

INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) ENVIRONMENTAL EXCELLENCE AWARDS 2023

Bruce Highway, Cairns Southern Access Corridor (Stage 3) - Edmonton to Gordonvale Project (E2G)

Environmental Excellence from Far North Queensland's
Largest Infrastructure Project



Department of
Transport and Main Roads

| Section 1: Entry Overview

The Bruce Highway, Cairns Southern Access Corridor (Stage 3) - Edmonton to Gordonvale Project (E2G) is located south of Cairns in Far North Queensland.

It marks a significant advancement in infrastructure, focusing on the duplication of a 10.5 kilometre stretch of the Bruce Highway and realignment and upgrade of 4.7 kilometres of the Queensland Rail North Coast Line. Accompanying these primary objectives is the construction of new local roads, pedestrian and rail bridges.

Situated in a floodplain region, E2G contended with a unique set of environmental challenges - from constructing multiple bridges and managing tropical soils to grappling with unpredictable weather.

The project's location in close proximity to two United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage sites added another layer of complexity to delivery.

Historically, implementation of erosion and sediment control best practice in the region has been challenging, due to various factors such as a lack of suitably skilled and qualified resources, as well as environmental conditions.

E2G's unique approach to implementing innovative solutions for environmental management, while weathering three tropical wet seasons and two tropical cyclones, without diminishing their commitment to erosion and sediment control performance, has provided a legacy for the continued delivery of future best practice.

E2G adopted innovative technologies, utilising drones for site mapping and erosion and sediment control evaluations, initiated trials for new erosion and sediment control products and championed strategies that intertwined sustainability goals with erosion and sediment control planning.

These measures resulted in substantial environmental gains including a 75,492 tonne mitigation in sediment runoff, relocating over 2,000 native animals and achieving noteworthy ecological enhancement.

Integrating with the local community, E2G ensured that project benefits radiated outwards, promoting local and Indigenous businesses and undertaking extensive upskilling programs for project subcontractors and the wider industry.

As a result, E2G has not only bolstered erosion and sediment control proficiency in Far North Queensland but also fortified the reputation of Joint Venture Partners, John Holland, Seymour Whyte Constructions, and AECOM (HSA Group), and the client, the Queensland Department of Transport and Main Roads (TMR).



Figure 1: The Bruce Highway, Cairns Southern Access Corridor (Stage 3) - Edmonton to Gordonvale Project (E2G) is the largest infrastructure project delivered in Far North Queensland (Image: HSA Group)