

DATE: September 7, 2017**FILE:** 5340-01**TO:** Chair and Members
Comox Valley Sewage Commission**FROM:** Russell Dyson
Chief Administrative Officer**RE:** Courtenay River Siphon Update

Purpose

To provide an update on the recently completed work on the Courtenay River siphon.

Policy Analysis

The Comox Valley Regional District (CVRD) operates a sewerage service primarily for the City of Courtenay and Town of Comox, established by Bylaw No.2541, being the “Comox Valley Sewerage Service Establishment Bylaw No. 2541, 2003”.

Executive Summary

The Courtenay River siphon runs below the Courtenay River and utilizes two PVC conduits (600 and 350mm diameters) a third 250mm is capped and not used. Sewage from West Courtenay flows through the siphon to the Courtenay pump station before proceeding on to the treatment plant.

The sewer master plan identified that any blockages of the 600mm line or excessive surcharge could result in damage to private property upstream of the siphon inlet. To ensure no blockages of the siphon lines, the CVRD has recently completed an inspection of both siphon lines to clean and determine the condition of the siphon. The CVRD retained Pipe Eye Video Inspections to clean and inspect the siphon lines, a summary report of the inspection is attached as Appendix A. Upon commencing the inspection and cleaning process, both lines showed no signs of infiltration and appeared to be in good condition.

Some grit and debris had built up in the bottom of the lines and was cleaned out during the inspection, to ensure no blockages in the future the CVRD will continue with regular inspection of the lines.

In addition to the inspection of the siphon, the CVRD has recently renewed the right-of-way for the siphon over the bed of the Courtenay River with the Ministry of Forests, Lands and Natural Resources. The original right-of-way was signed in 1984 for a term of 30 years. A new right-of-way agreement has been signed for another 30 year term with the Ministry.

Recommendation from the Chief Administrative Officer:

For information purposes only.

Respectfully:

R. Dyson

Russell Dyson
Chief Administrative Officer

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Attachments: Appendix A – “Pipe Eye Summary Report”



June 22, 2017

Mike Imrie
Manager of Waste Water Services
Comox Valley Regional District
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Summary Report: Cleaning and Inspection of CVRD Regional Sewerage System – West Courtenay Trunk Gravity Sewer Siphon

Introduction:

The following is a summary of the findings of the recent CCTV inspection and cleaning of the West Courtenay trunk gravity sewer siphon system:

Findings:

Upon initiating our inspection, we discovered that the siphon system consists of two (2) pipelines and not three (3) as initially anticipated. The third pipeline, the 250mm line, was found to be capped off at both upstream and down-stream vaults less than a meter from the inside of each vault.

The 350mm line was found to have a 90-degree long sweeping bend beginning approx. two (2) lineal meters outside of the inlet vault approx. This 90-degree bend leads out vertically and then horizontally, which prevented us from reaching the deepest area of the siphon on the West side of the River. We were able to inspect approx. twenty-seven (27) lineal meters in from the inlet side, and twenty-nine (29) lineal meters from the outlet side. The inspection of this line took place at high tide and we found no signs of infiltration. The water level in the pipeline remained steady for the duration of the video inspection and no other anomalies were found.

The 600mm pipeline did not have any bends and we were able to completely dewater the line and inspect it. This inspection was also completed at high tide, and there were no signs of infiltration. The only anomaly detected during this inspection was a small amount of grease build up on the top of the pipe from approx. ten (10) lineal meters in from the inlet vault.



Conclusion:

Upon commencing the inspection and cleaning process, it was found that the 250mm line was capped at both ends. The 350mm line was found to have a 90-degree bend just outside the inlet vault which prevented a complete inspection of this line. The 600mm line was fully cleaned, dewatered and inspected without issue. In both the 350mm and 600mm lines, no signs of infiltration were found; the only anomaly detected was a small amount of grease in the 600mm line.

Should you have any further questions or concerns, please feel free to contact me at the numbers below. I would like to take this opportunity to thank the Comox Valley Regional District for choosing Pipe Eye and we look forward to working with you again in the future.

Sincerely,

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