

## Wastewater Treatment Project

The Wastewater Treatment Project is on schedule to be complete by the end of 2020.

2019 has been the peak year of construction with over 550 people working across 23 active construction sites. Construction on the Residual Solids Pump Stations and the Arbutus Attenuation Tank began in the summer.

Key milestones were reached on the Project in 2019 including installation of the 1.9km outfall at the McLoughlin Point Wastewater Treatment Plant in July and completion of pipe installation for the Clover Forcemain in August.

2020 will be another busy year for the Project with completion of construction and transitioning to commissioning to begin treating the core area's wastewater by the end of the year.

### Construction Updates

#### MCLOUGHLIN POINT WASTEWATER TREATMENT PLANT

Construction of the McLoughlin Point Wastewater Treatment Plant in Esquimalt is progressing well. The new ocean outfall was completed in July. Over 95% of concrete has been placed and all concrete is anticipated to be complete by March 2020. Major equipment is being installed on site such as chemical tanks, the primary clarifiers, and secondary filters. Mechanical and electrical work are currently the main activities on site.



*The outfall pipe being installed in July is 2.25m in diameter and 1.92km long.*

#### CLOVER POINT PUMP STATION

A new roof has been installed over the expanded Clover Point Pump Station and all the structural concrete is complete. The majority of the work is now inside and is focused on equipment installation. All the large pumps have been installed. In November, work began for pipe installation to connect the Clover Forcemain to the pump station. As well, construction is underway on the public washroom that is being built as part of the public amenities that are being added to the area.



*View of the upper pump room in the Clover Point Pump Station.*

### MACAULAY POINT PUMP STATION AND FORCEMAIN

With the majority of concrete placed at the Macaulay Point Pump Station, the above-ground structure is currently being constructed. The pumps have been installed and equipment continues to arrive on site each week. The Macaulay Forcemain is nearing completion with over 90% of pipe installed.



*The above-ground timber structure is being constructed at Macaulay Point Pump Station.*

### CLOVER FORCEMAIN

The Clover Forcemain installation was completed in August 2019. Construction since then has focused on cycle path construction and restoration work, and will continue through the spring. The cycle path has been paved up to Douglas Street and will be open in the summer once the entire stretch from Dock Street to Clover Point is complete. Construction will continue from Douglas Street to Ogden Point and includes paving the road, reinstalling curbs, constructing the cycle path and landscaping. Landscaping is underway from Clover Point to Douglas Street with new trees and vegetation planted near Cook Street.

### ARBUTUS ATTENUATION TANK

Construction began in Haro Woods for the Arbutus Attenuation Tank, a 5,000m<sup>3</sup> underground concrete tank that will store wastewater during high storm events. Concrete piles are currently being installed around the perimeter of the tank. Once construction is complete, the site will be planted with vegetation appropriate for the woodland setting.



*Concrete caisson piles are being installed at the site of the Arbutus Attenuation Tank.*

### RESIDUALS TREATMENT FACILITY

Significant progress has been made at the Residuals Treatment Facility. All major equipment has been installed including the heat exchangers, dewatering and dryer equipment. Two of the digesters are complete with work progressing on the remaining tanks. Concrete work is nearing completion and construction of the operations building is underway.



*Aerial view of construction at the Residuals Treatment Facility.*

### TRENT FORCEMAIN

The Trent Forcemain is the final component of the Wastewater Treatment Project to be procured and construction is anticipated to begin in early 2020 and take approximately 10 months to complete. The Trent Forcemain will be a 1.9km extension of an existing pipe in the City of Victoria from the intersection of Chandler Ave and St Charles Street to the Clover Point Pump Station. The Trent Forcemain will increase the capacity of the eastern part of the wastewater system.



Map of the Trent Forcemain.

### RESIDUAL SOLIDS PUMP STATIONS

Three small pump stations are being built along the Residual Solids Conveyance Line to pump residual solids to the Residuals Treatment Facility. All three are currently under construction with completion anticipated in spring 2020.



Scaffolding on the Tillicum Bridge to install the RSCL pipe.

### RESIDUAL SOLIDS CONVEYANCE LINE

Construction of the Residual Solids Conveyance Line is over 80% complete. The majority of the remaining work is on Interurban Road which currently has four crews working on it. Please expect single lane alternating traffic while this work is completed. The upcoming work at the five-way intersection at Wilkinson Road will be done at night starting in January to limit traffic impacts. Pipe installation is anticipated to be complete in the spring.

#### CONSTRUCTION SUMMARY



**23**

active construction sites



**560**

construction workers



**20,047m**

pipes laid



**41,191m<sup>3</sup>**

concrete poured

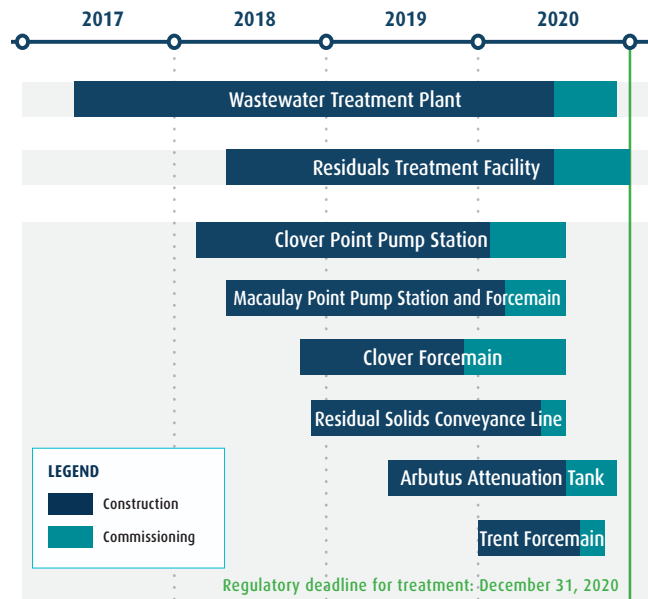
## Looking Ahead to 2020

By the end of next year, the CRD will be treating the core area’s wastewater to a tertiary level. Construction activities will continue in 2020 with the majority of work to be completed by mid-2020. While the main sites will be undergoing the start-up process, known as commissioning, there will still be construction on the Arbutus Attenuation Tank and the Trent Forcemain throughout 2020. These components are being built to add capacity to the system to reduce wet weather overflows. As part of restoration, any area impacted by construction will be returned to as good, or better, condition than when construction started. Restoration work will take place throughout 2020 and into 2021.

### WHAT IS COMMISSIONING?

Once construction is complete, the different parts of the system will be connected together. Commissioning is the process of testing the different parts of the system and connecting them so they are able to operate together.

### Wastewater Treatment Project Schedule\* Construction + Commissioning



\*Schedule subject to updates as Project planning progresses.

## Traffic Impacts

With peak construction for the Project in three municipalities, traffic has been impacted in many areas. Pipe installation often requires single lane alternating traffic controlled by flaggers, signs and cones. We work to limit traffic impacts where possible, but please expect delays.

Safety of not only the workers on site, but also the public, is the top priority for the Project. With road work throughout the region, some simple steps can keep everyone safe.



Slow down and drive with care near a construction zone.



Pay attention to flaggers. Make eye contact and follow their directions.



Follow construction signs.

### For More Information

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