

2013

FOURTH QUARTER REPORT



Engineering Department

Inside this issue:

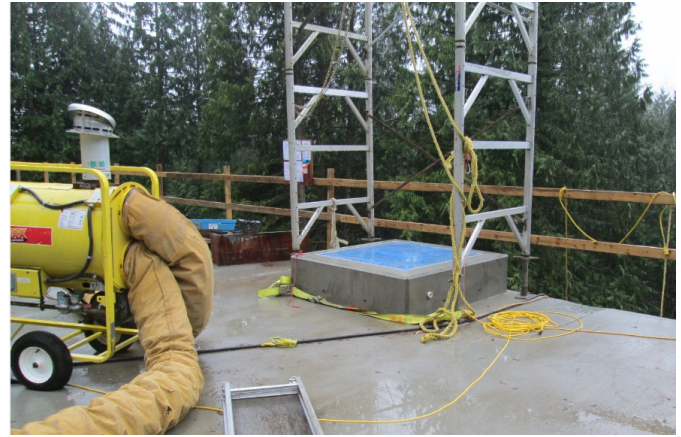
Introduction	1
Water & Sewer	2
Transportation	3
Environmental Services	7

Construction is nearing completion on the Eastern Hillside Zone 1 Balancing Reservoir. Expected to go on line in the First Quarter of 2014, the reservoir will provide necessary pressure and volume to balance demand in the eastern portion of Zone 1. Additional information about this project is available on Page 1.

Elsewhere in this issue are photos and details on transportation, sanitary sewer and environmental projects. Of special interest is the Provincial snow pack report on Page 7 indicating we are at normal levels of snow accumulation.

Eastern Hillsides Balancing Reservoir

The proposed project is to construct a balancing reservoir to stabilize the water system pressure in eastern Chilliwack. The reservoir will provide sufficient volume and elevation to maintain pressure throughout the peak water demand periods and ensure system reliability. Timbro Contracting / Civic Consultants design build team are currently in the process of testing the reservoir and associated water mains. This \$1,378,719 project is scheduled to be completed in early spring of 2014.



McGrath Road Water main at CN Rail

A sink hole appeared in and around CN Rail tracks on McGrath Road in the spring of 2013. After field investigations, it was revealed that the condition of the existing 150mm diameter steel water main underneath CN Rail has deteriorated and needs replacement to protect the CN Rail line and to provide reliable water supply. Installation of a new casing pipe and 300mm diameter Ductile Iron water main after receiving approval from CN Rail and the work was successfully completed by Sandpiper Contracting in November 2013.



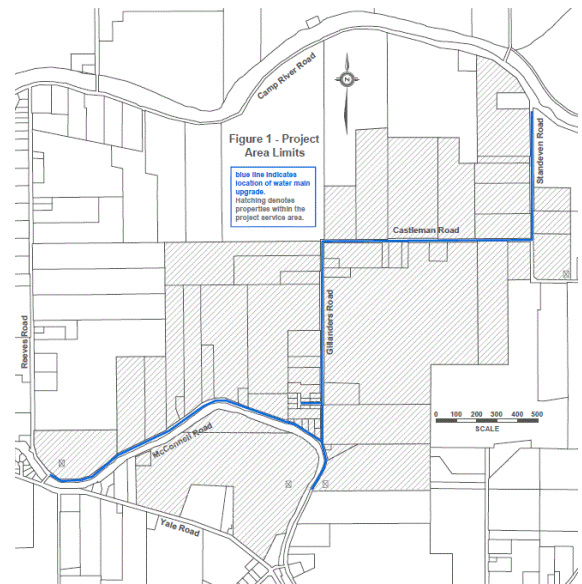
Sunset Drive Water main Upgrade

Installation of 280m of 200mm diameter Ductile Iron water main on Sunset Drive from Westview Avenue to Hodgins Avenue has been identified to replace an existing 100mm Cast Iron water main to increase capacity for fire flow and improve water quality. This project is included under South Trunk Sewer Upgrade project to increase scope and gain economy of scale. The RFEI stage for this \$150,000 design build project is currently underway. The project is scheduled to be completed in August 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 reviewing the petition submitted by local area residents, preliminary design work was completed along with cost estimates to upgrade the existing water main and notified the local area residents with information such as total cost, the City's contribution & the individual home owner contribution along with a non-binding petition. In May 2013, the majority of benefiting property owners gave their consent to go ahead with water main upgrade work based on preliminary cost information.

The proposed work includes installation of 4,510m of 200mm diameter DI water main to replace existing 75mm diameter CI and PVC water mains as well as 4,780m of new asphalt overlay and additional road rehabilitation work. RFP stage for this design build project is currently completed and Local Area Service petition is planned to commence early 2014. Construction of this design build project will commence only after the successful completion of Local Area Service petition. The approximate total project cost is \$2,000,000. If owners approve the project, completion is scheduled in early fall of 2014.



Biological Treatment System Expansion

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 increase WWTP capacity to service the increase sewered population within the next 20 years. Associated Engineering submitted the registration package under Municipal Wastewater Regulation (MWR) to the Ministry of Environment to obtain approval for higher discharge flows and is in the process of completing preliminary design work for the expanded biological treatment system to achieve high quality effluent discharge in the future. It is planned to issue the Request for Expression of Interest (RFEI) package in 2014 to select a design build contractor to complete upgrade work once Ministry approval is obtained.



South Trunk Sewer Upgrade

The existing South Trunk Sewer is required upgrade to ensure system reliability and to facilitate current and future anticipated flows. The project includes installation of 330m of 750mm diameter gravity sanitary sewer along Westview Avenue and Sunset Drive and 160m of 200mm gravity sanitary sewer along Newman Road. The RFEI stage for this \$1,100,000 design build project is currently underway. The project is scheduled to be completed in August 2014.



Commercial Vehicle Check

The Safer City Program, in partnership with representatives from the Ministry of Transportation and Infrastructure's Commercial Vehicle Safety and Enforcement Branch (CVSE) and Chilliwack RCMP Traffic Services checked vehicles to confirm their compliancy with applicable safety legislation at locations within the City of Chilliwack.

Hundreds of commercial vehicles travel through Chilliwack on any given day. The inspectors used their expertise to focus on vehicles that were not likely to pass an inspection. This was ultimately accomplished through a quick visual inspection in conjunction with vehicle type. Main items checked during inspection were the vehicles' mechanical components and driver qualifications, specifically brakes, tires, lights, steering, load security, driver licensing and fatigue.

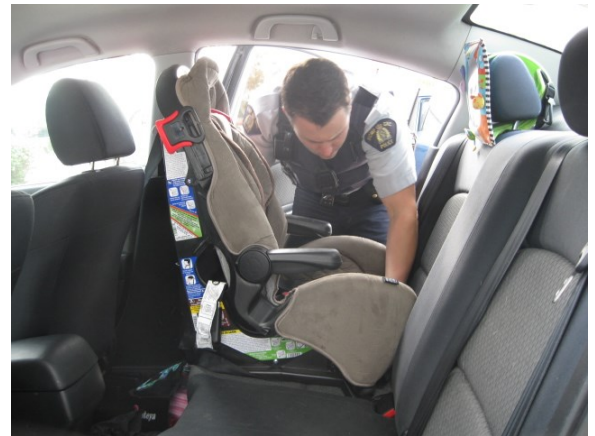


While the Ministry of Transportation and Infrastructure's inspectors were more focused on commercial transport safety infractions, police officers were checking both commercial and passenger vehicles. The participating enforcement agencies also checked trailers to ensure the cargo was properly secured and that any hazardous materials were being safely transported in accordance with provincial legislation.

In total, the officers targeted 46 vehicles for full inspection. Of that, 6 vehicles passed with no defects, 17 vehicles required minor repairs to be completed at a later time, and 23 required repairs to be completed prior to proceeding. There were 14 violation tickets issued during the day.

Car Seat Check

The Safer City team hosted a Free Child Car Seat Check for residents in October. The drop-in check was conducted at ICBC on a Saturday which welcomed a number of eager parents and caregivers. The team was kept busy checking seats installed in vehicles for proper installations; answered car seat questions and checked car seat expiry dates. The team anticipates hosting additional car seat checks in the upcoming year.



Impaired Driving

Safer City undertook enforcement and educational efforts in order to raise awareness about impaired driving with the approaching holiday season. In addition to road checks, the team deployed their poster campaign that was distributed through Bar Watch establishments named "You Choose Your Ride"; the local businesses openly supported the 'awareness' campaign and the posters could be seen in many local establishments across the City. The poster was original distributed during the holiday season of 2012 and received outstanding feedback.

With impaired driving being the #1 cause of criminal death in Canada, Chilliwack strives to have the safest roads in Canada and in doing so combined enforcement and education efforts assisted in getting impaired drivers off the roads.



Downtown Painting

In the fall of 2013 the City hired two companies Nouveau Interior and Prime Signs to complete painting of streetlights, traffic signals and City Parking Lot signs in the downtown area. Each year we paint some elements of our infrastructure that adds to the beautification and cohesive look in the downtown area.



New Crosswalk Installations

Crosswalk warrants were conducted at Teskey Way and Jinkerson Road, as well as South Sumas Road and Silverthorne Road and it was determined that a marked crossing was warranted. Scottish Line Painting was hired to install the roadway markings while City Public Works staff installed the associated signage.

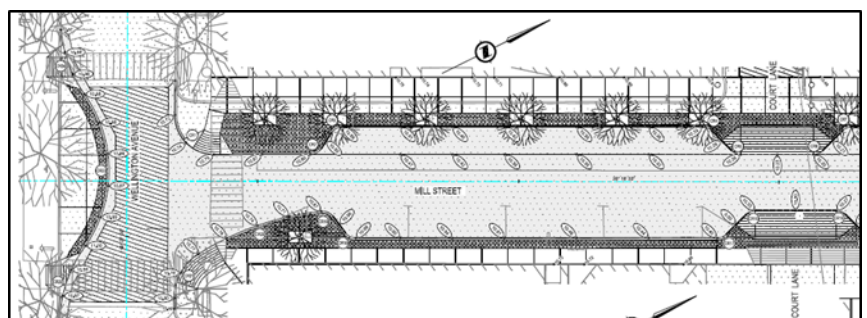


Teskey Way at Jinkerson / Hudson Road

Mill Street Project Update

The City of Chilliwack council has awarded the Mill Street Upgrade Project tender to Strohmaier's Excavating Ltd. Construction is set to begin during the first week of February with completion by April 2014; weather dependent. This work will include the replacement of water, sewer, storm drains and road surface on Mill Street from Wellington Avenue to Victoria Avenue.

The Mill Street Project will also provide improvements to sidewalks, parking lots, streetlight and accesses that will step up functionality for owners and users alike. Improvement to electrical services for street events and installation of street trees will really round this project off with a look that will fit nicely in with the Wellington Avenue and Community Park feel.



2013 Asphalt Rehabilitation and Shoulder Paving



Vedder north of Stevenson
Mill and Pave

Keywest Asphalt Ltd has now completed the Asphalt Rehabilitation and Shoulder Paving program. A total of 10,738 tonnes of asphalt was placed on 16 roads with a cumulative length of 11.2 km.

Vedder at Thomas - Traffic Signal Upgrading



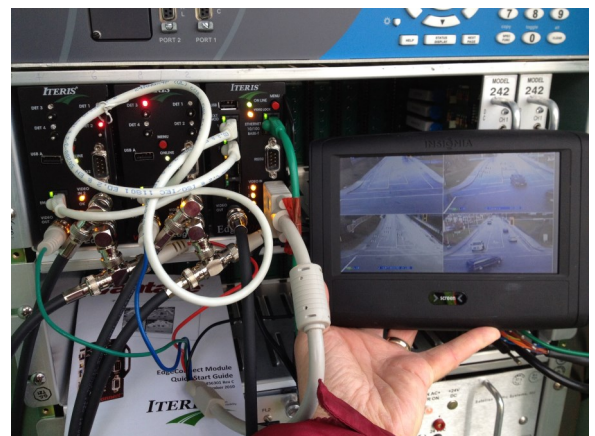
The new Eastbound and Westbound left-turn signals have been commissioned. ICBC contributed \$7,000 toward this project based on historical crash data indicating that this more orchestrated left-turn control will reduce accidents and insurance claims.

Traffic Detection Video Transmission

Video detection equipment has been installed at the intersection of Promontory at Teskey and Promontory at Vedder to improve the long-term reliability of traffic detection when compared to traditional in-pavement loop detection. Video detection is not disrupted by road maintenance activities like repaving and with the communication devices recently installed the zones can now be monitored and repositioned remotely to improve efficiency.



Promontory at Teskey



2014 Snowpack Report



The BC River Forecast Centre issued the first snowpack report for the 2013-14 winter season. As of January 1st, 2014, most of the snowpack within the Fraser River watershed (except Upper Fraser) was below normal:

Upper Fraser: 151% of normal	Nechako: 59% of normal
Middle Fraser: 93% of normal	North Thompson: 98% of normal
Lower Fraser: 57% of normal	South Thompson: 95% of normal

The Upper Fraser basin snowpack is above normal, and this area generally contributes about 27% of the total peak freshet flow at Mission gauge. Overall the watershed snowpack is at normal accumulation. Typically by early January only approximately one-half of the annual snowpack in BC has accumulated, so it is still too early to gauge potential flood risk for the spring freshet.

The snowpack normally does not reach full accumulation until mid-April and will continue to be monitored as part of the City's annual freshet preparedness procedures. At this point there are no strong indications of a high likelihood of extreme wet or dry seasonal weather through the rest of the accumulation season.



Bailey Landfill Design-Build Project

The \$6.4 million dollar capital project which includes the final phase of the expansion cell, a new landfill gas extraction system and a new lift station is progressing at the Bailey Landfill. The west cell is 85% complete and has the secondary cover system in place. All of the gas wells have been drilled and are currently being connected to the processing facility under construction. It is anticipated that the project will reach substantial completion at the end of February or March, 2014.



Bailey Landfill – East Cell Mitigation

The east half of the expansion area requires work to improve leachate drainage. During the tie-in to the west cell it was noted part of the leachate drainage layer had been compacted causing reduced permeability. Conestoga Rovers Associates was asked to investigate and prepare a report to improve the leachate draining in the east cell. Tervita will provide the labour to mitigate the drainage system. The works will be completed in January, 2014.



Household Hazardous Waste Day

Household Hazardous Waste Day was held on Saturday, October 5th, 2013. This event provides an opportunity for residents to bring their household hazardous materials for proper disposal or recycling, free of charge.

This year, Chilliwack residents dropped off 5,660 kg of hazardous waste ranging from waste oil to corrosive acids for handling by Newalta. In addition, 6,550 liters of paint, solvents, and pesticides were collected by Product Care, a Provincial Stewardship Program. 258 residents participated in 2013, similar to the number of participants over the past few years.



Waste Reduction Month

By promoting environmental programs run by the City, as well as provincial stewardship programs, Waste Reduction Month encouraged sustainable use of resources as a way of life in our community. Various programs included:

- **Free scrap metal drop-off** at Bailey Landfill all October long. 453 loads were brought in totaling 36 tonnes of metal now destined for recycling.
- **Elementary school recycling presentations** were popular again this year, and filled up within days. This year, presentations were delivered to 8 classrooms reaching 209 students in grades 2-5. To date, 60 presentations have been conducted since 2006 and there is a wait-list for 2014.
- **The Fall City Wide Garage Sale** had 153 residents sign up as sellers – a 14% increase in participation over 2012.
- **Retailer Participation materials** were sent to 27 local businesses who displayed various waste reduction messages alongside applicable products on their shelves.

Reduce Your Waste!

A helpful tip:

Properly Dispose of Electronics

TV's, computer products, and electronics can be safely recycled at the Chilliwack or Sardis Bottle Depots.

For more information on reducing household waste
call Environmental Services at 604.793.2907
or visit our website: www.chilliwack.com/environment



Christmas Shred-A-Thon

The 2013 Shred-a-Thon & Christmas Food Drive was a huge success. Over \$2,000 was collected in addition to 600 food items for the Salvation Army. Emterra Environmental donated an additional \$1,000 to the cause.

The event was made possible through generous contributions from Shred-It, Cottonwood Mall, Emterra Environmental, and Chilliwack residents.



Site Renovations at Parr Road Green Depot

In an effort to improve traffic flow at the Parr Road Green Depot, BioCentral, the new site operator, is adding a second scale to weigh incoming and outgoing vehicles separately. Scale installation will be completed in early 2014. The new operator has also reconfigured the tipping area for easier public access and a greater ability to sort material types. Certified organic soil and compost products are anticipated to be offered to the public for sale in the spring.

