

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.

Fourth Quarter Report 2020



**CITY OF
CHILLIWACK**

Watson Glen Rotary Structure Refurbishment



After completing an engineering inspection and condition assessment of the Watson Glen Rotary circle structure, the engineer advised that the structure was aging badly and the structural integrity of the wood was compromised due to age and rot. Capital funds had been allocated for the refurbishment of the structure; however, staff were able to obtain pricing low enough to allow the entire structure to be replaced and rebuilt. The project was completed by a local contractor using treated lumber. The project involved removing and completely replacing the existing structure to provide years of new life to this park feature which is very well used by school groups, exercise groups, meditation and yoga groups to name a few.

After the contractor had disassembled the old structure, the work began with a refurbishment of the metal foundations, which were to be reused after having the old paint stripped, the brackets cleaned with a wire brush and repainted. Following this the structure was reconstructed to the original design, with some minor alterations to improve the structural integrity of the overhead deck sections of the structure. Following construction, the project was inspected and approved by the contracted engineer.

Townsend Parking Lot Extension

To help to alleviate some of the parking issues experienced during busy periods at the Townsend ball fields, a 30+ parking space expansion has been constructed that connects the existing Townsend West parking lot to the new completed Rotary Services building. The project required working with several different contractors as well as city crews to complete the project. The parking lot provides a well-drained, gravel area with curb stops on each side with a central parking row as well. The initial stages of the project involved installing a drainage system that included 3 catch basins, a drainage rock pit as well as a connection the existing storm drain. Approximately 900m3 of organic soils material was removed and replaced with gravel to provide a well graded and compact driving surface. This was then followed by the installation of landscaping, trees and fence installation around the completed works.



New Asphalt Patch Truck Added To Fleet

The City has purchased a replacement asphalt patching truck and this new truck is now in service. This new patch truck has over 3 times the carrying capacity as the previous unit and as such, more time can be spent on the job. This additional capacity is already showing an increase in operational efficiency and productivity has greatly increased. Previously, a lot of time was wasted driving to and from the asphalt plant in Aldergrove because of limiting restrictions to load carrying capacities. The new truck can operate a full 8 hour shift without having to return to the Abbotsford asphalt plant for reloading. The new patch truck was also designed and custom built to be multi use and is equipped with a front mount snow plow and has an integrated salt/sand spreader making this unit a multi-purpose vehicle for use within the City's fleet.



Blackburn Road Emergency Culvert Replacement



On December 14, 2020 Operations received reports of the road shoulder sloughing at the Blackburn Road crossing of Lewis Slough. Staff investigating the issue determined that the culvert needed to be replaced immediately to accommodate heavy agricultural equipment in addition to area residents. The failed 600 mm corrugated steel pipe was installed in 1960 and was scheduled for replacement as part of the Engineering Department's Culvert Replacement Program. The Lewis Slough system was identified in the 2009 Greendale Drainage Study as requiring conveyance improvements to increase flow to the Collinson Drainage Pump Station. As a result, the replacement pipe was up-sized to 1,050 mm concrete pipe. The length and depth of the excavation required a complete road closure, allowing Operations staff to complete the pipe installation and open the road to traffic in two days and completed repaving the following week.

New Standby Generator Installation



This fall, Operations installed a 750-kilowatt standby power generator and new switchgear at the Wastewater Treatment Plant. Due to the growth and expansion of the plant it was necessary to increase the capacity of the existing generator to allow for treatment of sewage and general plant operations during power outages. Sizing and placement of the generator took into consideration existing site conditions, future expansions and long-term planning of the plant's electrical requirements.

Fall Safety Training at Operations

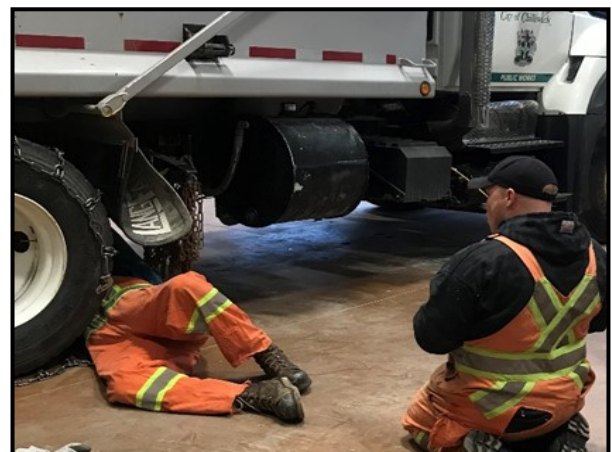


The Operations Department completed 2020 by achieving a training milestone. Managers and supervisors from Public Works, Parks and Fleet put their talented minds together and created a training program for winter operations, solely instructed by employees in-house. Not only does this manner of training create an extremely cost-effective program, it efficiently builds employee engagement throughout the learning process due to its customized approach.

Training content was specifically designed around Chilliwack's snow and ice control operations, policies and expectations. Experienced individuals from within Operations' various sub-departments stepped up and worked alongside their peers, providing detailed theory and hands-on mentoring. Definitive presentation material included the various pieces of equipment in use, plowing techniques relevant to our road systems, tricky areas and how to handle and the expectations for team work and communication to keep everyone safe during these often long and exhausting storms.

Over a two-week period, theory and practical training sessions were completed at the Operations Centre. Theory was presented in two parts with 65 workers completing Snow & Ice Control training for driver/operators and 31 for sidewalk clearing. Scheduling these two courses independently ensured employees only attended sessions relevant to the part of winter operations in which they would participate, making efficient use of training time. Theory groups were then broken down into smaller groups to perform practical skills labs which included chaining up, pre-trip inspections and snow blower operation.

Instructed by peers, these practical sessions ensured each employee demonstrated their ability to competently complete the task and provided mentoring to those learning for the first time. In addition, Operations concluded its training for 2020 with 20 employees successfully achieving their Ground Disturbance Level II® certification. This certification is for those who supervise or perform ground disturbance work around underground utilities. The course provides a review of informative steps that supervisors and workers are required to follow in order to safely complete the necessary steps of searching out, locating, and exposing underground facilities, without incident. This Level II certification included educational material on the Ground Disturbance 201 Standard for British Columbia, formerly designed for Alberta and recently endorsed for BC.



Fall Reservoir Cleaning

The City's water distribution system includes 18 strategically placed reservoirs, located in hillside areas such as Mt Shannon, Chilliwack Mountain, Promontory & Marble Hill. Reservoir tank capacities range from 250,000 litres to 19,000,000 litres, constructed out of both concrete and steel. Cleaning procedures are carried out annually on one third of the sites to not only maintain water quality but to also perform internal inspections on the structural materials. Each of the reservoirs are equipped with various styles of mixing systems to promote turn over and lower water temperatures. This fall, Operations completed the annual reservoir cleaning project in Marble Hill, Mt Shannon and the Falls Reservoir.

Cleaning of the Falls Reservoir required extensive planning and the installation of temporary water holding tanks due to it being a single cell storage tank which could not be emptied for cleaning without cutting off water services to local residents. By utilizing temporary water storage tanks, we were able to ensure uninterrupted water service to that area throughout the cleaning process.

