

# Operations Department



*The Operations Department is responsible for the operations and maintenance of the City's water, sanitary sewer, storm drainage, road and dyke infrastructure, as well as the operation and maintenance of the Wastewater Treatment Plant (WWTP), over 100 parks and sports fields and the City's recreational trail network.*

## Third Quarter Report 2018



**CITY OF  
CHILLIWACK**



## 2018 Community Forest Upgrades

The Community Forest has proven to be a very popular location for many Chilliwack residents and by the start of this year had outgrown the current parking / day use area that had been constructed in 2015. The decision was made to increase the capacity of both the parking lot and the day use area available at the bottom of the trails. The completed day use area adds to the current space available on the eastern side of the parking lot and provides a new raised area for all users to enjoy the natural surroundings whilst being safely separated from any traffic using the parking lot. The newly expanded parking lot involved two smaller projects. The first was an expansion to the existing parking area already available. This meant a new 20 car parking area on the western side of the lot, providing ample room for mid-week or quieter weekend traffic. The second expansion involved a widening of the road up to the existing parking lot to provide approximately 50 more spaces along the side of the road during peak times where the top parking lot may become full.



## Lickman Parking Lot Upgrades



The gravel parking lot at the Lickman Road access to the Vedder Rotary trail was redeveloped this quarter in order to increase the number of available parking spaces along the Vedder Greenway. This existing parking lot is located at the south end of Lickman Road and has been an uncontrolled lot for many years. Without defined parking stalls, this lot could support an estimated 55 vehicles. By defining each stall with concrete tire stops and standard travel lanes as per City parking standards, this parking lot can now accommodate 85 vehicles.



## Outdoor Fitness Equipment

In 2017, Parks Operations installed outdoor fitness equipment in Townsend Park, the Landing and Vedder Park. In the third quarter of 2018, outdoor fitness equipment was installed in Fairfield Park, Sardis Park and Crossing Park in order to continue to encourage health and wellness for all ages in our community. These parks were selected for outdoor fitness facilities because of their status as community and sub-community parks. As community parks, they provide a variety of facilities to a broad section of Chilliwack residents including parking, an exercise trail loop, washrooms, playgrounds, picnic areas and beautiful views to supplement these family-friendly activities.



Fairfield Park



Sardis Park



Crossing Park

## Townsend Park Playground Upgrade



The playground at Townsend Park was replaced thanks, in part, to a donation from the Mt. Cheam Rotary Club. Townsend Park is a large sport complex and community park, and therefore attracts many visitors from Chilliwack and nearby communities as sports groups come to Townsend Park to play. This led to typical wear and tear on the previous playground structure, making its replacement a timely one. The new playground features nets, slides, belts and climbers to provide children aged 5-12 with fun challenges that promote physical development and strategic thinking, as well as the space to take breaks and socialize with other children. With multiple entry points and plenty of activities, the new play structure can accommodate many children at once.

## Bulk Water Meter Replacement Program

The City's Operations Department provides water service to over 20,000 properties and all of these services are metered. Metering water consumption enables us to monitor customer usage while gathering statistical data for future water system planning. The water meters and service connections range in size from 19mm-300mm in diameter, depending on the property's water use requirements.

In the late 1980s, the City of Chilliwack started to install bulk water meters. A bulk water meter ranges from 100mm-300mm in diameter and provides a metering option for large diameter services that was not previously available. In the early stages of bulk water metering, measuring water usage accurately in large diameter services was always a challenge. As bulk water meters became more popular, and metering technology developed, the City of Chilliwack was able to utilize this style of meter more frequently. In 2004, a City policy titled "Installation of Bulk Water Meters to Private Distribution Systems" was adopted by Council. This policy was then incorporated into the Water Works Regulation Bylaw, No. 2995. Over the last decade, the installation of bulk meters has increased dramatically.

A large number of bulk water meters are now showing signs of aging and require replacement and/or upgrades. To manage this, the Operations Department has initiated a Bulk Water Meter Replacement program. The technology of the new, modern style meter has advanced and nowadays includes multiple automated system checks that alert staff of water leaks, high usage or potential backflow conditions. The new design also allows staff to complete meter repairs without removing the meter from service or disrupting the customer's water flow. For these reasons we see this meter replacement program having a significant impact on the City's overall water conservation initiatives.





## Water Leak Detection

The Operations Department is responsible for the effective operation and maintenance of the City's water supply and distribution systems. This includes planned activities that ensure the infrastructure is in optimal operating condition. One of the greatest influences on operating a water system efficiently is to identify (and then eliminate) water loss. Water distribution systems are under constant pressure and therefore can be prone to persistent leaks that are quite significant if unnoticed.

In the past, City staff could only respond to water leaks as they were identified by pressure loss, ponding water on the ground or reports from the public. The Operations Department recently purchased specialized leak detection equipment. This equipment enables staff to identify underground leaks which previously would not be identified resulting in constant water loss. This "Echologics" leak detection equipment is a non-invasive approach to leak detection which uses a patented acoustic technology to pinpoint the location of a leak.

The system automatically estimates the speed of sound in water pipes and interprets the sound waves to identify the exact location of a leak. The purchase of this equipment has enabled staff to take a more proactive approach to leak detection. No longer do Staff have to wait for a leak to be reported as the equipment allows them to actively look for leaks within the water distribution system and to identify and repair leaks before they present themselves at the surface.



## Municipal Fleet Acquisitions

Operations recently took delivery of a new 2018 Caterpillar 420F2 backhoe loader which is needed to replace a life-expired 2008 Caterpillar 420E backhoe loader. The new backhoe will be utilized daily by the Underground Utilities Department and will also be used for snow and ice control and other emergency response tasks.



A new 2018 Volvo EWR150E wheeled excavator complete with a 48" flail and two excavation buckets recently joined the municipal maintenance fleet. This new machine has a very short working radius which allows it to be used within a single lane closure zone on a two lane narrow road. Prior to this machine, Operations would have had to completely close a two lane road to carry out the same maintenance work, as the City's existing excavator is much larger. Avoiding complete road closures to preserve traffic flow is an ongoing maintenance goal. This new wheeled excavator will be utilized primarily for roadside brushing, ditch clearing and utility work.





## 2018 Kiosk Wrapping Program

Continuing on from the City's successful Kiosk Wrapping Program in 2016 and 2017, the City wrapped 16 BC Hydro kiosks and 8 traffic kiosks this year. As in previous years, the City received grant money from BC Hydro to complete the hydro kiosks.

The program has proven itself to not only reduce graffiti in the area but has greatly improved the streetscape appeal of this essential infrastructure. When choosing a specific graphic, colour, pattern and landscape types are appraised against a proven benchmark so to not provide a workable canvas option for the graffiti artists.

The feedback from the public has been exceptional for the wraps and several members of the public have either contacted the City to express how good the wraps look, or to ask how they can get specific kiosks in their area wrapped in the 2019 wrapping season.

