

**CITY OF ZANESVILLE  
STORM WATER UTILITY PROGRAM**

**POLICY: DEFINITION OF A SINGLE FAMILY RESIDENTIAL AND  
NON-RESIDENTIAL PROPERTY**

**I. OVERVIEW**

The JHA/ERC Team has been retained by the City of Zanesville to provide assistance in developing and implementing a successful and legally defensible storm water utility program and storm water billing master file that will include a storm water database and impervious area measurements. As part of the overall process and approach, the JHA/ERC Team is developing a series of "Policy Papers" and "Billing Policy Papers" that will be used to document discussions and decisions made regarding various components of the storm water utility program.

This is the first billing policy paper in a series of billing policy papers that will document the identification of properties within the proposed City of Zanesville Utility service area (city limits), assigning each parcel/property a land use code of either SFR (single-family residential) or NON (non-residential) or VAC (vacant and undeveloped), measuring the impervious area for all non-residential properties, calculating the number of Equivalent Residential Units (ERUs) for those non-residential properties, determining the rate of charge per ERU per month for all properties in the City. This "amount to bill" will then be transferred to the City of Zanesville's finance department who will be responsible for merging and integrating the JHA/ERC Team's storm water database created as part of the process into the existing water and sewer utility billing system for billing storm water under the ERU based approach.

The JHA/ERC Team will measure the impervious area for all developed (properties that contain impervious area) non-residential properties, and calculate the number of ERUs and resulting storm water user fee charge. Properties with no impervious area will not be assigned a stormwater fee. A statistically representative random sample of single-family residential properties will be measured in order to develop the square footage value of the equivalent residential unit (ERU). The ERU determination process will be explained in a billing policy paper titled "ERU Determination" later in the implementation process.

This process will enable the City to effectively incorporate the storm water billing information into the current utility billing system database, and begin billing customers under a legally defensible storm water utility program in the most cost effective manner possible. The process and approach described in this and future billing policy papers is slightly different and will have different policies and procedures as compared to the existing stormwater fee. This difference from the existing stormwater rates and billing approach will need to be reconciled by no later than August 2016 to assure the newly created stormwater rates and charges can be billed with the new utility billing and collection system.

## II. DISCUSSION:

Because single-family residential properties are the basis for defining the Equivalent Residential Unit (ERU), the definition of a single-family residential property is fundamental to the development of the entire rate system<sup>1</sup>. The Equivalent Residential Unit (ERU) is the common denominator in the algorithm(s) used to develop service charges for all classes of customers served by a storm water utility. The process can be summarized as follows:

1. The impervious area of a randomly selected and representative sample of single-family residential (SFR) properties is measured to determine the average impervious area. The average impervious area of those measured SFR properties represents one (1) Equivalent Residential Unit (ERU). The ERU is then used as the basis for calculating bills for all single-family residential and the non-residential property classes.
2. All SFR properties are charged a flat rate charge that is equal to one ERU.
3. The charge for all non-residential properties (not single-family as determined by the single-family residential property definition) is determined by first measuring the total impervious area for a particular property. The measured impervious area is then divided by the ERU (determined in Step 1 above) to determine the total number of ERUs for that particular property (rounded). The total number of ERUs for that property is then multiplied by the SFR flat rate (determined in the Rate Study Analysis) to determine the charge for that non-residential property.

In establishing the ERU, the most important issue is to define which property types are to be considered as "single-family residential" properties, and are to be included and measured as part of the "single-family residential" statistical sample. There are two questions that need to be answered as part of this definition process:

1. **Which single-family residential property type(s) should be included in the definition of a single-family residential property? Single-family? Duplex? Condominium? Triplex? Quadraplex? Other?**

A single-family residential property represents a class of property that reflects great commonality in terms of impervious area and potential to discharge runoff to a storm water system. Moreover, single-family residential properties are the largest

---

1. The concept of the Equivalent Residential Unit was challenged in litigation in the States of Washington and Kentucky. In both cases, use of the Equivalent Residential Unit was upheld by the Courts.

class of properties and the individual properties within the class are typically the smallest properties in the land record system. As a result of these features, single-family residential properties serve usefully as the lowest common denominator within the billing system.

When the number of single-family residential units exceeds two units, the impervious area increases beyond quantities typically measured for a single-family residential unit. Consequently, the definition of an SFR is normally limited to single-family residential and may include attached two-family dwellings.

2. **Should a single flat rate be applied to all single-family residential properties or should there be a graduated rate to reflect variations in lot sizes, house sizes and/or impervious areas for a single-family property?**

The most easily understood and administered Single-Family Residential Unit is derived from a simple flat rate system covering all properties defined as single-family residential. If a graduated rate is applied to single-family residential properties, a subset of the “other” single-family residential class will have to be identified and measured to establish the ERU. Thereafter, one of the following two procedures will have to be applied to the “other” single-family residential properties:

1. All “other” single-family residential properties will have to be measured and handled as a non-residential property similar to Gwinnett County, GA that made a policy decision to measure all properties to determine the individual impervious area for every property. The Gwinnett legal team deemed this is the most legally defensible rate structure possible.

OR

2. Classes can be established within the “other” single-family residential properties on the basis of lot size. For each class, a sample of properties would be measured to determine the average impervious area of the class and then calculate a flat rate based on the ERU for that class. All properties within the same class would be assigned the same flat rate. This procedure requires an analysis of the lot sizes of all single-family residential properties in order to assign each property to the appropriate class.

The following issues must be understood in the context of the foregoing procedures:

3. **The most fair and equitable approach to developing the ERU and creating the definition of single family residential property includes a single rate system not a multi level multi rate residential system.** Creating different residential rates and different residential levels is arbitrary and may not be upheld in the court system if challenged. If a multi or graduated rate for single-family residential properties is desired, the JHA/ERC team recommends measuring all residential properties. This system was implemented by Gwinnett County Georgia, and the Gwinnett legal team determined that this

approach is the most fair and equitable and the most legally defensible rate structure system for Gwinnett County property owners. The single flat rate system involves measuring only a sample of approximately 400 SFR properties to create the average for the sample size whereas the Gwinnett County system requires measurement of all SFR properties.

4. In addition, there is a general misunderstanding about the one ERU approach that has been challenged and upheld in various State Court systems. Many rate payers believe the one ERU approach may not be fair to the lower income properties (lots) and that larger homes in the suburbs should pay more because these homes have a much higher impervious area value. Actually the contrary is true. Small homes on small urban lots cause more runoff problems because they have a much higher percent imperviousness when compared to the very large homes on the very large lots which typically have less impervious cover as it relates to the individual property.

### III. TAC RECOMMENDATIONS:

1. The JHA/ERC Team recommends that a single-family residential property (SFR) be defined as follows:
  - ◆ Single-family residential properties;
  - ◆ Two-family or duplex properties;
  - ◆ Condominium properties where each unit is on its own parcel; and
  - ◆ Agricultural properties.
2. The JHA/ERC Team recommends that non-residential properties be defined in the following manner:
  - ◆ All properties not encompassed by the definition of single-family residential, including:
    - ◆ Apartment property;
    - ◆ Some condominium properties;
    - ◆ Commercial property;
    - ◆ Industrial property;
    - ◆ Institutional property;
    - ◆ Governmental property;
    - ◆ Churches;
    - ◆ Schools;
    - ◆ Properties used for auto storage (a.k.a. junkyards); <sup>1</sup>
    - ◆ Properties used to store old auto and truck tires; <sup>1</sup>
    - ◆ Manufacturing properties that use outside and uncovered storage of raw materials; <sup>1</sup>
    - ◆ Stone quarries; <sup>1</sup>
    - ◆ Mobile home / manufactured home parks;
    - ◆ Federal, State and Local government property; and

- Any other property type not mentioned in this or the above single-family list.

<sup>1</sup> - These property types are discussed in more detail in a Billing Policy Paper titled "Special Situations" later in the process of implementation.

**IV. TAC ACTION:**

The TAC reviewed, discussed and approved this billing policy paper during the February 24, 2016 TAC meeting.

Approved:  \_\_\_\_\_

Date: 2/26/16