



Tonkin & Taylor

MacKays Crossing, Wellington

Client

Fulton Hogan

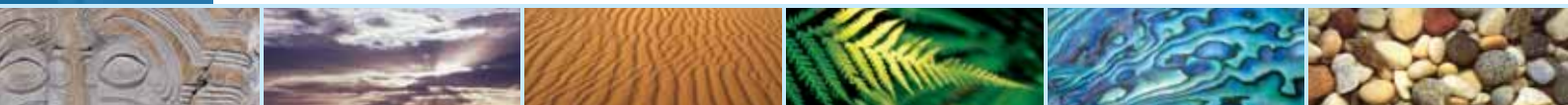
Project

The MacKays Crossing project north of Wellington involves construction of a 4 lane rail overbridge and 2 km of realignment of SH1 at a cost of \$21 M. The works include environmental mitigation measures and enhancement of the wetlands. Much of the cut is underlain by deep peat deposits and the works needed to be undertaken adjacent to live rail and a sensitive gas pipeline.

T&T provided geotechnical services during the investigations and preliminary design phase of the works and then joined the design build team of Fulton Hogan for the construction phase. Major design challenges were caused by proximity of existing rail, road and services and the potential effects of high settlements due to construction of embankments on the peat. This was mitigated by partial subexcavation installation of wick drains, preloading and careful staging of the works. Bridge approaches included reinforced earth embankments up to 8.5 m high and cuts of up to 15 m were designed in the alluvial sediments.



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