

2020 Prepaid Service Rate Evaluation

Water and Sewer Servicing

Water and Sewer Mains, Trunk Sewers, Primary Water Mains and Lift Stations

- 1) Water, Sewer Mains and Service Connections – two tenders were awarded for construction of services within the Aspen Ridge and Brighton neighbourhood totalling 406 lots. The Brighton tender resulted in local as well as trunk sewer and primary water main services installed. Information from both tenders were used to calculate this year's rate. An increase in overall unit prices has been noted. The total cost is offset by positive dense frontage within both neighbourhoods that has resulted in the rate for these services not being increased. Water and sewer servicing has had a compound rate increase of approximately 2.5% over the last ten years when comparing standard 200mm sanitary sewer piping and 200mm water mains constructed to a depth of 3-4m that are predominately used for local servicing. The last three years have shown a much smaller change in prices. During this year we noticed many components starting to increase in cost. For example, hydrants have increased on average between 5 - 6% while some piping products are over 10%. Our connection rate is averaging within about 1% of the current prepaid rate and has not changed since 2017. No change is recommended for the 2020 water and sewer direct service rates.

- 2) Primary Water Mains and Trunk Sewers – primary water mains include the larger piping systems that serve entire neighbourhoods, typically equal or greater than 400 mm in size. Primary water mains have, in most cases, lagged initial development and may include a variety of components that are not necessarily utilized consistently for each job, such as pumped drain structures or concrete bulkheads. A common component is piping, however, this can also vary between sizes, material type, construction required through pavement structures or undeveloped land. Depending on the size and the length of individual pipes needed in any one contract, different types of piping materials are utilized. In 2020 we are constructing a single project with over 1,600 metres of our normally largest diameter piping (1050mm), extending on McOrmond Drive to 8th Street. An increase is required to cover the cost of the many components needed for this type of construction. The primary water main levy is recommended to be increased by 2.2% for residential property and 4.4% for Industrial zoned lands.

Trunk sewers are essential for all sectors and include ponding and piping systems that can include storm pipes up to 3.0m in size and sanitary sewers of 1.2m in diameter constructed 14m deep. The Transportation and Construction Department has extensive studies and includes large geographic catchment areas to determine the overall city wide rates. Within the Administration's studies, sanitary and storm sewer piping comprises 74.7% of the trunk sewer

levy cost. The remaining 25.3% of the levy funds storm ponds, where the primary cost is the excavation of large amounts of earth material. Minimum pipe sizes for residential include sanitary trunk sewers of 450mm or greater with a flow rate of at least 68 l/s and storm trunk sewers of 1350mm or greater. In 2020, one of the most massive open cut trunk sewer projects in recent history was tendered along McOrmond Drive from Brighton Common to 8th Street East with total costs including the above primary watermains and some local servicing of about \$45 million. This project involved both Sanitary and Trunk Sewer Servicing with a total trunk piping length of about 4,600 metres. Piping ranged in size to 2100mm in diameter and was constructed up to 10m in depth. Although some trunk sewer monies were moved between various subprojects to allow for enough funding, this project will be delivered earlier than expected and within budget. In addition to this tender, along with information from Statistics Canada for items included for these types of projects used during construction, derives the trunk sewer rate.

From the results of past information and current cost curves and studies, the trunk sewer rate is recommended to remain the same in 2020 for residential zoned property and increase by 5.3% for industrial property.

- 3) Lift Stations – this is a smaller levy that funds the construction of lift stations within specific neighbourhoods that utilize lift station services. The lift station levy is charged only on neighbourhoods that require this service. No lift stations currently are needed within the Industrial area of the City. No changes are suggested for the lift station levy in 2020.

Taken as a whole, the net price change for various services and calculated frontages has resulted in an adjustment for 2020. It is recommended that the general construction rate change for various zoned property by the following percentages:

	<u>Residential/ Commercial</u>	<u>Industrial</u>
Water and Sewer Mains	0.0%	0.0%
Water and Sewer Connections	0.0%	0.0%
Trunk Sewers	0.0%	5.3%
Primary Water Mains	2.2%	4.4%
Lift Stations	0.0%	0.0%

Roadways

Grading, Sidewalks, Paving, Lanes, Buffers, Fencing, Signals and Arterial Roadways

The 2020 program is primarily centered around a new project on Fedoruk Drive with additional carryover construction occurring on Taylor Street within the Rosewood neighbourhood. Areas of noted significance are as follows:

- 1) Grading and Buffers – this component involves the excavation, transportation and placement of large quantities of dirt to facilitate the overall drainage pattern within a development area. In 2020, the various earthwork projects were analysed for stripping, fine grading and seeding. Embankment costs continued to be rising globally which has been commented on over the last number of years. In 2019, we reported that excavation prices had increased in a range up to \$5.65 per cubic metre which was above the prices previously experienced. In 2020, averaging the two contracts, prices are now in a range up to \$7.53 per cubic metre. This surprised us as the total amount of earth material moved in the Brighton and the Aspen Ridge neighbourhood totalled 1.1 million cubic metres which is enough material to fill the Mosaic Stadium bowl area twice. Some of the material was not directly related to our prepaid service rate and along with favourable frontage in these particular neighbourhoods, we are not able to increase the grading rate this year until further prices and analysis is completed in future years. The grading rate is recommended to remain the same.

The main components within the Buffer levy are berming which also utilizes the movement of earth material. As noted previously, excavation costs have been rising while seeding has been stable. The net effect will be to leave the buffer rate the same this year.

- 3) Sidewalk and Curbing – this service is normally tendered as part of the direct service roadway contract. No new direct service roadway contracts were tendered in 2020. Unit prices have been compared for this category with the various arterial roadway contracts tendered. Prices have generally stayed within an acceptable range for this category of expense. Different components are included within residential versus multi-family/commercial areas, which are then blended together in arriving at a rate for each classification. As a result, the multi-family/commercial rate, used primarily in suburban areas and on collector roadways, is traditionally 1.7 times greater in cost than the residential rate. No additional analysis for this component could occur this year. The residential, commercial and industrial rates are recommended to not undergo a rate change in 2020.
- 4) Paving, Lanes, Arterial Roadways and Interchanges – unit prices from last year's Taylor Street and this year's Fedoruk Drive tenders were analysed as well as an analysis of frontage from various neighbourhoods in determining the cost for these prepaid service categories.

Prices as a whole for this component have been very steady during the tendering period which included an augmented number of bidders. Statistics Canada reported initial falling component prices for most categories on the prairies prior to May of this year with rising prices transpiring after that date which did not affect the early City contract. The prepaid rates have been sheltered from increases because of the additional interest in this tender and the amount of aggregate that we utilize extensively within our roadway contracts appears to have moderated with the dry weather. As reported last year, we are attempting

to use other types of products within the geotextile family that have resulted in a reduction of subbase and/or base material that has benefitted us in cost savings. No change has been factored into this year's cost for Paving, Lane, and the Arterial roadway rate this year.

The interchange levy is one source of funding for the construction of interchanges where the construction benefits new land development. Within the Administration's study areas, costs have been extrapolated to determine a projected value for nine interchanges identified as requiring funding from the interchange levy. Information from the interchanges under construction at McOrmond and Boychuk Drive were previously analysed and a change in the rate was determined a number of years ago. The City traffic model is currently being studied further to update the amount of traffic generated from future growth. No change has been implemented for interchanges in 2020.

- 5) Signing and Signals - this rate is used for the erection of signals and street signing within neighbourhoods. This item encompasses extensive labour and utilizes various electronic and metal products. The rate is required to increase by 2.6% to cover costs related to recent labour contracts and material prices.

The net effect on the prepaid service rates for this category is as follows:

Grading	0.0%
Buffers	0.0%
Fencing	0.0%
Sidewalks and Curbing	0.0%
Paving	0.0%
Arterial Roadways	0.0%
Interchanges	0.0%
Lanes	0.0%
Signing & Signals	2.6%

Utilities

Street Lighting, Gas and Underground Electrical

City developed land includes a prepaid levy for street lighting, gas and underground electrical servicing. Private developers contract directly with the respective crown corporation for telephone and gas servicing.

Street Lighting - a data base exists that includes three decades of street lighting service applications where costs and revenues are tracked. Street lighting service is provided exclusively from Saskatoon Light & Power. Labour costs represent a predominate portion of the street lighting rate. Saskatoon Light & Power conducts servicing in the same administrative manor as other utilities. This entails preparing a fixed quotation for the particular area or phase that is being developed. The changes in the collective agreements have resulted in a small change to the labour component of the rate.

The net change is an increase of the residential rate of 1.1% with similar changes to other zoned categories for 2020.

Gas Servicing Levy - the Saskatchewan Energy Corporation provides natural gas servicing to all classifications of property. The gas servicing levy is composed of a header allocation charge that is calculated by the utility for each neighbourhood, as well as a gas distribution charge. SaskEnergy absorbs a portion of these costs by applying a capital contribution investment charge of \$1,145 per lot which has not changed this year. SaskEnergy also charges a lane stubbing cost of \$1,200 per lot. In 2020, taking into account an average number of lots that included one sided and or laned properties, the rate needs to be altered. The recommendation is for the rate to be increased by 2.3%.

Underground Electrical - new underground electrical service within Saskatoon is almost entirely provided by the Saskatchewan Power Corporation. Both the crown corporation and the City provide a \$1,300 per lot capital contribution in each of their respective franchise areas, however, SaskPower almost exclusively provides residential servicing. In 2018, we reported that SaskPower had dramatically reduced the cost of servicing by renegotiating servicing agreements with other utilities that share services in the same trench. At that time, the rate was reduced by 64% from a value per lot of \$1,847.00 with a very limited number of applications to determine a rate. Since then, we have been averaging additional applications each year to determine where the rate will ultimately be established. In 2020, we have taken into account additional applications where a somewhat more accurate average type of lot has been experienced including a small amount of one sided servicing and also laned lots. This rate has a tendency to increase in cost quicker than other rates over time due to the overall cost increasing and the subsidized portion such as the capital contribution and the fixed trench agreements not changing. These costs are then absorbed through the rate.

The Administration's model indicates that the current rate is recommended to increase for 2020 to \$860 per lot.

The recommended change to the utility rates is as follows:

Street Lighting	1.1%
Gas Servicing	2.3%
Underground Electrical Servicing	21.1%

Administration

Planning, Municipal Administration, Servicing Agreement Fees, Inspection

The servicing fees for the administration of the land development program are increased each year in tandem with possible changes to the standard collective agreement and the car allowance rate, where applicable. For 2020, the collective agreements were ratified and the change is between 1.5 and 1.8% for these services.

Parks and Recreation Levy, Community Centres

The Parks and Recreation Levy is a significant portion of the total offsite levies and is submitted as a separate report from the Community Services Department. The inclusion within this report is to illustrate completeness of the prepaid service rate schedule.

The levy for community centres has been implemented as a separate charge per residential neighbourhood, calculated on a front metre basis for all saleable property. This levy will also be reported on by the Community Services Department.