

Drysdale, Montgomery and Bailey Creek Bridge Environmental Assessment County of Simcoe

In 2005, the County of Simcoe retained the Ainley Group to undertake a Class Environmental Assessment (EA), Schedule 'B', of three bridges. The Class EA study will confirm the need for improvements and whether replacement is the most appropriate solution for each bridge. The study area at each site extends out from each side of the structure to provide sufficient roadway to reconstruct the bridge approaches if necessary. Additionally, the study area also extends approximately 100 metres upstream and downstream from each bridge to assist the stormwater (hydrology and hydraulic) design of a new structure. If the EAs recommend replacement as the best option, construction will be scheduled for the summer of 2007.

Project Facts

Client: County of Simcoe

Scope of Work:

- Class Environmental Assessment (Schedule 'B')
- Surveys and site investigation
- Identify alternate solutions
- Identify recommended solution
- Select preferred solution
- Prepare MOE Memo.

Project Cost: (2005)

Drysdale Bridge: \$35,500

Montgomery Bridge: \$25,500

Bailey Creek Bridge: \$28,750



Drysdale Bridge

Bridge No. 056080 (Drysdale Bridge) located on County Road No. 56 – a single-span structure with a deck length of 21.32 metres and a deck width of 7.32 metres constructed in 1950. A visual inspection of the bridge confirmed that the deck and girders were heavily cracked and spalled with evidence of leakage as noted by the significant quantity of efflorescence on the underside of the superstructure. The current barriers, a concrete post and rail system with steel-beam guardrail approaches, are in very poor condition. It was also determined that a new structure design must address problems associated with the current road profile over and approaching the bridge.

Bridge No. 009235 (Montgomery Bridge) located on County Road No. 9 – a reinforced concrete rigid frame with a deck length of 10.97 metres and a deck width of 8.36 metres constructed in 1929. A visual inspection of the bridge confirmed that the structure was in very poor condition with numerous large cracks and spalls with corroded reinforcing steel visible on the fascias, soffit and wingwalls. In addition, there were no barriers on the bridge or approaches, contrary to the current Canadian Highway Bridge Design Code and the Ministry of Transportation's Roadside Safety Manual. Considering the condition of the bridge, it was determined that rehabilitation of the structure would not be economical.



Montgomery Bridge



Bailey Creek Bridge

Bridge No. 014075 (Bailey Creek Bridge) located on Adjala-Tosoronto Sideroad 10 – a reinforced concrete rigid frame with a deck length of 10.67 metres and width of 6.45 metres constructed in 1935. A visual inspection of the bridge confirmed that the structure was in very poor condition with numerous large cracks and spalls with corroded reinforcing steel visible on the fascias and soffit. In addition, the existing barriers were found to be non functional and in extremely poor condition, with a large portion of the south barrier missing completely. The existing barriers would not meet the performance requirements of the current Canadian Highway Bridge Design Code.