2016 proved a successful year for the Mitchell Freeway Extension: Burns Beach Road to Hester Avenue project team, with numerous milestones achieved and project completion now just months away.

Some of the most notable achievements of 2016 include the completion of bulk earthworks, installation of all 54 bridge beams and completion of approximately 3.5km of residential noise walls.

Looking forward, 2017 will see some of the project’s key sustainability trials get underway, such as the installation of LED lights along the freeway extension. In recognition of the project’s commitment to environment and sustainability, the project will deliver an Infrastructure Sustainability Council of Australia (ISCA) rating for each stage of the project.

On the construction front, pavement and asphalting works are now well underway. Soon, finishing works will also commence across the project area, such as signage installation, barrier construction and Principal Shared Path works.

As finishing works often require teams to work in close proximity to live traffic, some lane and road closures may be required across the coming months. To minimise disruptions to the travelling public, some closures must take place during the evening. As such, intermittent night works are expected in various locations. Information on night works and traffic changes will be available on the Main Roads WA project page in the lead up to the activities.

The project thanks the local community for their ongoing patience and understanding as the team works to deliver the new freeway and amenities by mid-2017.

This $236m project is jointly funded by the Australian ($189m) and Western Australian ($47m) governments.
IN FOCUS: MITCHELL FREEWAY INTERCHANGES

As part of the project, two brand new interchanges are being constructed along the six kilometre Mitchell Freeway extension, improving transport efficiency for Perth’s northern suburbs.

When complete, the new interchanges at Hester Avenue and Neerabup Road will provide local residents and businesses with access to and from the Mitchell Freeway.

The design of the interchanges follows a format yet to be used on a freeway in the Perth metropolitan area. The design incorporates roundabout-controlled on and off ramps, as opposed to signalised ramps.

A similar interchange layout can be seen in the suburb of Redcliffe at the recently constructed Tonkin Highway/Dunreath Drive interchange.

Main Roads Project Director Chris Raykos said the interchange design has been incorporated into the freeway upgrade because of its safety, environment and economic benefits.

The design of the interchanges follows a format yet to be used on a freeway in the Perth metropolitan area. The design incorporates roundabout-controlled on and off ramps, as opposed to signalised ramps.

“Aerial view of progress at the Mitchell Freeway/Neerabup Road interchange

In addition to the new Hester Avenue and Neerabup Road interchanges, an upgrade of the existing Burns Beach Road/Mitchell Freeway intersection is also being carried out.

However, unlike Hester Avenue and Neerabup Road, the freeway extension will travel over Burns Beach Road. New signalised ramps will be constructed on the northern side of the intersection to complement the existing arrangement.

The interchanges are on target for completion by mid-2017.

“The roundabout-like formation improves traffic flow and reduces severity of vehicle impacts compared to other junction types.

The design also reduces the width of each bridge, meaning less construction materials and a reduced carbon footprint.

As the interchanges do not require traffic signal equipment, they will be more time and cost effective to maintain too. This also means less disruptions for road users.”

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Design sketch of the Mitchell Freeway/Neerabup Road interchange
NEW TRIAL FOR LINE-MARKING
Water Borne line markings will be swapped for Cold Applied Plastic (CAP) on the Mitchell Freeway extension project as part of a new sustainability trial for line marking.

As CAP is predicted to be six times more durable than Water Borne material, its use can bring about sustainability and community benefits. Examples include reductions in carbon emissions, material use, maintenance safety risks and traffic disruptions.

More specifically, CAP is predicted to save 1000kg of material per 100km of line marking every six years.

This means approximately 200 tonne of line marking material can be saved over a six year period in the Perth metropolitan region.

The use of CAP can also reduce diesel use by approximately 19,780L over six years for the Perth metropolitan area, saving 53 tonne in carbon emissions.

Final line marking activities are expected to commence in early 2017, with the trial estimated to continue for five years to coincide with its design life.

FIRST BRIDGE OPENED TO TRAFFIC
A major project milestone was achieved late last year when the new Hester Avenue bridge was opened to traffic.

The bridge, which will eventually form part of the new Mitchell Freeway/Hester Avenue interchange, is the first bridge being constructed as part of the project to carry traffic.

The five and a half metre high bridge, which is part of the project’s critical path to completion, is comprised of eighteen beams, around 1609m² of concrete and over 3757t of steel reinforcement.

Construction Manager Dennis Ouma said opening the bridge to traffic was a significant achievement for the project team and will enable crews to safely construct the remainder of the interchange.

“Redirecting traffic onto the bridge was a big step forward for us.

Traffic will be in a temporary arrangement along the bridge over the next few months, which provides us with the space required to remove the old arch structure over the railway line, construct the remainder of the interchange and commence finishing works.”

Night works and traffic changes will take place on Hester Avenue across the coming months as the interchange nears completion.

Those interested in keeping up to date with progress can do so by registering for updates at MFEenquiries@CPBcon.com.au
ROADS MAKING PROGRESS

Pavement construction on the Mitchell Freeway extension is making rapid progress, with asphalt already laid along some sections of the new freeway.

The running surface of the freeway will be comprised of open-grade asphalt. This specification of asphalt is designed to be porous and will result in a smoother surface for road users and reduce water spray. It is also estimated to reduce tyre-road noise by a daily average of approximately 2.5 decibels, when compared to dense-grade asphalt.

The sensitive properties of asphalt demand certain conditions for installation, such as the weather. Due to the longer than expected winter season experienced in 2016, teams were unable to install the asphalt as early as planned, though have since made up for lost time.

Pavement construction works.

Pavement construction and asphalting activities will continue to be a focus across the coming months as the freeway opening draws near.

DID YOU KNOW?

- Approximately 90% of project waste is recycled.
- Project mulch is made in-house from cleared vegetation.
- Over 300,000 endemic plants will be installed throughout the project area.
- Over 100 reptiles, 26 Bandicoots and three Brush-tail Possums were relocated prior to clearing activities.
- The design of the project’s bridge beams has saved 1300t of concrete and 108t of steel reinforcement.

A relocated Western shingleback (Tiliqua rugosa).

Bridge beams prior to installation

Fauna relocation

REGISTER FOR PROJECT UPDATES

Want the latest project news delivered straight to your inbox? Register for updates at MFEenquiries@cpbcon.com.au

FURTHER INFORMATION

If you would like to know more about the Mitchell Freeway Extension, please visit the project page at mainroads.wa.gov.au

CONTACT US

If you have a question about the project you are welcome to contact us on:
Call 1800 883 402
Email MFEenquiries@cpbcon.com.au