

Building the Bypass

All work on the Berrima Bypass was carried out by contractors under the supervision of the Roads and Traffic Authority.

Thiess Contractors Pty Ltd began work in January 1985 on the 5.5 km section from Medway Rivulet to Wingecarribee River.

Twin bridges over the Wingecarribee River were constructed by Enpro Constructions Pty Ltd. Each bridge comprises twin steel box girder superstructures with a reinforced concrete deck. Like all bridges on the Bypass they have provision for movements caused by mining subsidence.

A third contract was awarded to White Industries Ltd in April 1986 for road and bridge works from the Wingecarribee River to Welby. At the time this was the largest combined road and bridge contract to have been awarded in New South Wales.

- Total Excavation** — 4 million cu m
- Largest Cutting Bendooley Hill** — 1.1 million cu m
- Deepest Cut** — 26 metres
- Highest Fill** — 22 metres
- Climbing Lanes** — 2.5 kilometres
- Landscaping** — 90 hectares
35,000 trees

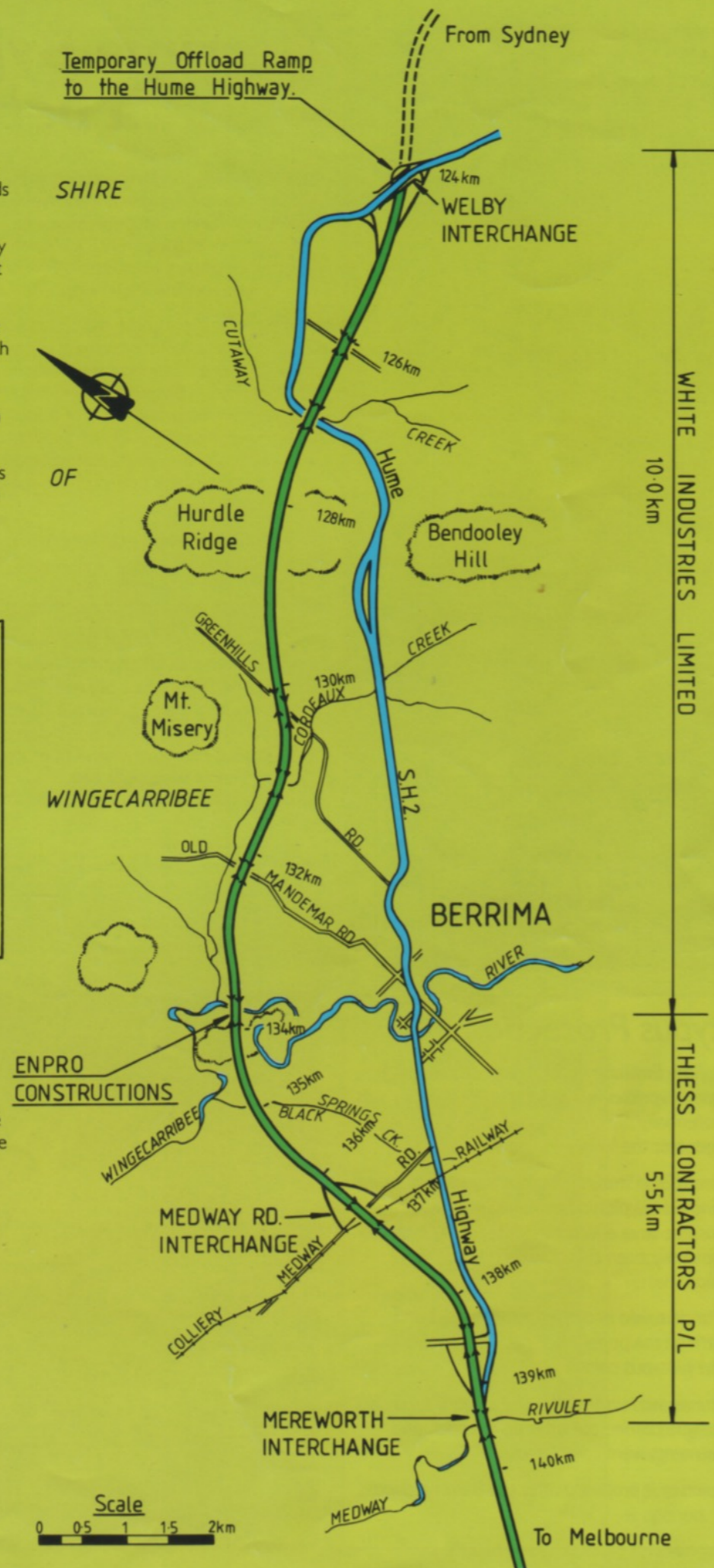
Mittagong Bypass

With the completion of Berrima Bypass, only the Mittagong Bypass remains to complete a four lane highway from Liverpool to Breadalbane, 20 km south of Goulburn.

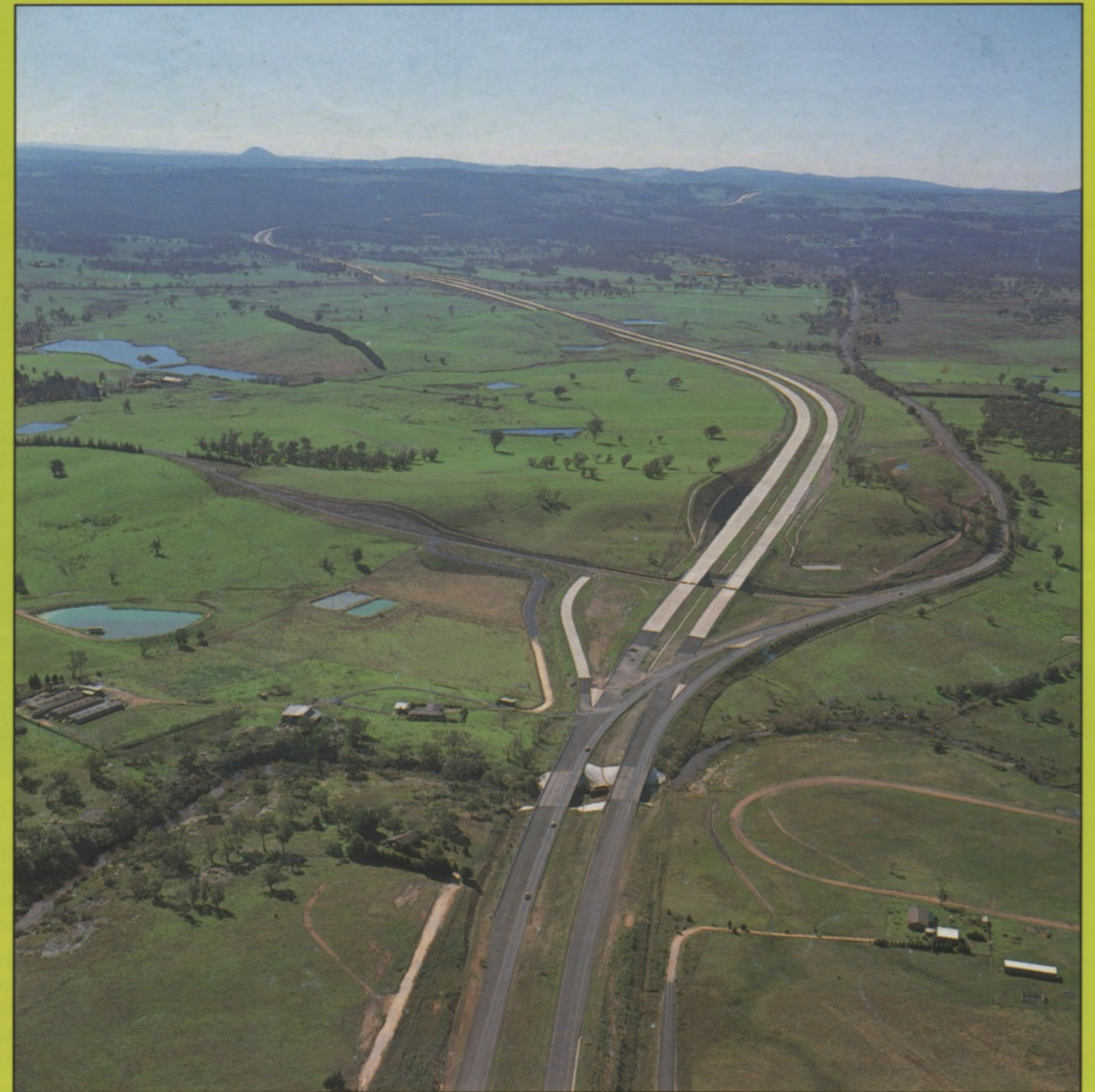
Construction of the \$62 million Federally funded Mittagong Bypass commenced in January 1989 and is expected to be completed by mid-1992. It involves construction of 8.2 km of dual carriageways, a grade separated interchange at Aylmerton, four twin bridges and one single bridge.

The project is being undertaken as six separate contracts and the first \$11.7 million contract has been awarded to Transfield Pty Ltd for construction of 239 metre long twin bridges and associated roadworks at Gibbergunyah Creek.

Construction of twin bridges over the Nattai River is expected to begin in June 1989.



Berrima Bypass



**Roads and Traffic Authority
New South Wales**

Savings in time, energy and accidents

Berrima Bypass forms part of the important National Highway between Sydney, Canberra and Melbourne. Its completion will bring considerable benefits to the many users of this busy road, as well as the residents of Berrima, whose historic township will be relieved of large volumes of through traffic, particularly heavy vehicles.

By providing flatter grades and improved, free flowing driving conditions, the new route will bring savings in travel time, energy consumption and, even more importantly, a reduction in accidents.

As part of the National Highway, Berrima Bypass was funded by the Federal Government, which is committed to upgrading this 16,000 km route linking Australia's capital cities.

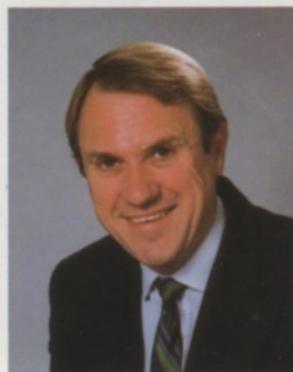
The State Government is also committed to upgrading the roads of New South Wales with a record \$1,125 million being spent this financial year. This amount is significantly more than last year, with the Government honouring its pre-election promise to progressively allocate the proceeds of all petrol taxes to road funding. We believe that motorists who are taxed by Government should receive direct benefits from this revenue in the form of improved roads.

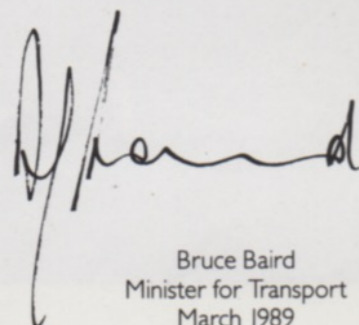
IN 1988-89, at least \$111 million of petrol and diesel tax will be used for roadworks in New South Wales, an amount which will increase in each of the next three years.

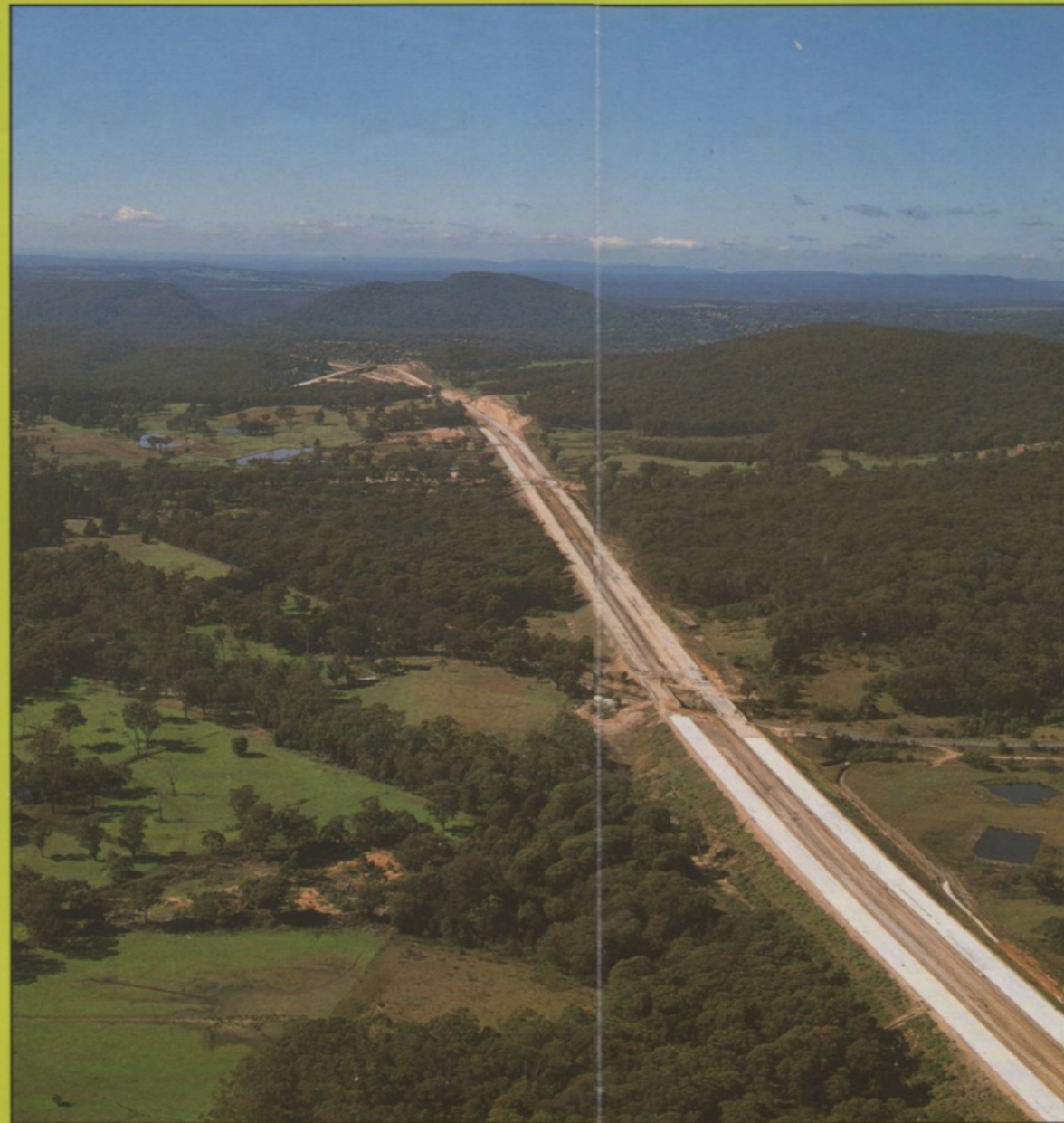
Roads are crucial to the economy of this State and lower transport costs and quicker delivery of products benefits everyone.

Money for roads also creates employment. Every \$1 million spent on road construction generates 25 jobs directly related to roads and another 36 jobs in related industries such as manufacturing and transport. This multiplier effect spreads the benefits of road construction throughout the community.

Under this State Government the people of New South Wales will benefit more than ever from our investment in roads.




Bruce Baird
Minister for Transport
March 1989



Platypus Protection

During preparation of the Environmental Impact Statement for Berrima and Mittagong Bypasses in 1983, a platypus colony was identified as being potentially affected by roadworks and construction of bridges over the Wingecarribee River.

The EIS recommended that a study be conducted to monitor the effects of road building on the platypuses, firstly to ensure that proposed safety measures were effective and, secondly, because such information had rarely been collected on any species of vertebrate in Australia.

An initial study was undertaken between October 1983 and March 1986 to determine the population, activity patterns and breeding habits of the platypus colony.

A pre-construction survey was undertaken in February 1985 and two progress surveys were carried out after earthworks, and bridge piers and abutments were completed.

A post-construction survey is proposed after the Berrima Bypass is opened.

Berrima Bypass — a better, safer road

Berrima Bypass provides motorists with 15.5 km of dual carriageway from Welby Interchange, 124 km south of Sydney, to Mereworth Interchange, 139.5 km south of Sydney. The project included nine sets of twin bridges and one single bridge.

Completed in March 1989, the \$80 million Bypass forms part of the National Highway between Sydney, Canberra and Melbourne. It carries a large volume of heavy traffic, with approximately two-thirds of truck traffic occurring at night. Both motorists and residents of Berrima will benefit from the diversion of these heavy vehicles from the township.

This new high standard road will provide greater capacity and safety, with grade separation at all local roads. Access is provided with half diamond interchanges at Medway Rivulet, Medway Road and Welby.

The pavement is of full depth concrete construction. It features a 220 mm thick base layer and a 150 mm thick sub-base layer. Concrete pavement was selected after detailed economic analysis of various rigid and flexible pavements and consideration of both initial and future maintenance costs.

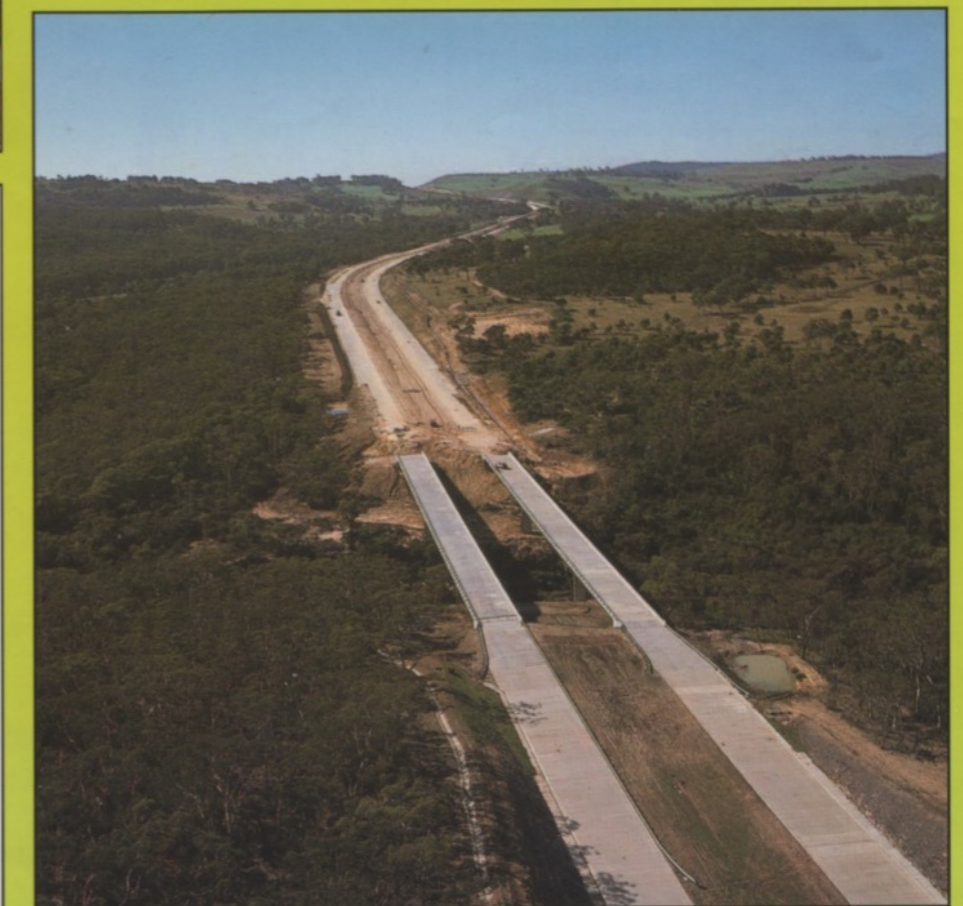
The route of the bypass is generally through undulating countryside, with the exception of a deep sandstone gorge at the site of twin bridges over the Wingecarribee River and a large excavation at the basalt-capped Bendooley Hill Ridge, where a minimum depth of 26 metres of material was removed.

The basalt excavated at Bendooley Hill was processed to provide most of the aggregate for the concrete pavement north of the Wingecarribee River bridges, producing a significant cost saving.

In addition to its depth, the design of the Bendooley Hill excavation was complicated by the presence of two water bearing strata (aquifers). A blanket of rock filled wire mattresses was provided to prevent the strata eroding and destabilising the excavation.

During construction, special measures were taken to preserve a platypus colony in the Wingecarribee River and various Aboriginal archaeological sites along the route.

Below: twin bridges over the Wingecarribee River.



**Front cover: looking north from Medway Rivulet, with the old highway route on the right.
Above: aerial views of Berrima Bypass during construction.**