunnells, Robert A	888 KIMMERLINGS RD	Bachman Used Cars	60,571	1.4	29,200	0.7	8
2328726-369936	Leshner, Gregory S	125 N 25TH ST	Trim's Automotive	30,620	0.7	28,593	0.7	8
2328408-373884	Bonnlie, Joseph A	2703 TUNNEL HILL RD	Leshner Mack Sales & Service	795,710	18.3	28,099	0.6	7
2336598-380978	Kercher, Edwin C	1624 W KERCHER AVE	Residential Home/Farm Field	2,299,912	52.8	27,779	0.6	7
2356243-385224	Eiswanger, Barbara R	200 STRACK DR	Farm	1,579,375	36.3	27,495	0.6	7
2326805-378431	Helsey, Gary R	ES STATE ROUTE 72 N	Baseball Field & Parking Lot	486,823	11.2	27,238	0.6	7
2320289-377234	Hawmlyuk, Alexander Trust	200 GRUBB AVE	Farm	1,750,627	40.2	27,229	0.6	7
2348269-372882	Valerit Mid Atlantic Realty	2581 ENMA RD	Farm	5,058,153	116.1	27,224	0.6	7
2318953-379861	Peters, Victor C	1490 E LEHMAN ST	Wendy's	41,021	0.9	27,032	0.6	7
2325395-389825	Lebanon Valley Economic Dev Corp	1805 RUSSELL RD	Farm	927,901	39.3	26,954	0.6	7
2367425-379490	Martin, Lester M	SS CHARLOTTE ST	Farm Field with RR Tracks	927,901	21.3	26,323	0.6	7
2324853-384554	Newsom, Melissa N	180 HALFWAY DR	Farm	3,084,811	70.8	26,249	0.6	7
2328730-369363	Bingeman, Lester E	ES HEILMANDALE RD	Farm	2,032,041	46.6	26,014	0.6	7
2346728-379246	Spruce Properties, Llc	25 HEAGY DR	Farm	1,087,796	25.0	25,765	0.6	7
2357833-378284	Weaver, James H	435 ADJ EBENEZER RD	Yancey's Auto Sales	410,531	9.4	25,453	0.6	7
2350443-373873	Carl, Lewis J	2515 W CUMBERLAND ST	Autozone	46,101	1.1	25,330	0.6	7
2330536-369770	Harris Savings Bank	929 MOUNT ZION RD	Accustar Labs	92,625	2.1	25,222	0.6	7
		2801 E CUMBERLAND ST	Weaver's Furniture Barn	51,120	1.2	25,014	0.6	7
		1715 E CUMBERLAND ST	Carl's Service Station	61,361	1.4	24,792	0.6	7
		2203 W CUMBERLAND ST	Santander Bank	39,645	0.9	24,764	0.6	7

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUs FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES									
GPIN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU	
				Sq.Ft.	Acres	Sq.Ft.	Acres		
2329075-369334	Litz, Jo Ellen	2901 W CUMBERLAND ST	Litz Co.	61,853	1.4	24,873	0.6	7	
2345018-373601	Hendricks, Ken M	717 N 8TH AVE	Suzanne's Dance & Gymnasitics	26,167	0.6	24,486	0.6	7	
2341839-382653	Wiese, Harold A	1880 N 7TH ST	Farm	3,971,227	91.2	24,274	0.6	6	
2347698-375707	Weavertown Business Enterprise Llc	1578 SUZY ST	Marlin's Auto Diagnostics	92,925	2.1	24,102	0.6	6	
2347913-372633	Fulton Financial Realty	1333 E LEHMAN ST	Fulton Bank	64,699	1.5	24,054	0.6	6	
2360283-379188	Seyfert, Donald J	2125 WEAVERTOWN RD	Farm	939,990	21.6	23,838	0.5	6	
2345562-376967	Fox, C Eugene	1010 E MAPLE ST	Accom Trail Woodcraft Furniture	267,897	6.2	23,594	0.5	6	
2347389-384840	Morrissey, James M	1235 MOUNT ZION RD	Farm	471,303	10.8	23,550	0.5	6	
2347218-375421	R Field & Stream Of Leb Co Assoc	SS WEAVERTOWN RD	Park	311,835	7.2	23,428	0.5	6	
2343594-385735	Reinford, Lester H	518 LINDA DR	Farm	484,065	11.1	23,233	0.5	6	
2335371-380753	Arnold, Alfred K	1631 GRACE AVE	Farm	619,060	14.2	22,983	0.5	6	
2347561-371809	Avon Zion United Methodist Church	1215 E OLD CUMBERLAND ST	Church	36,466	0.8	22,872	0.5	6	
2322709-379718	Heagy, Allen L	2405 ELIAS AVE	Heagy Construction Co.	86,279	2.0	22,527	0.5	6	
2339995-378840	First National Bank Of Fred	1690 N 7TH ST	Fredericksburg National Bank	55,188	1.3	22,417	0.5	6	
2346549-381270	Mtw Partners Llc	906 KIMMERLINGS RD	Glamorous K9S Pet Boarding Resort	55,880	1.3	22,372	0.5	6	
2331222-374941	Wolfe, Cynthia A	2023 HILL ST	Farm	1,736,850	39.9	22,108	0.5	6	
2318505-382164	Greater Lebanon Refuse Auth	SS HEILMANDALE RD	Greater Lebanon Refuse Authority	2,622,669	60.2	22,063	0.5	6	
2322052-372518	Gaffney, Thomas E	3615 HILL CHURCH RD	Farm	719,062	16.5	21,355	0.5	6	
2342004-386078	Heflinger, Charles L	2195 WEAVERTOWN RD	Farm	1,715,438	39.4	21,237	0.5	6	
2337570-379614	Zion Cemetery Association Of	SS KOCHENDERFER RD	Cemetery	316,957	7.3	21,180	0.5	6	
2332213-383783	Fisher, Barry L	SS GRACE AVE	Gravel Lot	50,278	1.2	20,949	0.5	6	
2333478-380098	Scholl, Chester L	1415 JAY ST	Farm	2,454,118	56.3	20,914	0.5	6	
2330552-373761	1130 North Properties Llc	1130 STATE ROUTE 72 N	Valley Cigars J A & J Pizza	26,291	0.6	20,823	0.5	6	
2352249-384952	Hostetter, David E	705 PRESCOTT DR	Residential Home/Farm Field	332,743	7.6	20,604	0.5	5	
2337523-380293	Kochenderfers United Meth Church	NS KOCHENDERFER RD	Kochenderfer's United Methodist Church	69,436	1.6	20,277	0.5	5	
2328277-369332	Hollis, Robert A	2627 W CUMBERLAND ST	Lebanon Eyecare Associates	43,869	1.0	20,099	0.5	5	
2344131-384610	Lane, Denzil W	864 JUSTA LN	Farm	2,289,782	52.6	20,084	0.5	5	
2349511-373125	Patel, Naresh N	1524 E CUMBERLAND ST	Relax Inn	21,975	0.5	19,935	0.5	5	
2331974-377617	Batorf, Bernard A	1711 JAY ST	Residential Home/Farm Field	1,417,941	32.6	19,842	0.5	5	
2338287-375587	Rural Security Fire Co	1301 N 7TH ST	Rural Security Fire Co.	34,080	0.8	19,818	0.5	5	
2328083-369355	V Laxminarayan Corp	2631 W CUMBERLAND ST	Country Cupboard	22,792	0.5	19,731	0.5	5	
2329551-374134	Tlc Properties Inc	WS STATE ROUTE 72 N	Road	100,836	2.3	19,721	0.5	5	
2327268-377396	Leemill'S Petroleum Inc	1700 STATE ROUTE 72 N	Valero Gas Station/Mini Mart	45,930	1.1	19,468	0.4	5	
2349136-372900	Rdq Group	1512 E CUMBERLAND ST	Dairy Queen Parking Lot	20,582	0.5	19,184	0.4	5	
2348401-384759	Seyfert, Dennis J	1284 MOUNT ZION RD	Farm	1,007,199	23.1	19,126	0.4	5	
2326340-378955	Krall, Arthur A	1754 STATE ROUTE 72 N	Lash Plumbing Heating & Air	1,34,206	3.1	19,064	0.4	5	
2344549-377170	New Testament Fellowship	920 N 8TH AVE	New Testament Fellowship	45,479	1.0	18,248	0.4	5	
2353118-382662	Nolt, Gary L	525 PRESCOTT DR	Farm	845,109	19.4	17,992	0.4	5	
2326981-378996	Burns, Phillip A	25 BRANDTHAVEN DR	Farm	3,276,582	75.2	17,980	0.4	5	
2346261-380096	Landmark Homes At Sweetbriar Inc	923 BRIAR ROSE AVE	Sweetbriar community center, undedicated roads	103,206	2.4	17,929	0.4	5	
2330406-373599	Smeltzer, William W Jr	1153 STATE ROUTE 72 N	Gravel Lot	66,402	1.5	17,788	0.4	5	
2346702-380857	Wagner, David J	973 MOUNT ZION RD	Multi-Family Residential Home	17,443	0.4	17,662	0.4	5	
2342389-372991	Engle'S Oil Inc	613 N 4TH AVE	Engle's Oil Inc.	38,865	0.9	17,654	0.4	5	
2352338-385547	Stolz, Donald L	755 PRESCOTT DR	Farm	346,925	8.0	17,551	0.4	5	
2350934-385128	French, Brett R	255 GRUBB AVE	Residential Home/Farm Field	300,065	6.9	17,427	0.4	5	
2329437-374565	Haldeman, Philip C	1290 STATE ROUTE 72 N	Haldeman Auto	22,702	0.5	17,339	0.4	5	
2340409-380147	1364 Market Llc	1753 N 7TH ST	Star Loan Auto	49,262	1.1	17,241	0.4	5	
2347164-375879	R Field & Stream Of Leb Co Assoc	1575 WEAVERTOWN RD	R Field and Stream	260,391	6.0	17,091	0.4	5	
2330025-380691	Aitz, Scott B	1950 WATER ST	Farm	991,590	22.8	16,993	0.4	5	
2347522-374660	Township Of North Lebanon	1528 SUZY ST	Weavertown Fire Co.	55,939	1.3	16,861	0.4	4	
2337279-376222	Hoch, Robert B	1411 N 8TH ST	Bob Hoch Furniture Warehouse	30,223	0.7	16,548	0.4	4	
2332554-378782	Arnold, Barry J	1509 JAY ST	Farm	753,729	17.3	16,526	0.4	4	
2352425-381712	Langie, Allen L	655 E KERCHER AVE	Farm	1,235,561	28.4	16,352	0.4	4	
2356972-385706	Hill, Marie	230 STRACK DR	Farm	1,099,166	25.2	16,341	0.4	4	
2351520-385185	Enubaker, Delmar S Etal	300 GRUBB AVE	Farm	1,125,921	25.8	16,188	0.4	4	
2350852-378076	Krall, Evelina M	500 NARROWS DR	Farm	607,700	14.0	16,139	0.4	4	
2344235-376705	Township Of North Lebanon	739 E MAPLE ST	NLT Municipal Authority	38,076	0.9	15,913	0.4	4	
2332110-383934	Merfild Llc	1745 GRACE AVE	D B Fisher Tours & Travel Agency	50,456	1.2	15,868	0.4	4	
2331854-373881	Podjed, Donald L	1010 STATE ROUTE 72 N	DNS Auto Exchange	21,234	0.5	15,653	0.4	4	
2331040-384421	Fisher, Donald J Etal	1745 GRACE AVE	Farm	646,252	14.8	15,547	0.4	4	

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2331101-369410	Associates Of Lebanon	2201 W CUMBERLAND ST	Boscov's	761,418	17.5	15,423	0.4	4
2323870-381125	Kreider, Kenneth L	155 MOUNTVILLE DR	Miscellaneous Structures	580,261	13.3	15,376	0.4	4
2329440-374063	Wickes, David L	31 OLD EBENEZER RD	Multi-Family Residential	32,421	0.7	15,360	0.4	4
2357661-384968	Roof, Steven P	895 E KERCHER AVE	Farm	723,139	16.6	15,300	0.4	4
2322224-384267	Marks, Gary L	W OF QUARRY RD	Gravel Lot	20,232	0.5	15,233	0.3	4
2348899-374126	Reed, Kenneth G	1535 JOEL DR	Stickler's Custom Millwork Inc.	149,588	3.4	15,138	0.3	4
2328227-376552	Lebanon Broadcasting Co	440 REBECCA ST	WLBR-AM Radio Lebanon	397,089	9.1	14,792	0.3	4
2346652-378229	Kneisel Farms Lic	905 MOUNT ZION RD	Farm	1,644,078	37.7	14,757	0.3	4
2342671-374415	White, Robert	315 E MAPLE ST	Diamond Fencing	18,507	0.4	14,361	0.3	4
2329945-374727	God's Missionary Church	ES STATE ROUTE 72 N	Farm Field with Driveway	1,217,124	27.9	14,268	0.3	4
2341660-379351	Horn, Paul F	NS KIMMERLINGS RD	Christmas Tree Farm	783,381	18.0	14,228	0.3	4
2323377-375604	Albert, Bruce A	1950 N 7TH ST	Farm	1,719,480	39.5	14,095	0.3	4
2341768-383929	Hursh, Glen Michael	2510 LONG LN	Residential Home/Farm Field	1,371,016	31.5	13,914	0.3	4
2324473-377984	Reber, William C	1225 MOUNT ZION RD	Farm	1,336,067	30.7	13,751	0.3	4
2320047-369272	Hively, Charles I	2469 ELIAS AVE	Farm	946,491	21.7	13,718	0.3	4
2348688-387685	Weaver, Earl G	2235 W CUMBERLAND ST	Farmetastik	20,890	0.5	13,528	0.3	4
2343716-375721	Bishop Of Diocese Of Harrisbrg	NS MOUNT ZION RD	Farm Field with Driveway/Old Foundation	2,224,672	51.1	13,454	0.3	4
2351351-385848	Grumblin, Randy L	1141 JAY ST	Apartments	41,425	1.0	13,370	0.3	4
2346943-372506	Gordon, Michael T	400 GRUBB AVE	Cemetery	183,935	4.2	13,337	0.3	4
2345157-382257	Duskin, John L	1125 1/2 E LEHMAN ST	Residential Home/Farm Field	49,271	1.1	13,320	0.3	4
2325148-379540	Bare, I Hershey	879 KIMMERLINGS RD	Apartments	466,630	10.7	13,221	0.3	4
2329362-376917	Martin, Paul G	1625 HEILMANDALE RD	Farm	4,806,737	110.3	13,168	0.3	4
2332351-381959	Messon, Josue A	1844 CRESTON DR	P G Martin Excavating	16,871	0.4	13,042	0.3	3
2335664-381123	Sims, Eric Etal	1677 GRACE AVE	Apartments	141,542	3.2	13,015	0.3	3
2354362-384340	Tice, Harold John	1623 W KERCHER AVE	Farm	1,280,081	29.4	12,763	0.3	3
2340122-380300	Hartman, Keith E	805 HALFWAY DR	Farm	432,203	9.9	12,665	0.3	3
2342204-378305	Horn, Conrad P	1751 N 7TH ST	Farm	154,349	3.5	12,631	0.3	3
2331550-373684	Eastern Electrical Systems Llc	780 KIMMERLINGS RD	Farm	755,102	17.3	12,124	0.3	3
2337785-375433	North Lebanon Mennonite	2111 W MAPLE ST	Warehouse/Garage	45,519	1.0	12,085	0.3	3
2338518-376251	Brensinger, Doris L	1300 SPRUCE ST	North Lebanon Mennonite Fellowship Church	29,046	0.7	12,085	0.3	3
2346859-382181	Jrg Futures Llc	1433 N 7TH ST	Multi-Family Residential Home	43,003	1.0	11,909	0.3	3
2335754-380273	Heilmann, Bruce	2483 E CUMBERLAND ST	Vacant Lot with Shed & Driveway	170,280	3.9	11,809	0.3	3
2321511-372326	Lopes, Michael S	1612 SANDHILL RD	Multi-Family Residential Home	68,741	1.6	11,795	0.3	3
2348969-372821	St Jacobs Kinnerlings Church	3645 PARADISE LN	Farm	453,060	10.4	11,792	0.3	3
2340325-379216	Stewart, Thomas A Sr	350 E KERCHER AVE	Outbuildings for St. Jacobs Church, Farm Fields	1,020,350	23.4	11,745	0.3	3
2351990-383998	Platt, John W	1539 E CUMBERLAND ST	Ebersole Bros.	14,862	0.3	11,692	0.3	3
2339426-383335	Roberts, Earl G	1720 ADJ KIMMERLINGS RD	Stewart Masonry Inc.	31,622	0.7	11,623	0.3	3
2328667-375651	Bachmann, Kenneth M	345 SNOW DR	Residential Home/Farm Field	427,457	9.8	11,569	0.3	3
2322914-381930	Carpenter, Keith S	1700 W KERCHER AVE	Farm	231,338	5.3	11,401	0.3	3
2328906-389328	Carpenter, Lawrence D Jr	333 EBENEZER RD	Multi-Family Residential Home	14,294	0.3	11,214	0.3	3
2335820-377361	Lapp, Levi Z	117 MOUNTVILLE DR	Residential Home/Forest Land	505,642	11.6	11,193	0.3	3
2329334-375083	Smith, Donald E Jr	2505 W CUMBERLAND ST	Carpenter's Automotive	12,043	0.3	11,086	0.3	3
2330973-377445	Lyons, George H	1336 SANDHILL RD	Apartment Building	14,003	0.3	11,053	0.3	3
2352602-384175	Footo, Dennis J	122 OLD EBENEZER RD	Multi-Family Residential Home	30,091	0.7	11,019	0.3	3
2330427-373881	God's Missionary Church	937 MILLER ST	Multi-Family Residential Home	949,810	21.8	10,770	0.2	3
2352404-383853	Buchmoyer, John W	355 SNOW DR	Multi-Family Residential Home	69,259	1.6	10,702	0.2	3
2330367-389161	New Centurian Llc	2127 HILL ST	God's Missionary Church	25,395	0.6	10,586	0.2	3
2344918-382684	Kreiser, Francis P	363 SNOW DR	Residential Home/Farm Field	433,889	10.0	10,572	0.2	3
2339469-378184	Pizzoli, Justine L	2213 W CUMBERLAND ST	Pretzel Factory	12,472	0.3	10,455	0.2	3
2343576-375011	Cemetery Association of Congregation Beth Israel	285 E KERCHER AVE	Farm	1,066,278	24.5	10,444	0.2	3
2319577-374394	Lyons, Michael P	SS E MAPLE ST	Justine's Place - Parking Lot	15,525	0.4	10,168	0.2	3
2329277-374492	Iona Investment Group Lp	1436 RUSSELL RD	Paved Drive on Cemetery Property	59,063	1.4	10,133	0.2	3
2356305-377393	Johnson, Brent E	2491 LONG LN	Farm	327,525	7.5	10,120	0.2	3
2344525-374237	Pushnik, Gloria	101 OLD EBENEZER RD	Residential Home/Farm Field	401,349	9.2	10,112	0.2	3
2336218-375208	Christ In Christian Unio Of	2611 E CUMBERLAND ST	Vacant Lot with Driveway	563,716	12.9	10,097	0.2	3
2336277-375571	Turley, Timothy J	777 N 8TH AVE	Leb-Myer Motors	12,883	0.3	10,070	0.2	3
		1000 LAUREL ST	G & G Uniform Shop	866,358	19.9	9,997	0.2	3
		1006 KATHLEEN ST	Christian Union Church	68,818	1.6	9,904	0.2	3
			Garage/Warehouse	18,659	0.4	9,867	0.2	3

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUs FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2331894-373736	Podjed, Donald	1005 STATE ROUTE 72 N	K B Graphix LLC	32,433	0.7	9,681	0.2	3
2323669-382834	Dissinger, Lester P Jr	7 HORST DR	Dissinger Garage - Auto Repair Shop	44,089	1.0	9,678	0.2	3
2336577-378240	Long, Daniel C	1505 SANDHILL RD	Long's Food Store	26,015	0.6	9,453	0.2	3
2334783-378807	Scholl, Chester L	SS HORIZON BLVD	Farm Field with Driveway	758,090	17.4	9,387	0.2	2
2344901-385701	Gruber, Dale E	240 HEFFELFINGER RD	Farm	307,068	7.0	9,288	0.2	2
2322285-371611	Shaak, Jerry W	10 PRIMROSE LN	Residential Home/Farm Field	364,886	8.4	9,215	0.2	2
2328906-369932	Leshner, Gregory S	123 N 25TH ST	Leshner Mack Sales & Service	9,210	0.2	9,210	0.2	2
2328764-375319	Steiner, James A	313 EBENEZER RD	Abe & Sons Auto Repair	50,638	1.2	9,208	0.2	2
2335279-378904	Ivc Realty Llc	1535 WEAVER LN	Iron Valley Ceilings LLC	34,146	0.8	9,043	0.2	2
2331292-373822	Bl & B Associates	1064 STATE ROUTE 72 N	The Artisans Gallery	11,250	0.3	9,036	0.2	2
2350859-386079	Cowden, Robert L	952 PRESCOTT DR	Farm	4,556,350	104.6	9,011	0.2	2
2329336-383062	Koenig, Timothy S	1911 WATER ST	Residential Home/Forest Land	425,434	9.8	8,822	0.2	2
2336001-376555	Fidler, Evelyn M	NS MECHANIC ST	Vacant Lot with Parking Area	20,705	0.5	8,633	0.2	2
2345602-377203	Hursh, James S	1013 E MAPLE ST	Farm Field with Barn	495,614	11.4	8,631	0.2	2
2326108-370968	Lebanon Valley Economic Dev Corp	S OF N 31ST ST	Farm Field with Road	2,499,184	57.4	8,584	0.2	2
2346269-382661	Hoover, Stephen L	355 E KERCHER AVE	Farm	603,851	13.9	8,579	0.2	2
2323159-380148	Etnis, Gerald J	1670 HEILMANDALE RD	Farm	563,892	12.9	8,408	0.2	2
2344087-376692	Horning, Raymond H	SS MEADOWLARK LN	Barn	81,844	1.9	8,184	0.2	2
2348452-373008	White, Donna A	408 N 15TH AVE	Decoran J. Thomas, MA	21,000	0.5	8,132	0.2	2
2341154-378672	City Of Lebanon Authority	740 KIMMERLINGS RD	Water Tower	72,874	1.7	8,083	0.2	2
2343584-377671	Beiler, Chris L	1625 N 8TH AVE	Multi-Family Residential Home	45,442	1.0	8,018	0.2	2
2326422-378744	Helsey, Gary R	1750 STATE ROUTE 72 N	Multi-Family Residential Home	46,516	1.1	7,952	0.2	2
2328790-375564	Steiner, James A	321 EBENEZER RD	Multi-Family Residential Home	20,675	0.5	7,937	0.2	2
2347016-371449	Steiner, James A	1101 E OLD CUMBERLAND ST	Carquest Auto Parts	8,506	0.2	7,889	0.2	2
2323367-377474	Ngyuen, Bav Van	1715 JAY ST	Multi-Family Residential Home	14,446	0.3	7,861	0.2	2
2331784-374274	Wolfe, Cynthia A	N OF HILL ST	Farm Barn/Sheed	35,990	0.8	7,744	0.2	2
2347342-374293	Fessler, William Z	1157 CEDAR CREST DR	Multi-Family Residential Home	13,774	0.3	7,712	0.2	2
2333161-378903	Cikovic, James J	INS JAY ST	Garage/Barn	51,746	1.2	7,704	0.2	2
2325296-379628	Yiengst, Kevin S	1626 HEILMANDALE RD	Yiengst Repair and Fabrication	22,992	0.5	7,567	0.2	2
2349063-372825	Rda Group	SS E CUMBERLAND ST	Dairy Queen	8,178	0.2	7,559	0.2	2
2340036-375752	Wright, Douglas A	889 MILLER ST	Multi-Family Residential Home	19,938	0.5	7,352	0.2	2
2328753-375683	Crouse, Colin R	325 EBENEZER RD	Multi-Family Residential Home	13,474	0.3	7,344	0.2	2
2346941-376020	R Field & Stream Of Leb Co Assoc	WS MOUNT ZION RD	R Field and Stream	126,717	2.9	7,315	0.2	2
2347414-377378	Musser, Jeffrey G	ES MOUNT ZION RD	Farm	352,354	8.1	7,285	0.2	2
2347411-373835	Morrissey Holdings Lp	WS N 15TH AVE	Vacant Lot with Driveway	232,474	5.3	7,274	0.2	2
2334906-378075	Ngyuen, Bav Van	1131 JAY ST	Multi-Family Residential Home	15,673	0.4	7,171	0.2	2
2351350-379310	Dontley, Edward J	2184 WEAVERTOWN RD	Residential Home/Farm Field	235,861	5.4	7,100	0.2	2
2339049-377597	Zentz, Michael L	1619 N 7TH ST	Multi-Family Residential Home	20,391	0.5	7,082	0.2	2
2347940-387163	Weaver, Stephen E	1356 MOUNT ZION RD	Earl Weaver Excavating LLC	1,361,991	31.3	7,038	0.2	2
2328823-379527	Township Of North Lebanon	2017 WATER ST	Small Building	31,436	0.7	6,942	0.2	2
2328146-376297	Yancey, Roger D	426 EBENEZER RD	Multi-Family Residential Home	23,903	0.5	6,924	0.2	2
2347086-385487	Felty, Schuyler R	WS MORRISSEY DR	Farm	134,827	3.1	6,915	0.2	2
2351821-386623	Allwein, Ammon W	855 PRESCOTT DR	Residential Home	447,735	10.3	6,709	0.2	2
2329914-383386	Dengler, Daniel T	1725 LINCOLN ST	Residential Home	71,031	1.6	6,657	0.2	2
2338203-375866	Zidik, Joseph J	WS N 7TH ST	Residential Home	23,748	0.5	6,504	0.1	2
2325978-379158	Morrissey, Thomas B	1759 STATE ROUTE 72 N	Multi-Family Residential	15,840	0.4	6,497	0.1	2
2332236-374014	White, Carl E	SS HILL ST	Residential Garages/Driveway	31,516	0.7	6,332	0.1	2
2348658-376896	Weber, Rodney L	2451 LONG LN	Multi-Family Residential Home	16,692	0.4	6,296	0.1	2
2343123-374609	Cunningham, Brett	319 WEAVERTOWN RD	Multi-Family Residential Home	26,491	0.6	6,273	0.1	2
2335705-378625	Snook, Arden A Sr	1520 SANDHILL RD	Multi-Family Residential Home	22,001	0.5	6,255	0.1	2
2336110-376812	Nolt, Cleon R	223 GARY AVE	Apartments	178,982	4.1	6,144	0.1	2
2336029-379384	City Of Lebanon Authority	1534 SANDHILL RD	Macadam Driveway and Parking Area	17,914	0.4	6,132	0.1	2
2351879-386578	Heisey, Gary R	322 EBENEZER RD	Multi-Family Residential Home	13,691	0.3	6,085	0.1	2
2328880-375662	French, Brett R	1425 SANDHILL RD	Multi-Family Residential Home	13,735	0.3	5,934	0.1	2
2335520-378049	Associates Of Lebanon	2241 W CUMBERLAND ST	Road	5,727	0.1	5,727	0.1	2
2329934-369252	Usher, Michael J	119 MOUNTVILLE DR	Vacant Lot with Driveway	130,769	3.0	5,709	0.1	2
2323031-382080	Blue Molar Llc	1695 N 7TH ST	Dr. Michael L. Feltin, DMD	16,342	0.4	5,671	0.1	2
2339776-378820	Kimmerlings Grange	990 MOUNT ZION RD	Kimmerlings Grange Hall	90,233	2.1	5,596	0.1	1
2346931-381529	Ward, Patricia M	1243 E OLD CUMBERLAND ST	Multi-Family Residential	7,992	0.2	5,581	0.1	1
2347837-371970	Sammer, John W	1217 SANDHILL RD	Multi-Family Residential Home	9,951	0.2	5,558	0.1	1

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUs FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPIN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use		Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
			Sq.Ft.	Acres	Sq.Ft.	Acres	Sq.Ft.	Acres	
2329270-373163	County Of Lebanon	SS TUNNEL HILL RD	1,003,034	23.0	5,539	0.1			1
2344033-384851	Lane, Casey M	863 JUSTA LN	425,615	9.8	5,494	0.1			1
2334843-384830	Arnold, Arthur J	WS KENBROOK RD	203,025	4.7	5,445	0.1			1
2339625-378182	Sunset Realty Inc	1668 N 7TH ST	6,192	0.1	5,389	0.1			1
2349705-373284	Polkinghorn, Charles W	1604 E CUMBERLAND ST	7,562	0.2	5,256	0.1			1
2348625-372531	Eight E Limited Partnership	187 E KERCHER AVE	83,737	1.9	5,197	0.1			1
2343329-383747	North Lebanon Mennonite	1031 E MAPLE ST	117,763	2.7	5,181	0.1			1
2346199-377523	Kneassell, Roy W	354 EBENEZER RD	8,816	0.2	5,111	0.1			1
2328504-375960	Deck, Robert L	1998 WATER ST	887,731	20.4	5,101	0.1			1
2329079-380381	Artz, Scott B	3112 TUNNEL HILL RD	63,788	1.5	5,067	0.1			1
2324941-371665	Dundore, Herman W	2439 UNION CANAL DR	13,558	0.3	5,050	0.1			1
2329814-372658	Batchelor, David W	110 N 11TH AVE	18,947	0.4	4,959	0.1			1
2346797-371932	Thompson, John P Jr	2227 W CUMBERLAND ST	8,034	0.2	4,901	0.1			1
2330097-369182	Tran, Minh Van	705 N 22ND ST	7,848	0.2	4,779	0.1			1
2351962-375144	Sheehy, Donald R	100 NARROWS DR	96,868	2.2	4,765	0.1			1
2326738-378928	Brandt, Alfred H	1755 STATE ROUTE 72 N	23,307	0.5	4,700	0.1			1
2339883-375982	Fornha, Robert D	490 CHERRY ST	21,043	0.5	4,675	0.1			1
2348014-375663	GQM New Ventures III LLC	ES SUZY ST	9,990	0.2	4,648	0.1			1
2338585-375450	Shuey, Lois J	614 PINE ST	473,994	10.9	4,612	0.1			1
2331560-384192	Fisher, Barry L	WS GRACE AVE	34,868	0.8	4,364	0.1			1
2346735-372134	Vanasdalan, David W	1100 E LEHMAN ST	12,680	0.3	4,297	0.1			1
2330606-373269	Dice, Steve E	741 N 22ND ST	28,580	0.7	4,290	0.1			1
2330770-373503	Wilmington Savings Fund Society Fsb	2135 W MAPLE ST	61,122	1.4	4,239	0.1			1
2334691-384682	Arnold, Arthur J	1745 KENBROOK RD	56,118	1.3	4,206	0.1			1
2336135-375386	Churches Of Christ In	NS LAUREL ST	20,304	0.5	4,171	0.1			1
2335698-376998	Risser, Mary K	1323 SANDHILL RD	20,834	0.5	4,149	0.1			1
2350840-374093	Snyder, R Gregory	1901 E CUMBERLAND ST	5,809	0.1	4,147	0.1			1
2339880-377036	Capretti, Vincent	1015 WATSON ST	20,571	0.5	4,140	0.1			1
2347400-372083	Stahley, Christopher S	SS E LEHMAN ST	8,038	0.2	4,080	0.1			1
2351994-386627	Allwein, Kathryn N	WS PRESCOTT DR	21,669	0.5	4,085	0.1			1
2338839-375282	Daub, Matthew C	1302 PENNSYLVANIA AVE	21,595	0.5	4,078	0.1			1
2344689-381278	Patches, Susan E	885 LOVERS LN	110,076	2.5	4,040	0.1			1
2341139-378219	Rainbold, Thomas K	872 KIMMERLINGS RD	32,375	0.7	4,023	0.1			1
2342862-378819	Batz, Cameron B	SS KIMMERLINGS RD	140,418	3.2	4,009	0.1			1
2322860-379202	Hollinger, Brenda M	ES N 8TH AVE	510,725	11.7	3,953	0.1			1
2337825-376120	Mull, Gregory A	2417 ELIAS AVE	13,243	0.3	3,944	0.1			1
2339603-378138	Sunset Realty Inc	SS MECHANIC ST	43,509	1.0	3,899	0.1			1
2349354-377432	Hammer, Bernd A	1666 N 7TH ST	6,307	0.1	3,856	0.1			1
2334318-384489	Chi Towers Assc's LLC	SS WEAVERTOWN RD	20,475	0.5	3,740	0.1			1
2332542-382116	Meson, Josue	W OF KENBROOK RD	235,264	5.4	3,715	0.1			1
2322286-374178	Heckard, Angela M	1685 GRACE AVE	76,863	1.8	3,600	0.1			1
2346438-373482	Keener, Jack L	ES SANDRA DR	208,028	4.8	3,587	0.1			1
2337417-375410	Allwein, Bradley T Jr	628 N 11TH AVE	50,606	1.2	3,519	0.1			1
2339451-378097	Pizzoli, Justine L	1235 N 8TH ST	10,482	0.2	3,479	0.1			1
2333687-375357	Woelfling, Lindsey Jo	1663 N 7TH ST	7,365	0.2	3,367	0.1			1
2336731-380682	City Of Lebanon Authority	NS E MAPLE ST	35,331	0.8	3,289	0.1			1
2335725-376782	Darcourt, Mitchell	1620 REAR EDNA ST	8,752	0.2	3,242	0.1			1
2345127-386997	Hellingner, Bruce R	1314 SANDHILL RD	14,298	0.3	3,235	0.1			1
2342712-374518	Baxter, Theodore R	716 WEAVERTOWN RD	9,076	0.2	3,224	0.1			1
2347678-371842	Strobel, Fred W	225 HEFFELFINGER RD	5,525,095	126.8	3,186	0.1			1
2355519-385789	Moody, Harold E	319 E MAPLE ST	5,239	0.1	3,186	0.1			1
2338386-375547	Beehive Properties Llc	ES N 11TH AVE	272,241	6.2	3,169	0.1			1
2347324-380861	Sewfert Properties Inc	1223 E OLD CUMBERLAND ST	4,879	0.1	3,154	0.1			1
2329854-373044	Township Of West Lebanon	175 STRACK DR	191,320	4.4	3,047	0.1			1
2354244-387450	Hibshman, Branden P	630 PINE ST	6,214	0.1	3,017	0.1			1
2340080-376131	Sonnorn, Richard L	WS MOUNT ZION RD	1,329,080	30.5	3,013	0.1			1
		WS N 25TH ST	36,419	0.8	3,007	0.1			1
		WS HALFWAY DR	47,777	1.1	3,007	0.1			1
		WS MILLER ST	12,168	0.3	2,915	0.1			1

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUs FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2341503-381295	Brown, John R	20 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	2,385	0.1	1,248	0.0	1
2344305-371829	Landmark Builders Inc	1010 N 8TH AVE	Vacant Lot with Driveway	114,507	2.6	1,228	0.0	1
2343488-380815	Gierhart, David D	847 KIMMERLINGS RD	Wooded Lot with 3 Small Buildings	448,580	10.3	1,206	0.0	1
2329485-376902	Martin, Paul N	SS CRESTON DR	Vacant Lot with Driveway	12,186	0.3	1,161	0.0	1
2341240-381293	Starr, Christian	42 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,350	0.0	1,117	0.0	1
2354857-382015	Buffermeier, Daniel	750 E KERCHER AVE	Lebanon Valley Racing Pigeon Club Inc.	9,715	0.2	1,114	0.0	1
2341672-380894	Mt Lebanon Campmeeting Assoc	56 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,982	0.0	1,059	0.0	1
2329927-372554	Township Of West Lebanon	2435 UNION CANAL DR	Garage	1,857	0.0	1,048	0.0	1
2335748-378239	Klinger, Ronald C	ES SANDHILL RD	Partial Paved Driveway on Auxiliary Lot	9,259	0.2	1,014	0.0	1
2341361-381347	Seeler, William	12 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,151	0.0	1,012	0.0	1
2341240-381260	Hosreiter, Mildred J	41 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	927	0.0	927	0.0	1
2343563-375287	Kate, Howard J	ES GRANT ST	Miscellaneous Structure	10,008	0.2	917	0.0	1
2324217-381352	Harmon, Daniel C	WS MOUNTVILLE DR	Driveway on Residential Auxiliary Lot	36,300	0.8	873	0.0	1
2339462-379394	Bunderman, Clarence C	847 KOCHENDERFER RD	Outbuilding on Accessory Lot	4,389	0.1	859	0.0	1
2325531-376760	Atkins, William C	SS LONG LN	Farm	50,746	1.2	832	0.0	1
2341240-381157	Mt Lebanon Campmeeting Assoc	56 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,099	0.0	800	0.0	1
2337899-375575	Zidlik, Joseph	NS PINE ST	Vacant Lot	15,095	0.3	787	0.0	1
2324730-383417	Patches, Dean R	43 HORST DR	Farm	652,809	15.0	760	0.0	1
2341298-381332	Bowers, Diane	44 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	988	0.0	744	0.0	1
2343820-387694	Bare, I Hershey	185 HEFFELFINGER RD	Farm	1,599,976	36.7	735	0.0	1
2341220-381383	Richard, Jeffrey M	48 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,425	0.0	716	0.0	1
2338447-376835	Smith, Gregory M	12 HAWK LN	Vacant Lot with Part of Driveway	4,499	0.1	691	0.0	1
2341503-381263	Fairfield, David	21 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,392	0.0	687	0.0	1
2349518-378648	Pitt, Tina Marie	WS NARROWS DR	Vacant Lot with part of a Shed	22,384	0.5	684	0.0	1
2348141-372297	Township Of North Lebanon	1401 E OLD CUMBERLAND ST	Vacant Lot	20,972	0.5	671	0.0	1
2341220-381415	Eckert, Frank	49 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,409	0.0	639	0.0	1
2341390-381347	Barnes, Donald	13 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	707	0.0	629	0.0	1
2335936-385313	Martin, Matthew S	1830 KENBROOK RD	Farm	3,241,883	74.4	601	0.0	1
2341320-381217	Kocher, Charles E	6 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	670	0.0	600	0.0	1
2341431-381347	Mount Lebanon Campmeeting Asso	15 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	766	0.0	599	0.0	1
2341503-381323	Rodriguez, Carlos H	19 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	708	0.0	598	0.0	1
2341331-381326	Lupter, Rebecca	11 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	737	0.0	594	0.0	1
2341240-381234	Johnson, Mike	40 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	739	0.0	578	0.0	1
2341503-381204	Mt Lebanon Campmeeting Assoc	23 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,054	0.0	572	0.0	1
2332896-374054	Hacm Inc	WS SANDHILL RD	Vacant Lot with Boat Dock	12,467,258	286.2	563	0.0	1
2341328-381059	Mt Lebanon Campmeeting Assoc	37 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,128	0.0	542	0.0	1
2321642-379441	Miller, Brenda J	S OF RUSSELL RD	Driveway and Shed on Auxiliary Lot	89,570	2.1	529	0.0	1
2341320-381153	Newslinger, R Kenneth	2 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	786	0.0	522	0.0	1
2323431-376347	Stahley, Christopher S	2504 LONG LN	Farm Field with Driveway	164,696	3.8	519	0.0	1
2341472-381347	Zweitzig, Raymond W	17 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	791	0.0	513	0.0	1
2341320-381201	Cassel, James G Jr	5 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	574	0.0	513	0.0	1
2341320-381233	Walter, James	7 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	588	0.0	512	0.0	1
2341320-381187	Morowchek, Marilyn	4 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	791	0.0	508	0.0	1
2341419-381087	Melly, Ernest A	30 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	942	0.0	503	0.0	1
2341250-381331	Gettle, Robert P	46 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	664	0.0	502	0.0	1
2341380-381013	Fellinski, William W	35 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	2,248	0.1	498	0.0	1
2341503-381154	Mt Lebanon Campmeeting Assoc	25 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	980	0.0	495	0.0	1
2341503-381177	Konski, Andre A Dr	24 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	1,078	0.0	488	0.0	1
2341228-381331	Weitzel, Richard L	46 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	901	0.0	479	0.0	1
2341320-381170	Graham, Thomas S	3 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	663	0.0	455	0.0	1
2341503-381341	Snewmaker, Eddie	18 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	583	0.0	446	0.0	1
2351879-378229	K R & S Realty Ltd	SS WEAVERTOWN RD	Farm Field	1,569,324	36.0	445	0.0	1
2342440-386385	Texas Eastern Transmission Lp	68 HEFFELFINGER RD	Vacant Lot with Driveway	82,907	1.9	438	0.0	1
2341303-381288	Fernsler, John Scott	43 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	545	0.0	438	0.0	1
2331997-374028	Township Of North Lebanon	ES N 20TH ST	Roadway with Sidewalk	7,659	0.2	425	0.0	1
2341320-381133	Huntley, Randy	1 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	813	0.0	421	0.0	1
2341356-381067	Nagle, Joan	32 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	827	0.0	420	0.0	1
2323737-371098	Township Of North Lebanon	S OF JOYCE ST	Partial Gravel Easement for Sanitary Sewer	709	0.0	411	0.0	1
2341331-381306	Star, Richard B	10 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	502	0.0	392	0.0	1
2341408-381347	Jewell, Mary	14 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	572	0.0	384	0.0	1
2341389-381087	Whayland, William Matthew	31 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	880	0.0	368	0.0	1

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2336549-378028	Johnson, Kim D	NS SHOLLY AVE	Gravel/Pool Area on Auxiliary Lot	1,306	0.0	367	0.0	1
2329544-373834	Strubhar, Randy R	WS OLD EBENEZER RD	Vacant Lot with Shed	15,698	0.4	365	0.0	1
2341331-381287	Taylor, Donald	9 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	501	0.0	352	0.0	1
2346751-378589	Seyfert, Thomas C	WS MOUNT ZION RD	Vacant Lot	28,432	0.7	350	0.0	1
2341240-381185	Starr, Richard B	38 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	966	0.0	346	0.0	1
2336611-380800	Kessler, Leonard L	NS RANK DR	Residential Yard	9,176	0.2	329	0.0	1
2341451-381347	Hess, Warren C	16 MOUNT LEBANON DR	Mount Lebanon Camp Meeting Grove	519	0.0	328	0.0	1
2344471-375721	Fulk, Mervin E	WS N 8TH AVE	Vacant Lot with Shed	23,235	0.5	326	0.0	1
2355493-385991	Johnson, Brent E	WS PRESCOTT DR	Vacant Wooded Lot	267,276	6.1	260	0.0	0
2342782-378713	Balz, Cameron B	3801 HILL CHURCH RD	Hill United Church of Christ	147,278	3.4	244	0.0	0
2350385-384833	Wolfe, Michael	215 GRUBB AVE	Farm Field	32,009	0.7	213	0.0	0
2323969-377720	Melly, Joseph S	SS ELIAS AVE	Farm Field	542,732	12.5	190	0.0	0
2329400-384004	Leonard, Roy	ES MONROE AVE	Residential Backyard	390,004	9.0	183	0.0	0
2343157-375277	City Of Lebanon	N OF JOFFRE ST	Vacant Wooded Lot	9,715	0.2	155	0.0	0
2337077-375993	Kercher Associates	SS MECHANIC ST	Vacant Wooded Lot	153,771	3.5	153	0.0	0
2324040-381817	Dresch, Stacey L	WS MOUNTVILLE DR	Vacant Lot	218,966	5.0	138	0.0	0
2324492-374877	Hartman, Harvey D	NS LIGHT ST	Vacant Lot	29,087	0.7	60	0.0	0
2335371-380753	Arnold, Alfred K	1631 GRACE AVE	Tiny Silver - Should be deleted	7,398	0.2	6	0.0	0
2356735-375555	PENNSY SUPPLY INC	700 W LINCOLN AVE	No Impervious Cover	4,934	0.1	3	0.0	0
2326709-383939	PATCHES, MIRIAM R	136 HORST DR	No Impervious Cover	619,060	14.2	0	0.0	0
2322918-370721	BOWMAN, SUE ELLEN	3635 TUNNEL HILL RD	No Impervious Cover	17,683,204	406.0	0	0.0	0
2347856-382307	ORCHARD VIEW FARMLLC	420 E KERCHER AVE	No Impervious Cover	4,650,110	106.8	0	0.0	0
2341491-385503	SNYDER, LINFORD R	2075 N 7TH ST	No Impervious Cover	4,560,590	104.5	0	0.0	0
2334706-374554	HAGM INC	841 JONESTOWN RD	No Impervious Cover	3,838,015	88.1	0	0.0	0
2321349-383476	GREATER LEBANON REFUSE AUTH	ES HEILMANDALE RD	No Impervious Cover	2,915,483	66.9	0	0.0	0
2341106-386745	B & R PONDEROSA	SS HEFFELFINGER RD	No Impervious Cover	1,634,486	37.5	0	0.0	0
2350682-382882	SEYFERT, DENNIS J ETUX	85 GRUBB AVE	No Impervious Cover	1,532,413	35.2	0	0.0	0
2327941-371036	BLUE RIDGE CAPITAL LLC	2750 HANFORD DR	No Impervious Cover	1,373,538	31.5	0	0.0	0
2324422-381763	MARTIN, WILLIS Z	11 A W STRACK DR	No Impervious Cover	1,268,238	29.1	0	0.0	0
2358013-386660	SNADER, JOHN L	SS STATE ROUTE 72 N	No Impervious Cover	1,075,700	24.7	0	0.0	0
2327271-374578	ARNOLD, HENRY J JR	SS LONG LN	No Impervious Cover	1,036,779	23.8	0	0.0	0
2342561-381312	HOOPER, LEON G	697 W LINCOLN AVE	No Impervious Cover	1,021,465	23.4	0	0.0	0
2357511-386138	WEISE, TERRENCE	E OF N 7TH ST	No Impervious Cover	709,278	16.3	0	0.0	0
2355821-388552	HILL, MARIE L	SS STRACK DR	No Impervious Cover	599,132	13.8	0	0.0	0
2321289-379430	BROWN, DARRYL M	45 OAK TREE LN	No Impervious Cover	536,315	12.3	0	0.0	0
2354873-375661	HEISEY, GWENDA L	2402 E CUMBERLAND ST	No Impervious Cover	535,042	12.3	0	0.0	0
2353304-381896	MARTIN, KENNETH H	600 N 22ND ST	No Impervious Cover	508,797	11.7	0	0.0	0
2333346-382895	LIVING WORD MINISTRIES	NS E KERCHER AVE	No Impervious Cover	497,378	11.4	0	0.0	0
2353670-384270	MEELY, JOSEPH S	ES GRACE AVE	No Impervious Cover	489,841	11.2	0	0.0	0
2319891-373566	HOFFMAN, JAMES R	ES PRESCOTT DR	No Impervious Cover	483,875	11.1	0	0.0	0
2341930-374188	CITY OF LEBANON	NS LONG LN	No Impervious Cover	460,297	10.6	0	0.0	0
2346299-372888	LEBANON VILLAGE LIMITED PARTNERSHIP	755 N HANOVER ST	No Impervious Cover	402,780	9.2	0	0.0	0
2355714-376699	HFP ASSOCIATES LP	201 LEBANON VLG	No Impervious Cover	402,505	9.2	0	0.0	0
2321204-381127	GREATER LEBANON REFUSE AUTH	2550 E CUMBERLAND ST	No Impervious Cover	372,770	8.6	0	0.0	0
2355126-376990	845LBT LLC	WS KENBROOK RD	No Impervious Cover	361,146	8.3	0	0.0	0
2334800-385100	ARNOLD, ARTHUR J	WS KENBROOK RD	No Impervious Cover	341,379	7.8	0	0.0	0
2354901-376773	WHITE, JOSEPH C	2494 E CUMBERLAND ST	No Impervious Cover	341,252	7.8	0	0.0	0
2349349-373430	PRAYERS HOSPITALITY LLC	2555 E CUMBERLAND ST	No Impervious Cover	328,262	7.5	0	0.0	0
2333940-384584	CTL TOWERS ASSETS I INC	1601 E CUMBERLAND ST	No Impervious Cover	327,125	7.5	0	0.0	0
2354313-386958	WENRICH, WILLIAM P	W OF KENBROOK RD	No Impervious Cover	294,030	6.8	0	0.0	0
2357129-384930	ROOF, STEVEN P	ES HALF-WAY DR	No Impervious Cover	283,868	6.5	0	0.0	0
2321106-382636	GREATER LEBANON REFUSE AUTH	E OF HEILMANDALE RD	No Impervious Cover	271,331	6.2	0	0.0	0
2352801-387375	LAPP, ELAM RAY	32 FLINCHBAUGH LN	No Impervious Cover	266,566	6.1	0	0.0	0
				266,386	6.1	0	0.0	0
				261,931	6.0	0	0.0	0
				258,763	5.9	0	0.0	0

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUS FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPIN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use	Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
				Sq.Ft.	Acres	Sq.Ft.	Acres	
2352518-387214	HABECKER, STANLEY D	18 FLINCHBAUGH LN	No Impervious Cover	246,433	5.7	0	0.0	0
2352702-387683	LAPP, ELAM RAY	38 FLINCHBAUGH LN	No Impervious Cover	244,568	5.6	0	0.0	0
2328380-371345	COUNTY OF LEBANON	NS HANFORD DR	No Impervious Cover	235,743	5.4	0	0.0	0
2352660-387294	FLINCHBAUGH, KEVIN L	26 FLINCHBAUGH LN	No Impervious Cover	227,938	5.2	0	0.0	0
2337964-380622	KOCHENDERFERS EUB CHURCH TRUSTEES	NS KOCHENDERFER RD	No Impervious Cover	217,199	5.0	0	0.0	0
2324588-370995	READING MATERIALS INC	S OF TUNNEL HILL RD	No Impervious Cover	212,480	4.9	0	0.0	0
2348898-384217	SEYFERT, DENNIS J	E OF MOUNT ZION RD	No Impervious Cover	209,590	4.8	0	0.0	0
2324837-371691	READING MATERIALS INC	3195 WINDSOR DR	No Impervious Cover	203,566	4.7	0	0.0	0
2353504-387437	LAPP, ELAM RAY	W OF HALFWAY DR	No Impervious Cover	170,325	3.9	0	0.0	0
2343454-385981	WEAVER, JOHN MARK	SS HEFFELFINGER RD	No Impervious Cover	164,351	3.8	0	0.0	0
2355451-376532	HFP ASSOCIATES LP	SS E CUMBERLAND ST	No Impervious Cover	149,634	3.4	0	0.0	0
2337091-374987	DOVE, EUGENIA H	NS REINOHL ST	No Impervious Cover	140,581	3.2	0	0.0	0
2346648-380161	LANDMARK BUILDERS INC	925 BRIAR ROSE AVE	No Impervious Cover	135,050	3.1	0	0.0	0
2323660-381798	ZOHNER, SANDRA J	W5 MOUNTVILLE RD	No Impervious Cover	130,017	3.0	0	0.0	0
2350067-382915	GEHMAN, ELTON J	105 GRUBB AVE	No Impervious Cover	124,260	2.9	0	0.0	0
2338911-380607	KERCHER, EDWIN C	1111 KOCHENDERFER RD	No Impervious Cover	123,210	2.8	0	0.0	0
2336424-377927	WOODLEA DEVELOPMENT INC	ES SHOLLY AVE	No Impervious Cover	108,231	2.5	0	0.0	0
2347876-376133	GQM NEW VENTURES, ILL LLC	1630 WEAVERTOWN RD	No Impervious Cover	90,757	2.1	0	0.0	0
2338653-383905	ARNOLD, ANDREW S	WS KENBROOK RD	No Impervious Cover	86,802	2.0	0	0.0	0
2352269-386971	WHITE, DONNA A	ES PRESCOTT DR	No Impervious Cover	80,550	1.8	0	0.0	0
2336844-380739	KERCHER, EDWIN C	WS NARROWS DR	No Impervious Cover	76,986	1.8	0	0.0	0
2321636-371138	LESSHER, ADAM M	NS RANK DR	No Impervious Cover	75,443	1.7	0	0.0	0
2354690-385882	GARRISON, WILLIAM N	NS HILL CHURCH RD	No Impervious Cover	73,477	1.7	0	0.0	0
2355351-384793	ARENDAISH, KATIE MARIE	ES WATER ST	No Impervious Cover	67,156	1.5	0	0.0	0
2343695-374939	CARPENTER, ROXANNE S	768 HALFWAY DR	No Impervious Cover	60,630	1.4	0	0.0	0
2327883-380067	CEMETERY ASSOCIATION OF	WS PRESCOTT DR	No Impervious Cover	52,830	1.2	0	0.0	0
2345183-378981	MC GEE, BARRY M	SS E MAPLE ST	No Impervious Cover	46,162	1.1	0	0.0	0
2324136-382610	HIBSHMAN, KIRK R	117 BUCK RUN	No Impervious Cover	45,727	1.0	0	0.0	0
2350349-376971	HORST, HOWARD M	SS RICHARD DR	No Impervious Cover	44,560	1.0	0	0.0	0
2329251-374945	HORNING, TOMOMI M	W OF NARROWS DR	No Impervious Cover	43,179	1.0	0	0.0	0
2346284-373313	POWDER MILL CORP	ES STATE ROUTE 72 N	No Impervious Cover	41,470	0.9	0	0.0	0
2335726-378445	KEENER, JACK L	810 N 11TH AVE	No Impervious Cover	38,966	0.9	0	0.0	0
2337838-375668	BROOKE LP	1512 BETA AVE	No Impervious Cover	36,341	0.8	0	0.0	0
2347024-381678	SEYFERT ORCHARDS INC	NS POPLAR ST	No Impervious Cover	35,815	0.8	0	0.0	0
2343089-379564	BATZ, CAMERON B	ES MOUNT ZION RD	No Impervious Cover	32,829	0.8	0	0.0	0
2345794-381147	JONESTOWN BANK & TRUST CO	SS KIMMERLINGS RD	No Impervious Cover	31,386	0.7	0	0.0	0
2353529-385764	BURKE, RANDY E	S OF KIMMERLINGS RD	No Impervious Cover	30,458	0.7	0	0.0	0
2335421-379618	MARKS, GARY L	710 PRESCOTT DR	No Impervious Cover	30,394	0.7	0	0.0	0
2335327-378362	WEAVER, WALLACE T	WS SANDHILL RD	No Impervious Cover	29,910	0.7	0	0.0	0
2341832-379487	HESS, THOMAS D	ES WEAVER LN	No Impervious Cover	27,951	0.6	0	0.0	0
2339664-375087	BARRY, JOHN D	WS MARCON DR	No Impervious Cover	27,834	0.6	0	0.0	0
2329122-383899	MARTIN, ZACHARY J	WS MILLER ST	No Impervious Cover	26,581	0.6	0	0.0	0
2355262-383323	HIRSEISEN, DONALD R	912 MOUNT ZION RD	No Impervious Cover	24,625	0.6	0	0.0	0
2335315-379606	LAUCKS, MITCHELL A	ES S MCKINLEY AVE	No Impervious Cover	24,394	0.6	0	0.0	0
2347130-379820	BURNS, RYAN R	3014 JOYCE ST	No Impervious Cover	24,302	0.6	0	0.0	0
2351299-387142	HAWKINS, DALE E	ES COLONIAL CIR	No Impervious Cover	24,249	0.6	0	0.0	0
2329824-383709	SCHAEFFER, LYNETTE J	NS KIMMERLINGS RD	No Impervious Cover	24,050	0.6	0	0.0	0
235148-383821	SMELTZER, NANCY JEAN	NS HESS DR	No Impervious Cover	23,995	0.6	0	0.0	0
2344734-386151	TEMPLIN, JOSEPH A	ES GRUBB AVE	No Impervious Cover	23,874	0.5	0	0.0	0
2342406-378149	SOLIDAY, M PATRICIA	1729 LINCOLN ST	No Impervious Cover	23,580	0.5	0	0.0	0
2343948-386194	HORN, CONRAD P JR	WS TROUTMAN DR	No Impervious Cover	23,183	0.5	0	0.0	0
2344086-377119	KALE, WILLIAM E	SS N 23RD ST	No Impervious Cover	22,971	0.5	0	0.0	0
2343069-380154	KLASSEN, HENRY	WS HEFFELFINGER RD	No Impervious Cover	21,331	0.5	0	0.0	0
2334639-381949	KERCHER, EDWIN C	SS HEFFELFINGER RD	No Impervious Cover	21,105	0.5	0	0.0	0
		WS JOSEPHINE ANN DR	No Impervious Cover	20,786	0.5	0	0.0	0
		SS HEFFELFINGER RD	No Impervious Cover	20,126	0.5	0	0.0	0
		W OF N 8TH AVE	No Impervious Cover	20,000	0.5	0	0.0	0
		ES PATMAR DR	No Impervious Cover	19,992	0.5	0	0.0	0
		ES GRACE AVE	No Impervious Cover					

NORTH LEBANON TOWNSHIP SCHEDULE OF IMPERVIOUS AREAS & ERUs FOR NON-SINGLE FAMILY RESIDENTIAL PROPERTIES

Updated September 18, 2017

GPN	Property Owner	SITUS ADDRESS	Property Occupant / Land Use		Parcel Area		Impervious Area		ERUs @ 3755 sf per ERU
			Sq.Ft.	Acres	Sq.Ft.	Acres	Sq.Ft.	Acres	
2349250-377258	G P HARRIS CONSTRUCTION INC	SS WEAVERTOWN RD	No Impervious Cover	19,892	0.5	0	0.0	0	0
2336233-376755	BOWMAN, HARRY G	232 GARY AVE	No Impervious Cover	19,631	0.5	0	0.0	0	0
2344374-376926	OAKVIEW DEVELOPERS	917 N 8TH AVE	No Impervious Cover	19,218	0.4	0	0.0	0	0
2347177-371927	DUNKLEBERGER, PAMELA J	N OF E CUMBERLAND ST	No Impervious Cover	18,501	0.4	0	0.0	0	0
2339023-376514	KERKESLAGER, RICHARD J	SS PLEASANT VIEW DR	No Impervious Cover	18,473	0.4	0	0.0	0	0
2337450-375579	SPEECE, SANDRA	1260 N 8TH ST	No Impervious Cover	18,177	0.4	0	0.0	0	0
2344068-375465	MORRISSEY, THOMAS G	SS E MAPLE ST	No Impervious Cover	18,120	0.4	0	0.0	0	0
2342730-373244	BOLTZ, PAUL M	666 N 3RD AVE	No Impervious Cover	16,356	0.4	0	0.0	0	0
2334526-381908	KERCHEK, EDWIN C	SS GRACE AVE	No Impervious Cover	16,312	0.4	0	0.0	0	0
2332433-383954	HOWER, SHIRLEY A	WS QUARRY RD	No Impervious Cover	16,018	0.4	0	0.0	0	0
2329588-372694	TOWNSHIP OF WEST LEBANON	WS GREINA ST	No Impervious Cover	15,916	0.4	0	0.0	0	0
2340055-379063	EBERLY-LEHMAN, DONNA N	NS KIMMERLINGS RD	No Impervious Cover	15,379	0.4	0	0.0	0	0
2337951-379912	METROPOLITAN EDISON CO	NS KOCHENDERFER RD	No Impervious Cover	14,863	0.3	0	0.0	0	0
2329964-384078	SHIRK, HARRY A JR	SS WASHINGTON AVE	No Impervious Cover	14,559	0.3	0	0.0	0	0
2342500-374505	BOOKS, GEORGE F JR	ES N 3RD AVE	No Impervious Cover	14,495	0.3	0	0.0	0	0
2330785-372680	MALESZEWSKI, ROMAN	WS N 22ND ST	No Impervious Cover	13,259	0.3	0	0.0	0	0
2340349-376117	CHERESINI, MICHAEL	S OF MILLER ST	No Impervious Cover	12,802	0.3	0	0.0	0	0
2336890-375635	MINNICH, JAMES A	ES N 9TH ST	No Impervious Cover	12,787	0.3	0	0.0	0	0
2339590-374938	BROWNSWEIGER, ARTHUR S JR ESTATE	1108 RACE ST	No Impervious Cover	12,569	0.3	0	0.0	0	0
2336607-378247	FRENCH, KARL R JR	NS JAY ST	No Impervious Cover	12,211	0.3	0	0.0	0	0
2339752-378833	SCHULZE, CRAIG D	801 WILL OW LN	No Impervious Cover	12,112	0.3	0	0.0	0	0
2344028-375854	BARTAL, JAMES R	NS E MAPLE ST	No Impervious Cover	12,053	0.3	0	0.0	0	0
2336534-379186	HOFFMAN, BONNIE LEE	1538 BETA AVE	No Impervious Cover	11,925	0.3	0	0.0	0	0
2335398-376353	SAMMER, JOHN W	W OF SANDHILL RD	No Impervious Cover	11,721	0.3	0	0.0	0	0
2346241-373478	KEENER, JACK L	631 N 11TH AVE	No Impervious Cover	11,595	0.3	0	0.0	0	0
2346262-373379	KEENER, JACK L	629 N 11TH AVE	No Impervious Cover	11,161	0.3	0	0.0	0	0
2342895-374195	SNOOK, ARDEN A SR	740 N 3RD AVE	No Impervious Cover	10,456	0.2	0	0.0	0	0
2330047-372802	HOFFMAN, WILLIAM P	ES N 25TH ST	No Impervious Cover	10,275	0.2	0	0.0	0	0
2329342-383939	PUSHNIK TRUST	ES MONROE AVE	No Impervious Cover	9,805	0.2	0	0.0	0	0
2345589-373091	DOYLE, JAMES J JR	WS N 9TH AVE	No Impervious Cover	9,411	0.2	0	0.0	0	0
2345424-379499			Vacant Lot	9,170	0.2	0	0.0	0	0
2330202-373058	TOWNSHIP OF WEST LEBANON	824 N 24TH ST	No Impervious Cover	9,028	0.2	0	0.0	0	0
2342814-373070	BAUMAN, ANTHONY	642 N 3RD AVE	No Impervious Cover	8,405	0.2	0	0.0	0	0
2329852-375766	STEGMAN, KURT	SS JAY ST	No Impervious Cover	8,102	0.2	0	0.0	0	0
2329403-383809	STEWART, THOMAS A	WS GROV AVE	No Impervious Cover	8,024	0.2	0	0.0	0	0
2330017-372888	FLOWERS, ERIC W	ES N 25TH ST	No Impervious Cover	7,800	0.2	0	0.0	0	0
2346501-372559	POWDER MILL CORP	SS E CUMBERLAND ST	No Impervious Cover	7,680	0.2	0	0.0	0	0
2337448-375356	GAMBLER, JOHN D	ES N 8TH ST	No Impervious Cover	7,085	0.2	0	0.0	0	0
2331701-373930	PRENTICE, JOE B	SS HILL ST	No Impervious Cover	6,911	0.2	0	0.0	0	0
2343654-375216	WOELFLING, LINDSAY JO	NS E MAPLE ST	No Impervious Cover	6,707	0.2	0	0.0	0	0
2338827-376144	LAHR, MICHAEL R	N CHERRY ST	No Impervious Cover	6,368	0.1	0	0.0	0	0
2339592-375013	HEILMAN, RICHARD	ES RACE ST	No Impervious Cover	6,335	0.1	0	0.0	0	0
2330340-372500	TEMLIN, JOHN E	ES N 24TH ST	No Impervious Cover	5,786	0.1	0	0.0	0	0
2329580-372775	TOWNSHIP OF WEST LEBANON	WS GREINA ST	No Impervious Cover	5,415	0.1	0	0.0	0	0
2335485-375139	ETZWEILER, TERRY LEE	1109 WOODBINE ST	No Impervious Cover	5,241	0.1	0	0.0	0	0
2329209-383818	PUSHNIK TRUST	ES MONROE AVE	No Impervious Cover	4,086	0.1	0	0.0	0	0
2329094-383978	HEILMAN, RICHARD	ES S MCKINLEY AVE	No Impervious Cover	4,063	0.1	0	0.0	0	0
2329192-383950	FAKE, KENNETH R	WS MONROE AVE	No Impervious Cover	4,062	0.1	0	0.0	0	0
2329685-384096	KERCHEK, MATTHEW A	WS GARFIELD AVE	No Impervious Cover	4,030	0.1	0	0.0	0	0
2329893-383771	SCHAEFFER, LYNETTE J	WS LINCOLN ST	No Impervious Cover	4,028	0.1	0	0.0	0	0
2329311-383856	PUSHNIK TRUST	ES MONROE AVE	No Impervious Cover	4,026	0.1	0	0.0	0	0
2329798-383798	SCHAEFFER, LYNETTE J	ES GARFIELD AVE	No Impervious Cover	4,021	0.1	0	0.0	0	0
2329322-383994	GUNDRUM, GEORGE C	ES MONROE AVE	No Impervious Cover	4,000	0.1	0	0.0	0	0
2342685-374894	WEBSTER, MICHAEL D	ES HAIG ST	No Impervious Cover	3,055	0.1	0	0.0	0	0
2329995-372535	THOMAS, WILLIAM H JR	SS BEAUMONT ST	No Impervious Cover	2,765	0.1	0	0.0	0	0
2349924-373396	LEBANON CHEMICAL CORP	SS E CUMBERLAND ST	No Impervious Cover	2,648	0.1	0	0.0	0	0
2329248-378173	TOWNSHIP OF NORTH LEBANON	WS MEADOWFIELD DR	No Impervious Cover	2,198	0.1	0	0.0	0	0
2326693-373037	TOWNSHIP OF NORTH LEBANON	N OF TUNNEL HILL RD	No Impervious Cover	1,756	0.0	0	0.0	0	0
	Totals			945	0.0	0	0.0	0	0
				416,403,741	9,559	24,486,957	562	6,607	

Appendix D
Credit Manual

North Lebanon Township
Stormwater Pollution Control Fee
Credit Manual

Introduction

Credits for qualifying stormwater Best Management Practices (BMPs) are a vital component of every stormwater fee structure. Act 62 of 2016 specifically states that “the Township shall consider and provide appropriate exemptions or credits for properties which have installed and are maintaining storm water facilities that meet best management practices and are approved or inspected by the Township.” Granting credits for the installation and maintenance of BMPs gives all property owners the incentive to install and maintain such BMPs on their own or permit the Township to install BMPs on the property. These BMPs reduce pollutants and improve the health of local waterways. The construction of many new privately-owned BMPs will be necessary in order to meet the stringent requirements for Pollutant Reduction Plans. Therefore, it is in the Township’s best interest to incentivize the construction of privately-owned BMPs by granting credits in the stormwater pollution control fee program.

Owners of existing BMPs are also eligible for credits if the BMPs continue to be maintained. Owners of existing BMPs are permitted to apply for credits under this policy in the same manner as landowners who are planning future BMPs.

Disclaimer

By submitting a Stormwater Pollution Control Fee Credit Application, the property owner acknowledges and agrees that he/she and his/her heirs, grantees, successors, and assigns shall be solely responsible and liable for the operation and maintenance of any and all Best Management Practices (“BMPs”) constructed, installed, or employed by the Property Owner. North Lebanon Township shall not be responsible or liable for the operation and maintenance of any BMP, or any damages arising therefrom. The property owner and his/her heirs, grantees, successors, and assigns shall indemnify and hold harmless North Lebanon Township, its officers, agents, and employees from any and all claims, actions, causes of action, judgments, damages, losses, costs, and expenses (including attorneys’ fees) arising out of or resulting from the construction,

installation, employment, maintenance, or operation of the BMP(s). The property owner will be required to record an Operation and Maintenance agreement in accordance with section 408 of the Lebanon County Stormwater Management Ordinance before credits are issued for any and all BMPs on the subject property. The Operation and Maintenance Agreement is provided in Appendix E of this report.

Definitions:

Best Management Practice (BMP): Activities, facilities, measures, or procedures used to manage the volume, rate and water quality of stormwater runoff from a developed parcel. For the purposes of this credit policy, BMPs eligible for credits are those structural BMPs listed in the Department of Environmental Protection’s “BMP Effectiveness Values” document (publication number 3800-PM-BCW0100m, dated 5/2016). Definitions for individual BMPs shall be as stated in the “BMP Description” column of the “BMP Effectiveness Values” document.

Credit: A Stormwater Management Program Fee reduction that a property owner receives for implementing and complying with the practices and policies contained in this Manual.

Design Standards: Specifications, requirements, construction sequences, and other standards that must be met in order for an implemented BMP to receive credit. Design standards for implemented BMPs shall be in accordance with the latest edition of the Pennsylvania Stormwater BMP Manual.

Developed Parcel: A parcel altered from a natural state that contains impervious surface equal to or greater than 300 square feet.

Equivalent Residential Unit (ERU): The measure of impervious ground cover for a typical single-family detached residential property used in assessing the fees for each parcel of property, and which has been determined to be 3,755 square feet.

Impervious Surface: The definition of an impervious surface shall be that which is included in Article II of the Lebanon County Stormwater Management Ordinance: “a surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, streets, sidewalks and vehicle and pedestrian areas that are gravel and crushed stone.”

Non-Single Family Residential (non-SFR) parcel: Any developed parcel not fitting the definition of single-family residential parcel, or not having a land use code of 101, 107, or 108 per data from the Lebanon County Assessment Office. Non-SFR parcels include, but are not limited to, multi-family houses, townhouses, apartments, boarding houses, hotels and motels, churches, industrial properties, commercial properties, manufactured home or mobile home parks, commercial and office buildings, storage areas, parking lots and other impervious areas, parks, recreation properties, public and private schools and universities, hospitals and convalescent centers, office buildings, government properties, and mixed-use properties.

Owner: Any person, firm, corporation, individual, partnership, trust, company, association, government agency, society or group owning real property in North Lebanon Township. Also referred to as “property owner” or “land owner.”

Single Family Residential (SFR) parcel: Developed parcel containing one (1) structure which contains one (1) or more rooms with a bathroom and kitchen facilities designed for occupancy by one (1) family and shall include single-family houses, single-family units, manufactured homes, and mobile homes located on individual lots or parcels of lands. A SFR parcel must have a land use code of 101, 107, or 108 per Lebanon County Assessment Office data.

Stormwater: Water from a rain or snowfall event that flows across the land and eventually into rivers, creeks, lakes, ditches and canals resulting in debris, sediment, pollutants, bacteria and nutrients from sidewalks, streets, parking lots, and other impervious surfaces washing into gutters, through storm drains, and eventually flowing into creeks and rivers.

Stormwater Pollution Control Fee: A fee to be collected from each developed land parcel in North Lebanon Township and used to defray the cost of the Township's stormwater management program.

Application Procedure

Before applying for a credit, the account associated with the subject property must be current. The Stormwater Pollution Control Fee Credit Application Form included in this credit manual must be submitted along with all required information and attachments to North Lebanon Township in hard copy. The Township will review the application to determine if it is complete within thirty (30) days of receipt and will notify the applicant if the application is deficient. The Township will review a complete application within thirty (30) days of receipt during which time action will be taken on the application by the Board of Supervisors. The decision to approve or deny the application will be transmitted to the applicant in writing following the meeting where the decision took place. If the application is approved, the property owner will receive the credit beginning with the next quarterly billing cycle.

Design Standards

All credited BMPs shall comply with the design standards presented for that BMP in the Pennsylvania Stormwater Best Management Practices Manual and in the Lebanon County Stormwater Management Ordinance. All credited BMPs must, at a minimum, be able to treat the post-development increase in the volume of stormwater directed to the BMP during the 2-year, 24-hour storm as calculated using the Soil Cover Complex Method and the specifications of section 311 of the Lebanon County Stormwater Management Ordinance.

Best Management Practice Classifications

Best Management Practices (BMPs) are divided into two classifications, or tiers, in order to assess the BMP's pollution reduction capabilities. Tier I BMPs are those which provide minimal pollutant reductions and thus minimal benefits to the health of local streams. Two BMPs fall into this category: dry detention basins and filter strips for stormwater treatment. While only two BMPs are in this category, the overwhelming majority of BMPs in the ground at the present time

are dry detention basins that were constructed before 2003, when NPDES regulations for new development began to increase.

Tier II BMPs are those which provide greater pollutant reductions and thus greater benefits to local stream health. These BMPs are generally more complex than simple dry detention basins. With a few exceptions, the remainder of the BMPs listed in the “BMP Effectiveness Values” Document are Tier II BMPs. A full list of the BMP types eligible for Tier II credits is as follows:

- Wet Ponds and Wetlands
- Dry Extended Detention Basins
- Infiltration Practices with Sand and Vegetation
- Filtering Practices (Constructed Filters)
- Filter Strips for Runoff Reduction
- Bioretention/Rain Gardens
- Vegetated Open Channels
- Bioswales
- Pervious Pavement
- Stream Restorations
- Riparian Forest Buffers

Single-Family Residential Credit Policy

Properties designated as single-family residential (SFR) are eligible for credits for the implementation, operation, and maintenance of Tier I and Tier II BMPs.

- SFR properties may receive a 50% credit for the maintenance of an existing Tier I BMP that treats runoff from 75% of the property’s impervious area OR off-site impervious areas of more than 10,000 square feet.
- SFR properties may receive a 100% credit for the maintenance of an existing Tier II BMP that treats runoff from 75% of the property’s impervious area or off-site impervious

areas of more than 10,000 square feet OR the implementation of a new Tier II BMP that treats 75% or more of the property's impervious area.

The off-site considerations described above exist to cover BMP(s) located on one property that receive drainage from a larger development area. For example, if a landowner in a 10-lot residential development has a detention basin on his or her property that treats runoff from all 10 houses, the landowner with the detention basin would be eligible for a credit. The other nine homeowners in the development would not be eligible to receive a credit for the detention basin. The reasoning is simple: the owner of the lot on which the detention basin is located is the one responsible for the operation and maintenance of the BMP. The other nine landowners cannot execute an O&M agreement for the BMP and thus cannot ensure that the BMP functions correctly. The other nine landowners would be eligible to implement other low-cost BMPs on their properties in order to receive a credit.

In order to be eligible for a credit, BMPs located on a SFR property must meet all other criteria of this credit policy. SFR parcels which are granted a 50% credit will be charged for 0.5 ERU and parcels which are granted a 100% credit will not be charged under the stormwater pollution control fee program.

Non-Single Family Residential Credit Policy

The credit policy for non-single family residential (non-SFR) parcels is more complex because of the large impervious areas typically constructed on these parcels. Instead of granting a blanket credit to the entire parcel for the implementation of a BMP, the credit given for a non-SFR parcel is based on the actual on-parcel impervious area treated by the BMP. The amount of credit earned (in terms of a percentage) is calculated using the following equation for non-SFR parcels:

$$(\text{Credit earned \%}) = (\text{Percent of parcel impervious area treated by BMP}) * (\text{BMP credit value})$$

The following notes apply to the above equation:

- BMP credit values for non-SFR parcels are 25% for Tier I BMPs and 50% for Tier II BMPs.

- Multiple BMPs may exist on the non-SFR parcel. In cases where multiple BMPs exist, a summation of the total credit earned may be computed by adding the individual credits earned by each BMP. The applicant must be careful to adjust the BMP credit value in cases where an impervious area is treated by more than one BMP, and must also be careful not to count the same impervious area in multiple individual BMP calculations.
- The maximum credit a non-SFR property can receive is 50%.

For example, a commercial establishment has a rain garden that receives drainage from 80% of the property's impervious area. The rain garden meets all the requirements of the PA Stormwater BMP manual, the Lebanon County Stormwater Management Ordinance, and DEP's "BMP Effectiveness Values" document. Thus the rain garden is considered a Tier II BMP and is eligible for a 50% BMP credit value. The calculation for the credit earned would be as follows:

$$\text{Credit earned} = 80\% \text{ of impervious area treated} * 50\% \text{ BMP credit value} = 40\%$$

In order to be eligible for a credit, BMPs located on a non-SFR property must meet all other criteria of this credit policy. The credit earned will be applied to the base number of ERUs charged to the non-SFR parcel and the new ERU count would be calculated according to the following equation:

$$(\text{ERUs charged with credit applied}) = (\text{Base ERUs charged}) * [1 - (\text{Credit earned } \%)]$$

The number of ERUs charged with the credit applied will be rounded to the nearest whole ERU. For example, if the non-SFR property mentioned above was charged for 18 base ERUs and received a 40% credit, the number of ERUs charged with the credit applied would be $18 * [1 - 40\%] = 10.8$ or 11 ERUs.

Special Note on Stream Restorations

Stream restorations are valuable BMPs that significantly reduce pollutants generated by the accelerated erosion of stream banks. However, there is the potential to do more harm than good when undertaking a stream bank restoration project, especially if the stream reach in question

does not actually require restoration. Additionally, restoring a small reach or restoring only one side of the stream is not as effective as restoring long reaches (several hundred feet) of both sides of the stream. Many property owners only own a small reach of one side of the stream and therefore are not in a position to complete a successful stream restoration on their own. For these reasons, property owners who wish to pursue streambank restorations are required to have a pre-application meeting with the Township to determine if the proposed streambank restoration project is eligible for a credit under this credit policy. The Board of Supervisors reserves the right to deny credits for any and all streambank restoration projects that were not granted prior approval by the Township.

Operation and Maintenance

All BMPs that receive credits in accordance with this credit policy must be operated and maintained in order to continue producing the expected pollutant reductions and to continue receiving credit under the policy. An Operation and Maintenance agreement consistent with that which is included in Appendix C of the Lebanon County Stormwater Management Ordinance is required to be recorded in the Lebanon County Recorder of Deeds office before credit is approved under this policy.

All BMP facilities in North Lebanon Township are subject to inspections at the schedule proscribed in section 502 of the Lebanon County Stormwater Management Ordinance. If it is found during an inspection that the BMP is not being operated and maintained in accordance with the recorded agreement, the credit granted under this policy shall immediately be voided and the Township will request that the Lebanon County Planning Department commence with enforcement actions per section 702 of the Lebanon County Stormwater Management Ordinance.

Annual Credit Cap

North Lebanon Township has instituted an annual credit cap of \$65,000. Credits will be distributed on a first-come, first-served basis until the credit cap is reached. The Board of Supervisors may consider expanding the credit cap in future years if the demand for credits warrants an expansion. Credits do not expire unless the non-maintenance of a BMP warrants a voiding of the credit. There is no need for property owners to re-apply for a credit each year.

North Lebanon Township
Stormwater Pollution Control Fee
Credit Application Form

Property Owner Name: _____

Account Number: _____

Daytime Phone Number: _____

Email Address: _____

Mailing Address: _____

Address of the property which is the subject of this application: _____

- Property Classification: Single-Family Residential (SFR)
 Non-Single Family Residential (Non-SFR)

BMP Classification (check all that apply):

BMP descriptions may be found in the Department of Environmental Protection's "BMP Effectiveness Values" Document, publication number 3800-PM-BCW0100m. This document may be accessed at [http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-112621/3800-PM-BCW0100m%20BMP%20Effectiveness%20\(Final\).pdf](http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-112621/3800-PM-BCW0100m%20BMP%20Effectiveness%20(Final).pdf)

- Tier I BMPs: Dry Detention Basin
 Filter Strip for Stormwater Treatment
- Tier II BMPs: Wet Pond/Wetland
 Dry Extended Detention Basin
 Infiltration Practice with Sand and Vegetation
 Filtering Practice (Constructed Filters)
 Filter Strip for Runoff Reduction
 Bioretention Basin/Rain Garden
 Vegetated Open Channel
 Bioswale
 Pervious Pavement
 Stream Restoration
 Riparian Forest Buffer

Description of the size, location, and condition of the BMP(s): _____

Approximate Date of Installation: _____

Please check the box next to each of the following pieces of supporting documentation that are attached to this application. Including as many of these items as possible will expedite the review of the credit application.

- Design documents or engineering analyses of the BMP(s)
- As-built plans or construction drawings
- Calculations of the on-site impervious areas treated by each BMP (required for non-SFR parcels)
- Applicant's calculation of credit to be received
- Operation and Maintenance Plan
- Signed Operation and Maintenance Agreement

Appendix E
Operation and Maintenance Agreement

**Lebanon County - Stormwater Management
Best Management Practices (BMP)
Operation and Maintenance (O&M) Agreement**

THIS AGREEMENT, made and entered into this _____ day of _____, 20___, by and between [name of owner/equitable owner], (hereinafter the "Landowner"), and the subject municipality, Lebanon County; Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Lebanon County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the Subdivision/Land Development/Stormwater Management (SWM) Site Plan (hereinafter "Plan") for [name of owner/equitable owner] which is expressly made a part hereof, as approved or to be approved by Lebanon County, provides for management of stormwater within the confines of the Property; and

WHEREAS, the SWM BMP Operation and Maintenance Plan (hereinafter referred to as the "O&M Plan") approved by the Municipality for the property identified herein, which is attached hereto as Exhibit A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality and the Landowner, his successors and assigns agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM Best Management Practices (BMPs) be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, that stormwater management facilities as shown on the Plan be constructed and adequately maintained by the Landowner, his successors and assigns; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Lebanon County Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The stormwater management BMPs shall be constructed by the Landowner, his successors and assigns, in accordance with the terms, conditions and specifications identified in the subdivision/land development/SWM Site Plan.

2. The Landowner, his successors and assigns, shall operate and maintain the stormwater management BMPs as shown on the subdivision/land development/SWM Site Plan in good working condition in accordance with the specific operation and maintenance requirements noted in the approved O&M Plan.
3. The Landowner, his successors and assigns, hereby grants permission to the Municipality, Lebanon County and the Lebanon County Engineer, his authorized agents and employees, upon presentation of proper identification, to enter upon the Property at reasonable times, and to inspect the SWM BMPs whenever deemed necessary. Whenever possible, the Municipality, Lebanon County or the Lebanon County Engineer shall notify the Landowner prior to entering the Property. The purpose of the inspection is to assure safe and proper functioning of the SWM BMPs. The inspection shall cover the entire facilities, pipes, berms, outlet structures, pond areas, access roads, etc. When inspections are conducted, the Municipality, Lebanon County and/or the Lebanon County Engineer shall give the Landowner, his successors and assigns, copies of the inspection report with findings and evaluations. At a minimum, this agreement grants the Municipality, Lebanon County and/or the Lebanon County Engineer the right to perform inspections in accordance with the following schedule:
 - Annually for the first 5 years after the construction of the stormwater facilities,
 - Once every 3 years thereafter, or
 - During or immediately upon the cessation of a 10 year or greater precipitation event.
4. All reasonable costs for said inspections shall be borne by the Landowner and payable to the inspecting agency.
5. The owner shall convey to the Municipality easements and/or rights-of-way to assure access for periodic inspections by the Municipality and Lebanon County and maintenance, if required.
6. In the event the Landowner, his successors and assigns, fails to maintain the SWM BMPs in good working condition acceptable to the Municipality, the Municipality, or its representatives, may enter upon the Property and take such necessary and prudent action to maintain said SWM BMPs and to charge the costs of the maintenance and/or repairs to the Landowner, his successors and assigns. This provision shall not be construed as to allow the Municipality to erect any structure of a permanent nature on the land of the Landowner, outside of any easement belonging to the Municipality. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
7. The Landowner, his successors and assigns, will perform maintenance in accordance with the maintenance schedule for the SWM BMPs including sediment removal as outlined on the approved schedule and/or Subdivision/Land Development/SWM Site Plan.
8. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like on account of the Landowner's or his successors' and assigns' failure to perform such work, the Landowner, his successors and assigns, shall reimburse the Municipality upon demand, within 10 days of receipt of invoice thereof, for all costs incurred by the Municipality hereunder. If not paid within said 10-day period, the Municipality may enter a lien against the property in the amount of such costs, or may proceed to recover his costs through proceedings in

equity or at law as authorized under the applicable provisions of the Pennsylvania Municipal Code.

9. The Landowner, his successors and assigns, shall indemnify the Municipality and Lebanon County and their agents and employees against any and all damages, accidents, casualties, occurrences or claims, which might arise or be asserted against the Municipality or Lebanon County for the construction, presence, existence or maintenance of the stormwater management facilities by the Landowner, his successors and assigns.
10. In the event a claim is asserted against the Municipality, its agents or employees, the Municipality shall promptly notify the Landowner, his successors and assigns, and they shall defend, at their own expense, any suit based on such claim. If any judgment or claims against the Municipality, its agents or employees shall be allowed, the Landowner, his successors and assigns shall pay all costs and expenses in connection therewith.
11. In the advent of an emergency or the occurrence of special or unusual circumstances or situations, the Municipality or Lebanon County may enter the Property, if the Landowner is not immediately available, without notification or identification, to inspect and perform necessary maintenance and repairs, if needed, when the health, safety or welfare of the citizens is at jeopardy. However, the Municipality or Lebanon County shall notify the landowner of any inspection, maintenance, or repair undertaken within 5 days of the activity. The Landowner shall reimburse the agency undertaking the inspections, maintenance or repairs for any associated costs.
12. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or affect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
13. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality, Lebanon County Engineer and Lebanon County from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner, Municipality or Lebanon County.

This Agreement shall be recorded among the land records of Lebanon County, Pennsylvania and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

I, _____, a Notary Public in and for the County and State aforesaid, whose commission expires on the _____ day of _____, 20__, do hereby certify that _____ whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day of _____, 20__, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 20__.

NOTARY PUBLIC

(SEAL)



Appendix F
Appeal Form

**North Lebanon Township
Stormwater Pollution Control Fee Appeal Form
Instructions**

This form is to be used by North Lebanon Township property owners who believe that one or more aspects of their stormwater pollution control fee bill is/are incorrect to formally file an appeal. The Township Board of Supervisors will review the appeal at the next regularly-scheduled Board of Supervisors meeting if the appeal is received at least ten business days in advance of the meeting. The Board of Supervisors will approve or deny the appeal and transmit the decision to the appellant in writing. If the appeal is accepted, corrections to the stormwater pollution control fee bill will be made on the next quarterly bill. The following types of appeals will be considered by the Township Supervisors:

1. Non-Single Family Residential impervious area/ERU calculation appeal: an owner of a non-Single Family Residential (non-SFR) property who believes that the impervious area calculation, and thus the ERU calculation, for the property is incorrect may file an appeal to have the impervious area of the property re-examined. The property owner must provide a detailed estimate of the impervious area on the property for the appeal to be considered. A survey or analysis performed by surveyor licensed in the Commonwealth of Pennsylvania is the preferred means of identifying and measuring the impervious area on a parcel. The Township reserves the right to, with the property owner's permission, inspect the property to determine the boundaries of the impervious surfaces upon it.
2. Incorrect non-SFR classification appeal: a property owner who believes that the classification of his or her property as non-SFR is incorrect may file an appeal to have the classification changed to SFR. Please note that the classification may only be changed via a land use code change through the Lebanon County Assessment Office, and the Board of Supervisors will not override the decision of the Assessment Office.
3. Auxiliary parcel appeal: property owners who own two adjacent SFR parcels may be billed for a separate ERU for each parcel even if there is only one single-family residence between the two parcels. In this instance, the property owner may file an appeal to have one of the two ERUs waived. In order for one of the ERUs to be waived, the total impervious area on both properties must be less than 1.5 times the ERU value of 3,755 square feet, or less than 5,633 square feet.
4. Other appeals: the Township Board of Supervisors may entertain other appeals for extenuating circumstances. Please contact the Township office to discuss other appeals in detail. This appeal form should not be used for errors in billing information (customer name, address, phone number, etc). Please contact the Township directly regarding incorrect billing information.

Please complete all information on the reverse side of this form. Please mail the completed appeal form and all supporting information to: North Lebanon Township, 725 Kimmerlings Road, Lebanon, PA, 17046.

North Lebanon Township
Stormwater Pollution Control Fee Appeal Form

Property Owner Name: _____

Account Number: _____

Daytime Phone Number: _____

Email Address: _____

Mailing Address: _____

Address of the property which is the subject of this appeal: _____

Type of Appeal:

- Non-SFR impervious area/ERU calculation
- Incorrect non-SFR classification
- Auxiliary SFR parcel
- Other

Description of appeal: _____

Is supporting information attached? Supporting information is required for non-SFR impervious area/ERU calculation appeals.

- Yes No