

CASE STUDY

CANBERRA LIGHT RAIL STAGE 2A

CANBERRA, ACT

FUTURECAST LOW-CARBON
SOLUTIONS



ISSUED BY HUMES



National Sales

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FutureCast Delivers Low-Carbon Solutions for Canberra Light Rail

Project Background

The Canberra Light Rail Stage 2A project extends the tram network south from the CBD to Commonwealth Park, improving connectivity and supporting more sustainable modes of transport. From the beginning, Canberra Metro Construction placed a strong focus on sustainability and worked with Humes to help lower the project's embodied carbon footprint.

Key Challenge

A key target for the project was achieving a **25% reduction in Scope 3** emissions. To reach this goal, the team required precast solutions that could reduce carbon while still delivering the durability, strength and reliability expected from major infrastructure works. Humes was engaged to provide products that met both the environmental and engineering requirements of the project.

Manufacture and Installation

Humes delivered a range of precast pipes and box culverts incorporating **FutureCast technology**, which lowers Portland Cement content through supplementary cementitious materials.

- **Box Culverts:** 25% Fly Ash Replacement
- **Concrete Pipes:** 30% Fly Ash Replacement

All products were designed, manufactured and tested at Humes' facilities under strict quality controls. This approach ensured the sustainability benefits were achieved without compromising on structural performance or delivery schedules.

Innovation and Outcome

Through Humes' FutureCast technology, the project achieved a **25% reduction in Scope 3 emissions** across precast components. These savings supported wider sustainability measures on site, including solar-powered compounds and recycling more than 95% of construction waste.

"We're setting new expectations for sustainability... It's an exciting opportunity to set new standards, not just for this project, but for the ACT as a whole."

- Mia Deans, Sustainability Lead, Canberra Metro

The Canberra Light Rail Stage 2A demonstrates how **Humes' innovation, technical expertise and commitment to sustainability** can deliver measurable environmental outcomes at scale. This collaboration highlights Humes' role in delivering low-carbon solutions for major projects and sets a benchmark for sustainable rail infrastructure in Australia.



PROJECT INFORMATION



PROJECT

Canberra Light Rail Stage 2A



PRINCIPAL

Canberra Metro Construction



CONTRACTORS

Canberra Metro Construction



PRODUCT SUPPLIED

- Precast Box Culverts (25% fly ash replacement)
- Precast Concrete Pipes (30% fly ash replacement)

