

3789 Shenton Road

Client: R.W. (Bob) Wall Contracting

End Date: Rezoning initiated ~2019; development progressed through permitting and construction completed in 2025

Location: Nanaimo, BC

Industry Segment: Building Development, Transportation, Sanitary, Stormwater

Key Team Members

Drew Beiderwieden, Mark, John Diggins (Design), Mike Shepherd (Construction Inspection), Jordan (Inspection), Newcastle Survey Team

Challenges:

- Proximity to Diver Lake required careful stormwater management within a sensitive environmental buffer, informed by previous lakefront remediation completed through the rezoning process.
- With no municipal storm sewer connection available, an alternative stormwater servicing approach was required to meet municipal water quality requirements prior to discharge.
- Surface-level drainage and grading constraints made it challenging to collect runoff from the building and surrounding roadways.

Solutions:

- Developed a site-specific stormwater management approach to address the absence of a municipal storm sewer connection and the site's proximity to Diver Lake.
- Designed an on-site rain garden to manage runoff, directing excess flows through the adjacent riparian and environmental buffer to support natural filtration and meet municipal water quality objectives.
- Designed and coordinated a public bioswale within the road corridor to treat roadway drainage prior to discharge to Diver Lake.

Deliverables:

- On-site stormwater management design, including a rain garden to treat building runoff prior to discharge.
- Public bioswale integrated into the road corridor to provide water quality treatment for roadway drainage.
- Public sanitary sewer extension to service the development (length = 160m).
- Road frontage upgrades (approximately 150m).
- Surveying and construction inspection services provided by Newcastle Engineering.

Newcastle Engineering was engaged to deliver civil engineering services including stormwater management design for the Shenton Road mixed-use development in Nanaimo, featuring a below grade parking structure, dental clinic at street level, and residential units above.

Located directly adjacent to Diver Lake, protecting the surrounding environmental buffer was a key priority. With no municipal storm sewer connection available, Newcastle Engineering developed a site-specific approach to provide water quality treatment before runoff entered the lake.

By integrating an on-site rain garden and a public bioswale into the road corridor, Newcastle Engineering developed a solution that met municipal requirements and supported local water quality objectives. The design was coordinated with project consultants and reviewed by the City of Nanaimo.

