Policy for the

Determination and Review

of Storm Water Service Charges

October 2018

City of Fargo, ND
Engineering Department
Storm Sewer Utility

Introduction and Statement of Purpose

The City of Fargo has adopted an ordinance establishing a Storm Water Service Charge for paying a portion of the cost of construction, reconstruction, repair, enlargement, and improvements necessitated for the maintenance, operation, and use of the storm sewer system. The storm sewer system includes all facilities pertaining to the management of storm water discharged from all property, including but not limited to natural or manmade drainage ways, ponds, detention basins, pump stations, flood preventative measures, catch basins, storm sewer pipe, curb and gutters.

The Storm Water Service Charge shall be based on a parcel's anticipated contribution of storm water runoff to the storm sewer system, which is a function of the parcel's size and impervious surface area. Typically, more intensely developed land uses have a higher percentage of impervious surfaces (i.e. a surface which water can't or will minimally penetrate such as rooftops, pavement, or hard packed gravel surfaces) and contribute a greater volume of storm water to the storm sewer system. Similarly, a large parcel would contribute more runoff than a smaller parcel with similar development characteristics or impervious area.

Under the charging system established in City ordinance and outlined in this policy statement, a parcel that contributes a higher peak storm water runoff rate and volume based on size and impervious surface area will pay a higher Storm Sewer System Charge; as a result, charges allocated under this methodology will better reflect a parcel's fair share of the costs of operating and maintaining the storm sewer system. It is not feasible to inspect every parcel in the City of Fargo to determine its individual hydrological response to storm water. Therefore, to implement this Storm Water Service Charge policy, parcels will be charged based on their land use (Single-Family or Non-Single Family) and a calculation of their land surface area and impervious surface percentage taken from aerial photography and incorporated into the cities Geographical Information System (GIS). Thus, two parcels of the same size and same level of impervious surface with different land uses would pay an equal share of the costs of the storm sewer system.

The City has recognized that assigning costs and making charges based upon size and amount of impervious surfaces is now available thru the use of Light Imaging Detection and Ranging (LIDAR) aerial imagery and GIS technology. However, due to land subdividing, or re-platting, parcel sizes may change over time and improvements to properties may increase or decrease impervious areas after the City has completed the most recent LIDAR data collection (which is proposed to occur on a three year cycle). In these cases, this policy will allow changes to be made to a parcel billing to provide the most accurate up to date data and the respective computations of charges.

Determination of the Storm Water Service Charge

As Fargo continues to grow, more of our City, which used to be open fields, wooded areas, and agricultural sites, is now covered by homes, businesses, roads, and parking lots. Those areas with largely unimproved drainage conditions, at one time soaked up water from rains and snowmelt. As these areas are annexed into the City and improved, they now force storm water to find a natural or manmade drainage ways, ponds, detention basins, pump stations, flood preventative measures, catch basins, storm sewer pipe, curb and gutters maintained by the City Storm Water Utility. Improvements to the drainage of vacant annexed lands and increases in impervious areas from development pose greater challenges to storm water quality, runoff control, storm water maintenance, and floodplain management. The funding provided to address these challenges is largely provided by the City's Storm Water Utility.

The board of city commissioners of the City of Fargo shall periodically adopt a revised Storm Water Service Charge based on the anticipated expense to construct, operate, and maintain the storm sewer system. The Service Charge may be revised or amended by resolution.

The Storm Water Service Charge is based on land use (i.e. single family residential or non-single family use) and the amount of total and impervious surface area on each property within the Fargo city limits. All single-family residential homes within the City limits of Fargo pay a minimum service charge set by resolution of the Fargo City Commission. Non-Single Family properties are charged based upon a formula with inputs of the total area of the property and the total impervious area on the property. Details of the residential and non-residential charge and billing are listed as follows:

Developed Single-family Residential Properties Billing:

The Storm Water Service Charge Ordinance establishes a storm water drainage system service charge. Based on a comprehensive review of the City's total parcel data, single-family residential properties are most often of similar size and impervious surface area. For this reason, the City of Fargo will administer through this policy a common residential minimum monthly Storm Water Service Charge for developed single-family residential properties. The minimum service charge will be added to the utility bill for single-family properties already receiving water, sanitary, or solid waste services. The charge will be collected at the parcel level of a development, which may require the parent parcel, or master utility bill, to split out the charge to tenants in the instance of common utility service circumstances for duplex, townhome, condo, or other multiple single-family unit development circumstances with common utility billing arrangements. A separate Storm Water Service Charge bill is created for properties not currently receiving a bill for other City services.

Undeveloped Single-family Residential Properties Billing:

In the case of single family parcels that has been created through recent rezoning or subdivision activity, the proposed single-family minimum service charge will not be applicable until other utility services are requested for the property. The newly subdivided parcels will be assigned a new utility account for Storm Water Utility service only. These new parcels will continue to be charged as they would have been under previous zoning or development circumstances and the total fee prior to subdividing will be proportioned based on the area of the new parcels created.

Non-single Family Residential Properties Billing:

Multi-family housing, apartments, businesses, retail, commercial and industrial properties are examples of non-single family residential properties. As stated previously, these properties have been evaluated to determine the actual amount of total and impervious surface on the property. Aerial photography maps were used for impervious area determinations, with site investigations performed where necessary. All Non-single family properties will be charged either a monthly minimum or a calculated Storm Water Service Charge, to be determined by resolution. Larger or more intensely developed parcels will be charged based on the Storm Water Service Charge formula as included to the most recent rate resolution approved by the Fargo City Commission and as amended from time to time. Non-single Family parcels with a fee calculation from the Storm Water Service Charge formula that does not exceed the adopted minimum in the rate resolution shall be charged the adopted minimum.
The charge will be collected at the parcel level of a development, which may require the parent parcel, or master utility bill, to split out the charge to tenants in the instance of common utility service circumstances for condo or other multiple unit/tenant developments with common utility billing arrangements. In certain instances where no other utility service is being provided to a parcel, a separate bill may be required for Storm Water Utility service only.

Modifications to Non-single Family Residential Properties:

In the case of non-single family parcels that have been modified through recent rezoning, subdivision, or development activity, the proposed minimum service charge will not be applicable until other utility services are requested for the property or until revised site plan data is submitted to the City for review. The newly subdivided parcels will be assigned a new utility account for Storm Water Utility service only. These new parcels will continue to be charged as they were under previous zoning or development circumstances and the total fee prior to subdividing will proportioned based on the area of the new parcels created.

The issuance of any building permit or other action, which changes or intensifies an existing land use, shall be cause for an adjustment of the Storm Water Service Charges

to an appropriate level. Upon receipt of site plans that include revisions to a parcels impervious surface characteristics, the City will make determinations for revisions to a parcels Storm Water Service Charge including determinations regarding whether the parcel is subject to the minimum or calculated service charge for larger or more intensely developed parcels. The Storm Water Service Charge is also subject to further revisions after the collection of updated aerial imagery data as noted prior in this Policy.

Figure 1 below outlines the protocol to be used by the City of Fargo in making determinations for a parcel's specific Storm Water Service Charge.

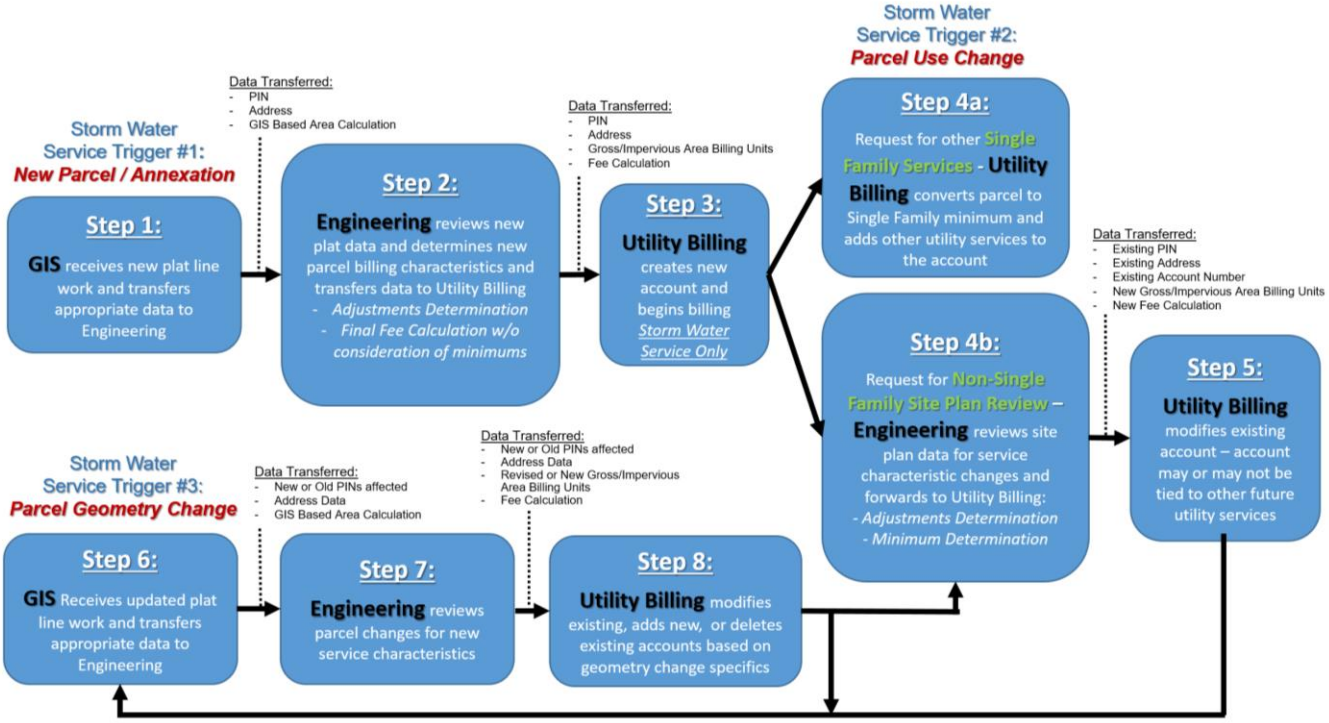

FIGURE 1: Billing Database Management Protocol – Parcel Billing Lifecycle

Request for Adjustment of Non-Residential Storm Water Service Charge

The City Engineer or designee may verify and adjust the parcel's Storm Water Service Charge to an appropriate level in accordance with the following guidelines. A parcel's Storm Water Service Charge shall be subject to increases as well as decreases by this procedure and by action of the City Commission.

To receive the non-residential Storm Water Service Charge Adjustment, the owner of the parcel that wishes to apply for the adjustment must submit an application in the form of a cover letter requesting the adjustment. In certain instances and depending upon the complexity of the adjustment, the request may be required to be accompanied by a stamped and signed analysis

conducted by a Professional Engineer or Land Surveyor in the State of North Dakota describing the adjustment being requested.

Request for Adjustment based on Parcel Size or Impervious Percentage:

Any non-residential parcel that disputes the total site area or impervious surface utilized in the calculation of their respective Storm Water Service Charge may request an adjustment to their charge by submitting appropriate application materials. The City Engineering Department will perform an initial review of the parcels drainage characteristics in order to make a determination on the merits of an adjustment. In certain instances, and depending upon the complexity of the request, further information such as site survey or site map prepared and certified to by a ND Registered Land Surveyor may be required.

Request for Adjustment for <u>On-site</u> Structural Drainage Controls Exceeding City Standards:

Property owners who reduce their service needs from the City storm water system by installing structural storm water management measures can receive a reduction in their Storm Water Service Charge. All adjustments are determined on a case-by-case basis through the City Engineer's office. These storm water charge adjustments are applicable if a property owner takes measures to reduce the storm water flow rate (cfs), or volume (ac-ft) from his or her property to the City storm water system that exceeds the current City minimum requirements for managing storm water discharges. A monthly storm water charge may be reduced by:

a) Up to ten (10) percent for reduction in flow rate. Incremental one (1) percent reduction for every ten (10) percent reduction in storm water flow from the site, above and beyond the maximum set forth in the storm water management manual.
b) Up to fifteen (15) percent for increased storage. Incremental one (1) percent for every three (3) percent increase in storm water storage on-site, beyond the minimum set forth in the storm water management manual. (standard pond design shall include two feet of free board)
c) The rate reduction may be calculated using a combination of reductions in flow or increased storage, but the storm water monthly charge may not be reduced overall by more than twenty five (25) percent.
d) Minimum five (5) percent reduction required to have a measurable impact to the reductions prior to a rate modification.

To permit for an accurate assessment of any on-site drainage controls, the request for review must include, but is not limited to:

1. A site plan showing locations of all buildings and other development contained within the parcel.
2. The total parcel area and area of impervious surfaces shall be shown.

3. Site topography and contours of sufficient detail to ascertain flow directions, rates, and volumes. The flow directions, rates, and volumes shall be computed and certified by a ND Registered Professional Engineer
4. Size, details and/or volumetric characteristics of any drainage control facilities.
5. All maps of site characteristics shall be prepared and certified to by a ND Registered Land Surveyor. A ND Registered professional Engineer shall prepare all computations and conclusions.

Periodic Inspection and for Structural Drainage Control Charge Adjustments:

The City Engineer reserves the right to inspect periodically all storm drainage control facilities to ascertain that they are operating properly. If such a system due to improper maintenance or other reason, fails to detain storm water runoff in an effective manner, the City Engineer shall issue an order to complete the repair of the facility within 60 days. If such repairs are not completed in a timely manner, the City Engineer may eliminate or reduce Storm Water Service Charge Adjustments to an appropriate level.

Adjustment for Service to Public and MS4 Parcels:

All parcels receiving service determined to be in the public interest and have local property taxation authority under North Dakota Statute, or individual Municipal Separate Storm Sewer System Authority (MS4) as per North Dakota Department of Health requirements, may be subject to an adjustment per this policy. Adjustments of this nature shall be adopted by resolution of the board of City Commissioners of the city of Fargo.

Special Cases

For special and unusual cases where the above procedures do not result in an appropriate Storm Water Service Charge, the City Engineer or designee has the authority to make adjustments consistent with the intent of the ordinance establishing the Storm Water Service Charge and with this policy.

Citywide Storm Sewer Service Charge Map

Property owners may determine the storm sewer service charge for individual parcels by visiting the City of Fargo storm sewer utility webpage. A link to the storm sewer service charge map is available to view through either a parcel address search or alternately by clicking the desired parcel for an information dialog box to appear. The identification box will display the measured impervious area and the applicable service charge for the selected parcel.