Cumberland Village Heath Care Centre

Key Team Members

Drew Beiderwieden (Project Lead)

Mike Shepherd (Construction Inspection)

Scott Sled (Surveying)

Challenges:

- Existing landmark trees needed to be preserved.
- Topographical considerations, including contaminated soil and a significant amount of rocks close to the surface.
- Stormwater management.
- Ensuring the lot would be ready for future expansion as part of a multi-phase project.

Solutions:

- Site grading iterations to optimize cut fill balance due to contaminated soils and bedrock outcrops.
- Building redesigns to make space for existing landmark trees.
- Worked closely with the architect and landscape architect for site grading and stormwater management to ensure alignment.
- Bioswale to collect polluted stormwater runoff, soak it into the ground, and filter out pollution before flowing into the detention tank.

Deliverables:

- Civil design package
- Civil drawings
- Construction inspections
- Post-construction documentation

With the village of Cumberland expanding and needing to grow its healthcare infrastructure, Newcastle Engineering was engaged by long-term client R.W. (Bob) Wall Ltd. to prepare a lot on Beaufort Avenue for a new health centre.

Because the project would be built in phases, the site had to be ready for increased utility and sewage demands while preserving the surrounding natural environment. Existing landmark trees needed to be protected, topographical challenges like contaminated soil and shallow rock had to be managed, and stormwater solutions were essential.

Newcastle worked closely with the architect and landscape architect, completing multiple site grading iterations to ensure well balanced site grades and redesigning elements to preserve landmark trees. To manage runoff, a bioswale was installed to capture stormwater, filter out pollutants, and safely channel it to the detention tank.