RESOLUTION NO. 2018-28

ADOPTING THE STORMWATER SERVICE FEE STUDYC PREPARED BY LENNON, SMITH, SOULERET ENGINEERING, INC. FOR BRIGHTON TOWNSHIP, BEAVER COUNTY, PENNSYLVANIA

WHEREAS, the Township of Brighton owns and operates a separate municipal stormwater sewer system which consists of a system of collection and conveyance infrastructure, with facilities providing detention and treatment used to manage stormwater runoff; and

WHEREAS, the operation of such a system is a matter of considerable expense to the Township; and

WHEREAS, the Township retained the services of Lennon, Smith, Souleret Engineering, Inc. to study the existing system and estimate the cost of operation of the system; and

WHEREAS, the Engineers have submitted a report, dated December 2018, containing the results of their Stormwater Management Fee Study.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of the Township of Brighton, Beaver County, Pennsylvania, that the Stormwater Management Fee Study submitted by the Engineers is adopted as the official study of the Township for the purpose of fixing and apportioning the fees to be charged to its residents for providing stormwater services.

RESOLVED this 10th day of December, 2018.

ehart. Secretary

BRIGHTON TOWNSHIP SUPERVISORS

John Curtaccio, Chairman

James E. Equels, Sr., Vice Chairman

Mark Piccirilli, Supervisor

STORMWATER MANAGEMENT FEE STUDY

Prepared For

BRIGHTON TOWNSHIP 1300 Brighton Road Beaver, Pennsylvania 15009

DECEMBER 2018



Lennon, Smith, Souleret Engineering, Inc.

Civil Engineers and Surveyors 846 Fourth Avenue, Coraopolis, PA 15108 (412) 264-4400 • (412) 264-1200 Fax info@lsse.com • www.lsse.com

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BRIGHTON TOWNSHIP STORMWATER FEE STUDY

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SECTION 1

INTRODUCTION

Section 1.1 – Background

Brighton Township owns and operates a Municipal Separate Storm Sewer System (MS4) consisting primarily of a system of collection and conveyance infrastructure, with facilities providing detention and treatment used to manage stormwater runoff. Infrastructure associated with the Township's MS4 includes, but is not limited to inlets, catch basins, storm drains, conveyance pipes, channels, swales, roadway curbs, culverts, detention basins, infiltration practices, and other post-construction stormwater management (PCSM) Best Management Practices (BMPs). This infrastructure has been installed in accordance with state and federal law and must be maintained to manage impact of stormwater runoff and minimize the potential negative effect of runoff to public and private property for the public good throughout the Township. To this effect, the Township's MS4 should be considered a public utility serving each property owner, or user of the MS4, throughout the Township. Similarly, stormwater quality and the quality, ecology and cleanliness of the streams and lakes throughout the Township (the Waters of the Commonwealth) are components public health safety and must be maintained for drinking water and recreational uses, among others. As such preservation and improvement of stormwater and stream water quality provide benefit to all property owners throughout the Township. A property's impact and therefore the user's contribution of stormwater to the MS4 and the Waters of the Commonwealth can be best evaluated based on the amount of impervious cover present on the property. As development occurs and pre-existing natural land cover is replaced with impervious cover, rates and volumes of runoff increase and as such must be managed by the MS4. Introduction of impervious surfaces also increases the occurrence for contribution of pollutants to the Waters of the Commonwealth, thus diminishing water quality. Funding

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for operation, maintenance and improvement of the MS4 has historically been budgeted as part of the Township's General Fund. However, as development progresses, flooding and stormwater quality concerns intensify and federal and state regulations increase, a dedicated funding source similar to that which has been previously established for the noted sanitary sewer and potable water services, should be established for the required sustainability of the MS4.

Section 1.2 – Purpose

The purpose of this study is to develop an equitable and fair MS4 user fee system that promotes that users and beneficiaries of the Township's MS4 and the preservation and improvement of water quality throughout the Township pay a proportionate share of the costs of administration, operation, maintenance, repair, replacement and improvement of the MS4. A reasonable basis by which to establish the user fee system would be on the user's anticipated contribution of stormwater runoff to the MS4 system or surface waters. It is also reasonable to establish criteria for credits or reduction in fees for those users who opt to implement Best Management Practices that serve their properties to lessen the impact of same on the Township's MS4.

Section 1.3 – Definitions

DWELLING UNIT – A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

DUPLEX RESIDENTIAL PROPERTY – A property containing a single two family attached structure containing only two dwelling units, each of which are constructed on top of one another and divided by a common floor/ceiling structure with each dwelling unit having direct access to the outside or a property containing a single two family attached structure containing only two dwelling units each of which are entirely separated

from the other by a continuous, common wall extending from the basement to the roof, each unit having independent access to the outside.

EQUIVALENT RESIDENTAL UNIT (ERU) - The measure of impervious ground cover for a typical single-family residential Property used in assessing the fees for each parcel of Property, and which has been determined to be 4,700 square feet. Refer to Section 3.3 for additional information of the ERU calculation.

IMPERVIOUS SURFACE - Those hard surface areas that either prevent or impede the entry of water into the soil under natural conditions, pre-existent to development, or which cause water to run off the surface in greater quantities, or at an increased rate of flow than under natural conditions, pre-existent to development, including, without limitation, surfaces such as roof tops, asphalt, concrete, or any other material that has been compacted, engineered and intended for vehicular traffic or parking, including, but not limited to, driveways and parking lots, private streets, or other surfaces which similarly affect the natural infiltration or runoff of natural drainage patterns existing prior to development including, but not limited to, walkways, patio areas and storage areas. Compacted gravel or crushed stone surfaces are considered impervious surfaces for this analysis. In addition, any surface designed to be constructed of permeable, pervious or porous concrete, asphalt, or pavers are also considered to be an impervious surface for this analysis.

NON-SINGLE-FAMILY RESIDENTIAL PROPERTY - Individual Properties not used as a Single Family Detached Property, Single Family Attached Property or Duplex Property. These may include manufactured homes and mobile home parks, commercial and office buildings, public buildings and structures, industrial and manufacturing buildings, multi-family dwelling containing three or more dwelling units, places of worship, places of assembly, condominium units where individual units are not townhouses, parking lots or garages, schools and other educational facilities, storage buildings and storage areas covered with impervious surfaces, research stations,

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hospitals, convalescent centers, airports, agricultural, water reservoirs, and water and wastewater treatment plants.

OPERATION, MAINTENANCE AND CAPITAL COSTS - The associated costs for facilities, energy, manpower, materials, property acquisition, transportation and other services and equipment required to collect, convey, detain, pump, treat and/or transport stormwater.

PROPERTY or PROPERTIES - Means each lot, parcel, or portion thereof containing 600 or more square feet of impervious surface. Lots or parcels containing less than 600 square feet of impervious surface shall be considered vacant land.

SINGLE FAMILY ATTACHED RESIDENTIAL PROPERTY - An individual property containing one dwelling unit that is designed for occupancy by one family located on one parcel of land that is attached to another dwelling unit. This does not include individual units in a two-family dwelling or in a multifamily dwelling containing 3 or more units in which the individual dwelling units are located on a single parcel. This definition includes individual units in a condominium unit in which the subject lot includes only the extent of the individual condominium unit, with adjacent driveways, access roads, and open areas located on common ground only when condominium units are designed as Townhouses as defined herein. The inclusion of condominium townhomes as single family attached dwellings takes into account impervious area located in common areas.

SINGLE FAMILY DETACHED RESIDENTIAL PROPERTY - Means an individual property containing one dwelling unit that is designed for occupancy by one family located on one or more individual lots or parcels of land that is not attached to another dwelling unit. This does not include individual units in a condominium association or mobile home community in which the subject lot includes only the extent of the

individual condominium unit or mobile home, with adjacent driveways, access roads, and open areas located on common ground.

TOWNHOUSE – A building which contains at least three (3) but no more than eight (8) single family dwelling units, each of which are separated from the adjoining unit or units by a continuous, common wall extending from the basement to the roof, each unit having independent access directly to the outside and having no units above or below. For the purpose of this definition each dwelling unit is located on an independent tax parcel containing no other dwelling units.

SECTION 2 ASSESSMENT OF STORMWATER UTLITY EXPENDITURES

Section 2.1 – Administrative Costs

Administration of the Township MS4 and provision of the stormwater utility service to its users requires effort of many Township departments and staff members and third party services, including the Township Manager, Road Department and administrative/billing/clerical staff and contractors.

Section 2.2 – Operation and Maintenance of Storm Sewer Infrastructure

Continued operation of Township MS4 infrastructure requires routine annual maintenance and repairs. Expenditures associated with operation and maintenance activities primarily consist of labor, material and equipment costs of the Township staff. Annual operation and maintenance activities typically involve cleaning and repair of collection and conveyance facilities, including, but not limited to, removal of debris from inlets, flushing of storm sewer lines, street sweeping, rebuilding deteriorating inlets, repair of roadway curbs and maintenance of collection channels and swales. Significant annual maintenance is also required to ensure proper operation of post-construction stormwater management BMPs owned by the Township, including mowing, debris and sediment removal, maintenance of plantings and vegetation, repair or replacement of the facility's infrastructure and repair of erosion areas.

Section 2.3 - Capital Improvement Projects for Storm Sewer Infrastructure

A long term capital improvement program consisting of replacement and improvement of storm sewer infrastructure is needed for effective provision of the stormwater utility by the Township. Storm sewer infrastructure deteriorates with age increasing potential for failure of the facilities and occurrence of flooding or other stormwater runoff issues. Similarly, instances of undersized infrastructure lacking capacity throughout the Township contribute to flooding and stormwater runoff issues. Expenditures for long term capital improvement programs are based upon the estimated replacement or improvement cost of the Township's storm sewer infrastructure, including, inlets and conveyance piping distributed over a 40 year period.

Section 2.4 – NPDES MS4 Permit Compliance

The Township's MS4 is regulated by the Pennsylvania Department of Environmental Protection (PADEP) under the National Pollutant Discharge Elimination System (NPDES) established as part of the federal Clean Water Act administered by the Environmental Protection Agency (EPA). Compliance with the Township's NPDES MS4 Permit, number PAG136159, requires implementation of a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4 and protect water quality. Implementation of the SWMP requires compliance with six Minimum Control Measures, as follows:

- 1. Public Education and Outreach on Stormwater Impacts
- 2. Public Involvement/Participation
- 3. Illicit Discharge Detection and Elimination (IDD&E)
- 4. Construction Site Stormwater Runoff Control
- 5. Post-Construction Stormwater Management (PCSM)
- 6. Pollution Prevention/Good Housekeeping

In addition, beginning with issuance of the MS4 NPDES permit in March 2018, the Township will have to comply with Pollutant Reductions Plan requirement for the surface waters within the Township that are impaired for sediment or nutrients. Between 2018 and 2023, the Township must implement and perpetually maintain new BMPs to achieve minimum pollutant reductions established by PADEP.

SECTION 3

EVALUATION OF USERS/CONTRIBUTORS OF STORMWATER RUNOFF AND QUANTIFICATION OF FEE BASIS CRITERIA

Section 3.1 – Introduction

As described as part of Section 1.2 – Purpose, the intent of this study is to establish an equitable fee for each user of the Township MS4, based, to the extent practicable, on the user's anticipated contribution of runoff to the Township MS4 or waters of the Commonwealth. In determining the anticipated contribution of runoff to the MS4, the variable most reasonably associated with quantifying the relative contribution of runoff to the MS4 was determined to be impervious area. While land in a natural wooded or meadow state does contribute runoff to the MS4, the magnitude of runoff rate, runoff volume and the introduction of pollutants is greatly increased with the development of impervious surfaces. The basis of the user fee was determined to be based on the present use of the parcel. For analysis, parcels were generally categorized into five groups as follows, and as defined in Section 1.3:

- 1. Single Family Detached Residential Property
- 2. Single Family Attached Residential Property
- 3. Duplex Residential Property
- 4. Non Single Family Residential Property
- 5. Vacant Land

Appendix A: Parcel Designations provides mapping showing the categorization of each parcel within the Township. Parcel lines provided are based on Beaver County tax parcel data, last updated January 2018. An overview drawing is provided in Appendix A as well as detailed map books overlain on available orthometrics.

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Section 3.2 – Analysis of Single-Family Residential Properties

Analysis of land cover conditions was completed using GIS software. The amount of impervious coverage and associated contribution of runoff to the MS4 is not expected to vary significantly between individual Single Family Detached Properties. Because of the apparent relative uniformity of use and magnitude of the number of single family residential parcels located in the Township, establishment of the user fee based on the precise impervious cover on each parcel is not practical or necessary.

The intent of analysis of Single Family Detached Residential Properties was to establish a reasonable, representative value of all such properties for use as the Equivalent Residential Unit (ERU). This ERU is to be used as the fee basis for all Township properties.

To determine a reasonable and equitable impervious cover value for an ERU and evaluate the representativeness of the ERU if applied to all Township Single Family Residential Properties, a random sample of one-hundred (100) parcels was selected for evaluation. Using GIS software, and aerial photography dated August 2016 were traced and calculated for 100 single family residential parcels. Refer to Appendix A for identification of the randomly selected sample parcels.

Section 3.3 – Establishment of the ERU

Table B1 of Appendix B provides a summary of average impervious for the single family detached residential property. Based on this analysis one ERU for the Township recommended to consist of 4,700 square feet of impervious area. Assessment of user fees will be based on this value, with each Single Family Detached Residential Property determined to be one ERU.

A subsequent review was conducted of the remaining residential property type categories, Single Family Attached Residential Dwellings and Duplex Residential Dwellings. Upon review of impervious area on typical lots of each type, with respect to a typical Single Family Detached Residential, the fee assessment basis for each property type is recommended as follows:

- Single Family Attached Residential: 0.5 ERU
- Duplex Residential: 1 ERU

Section 3.4 – Analysis of Non-Single Family Residential Properties

Determination of a single ERU value for Single Family Detached Residential, Single Family Attached Residential, and Duplex Residential Properties was based upon the conclusion of sample size analysis that impervious cover and therefore contribution of stormwater runoff to the MS4 does not vary greatly between properties of each type and as such a single uniform fee for each is reasonable. When evaluating the characteristics of Non-Single Family Residential Properties within the Township, the same conclusion cannot be made. Land use and impervious cover for Non-Single Family Residential Properties varies significantly for the variety of property uses that fit within this category. Runoff contributions to the MS4 and use of this utility varies significantly and establishment of a uniform fee basis for Non-Single Family Residential Properties would not be equitable. Accordingly, to determine the contribution of stormwater runoff to the MS4 and establish a fee basis for these properties, the actual approximate existing impervious coverage of each lot was calculated. Impervious coverages were calculated using the same methodology as noted for the sample Single Family Residential Properties. Coverage for each parcel was determined using GIS tools and aerial photography dated August 2016. To determine the contribution of stormwater to the MS4 from each property and subsequently the basis of the assessment of the user fee the actual measured impervious area was converted to its corresponding number of ERU's. Fractional ERUs were rounded to the next highest whole number. For example a Non-Single Family Residential Property containing 18,000 square feet of impervious area

would be assessed in the amount of 4 ERUs (18,000 sf \div 4,700 sf/ERU = 3.83 ERUs, rounded to 4 ERUs).

Section 3.5 - Vacant Land

For purposes of calculating user fees and assessing an equitable distribution among utility users, parcels containing no dwelling units and consisting of less than 600 square feet of impervious area were considered to not be significant contributors to the Township MS4. Those parcels have been categorized as vacant land exempt from the user fee.

<u>SECTION 4</u> ESTABLISHMENT OF RATE PER ERU

Section 4.1 – Determination of Total ERUs

Analysis of all properties within the Township as described in Section 3 yielded the following summation of ERUs existing as of the date of this study:

- Non-Single Family Residential (101 Properties) 1,341 ERUs
- Single Family Detached Residential (3,085 Properties) 3,085 ERUs
- Single Family Attached Residential (88 Properties) 44 ERUs
- Duplex Residential (7 Properties) 7 ERUs
- Totals 4,477 ERUs

Totals presented are indicative of conditions as of the date of this report and the land cover conditions as noted above. ERU totals are subject to change with development currently in construction, development pending construction and future land use changes.

Section 4.2 – Determination of Stormwater Expenditures

Anticipated annual expenditures were calculated using information from the Township's anticipated budget expenses and supplementing additional costs for long term replacement and improvement of MS4 infrastructure. An approximation was included to account for the Township's required compliance with the Pollutant Reductions Plan requirements of the 2018 NPDES MS4 Permit. Expenditures were categorized as generally described in Section 2, however, it should be noted that overlap inherently exists among expenditure categories, though tabulation of expenses avoided double-counting of these overlaps. For example, MS4 Permit Compliance requires the effort of many Township staff members throughout each permit year. While labor and other associated costs for these Township employees are not specifically included in the MS4

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Permit Compliance value, they are included in the Administration and Annual O&M values, as appropriate, and the tabulation assumes that implicit sharing of expenditures among noted categories avoids unreasonable inflation of total anticipated annual expenditure.

The following table provides a summary of annual anticipated stormwater expenditures. Refer to Tables C located in Appendix C for a complete breakdown of anticipated expenditures for each category.

Administration	\$9,179
Annual O&M	\$49,870
Capital Improvements	\$95,450
MS4 Permit Compliance	\$118,000
Total Annual Expense	\$272,499

<u>Cost Summary</u>

Section 4.3 – Establishment of Fee Reduction Credits

In assigning a user fee and developing an equitable distribution of stormwater utility costs, individual property owners, or users, should be given the opportunity to implement on-site post construction stormwater management best management practices (PCSM BMPs) to reduce the rate of runoff generated by the impervious area on their property. To receive credit, all PCSM BMPs must be designed, operated and maintained to control the peak rate of runoff, up to the 100-year design storm, from the developed property. PCSM BMPs that have not been maintained in accordance with their original design and operation and maintenance plan or the PADEP BMP manual will not be considered to be eligible for credit. Properties with such PCSM BMPs shall be eligible, upon review of the Township, to receive up to a 50% reduction of the property's base fee. For example, a property calculated to contain 100 ERUs, as determined using the methodology noted in Section 3.4, shall be assessed a fee at the rate of 50 ERUs, if the PCSM was designed to

serve the entire property. If the PCSM BMP was designed to serve only a portion of the property and its impervious area, the credit shall be prorated for that portion of the billed ERUs only. For improvements installed based on the Township's Small Project Development Stormwater Management Plan Application, properties shall be eligible for credit as follows. Projects proposing on-lot BMPs to associated with the construction of a new single-family home shall be eligible for credit up to a up to 40% reduction of the property's base fee. Projects related to construction of improvements to an existing single-family home (i.e. construction of an addition, detached garage, barn, accessory structure etc.), shall be eligible for credit of up to a 20% reduction of the property's base fee.

Public Education and Involvement Credit may also be considered for users that have the capability to conduct, organize and implement public education or public involvement activities related to stormwater management or stormwater quality. This credit is based upon public participation and involvement requirements of Minimum Control Measures (MCM) No. 1 and No. 2 as part of the Township's MS4 Permit. Groups and/or organizations that assist the Township in completing its goals for MCM 1 and MCM 2 will be eligible for credit up to 10% of the annual fee, at the discretion of the Township, based upon the proposed education or involvement. Eligibility for credit requires a minimum annual documented participation of 20 participant manhours associated with educational or involvement activities sponsored by the applicant. All activities must be approved for credit eligibility in advance. For receipt of credit, the applicant must provide written copies of educational curriculum or materials and/or written agendas and descriptions for involvement activities. Subsequent to completion of the educational activity the applicant must furnish to the Township documentation of completed activities, to include, at a minimum, a written summary of the planning, implementation and results of the activity or event, a sign in sheet or roster identifying the participants and photographic documentation of the activity. This credit must be applied for, reviewed, and approved annually.

<u>Section 4.4 – Determination of Fee per ERU</u>

Anticipated expenditures calculated as part of Section 4.2 are based on present and projected future stormwater expenditures based on current conditions throughout the Township. This includes the presence of existing PCSM BMPs throughout the Township, and as such, anticipated fee credits must be incorporated in establishment of the base fee rate. If PCSM BMPs have been properly maintained, the property's impact on stormwater utility expenses are lesser than that of other uncontrolled, developed properties and accordingly these property owners or users will be immediately eligible for the fee reduction credit. Conversely, developed sites without PCSM BMPs, or with PCSM BMPs that have not been maintained to ensure proper operation have a greater contribution to the utility costs and should be expected to receive a higher distribution of the user fee costs. Base calculations as noted in Section 4.1 note 4,477 total ERUs.

Distribution of anticipated annual expenses noted in Section 4.2 among 4,477 ERUs results in a monthly per ERU fee of \$5.16. For implementation, a \$5.50/month/ERU fee is recommend. This equates to a \$66.00 annual fee per ERU and an annual gross revenue of \$295,482.00 collected for the Township Stormwater Fund prior to potential reductions for credit applications.

TABLE B1 RESIDENTIAL SAMPLE PARCEL SUMMARY

Sample Parcel	Parcel ID	Property Address	Impervious Area (sf)		Sample Parcel	Parcel ID	Property Address	Imperviou s Area (sf)
1	550350308000	301 WINDY GHOUL DR	9973	51	551520169000	1225 CHAPEL RD	3704	
2	551520125000	2425 GYPSY GLEN RD	9776	52	550470145000	108 BRIAN DR	3674	
3	551420175001	2410 BRADYS RUN RD	9631	53	550470315000	169 ERIC DR	3639	
4	550200210000	160 JUANITA DR	9562	54	550360303000	111 MAPLEWOOD DR	3572	
5	551520163003	1005 GRANGE RD	9551	55	551420167000	2965 BRADYS RUN RD	3514	
6	550030806000	129 MACKALL DR	9418	56	550190110000	15 POPLAR ST	3513	
7	550250206000	3240 DUTCH RIDGE RD	9345	57	551620249001	1025 BARCLAY HILL RD	3482	
8	551620283000	690 MCINTYRE DR	9211	58	551620197000	880 PINE GROVE RD	3481	
9	551520102005	135 KERR DR	8942	59	551520135001	3920 DUTCH RIDGE RD	3459	
10	551520116000	106 FORREST DR	8743	60	550450113000	126 BARRETT DR	3419	
11	550280110000	415 SEBRING ROAD	8404	61	550040204000	144 RIDGEVIEW DR	3325	
12	551520119000	2100 TUSCARAWAS RD	8236	62	550130108000	370 BARCLAY HILL RD	3265	
13	551520165002	1725 CHAPEL RD	8174	63	550240115001	200 CHAPEL RD	3260	
14	551520140000	670 GRANGE RD	8151	64	550390424000	433 SHERWOOD DR	3127	
15	551620189000	2160 PINE GROVE RD	8081	65	551520103000	660 PINE GROVE RD	3099	
16	551520138002	4590 DUTCH RIDGE RD	7934	66	551530121000	214 2ND ST	3028	
17	551620226007	525 SOISSON LN	7456	67	550060202000	169 ORCHARD DR	2938	
18	550310112000	1105 DUTCH RIDGE RD	7318	68	550480100000	101 SHADYLANE DR	2629	
10	550030700000	120 LAKE DR	7040	69	550260700000	2680 DUTCH RIDGE RD	2509	
20	550290154005	460 BEACOM DR	6541	70	551420163000	3545 BRADYS RUN RD	2478	
20	550050107001	1700 TUSCARAWAS RD	6427	70	550170124000	4270 TUSCARAWAS RD	2382	
22	551530107001	267 CENTER DR	6368	72	550180707000	160 BEECH ST	2343	
22	551530168001	1020 BEANER HOLLOW RD	6135	72	550200300000	128 MAGNOLIA DR	2282	
23	550070400000	343 COOPER DR	6056	73	550430204000	1560 BARCLAY HILL RD	4565	
24	550470405000	133 ERIC DR	5834	74	550340900000	1306 8TH AVE	3775	
26	550040332000	131 ORNIDA DR	5764	76	550150200000	680 FLETCHER RD	2159	
20	550090102000	3230 TUSCARAWAS RD	5743	70	550210101000	5145 TUSCARAWAS RD	2159	
27	550310129000	1505 DUTCH RIDGE RD	5570	78	550331700000	1708 8TH AVE	2130	
28	551620295P00	1095 SEBRING RD	5414	78	550331300000	504 TERRACE AVE	2092	
30	551620282003	325 TODD RD	5238	80	550210200000	5910 TUSCARAWAS RD	2032	
30	551620203002	1280 NEVILLE RD	4814	81	550280308000	835 SEBRING RD	2043	
32	550040109000	1395 TUSCARAWAS RD	4814	81	550070119000	21 CIRCLE DR	2039	
33	550350202000		4809	83			2030	
33	550320507000	107 WINDY GHOUL DR 715 DUTCH RIDGE RD	4784	83	550390304000 550520203000	208 E EDGEWOOD DR E 5480 DUTCH RIDGE RD	5763	
34		635 SEBRING RD	4683	84			1935	
36	550280101000 550330800000	1512 2ND AVE	4672	86	550181216000 550160224000	50 HEMLOCK ST 108 ALLISON DR	1935	
36		119 ERICSON CIR	4565	80		74 WALNUT ST	1926	
	550550158000				550180518000			
38	551620248002	340 DAPPENBROOK RD	4312	88	550380103000	107 GRANDVUE DR	7069	
39 40	551430101003 550080310000	1240 WILDWOOD RD 2775 TUSCARAWAS RD	4302 4267	89 90	550181110000 551520172003	173 MAPLE DR 895 CHAPEL RD	2282 6939	
			-					
41	550230216000	5035 DUTCH RIDGE RD	4263	91	550150309P00	1320 MUDLICK HOLLOW RD	1535	
42	550220200006	5360 TUSCARAWAS RD	4141	92	550540124000	135 ASPEN DR	1525	
43	551530124001	205 GLENN DR	4040	93	550110125000	3370 TUSCARAWAS RD	3837	
44	550010613000	113 CENTER DR	4033	94	550190609000	208 MAPLE DR	2936	
45	550330502000	306 WESTERN AVE	3992	95	550030513000	204 VIRGINIA DR	2652	
46	550320418002	1503 10TH AVE	3966	96	550290105000	230 BEACOM DR	6458	
47	550120118000	129 WISHART DR	3880	97	550100109000	107 COLEMAN DR	3392	
48	550410100000	1410 PINE GROVE RD	3834	98	550031001000	850 TUSCARAWAS RD	4420	
49	550270209000	106 DUNCAN CIR	3774	99	550400203000	158 CRANDON CIR	2881	
50	550100120000	121 CREST DR	3748	100	550010516017	118 KAYE CIR	2832	

Summary		
Average Area (sf)	4,727	
Proposed ERU (sf)	4,700	

TOWNSHIP OF BRIGHTON STORMWATER MANAGEMENT FEE STUDY

TABLE C ANTICIPATED ANNUAL EXPENDITURES

ITEM NO.	POTENTIAL BUDGET ACCOUNT	QUANTITY	UNIT	UNIT COST	ITEM COST
Adminstratio)n		-		
1	1 Admin - Salaries and Benefits		LS	\$8,428.75	\$8,429
2	Law - Solicitor Fees	1	LS	\$750.00	\$750
	· · · · ·		Admin	istration Total	\$9,179
Annual Oper	rations and Maintenance		-		
1	1 Public Works - Salary and Benefits		LS	\$33,670.35	\$33,670
2	Storm Sewer Materials	1	LS	\$16,200.00	\$16,200
		Operatio	n and Mai	ntenance Total	\$49,870
Capital Impr	ovements		-		
1	Storm Sewer Piping	57,200	LF	\$40.00	\$2,288,000
2	Inlets	510	EA	\$3,000.00	\$1,530,000
				nance Subtotal	\$3,818,000
		Annu	al Cost ove	r 40 year cycle	\$95,450.00
/IS4 Permit	Compliance				
1	Annual Tasks - Miscellaneous Expenditures - Training Seminars, Publications, Postage, Advertisements, Public Events, etc.	Anticipated Annual Costs for 2018 Permit		\$10,000	
2	Annual Tasks - Engineering Support	Anticipated Annual Costs for 2018 Permit			\$29,000
3	PRP Implementation	Anticipated Annual Costs for 2018 Permit		\$79,000	
		MCA	D	mpliance Total	\$118,000

Anticipated Annual Township	\$272,499
Stormwater Expenditures	\$272,477