

CITY OF SURREY, BRITISH COLUMBIA, CANADA WASTEWATER HEAT RECOVERY - EXPERT PEER REVIEW

Overview

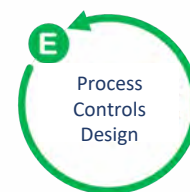
In early 2023, Associated Engineering, a leading Canadian engineering consultancy, contracted Recirc Energy to complete an expert Peer Design Review of a sewer heat recovery system that was integrated into a large, existing district heat network (DHN) in the City of Surrey, British Columbia. Associated Engineering and the City's design team, had produced an initial plan to use sewer heat recovery to deliver low carbon heat to the network, serving a large number of domestic and commercial properties.

Key Findings

As leading experts in wastewater heat recovery (WHR), Recirc were integrated into the Associated Engineering design team where we completed a comprehensive review of the proposal. Our scope included a design review, provision of drawing mark-ups and extensive evaluation of the project's schematics.



Sewer Connection Design



Process Controls Design



Diversion Chamber Design

Our team delivered crucial feedback across numerous iterations, enabling design improvements for the wastewater abstraction and heat exchange processes.

Results

By leveraging our expertise in WHR, real world experience in operating and maintaining a WHR site, and the system's existing design, we were able to provide Associated Engineering and the City of Surrey with suggestions for improvement and optimization of the proposed system.

The project team can use the information provided by Recirc to improve system design, increase heat output and reduce the likelihood of costly redesign and rebuild activities.

"Recirc staff were conscientious in their review of our concept designs for flow diversion structures and sewer heat recovery system in the City of Surrey. Their thoughtful comments will greatly benefit the quality of the detailed design of these systems."

Aaron McCartie, CEM, P.Eng.
Manager, Energy & Mechanical
Associated Engineering

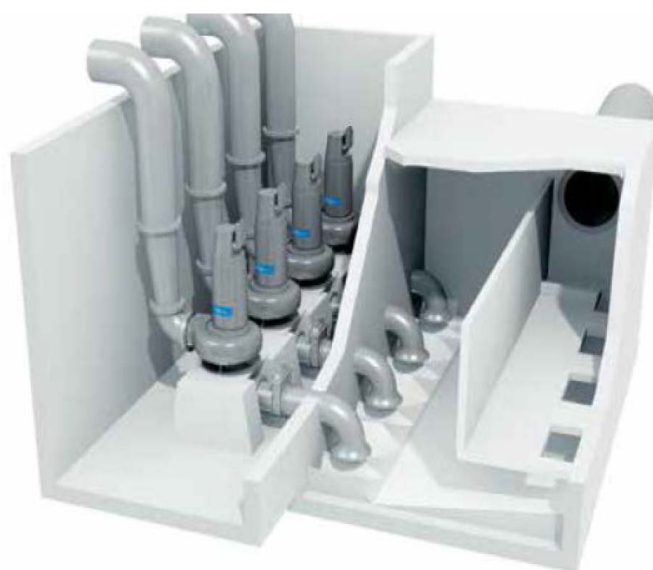


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Contact us to learn how wastewater heat recovery can help you meet your net-zero targets:

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