



# Engineering & Public Services

## Departmental Activity Report

September - December 2008

### **ENGINEERING**

#### ***Bylaws***

##### **Truck Route Bylaw**

The Truck Route Bylaw is on hold until the Benvenuto and West Saanich Road allowance issue is resolved with Butchart Gardens.

##### **Surface Water Runoff Bylaw**

The Bylaw is in draft form and currently being reviewed internally.

##### **Rey Road Traffic Regulation Bylaw**

The Rey Road Closure Bylaw was adopted in October 2008. The access gate will be closed for other than emergency vehicle access and for commuter access at times when Monta Vista Way is impassible due to inclement weather (snowfall condition, for example).

#### ***Projects***

##### **Transportation Projects**

- **Mt. Newton and Central Saanich Road Crosswalk Review** Rumble strips and bus stop warning signs have been installed, and tree trimming completed to improve visibility and pedestrian safety at this location.
- **East Saanich Road Bike Lanes and Trail** An Open House is set for March 5<sup>th</sup> to allow members of the community to review the preliminary design and to comment on the proposal.
- **Traffic Speeding and Calming Issues** Recommendations to install speed humps on Sluggett Road will be presented to Council in the month of March 2009.

- **“Welcome to the Neighbourhood 40 km Signs”** Signs are up and being monitored by CS Police Services.
- **Benvenuto/West Saanich Intersection Improvement** On hold until the Benvenuto and West Saanich Road road allowance issue is resolved. (see “Truck Route Bylaw”)
- **Keating School Crosswalk Improvement** Lights are installed and functioning.
- **Bus Stop Improvement Program** Keating/West Saanich location has a new ramp and shelter. The East Saanich Road at Polo Park location has a new shelter.
- **Building Canada Fund – Grant Application – East Saanich Road Project** A Building Canada Fund (Federal, Provincial, Municipal) Grant Application for the East Saanich Road (Prosser to Island View) improvement project has been submitted.

**Asset Inventory and Valuation - PSAB** The asset inventory and valuation project is nearing completion. Delivery of the final report is anticipated in February 2009.

**Integrated Stormwater Management (ISMP) Study** Open House was held October 16, 2008. Draft report was received by Council on November 10, 2008. The Final Report will be completed in March. Ongoing data monitoring and implementation plan being organized.

**Tetayut Creek Stewardship** Engineering and Public Works staff continue to work with Peninsula Streams representatives. Acting Public Works Coordinator is the District's liaison on this project.

**General Drainage Projects** Mt. St. Michael drain has been relocated in ROW. Welch Road drainage has been completed. Woodward Drive drain works has been designed. Clarke Road drain works has been designed.

**Maber Flats Storm Water Equalization** Culverts were installed and are functioning as designed. The trail works has raised the low areas above high water.

**Trees for Tomorrow Application** A grant application has been submitted.

**SCADA** - Software and equipment upgrades will continue in 2009 to maintain compatibility with the CRD system.

### **Sewer System Modifications**

- Root repairs – ongoing
- The surge protection line at the Hagan Pump Station suffered a rupture on Dec 31, 2008 resulting in the discharge of sewage over two residential properties and into Sluggett Creek. PEP reporting and clean-up were conducted immediately. Minor damages to the roadway and adjacent properties will be affected at first opportunity in the new-year. Detailed engineering review of the surge protection line and associated equipment will be conducted in consultation with the CRD, repairs will be completed by CS.
- Concerns over the serviceability of the station continue. In this regard, an IPG grant application will be submitted for the funding of a feasibility study to evaluate the pumping options for the Hagan and Brentwood Pumping Stations and the replacement of the ageing asbestos cement forcemains from those two stations.

### **Senanus Water Main Project**

The amendment of the Regional Context Statement in regards to the extension of services

outside of the Residential Settlement Area has been completed. The next steps towards continuance of the project include the preparation of the necessary Local Area Service and Loan Authorization Bylaws.

### **Dock Maintenance**

Maintenance and Inspection of the two dock facilities continues to be conducted by Advanced Contract Services. The concrete float at the Saanichton Facility suffered considerable storm damage in December and was removed pending repair or replacement in the new year.

Full structural evaluations of both facilities is anticipated for 2009.

### **Rezoning and Subdivision Applications**

Engineering and Public Works Department continue to review the Subdivision, Rezoning and Development Permit applications referred by the Planning Department.

## **PUBLIC WORKS**

### **Vehicle Equipment Maintenance**

- ❖ Police – regular servicing of the fleet and two new black and white units readied for service.
- ❖ Fire –regular servicing of all fire equipment.
- ❖ Roads/Drains – regular servicing and one new unit put into service.
- ❖ Parks - regular servicing of vehicles and continued cooperation with parks staff to optimize well maintained and safe equipment operation. One new unit put into service.
- ❖ Water/Sewer – regular servicing Engineering and Inspections – regular servicing of vehicles.
- ❖ Provided additional vehicle support during the December snowfall events.

## **Water Maintenance**

- ❖ *Water meter replacement program was completed for another year. Installed approximately 200 check valves into the residential service lines and new meters where required.*
- ❖ *Fire hydrants have all had a "B" service, which is a pressure check and to ensure they are properly drained for the winter months.*
- ❖ *All grass and brush has been cut around the hydrants.*
- ❖ *Approx. 40 new Storz nozzles were installed onto various hydrants throughout the Municipality.*
- ❖ *AC (asbestos cement) water mains continue to be a problem, as the residential saddles are deteriorating and mains are breaking. A replacement programme will be prepared upon completion of the PSAB Study (asset inventory and evaluation).*
- ❖ *Five more water services were installed, as well as the 8" AC water main on Rafiki Way was shortened to remove it off of private property.*
- ❖ *Provided the snow removal support during the month of December.*

## **Sewer Maintenance**

- ❖ *Annual sewer main inspections and camera work is almost done for this year.*
- ❖ *Approx. 1/7 of the sewer mains were flushed and cleaned to prevent blockages and backups.*
- ❖ *One of Brentwood pump stations pumps was sent out to be serviced with new bearings, and was put back into service with a new impellor, volute and wear rings.*

- ❖ *Flushing and cleaning the 17 sewer pump station wet wells.*
- ❖ *Inspection and maintenance of the 13 smaller sewer grinder pump stations.*
- ❖ *SCADA is up and running in our entire sewer and most of our water PRV stations. Adding onto this technology will continue.*

## **Roads and Drain Maintenance**

- ❖ *Street sweeping cleaning up for 200 hours.*
- ❖ *Cleaned, inspected and effected repairs on all of the culvert ends within the municipality.*
- ❖ *Cleaned and flushed approximately 1300 catch basins for 300 hours.*
- ❖ *Completed the agriculture ditching portion of our maintenance around 3 kilometres of ditches through Maber flats and Island View/valley area.*
- ❖ *Completed painting all existing yellow curbs plus adding new curbing.*
- ❖ *Removing and replacing 20 meters of mountable curb that was damaged due to roots heaving on Pelter Place.*
- ❖ *Installed a new bus pad, shelter, bench and garbage can at Keating Cross Road and West Saanich Road.*
- ❖ *Added 30 new signs to the current inventory of signs.*
- ❖ *Assisted in the installation of the flashing pedestrian cross walk lights at Saanichton Elementary School.*
- ❖ *Repairs to the storm drainage system for 500 hours.*
- ❖ *Completed an upgrade and additional infrastructure to the drain on Welch Road to include 50 meters of pipe, 2 manholes and 5 catch basins.*

- ❖ *Responded to a long cold spell with several snow events spanning three weeks through Christmas and New Years. Public Works Crews were working around the clock.*
- ❖ *Participated in regular training as scheduled.*
- ❖ *Provide service requests on a daily basis.*

### **Parks Maintenance**

- ❖ *Build a set of service stairs at Newman Farm.*
- ❖ *Realigned driveway at Butterfield Park.*
- ❖ *Repainted Field House at Centennial Park.*
- ❖ *Performed routine Parks tasks such as litter collection and trail maintenance within the Parks System.*
- ❖ *Routine grass cutting within our community, neighbourhood and nature parks into early November this season.*
- ❖ *Monthly park and playground inspections completed.*
- ❖ *Completed the Fall field maintenance which included aerating, mechanical weed removal in Centennial and Alexander Field.*
- ❖ *Performed projects in the Invasive Plant Removal Program within Adam Kerr.*
- ❖ *Tree management is under way dealing with winter storm /snow damaged trees.*
- ❖ *Continue to assist other sections of Public Works with tree related issues.*
- ❖ *Extensive tree planting will continue into 2009.*
- ❖ *Completed de-icing/sanding of all Municipal facilities and parking lots.*
- ❖ *Winterized all irrigation systems and equipment for the season.*

### **Workplace Safety and Risk Management**

*In order to comply with Workers' Compensation Board (WCB) Regulations and limit the District's liabilities, the following steps were taken:*

- ❖ *Weekly General Safety Meetings and Monthly Safety Committee Meetings were held at the Public Works Yard.*
- ❖ *Ensured the completion of quarterly inspections:*
  - i. *First Aid Kits*
  - ii. *Eye wash stations*
  - iii. *Emergency Lights*
- ❖ *Provided training/clinics for the following issues:*
  - i. *Underground Gas Awareness*
  - ii. *Underground Utility Equipment*
  - iii. *Inattention/Driver Distraction*
  - iv. *Air Brake Refresher*
  - v. *Winter Driver Awareness*
  - vi. *Safe chainsaw use*
- ❖ *Monitored Work Safe BC coverage of contractors who perform services for the Public Works Division.*

### **Public Services**

- ❖ *Fuel Tanks:*
  - i. *Monitored tanks on a weekly basis to ensure that the tanks are not leaking, and*
  - ii. *Physically inventoried tanks on a monthly basis to ensure that there is not any fuel loss.*
- ❖ *Processed numerous requests for service.*
- ❖ *Stock piled supply of road salt (extremely limited supply.)*

## Vehicles and Equipment

- ❖ Replaced Turf Machine #203 with #213, a mower with mulching capabilities, snow blower & hydraulic dump.
- ❖ Replaced vehicle #303 with #313, cab & chassis, hydraulic capabilities, power winch with snow plow.
- ❖ Replaced vehicle #205 with #215, cab & chassis, power winch & snow plow.
- ❖ Replaced rear mower attachment #250 with rear attachment mulching mower #270
- ❖ Purchased New Building Services vehicle #511 for inspections and to transport staff. Transfer Building Services vehicle #501 to Community Services as a minimum use vehicle.
- ❖ New vehicle #216 truck with insert dump/sander and with heavy towing/hauling capabilities.

## Environmental Initiatives

- ❖ Parks Dept applied for funding through Tree Canada & BC Hydro & received \$8,000 for tree planting & shrubs.
- ❖ Scraping out the grass and debris from sidewalks seems to prevent growth and reduce the need to use herbicides.
- ❖ Wood products are no longer burned at the Works Yard, they are sent for grinding and the byproduct is recycled.
- ❖ All organic waste products continue to be composted and produce topsoil for Public Works projects.
- ❖ All asphalt and concrete construction waste is returned to the production plant for recycling.
- ❖ Continue to implement the Integrated Pest Management.

- ❖ Initiate the use of hybrid technology to reduce emissions and fuel consumption.
- ❖ Ongoing installation of low power LED lights so vehicles don't have the motor running on the job. This initiative reduces fuel consumption and reduces harmful emissions.
- ❖ A fuel additive is added to the diesel and gas to reduce emissions and add lubrication to reduce maintenance costs.
- ❖ Continue to use Biodiesel in the Central Saanich Works Yard in an attempt to reduce air pollution and consumption of fossil fuels.
- ❖ Invasive Species Management Program to remove invasive species in Adam Kerr Park.
- ❖ Urban Forest Management Plan, Parks continues to reestablish disturbed areas with native species.
- ❖ Established an aerosol can recycle program.
- ❖ Established a paint can recycle program.
- ❖ Established a propane tank recycle program.
- ❖ The Parks Department currently installing additional recycle cans in the District; and biodegradable garbage bags are being used in the trash cans on a fulltime basis.
- ❖ Continue the use of biodegradable garbage bags. Bags degrade after one year.

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**February 2009**