



Houghton River Floodplain Upgrade

Project Description:

The Houghton River Floodplain Upgrade has significantly improved road safety and flood resilience along the Bruce Highway between Ayr and Townsville. Delivered by The Infrastructure Group, a joint venture between Bielby Holdings, BMD Construction, JF Hull, and Albem Pty Ltd, the Houghton River Floodplain Upgrade was named 2022 Project of the Year by Infrastructure Partnerships Australia (IPA).

The project aimed to reduce the frequency and duration of highway closures due to flooding, improve connectivity for regional communities, and enhance safety on this vital transport corridor. Prior to the upgrade, flooding frequently forced the Bruce Highway to close for extended periods, isolating communities and disrupting freight movements.

Works involved the construction of five new bridges, two cane rail overpasses, intersection upgrades, and extensive road widening along a 13.5-kilometre stretch of highway. The new Houghton River Bridge, a key component of the project, was built wider and longer to improve flood resilience and safety for all road users. Additional works included realigning the Reed Beds curve, constructing grade-separated interchanges, and installing wide centre line treatments to reduce the risk of head-on collisions.

The project has delivered long-term benefits by significantly reducing the severity and frequency of flood-related road closures.

The highway is now expected to be inundated for an average of just one hour per year during severe weather events, a drastic improvement from the previous average of 3.5 days.

Our Role:

Construction Sciences provided construction materials testing for soils and concrete through an on-site annex facility supported by the Townsville Laboratory, ensuring all materials met project specifications. Along with establishing a dedicated Foam Bitumen Lab, conducting resilient modulus testing to assess pavement strength and durability. Our expertise contributed to the successful delivery of this critical infrastructure project, improving road resilience and safety in North Queensland.

*Images courtesy of BMD.

Client/s: The Infrastructure Group

Location: Houghton River, Queensland

Services: Construction Materials Testing, Foam Bitumen Testing

Construction Sciences Units:
On-site Annex Laboratory, Townsville
Laboratory North Queensland