

Engineering



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

Third Quarter Report, 2014

McConnell to Standeven Water Main Upgrade



In early 2013, local residences commenced a petition process to request that the City of Chilliwack install a new larger diameter water main in the area from McConnell to Standeven to provide adequate fire hydrant protection. After going through Local Area Service petition process, 81.3% of benefiting property owners gave their consent to go ahead with water main upgrade work as a Local Area Service in May 2014.

The proposed work includes installation of 4,510m of 200mm diameter DI water main to replace the existing 75mm diameter CI and PVC water mains as well as 4,780m of new asphalt overlay and additional road rehabilitation

work. Strohmaier's Excavating Ltd./Aplin & Martin Consultants Ltd. design build team is proceeding with the work and approximately 90% water main installation work is now completed. Construction of this \$1,957,000 project commenced in July and with a completion scheduled in late fall of 2014. The paving portion of the project may have to be postponed to the spring of 2015 depending on fall weather conditions.

Sunset Drive Water main Upgrade

Installation of 280m of 200mm diameter Ductile Iron water main on Sunset Drive from Westview Avenue to Hodgins Avenue has been identified as a replacement for the existing 100mm Cast Iron water main to increase capacity for fire flow and improve water quality. This project is included under the South Trunk Sewer Upgrade project to increase scope and gain economy of scale. B&B Heavy Civil Construction Ltd./Associated Engineering Ltd. design build team completed the construction of this \$245,000 water main upgrade project in July 2014.

South Trunk Sewer Upgrade Phase 3



The existing South Trunk Sewer required upgrades to ensure system reliability and to facilitate current and future flows. The project includes installation of 330m of 750mm diameter gravity sanitary sewer along Westview Avenue and Sunset Drive and 160m of 250mm gravity sanitary sewer along Newman Road. B&B Heavy Civil Construction Ltd./Associated Engineering Ltd. design build team successfully completed the project by late August 2014. The total project cost was \$1,185,700.

Biological Treatment System Expansion Phase 1

The existing biological treatment system at the Wastewater Treatment Plant (WWTP) needs expansion to accommodate increased flows and loads due to growth as well as to meet discharge quality requirements in the future. The objective of this project is to construct a new Bioreactor Tank with associated equipment, a splitter Box and a third Secondary Clarifier to increase WWTP capacity and to maintain regulatory effluent quality requirements. The design build delivery process for this \$8.5 Million project is currently underway with the issue of RFP package to selected three (3) proponents in April 2014. The RFP will be concluded in October 2014 with a selection of design build team to complete the project. The project is planned to be completed by end of November 2015.



Weeden Drive Booster Pump Station



The Weeden Drive booster pump station serves a high elevation residential area of Promontory. The pump station requires an upgrade to provide backup fire flow pumping capacity. Major mechanical and electrical upgrades will be required to accommodate the additional fire pump. Associated Engineering was selected to provide project engineering services and final details of the design are to be completed by October 2014. Construction of this \$150,000 project is scheduled to be complete by early spring 2015.

Commercial Vehicle Inspections

Safer City partnered with representatives from the Ministry of Transportation and Infrastructure's Commercial Vehicle Safety and Enforcement Branch (CVSE), WorkSafe BC, and RCMP for a 2-day project. Vehicles were checked to confirm their compliance with applicable safety legislation at locations within the City of Chilliwack. Even though this initiative resulted in violation tickets of commercial vehicles, the public is reminded that it is important to remember the overwhelming majority of vehicles are being operated in a professional manner.



Roundabout Open House

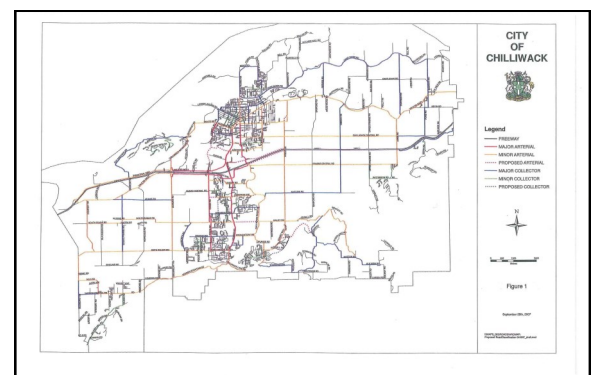
The second "Roundabout Open House" of the year was held on September 18, 2014 at the Sardis Public Library. Safer City hosts the event with support from Engineering Staff, ICBC staff and the RCMP. Throughout the evening visitors were able to have their questions answered, gain driving confidence by learning the rules of the roads and were encouraged to leave their comments about the roundabouts in the community. This event continues to be a popular public engagement effort and the twice a year event will continue in 2015.

Evans Road Roundabout



Network Screening Study

The City of Chilliwack has partnered with ICBC to conduct a network screening study for the overall road network in community. The comprehensive work plan will include crash data and traffic count reviews, safety analysis, site ranking, review of collision patterns and site visits. The end result will be a comprehensive document that both ICBC and the City of Chilliwack can utilize during safety improvement planning. The report will summarize recommendations for identified locations, a ranking of sites and summarize all the findings from the review. The project is set to be completed by the end of 2014.



2012—2016 Bridge Inspection Program



The City of Chilliwack has engaged Delcan Corporation to carry out a multi-year Bridge Inspection and Reporting program. The objective is to provide bridge inspection and reporting on 23 bridge structures in Chilliwack. Bridge inspections were completed this summer by a qualified bridge inspection engineer to visually inspect each of the bridges including ancillary structures. The 2014 Bridge Inspection Report is the second of three reports (2012, 2014 & 2016) that will be submitted by Delcan as part of the 5 year inspection program. The report outlines the inspection procedure, findings, and rehabilitation recommendations.

Tyson Road Roundabouts Project Update



The \$1.2 million dollar Design-Build project awarded to the team of Martens Asphalt Ltd. /McElhanney Engineering Services Ltd. for the construction of roundabouts at Keith Wilson Road and Watson Road along the Tyson Road was completed in August with final landscaping restoration in late September.

Bailey Sanitary Force Main Upgrade - Storm Sewer Phase 1

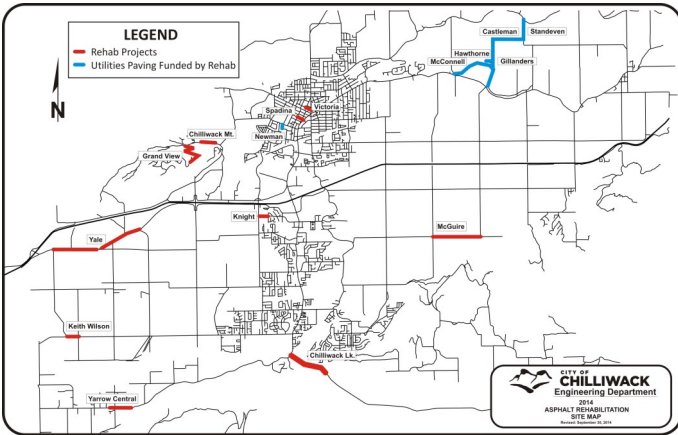


The Bailey Sanitary Forcemain Upgrade / Storm Sewer Phase 1 Project includes approximately 500m of 250mm diameter sanitary forcemain and 440m of 1200mm diameter storm sewer. The project was awarded to Sandpiper Contracting LLP / McElhanney Engineering Ltd. in July with construction through August and completion in September.

2014 Asphalt Rehabilitation and Shoulder Paving

All work under these two programs is now complete.

Chilliwack Mountain Road Reinforcement



Spadina Avenue,
Mary Street to
Yale Road



Yarrow
Central Road



Chilliwack Lake Road - Overlay and Shoulder
Paving



Transit

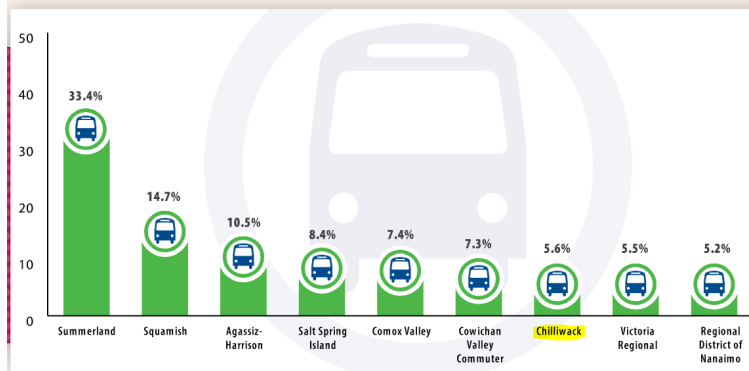
On August 31, 2014 expansion was implemented which included a longer service day on Conventional Routes 1, 2 and 4 and 580 extra revenue hours and an additional vehicle for the Custom system.

Ridership growth has been steady over the last few

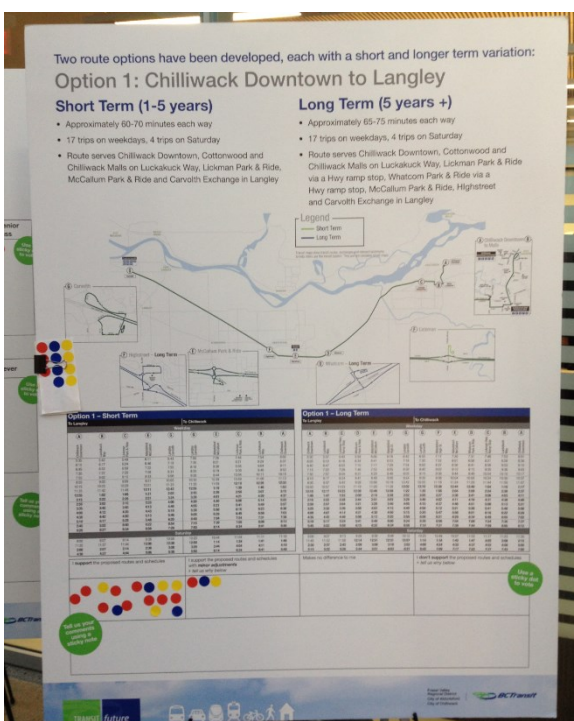
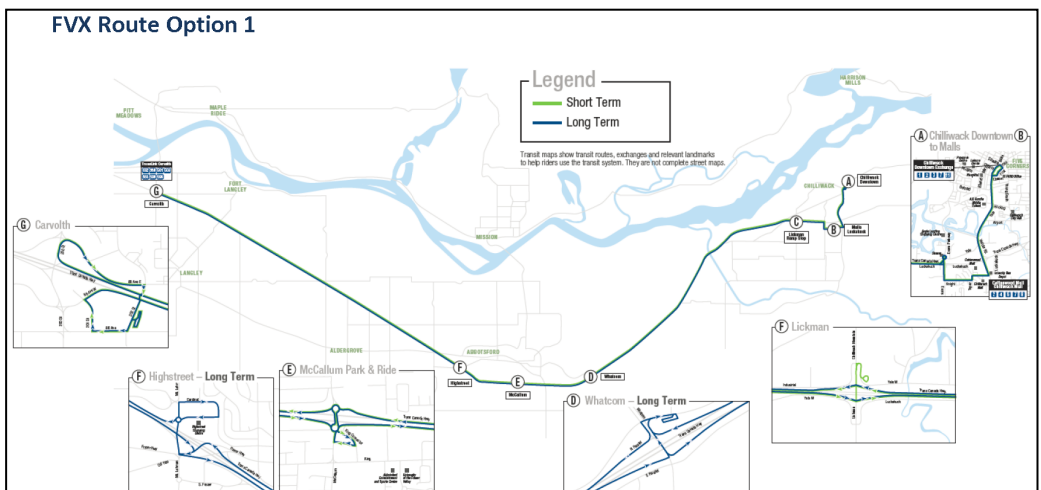
years and compares well to other top performing systems in BC as shown on the following “Fast Facts” graph which appeared in the Summer 2014 BC Transit Connections newsletter.

The Fraser Valley Express (FVX) open houses were held from September 9 to 12 to present routing options to potential riders and invite comments on proposed fares and scheduling.

Fast Facts



A number of communities experienced significant ridership growth in 2013/2014 over the previous year.



Thornton Road Reconstruction

Tenders for the reconstruction and reinforcement of Thornton Road were received and Kan-Arm Contracting Ltd. was the low bidder. Construction commenced in mid-July and was complete by mid-August.



Vedder Road Pedestrian Signals

Fraser City Installations Ltd. completed the pedestrian signal installations on Vedder at Storey and Alder and they were put into service on September 24th. These new signals feature LED down lighting, audible pedestrian signals, coordination with adjacent signals and video traffic detection for efficient off-peak operation.

Vedder and Storey/Gaetz pedestrian signal



Traffic Signal Upgrades

Yale at Menzies - Traffic Signal Pole Replacement



Yale at Airport - Traffic Signal Pole Replacement



Concrete Works



Universal Contracting has finished on the Reid Road sidewalk project.

River Clean Up Events

Through BC and World Rivers Day on September 28, we are reminded of the value our local waterways provide to our community. The City continues to honor the Fraser and Chilliwack/Vedder Rivers by helping to facilitate community cleanups along their banks.

On September 27 stewardship groups, anglers, and concerned citizens cleaned the banks of the Fraser River during a cleanup organized by the Fraser Valley Salmon Society. The City of Chilliwack supported their efforts by helping to arrange a commercial bin and by waiving the tipping fees at the Bailey Landfill for 2.3 tonnes of garbage they collected.

On September 28, three hundred Chilliwack residents headed to the banks of the Vedder /Chilliwack River to give a little back to the river which gives our community so much. Building off the success of the April and July Adopt-A-River clean-up events, the September event was the largest of the year and saw the removal of 3.6 tonnes of garbage for an annual total of 7 tonnes in 2014 alone. The Adopt-A-River events are coordinated by the Chilliwack Vedder River Cleanup Society in cooperation with the City and FVRD. Environmental Services staff was on hand to coordinate, answer questions, and engage with kids through an interactive display. The City also provided free tipping at the Bailey Landfill so the gathered material could be disposed of responsibly.



Tzeachten Open House



On August 13, Environmental Services staff participated in the Tzeachten Open House community event. Activities included informative booths by various organizations, activities for children, and a barbecue. At the City of Chilliwack booth, visitors learned about the City's environmental initiatives, green lifestyle tips, and free recycling options for a variety of household items.

Bailey Landfill Maintenance



Several projects have been carried out at the Bailey Landfill to improve the operation of the facility. Tervita Corporation capped areas of the landfill to reduce leachate generation, and completed some drainage improvement works. A new road into the lower waste cell was also constructed to facilitate commercial vehicle access.



Golder Associates and Downrite Drilling replaced three groundwater monitoring wells in connection with the north expansion area project. The wells are part of a larger network of groundwater and surface water monitoring stations that are sampled regularly to ensure landfill operations are not negatively impacting local water resources.

2014 Vedder River Sediment Removals



The Vedder River sediment removal is a collaborative effort between the City of Chilliwack, City of Abbotsford and the BC Ministry of Forests Lands and Natural Resource Operations. Planning for the 2014 removal included river survey by Tracker Survey, hydraulic river modeling by Tetra Tech (EBA) and environmental planning and monitoring by Nova Pacific consultants. The Vedder River Technical Committee reviewed the proposed removal locations and provided recommendations to the Vedder River Management Area

Committee. Sediment removal of 63,500m³ at 3 Province of BC locations, 2 City of Chilliwack locations and 1 City of Abbotsford locations was approved. Jakes Construction in coordination with the City environmental consultant successfully completed the removal work between August 14 and September 12 2014.

Fall City-Wide Garage Sale

The Fall City-Wide Garage Sale took place on Saturday, September 27th. Residents were able to register their address online and have their location listed on the City of Chilliwack website as well as in the local paper. A total of 156 residences signed up to participate which was similar to the number from last year's fall event. This initiative continues to support our reuse and recycle goals at little cost to the public.