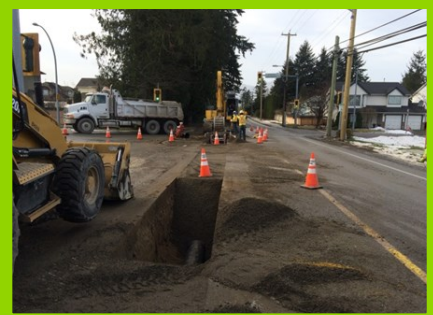


Engineering



Engineering is responsible for water and sewer, transportation and environmental services.

Fourth Quarter Report, 2017

2017 Water and Sewer Combo Project

The project is a combination of one water main installation, one storm main installation and five sewer main upgrades throughout Chilliwack that have been combined to increase scope and economy of scale. The proposed water main installation will increase supply, fire flow capacity and improve water quality of the existing water system in the local area. The proposed sewer main replacements and upgrades will replace aging infrastructure and increase capacity to satisfy increased flow from new and future developments. The proposed storm main installation will convey storm water away from water supply production wells to protect the City's drinking water.

The following table shows water, storm and sewer main installation and upgrade projects:

Name of Project	Contract Value	Project Status
Keith Wilson Road Water Main	\$840,130	Completed
Watson Road Storm Main	\$808,389	Completed
Watson Road Sanitary Main	\$82,147	Completed
Watson Road Paving Works	\$315,384	Completed
Evans Road Sanitary Main	\$348,242	Completed
Vedder Road Sanitary Main	\$643,364	Completed
Cheam Avenue Sanitary Sewer	\$935,604	Completed
Hodgins Avenue Sanitary Sewer	\$746,777	Completed
Hodgins Avenue Paving Works	\$333,730	Completed
Princess Avenue Sanitary Sewer	\$89,957	Completed

The Sandpiper Contracting / Wedler Engineering design build team completed this \$5 million plus project successfully in Fall 2017.



Wastewater Treatment Plant High Strength Wastewater Pre-Treatment Facility Project

The PCL Constructors Westcoast Inc. (PCL) has been selected as the Construction Manager along with Associated Engineering (B.C.) Ltd. as the design consultant for this construction management project. Global Water & Energy (GW&E) has been selected as the preferred vendor to supply an anaerobic wastewater treatment system for the pre-treatment facility after successful completion of Request for Proposal (RFP) process. PCL, AE & GW&E are currently in the process of completing detailed design work for Mechanical & Electrical components. The civil, structural & architectural designs were completed and work is currently underway. The overall project is scheduled to be completed in December 2018.



Kerr Avenue Sanitary Pump Station and Forcemain Project

The project includes the construction of a sanitary pump station and the installation and upgrade of a forcemain that have been combined to increase scope and economy of scale. The Kerr Avenue Sanitary Pump Station will include a 30 L/s capacity duplex submersible sanitary pump station, including a pump house building to house electrical controls, a backup generator, and other appurtenances. Kerr Avenue Sanitary Forcemain is a dedicated sanitary forcemain to convey wastewater flows from the new sanitary pump station to the high-strength wastewater pre-treatment facility (HSWWTF) at the wastewater treatment plant (WWTP). Jakes Construction Ltd. has been selected as the successful contractor for this \$4,074,900 project. The overall project is scheduled to be completed in December 2018.



Yarrow Reservoir “A” Replacement Project

The project consists of the demolition of the existing damaged reservoir, rock excavation to prepare the reservoir foundation, slope stabilization, a duty/standby pumping arrangement, 1,500 cubic metre capacity glass-lined, bolted steel circular tanks and related piping and improvements to drainage systems. The Maple Reinders Inc. / Ecora Engineering & Resource Group Ltd. design build team was selected to design and construct this design build project after successful completion of the Request for Proposal (RFP) process. The overall project is scheduled to be completed in Fall 2018. The funding for this \$2,011,567 project is through a combination of sources, including \$1,411,000 of grant funds provided by the Provincial-Federal Clean Water and Wastewater Fund and the rest by Yarrow Waterworks District.

Safety Fair

The formerly known Road Safety Day was rebranded for this year's Safety Fair and was co-hosted by Safer City and the Chilliwack Fire Department. The event was held simultaneously at three separate parking lot locations: Home Depot, Canadian Tire and the Yarrow Fire Hall. Multiple vendors provided booths to showcase their safety expertise, all in an effort to expand knowledge throughout the community.

Vendors included:

- Chilliwack Fire Department
- City of Chilliwack Operations Department
- Safer City
- RCMP (multiple booths)
 - ◊Garage 549
 - ◊Car seat check
 - ◊Police vehicle displays
- Alexa's Bus
- ICBC
- Fraser Valley Brain Injury Association
- StreetWise Traffic
- St. John Ambulance
- Canadian Tire (tire display)
- Home Depot (wood craft)
- Fire Smart
- Wally's Autobody
- Lafarge
- Combined Workplace Health & Safety
- Commercial Vehicle Safety Enforcement (CVSE)
- First Canada (Transit)

The team looks forward to expanding the Safety Fair next year to include more vendors and more opportunities for the public to be engaged one-on-one with local experts on a variety of safety topics.



Roundabout Education



The fall roundabout education session welcomed just over 30 visitors. This drop-in style session is held twice a year, once in the spring and once again in the fall. The purpose of the education sessions is to broaden visitors' knowledge of how to use a roundabout while in a vehicle, bicycle or as a pedestrian. The rules of the road are confirmed for any of the visitors through one-on-one discussions with engineering staff or the RCMP; simulators; printed material and display boards.

Project sites completed in 2017 are shown in the map and table below:



Vedder Bridge Replacement Design-Build Project

The old 1947 Vedder Bridge was de-launched and moved onto the south side of the river where it was decommissioned in November. Final paving, line painting, signage, landscaping, fencing, trail connections and lighting were completed and substantial completion for the project was issued at the end of November in accordance with the contract. Final outstanding deficiencies are scheduled for warmer weather in the early spring.



2016 Transportation Design-Build Combination Project

The Promontory – Teskey Detention Pond berm construction and preload was completed in September. Settlement will be monitored through the winter with completion of the remaining works in Spring 2018. The pedestrian signal on Yarrow Central Road and Kehler Road was completed in December. Watermain installation began in December for the Cultus Lake Roundabout project. BC Hydro, Telus, Shaw and Fortis utility relocations are scheduled for the first quarter of 2018.



Household Hazardous Waste Day

Household Hazardous Waste Day was held on Saturday, October 14, 2017 at the City's former Operations Yard.

This popular annual event is an opportunity for residents to drop off their household hazardous waste materials for proper disposal or recycling free of charge. Common items that were dropped off included paints, adhesives, fire extinguishers, and household cleaners.

Event summary:

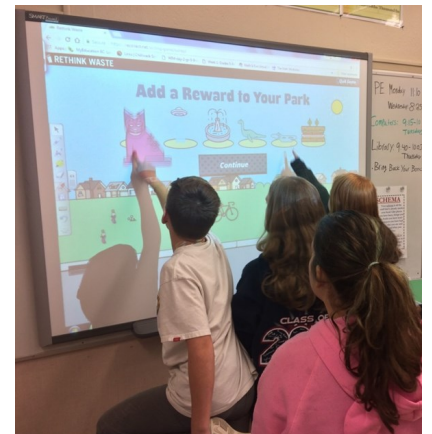
- Customer count: 432 vehicles; a significant increase from previous events, which received 200 to 300 vehicles.
- Contractors: Terrapure Environmental Solutions and ReGeneration (Chilliwack Bottle Depot).
- Donations to Salvation Army Food Bank: approximately \$1,240 and 800 food items.
- Amount of hazardous waste collected: 10.7 metric tonnes (excluding waste collected by the Chilliwack Bottle Depot).



Waste Reduction Month

In addition to Household Hazardous Waste Day, the City organized other environment-related events this fall to further instill the values of waste reduction. These programs included:

Elementary School Presentations – Over 500 students from 14 different elementary schools engaged in discussions about recycling and composting with the City's Environmental Services staff. A new online waste sorting game was used to help test the lessons learned during the session. Passing each successive waste diversion skill level allowed the students to add features to a digital park. The sorting game reinforced key concepts and kept students engaged.



Free Scrap Metal Recycling – Residents were permitted to drop off scrap metal at the Bailey Landfill free of charge throughout the entire month of October. A total of over 60 metric tonnes of scrap metal from 775 loads was collected. All of the scrap metal is transported to a processing facility owned by ABC Recycling and is ultimately shipped to end markets to be recycled into new products.



Shred-a-Thon



The Shred-a-Thon event on December 2, 2017 was another huge success! Together, Chilliwack residents donated 1,500 food items as well as \$8,886 in cash to the Salvation Army Food Bank.

A special thank you to Emterra for matching the first \$2,000 of community cash donations for a combined event total of \$10,886! The event was made possible through generous contributions from Shred-It, Cottonwood Mall, Emterra Environmental and Chilliwack residents.

Pumpkin Composting

Residents brought 144 Halloween pumpkins to the Parr Road Green Depot in 2017 compared to 530 in 2016. This 73% decrease corresponds with the launch of the City's compostables collection program where residents can conveniently include pumpkins in their Green Cart.

Through either method, the composting of pumpkins is a way to encourage diversion from the landfill.



Community Cleanup



Southside Church engaged over 100 volunteers on November 25th to perform a city-wide cleanup of riverbanks and known illegal dumping spots. The group collected an impressive two tonnes of garbage that could have ended up downstream with the high river volumes at that time. Emterra Environmental used one of their curbside collection vehicles and crew members to gather and transport all the debris for responsible disposal. The City coordinated the cleanup locations, Emterra's participation, and provided free tipping for the event.

Green Christmas



Environmental Services promoted waste-free gift ideas and other Green Christmas tips with the aid of the new Chilliwack Curbside Collection App and Metro Vancouver's "Create Memories, Not Garbage" campaign.