



Thornbury dam



Thornbury harbour

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Thornbury Water Storage Class Environmental Assessment Town of The Blue Mountains

In early March of 2003, the Ainley Group was retained by the Town of The Blue Mountains to re-assess water storage options for the Thornbury area.

In 2000, The Town of The Blue Mountains completed a Schedule 'B' Class Environmental Assessment planning process with respect to a short fall in the municipal water storage (Thornbury area). The Preferred Solution was to construct a new, elevated water storage facility in the Thornbury area to increase the total storage volume to 12,000m³. The new tank was to be located on a site to be purchased by the Town, adjacent to the southwest corner of the existing Sewage Treatment Plant site; however, the owner did not want to sell and the Town did not wish to proceed to expropriation. As a result, the Town decided to re-assess the options available for the provision of additional water storage in Thornbury.

Based on the understanding that an elevated tank could not be located in the West end of Thornbury due to property restrictions, the Town had two options with respect to the provision of additional water storage capacity; those being a grade-level structure or an in-ground facility. Both options would require the provision for high-lift pumps, a stand-by power source and the possibility of a re-chlorination facility.

Recommended Solution: Considering the fact that site options were limited, it was recommended that a grade-level water storage facility be constructed on a site in Thornbury (Grey Street) with the following design features:

- 3,400 m³ capacity volume
- pump capacity to meet design water demands
- pump control system connected to WFP high-lift pump control
- stand-by power
- extension of the Town's SCADA system
- top-up chlorination provision
- HVAC
- site piping access, parking and landscaping.

Project Facts

Client: Town of The Blue Mountains (Thornbury)

Scope of Work:

- Review problem statement to confirm required storage volume
- Evaluate alternate sites
- Assess environmental and aesthetic impacts
- Recommend preferred solution
- Complete the Schedule 'B' Class Environmental planning procedure including preparing a Project File.

Key Design Criteria:

- Design population of 8,000 persons
- Existing development has less than the recommended water storage capacity
- Preferred site for an elevated water storage tank is not attainable.

Project Cost:

Class EA only: \$7,900

Estimated Capital Cost: \$2,157,000