

## INQUIRY INTO CROSS CITY TUNNEL

Organisation: Connector Motorways  
Name: Mr Ian Hunt  
Position: Chief Executive Officer  
Telephone: 02 9034 8400  
Date Received: 25/05/2006

---

Theme:

Summary

**File No. LCTC/00.12.02-00087**

24 May 2006

The Director  
Joint Select Committee on Cross City Tunnel  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000

Dear Sir

**RE: INQUIRY INTO CROSS CITY TUNNEL – LANE COVE TUNNEL**

Thank you for your letter of 20 April 2006 inviting us to make a submission on terms of reference 1(g) to 1(j).

We are pleased to enclosed a submission prepared by Connector Motorways.

We are currently finalising detailed diagrams of surface roads in the Lane Cove Tunnel, Gore Hill Freeway and Falcon Street Gateway corridor to assist motorists and local communities to understand access to and from the tunnel, and the road changes associated with the project. We will forward copies of these diagrams as soon as they are ready.

Should you require any further information, please do not hesitate to contact me on 9034 8401.

Yours faithfully



Ian Hunt  
**Chief Executive Officer**

Encl.



**Inquiry into the Cross City Tunnel  
Lane Cove Tunnel**

**Submission by Connector Motorways**

**25 May 2006**

## Table of Contents

<b>Section</b>		<b>Page</b>
	Summary	ii
1	Introduction	1
2	Connector Motorways	1
3	The Lane Cove Tunnel Project	2
4	Contractual Framework	3
5	Connector Motorways' Project Partners	4
6	Project History	5
7	Changes to Surface Roads	6
8	Improvements to the Project	8
9	Tolling	9
10	Traffic Forecasts	10
11	Air Quality	11
12	Progress to Date	12
13	Terms of Reference	13
14	Conclusion	14

## Summary

This submission by Connector Motorways (formerly Lane Cove Tunnel Company), to the Joint Select Committee on the Cross City Tunnel, provides background information then addresses the Committee's three new terms of reference.

The Lane Cove Tunnel is the missing link in the Sydney's orbital motorway network. It is more than a tunnel—it is an integrated transport solution that enhances public transport in the corridor, reduces traffic on Epping Road, and provides new facilities for cyclists.

The project is a large and complex piece of urban transport infrastructure involving many parties over a long period of time. Connector Motorways and its contractors are delivering the project in accordance with the very specific requirements of the Government as set out in the Project Deed and the Planning Minister's Conditions of Approval.

The project comprises the Lane Cove Tunnel, the widening of the Gore Hill Freeway, new ramps at the Falcon Street Gateway, and changes to local roads to improve public transport services and enhance local amenity.

The definition of the project was established through a long history of enquiry, including a comprehensive Environmental Impact Statement, culminating in 2002 with the Planning Minister's approval for the project, subject to 259 conditions.

Connector Motorways was not involved in any of the planning or decision-making that resulted in the project definition. Connector Motorways (as the then Lane Cove Tunnel Consortium) participated in the tendering process for the project through 2002 and 2003, and was awarded the contract to undertake the project in late 2003. Connector Motorways was not involved with any Government agencies other than the RTA throughout that tender process.

Associated with the project are several changes to the surface roads that were the result of the 2001–02 planning approvals process. These are described in detail in this submission.

That the Lane Cove Tunnel and the new ramps at the Falcon Street Gateway would be tolled, has been known since 1999. At opening, the tolls in the tunnel and on the ramps will be no more than \$2.60 and \$1.30 respectively for cars.

Comprehensive patronage forecasting was undertaken by the Connector Motorways bid consortium. At the end of the 18-month to two-year ramp up period, traffic volumes in the Lane Cove Tunnel are expected to be about 100,000 vehicles per day, and on the new ramps at Falcon Street about 35,000 vehicles per day. In the early stages of the ramp up period, volumes are expected to be much less.

The tunnel is subject to stringent air quality requirements prescribed in the Conditions of Approval for the project. These include pollution concentration limits and air quality monitoring requirements. With two ventilation stacks, a mid-tunnel fresh air intake and more than twice the air handling capacity of other Sydney road tunnels, the Lane Cove Tunnel is well placed to meet the approval conditions. Monitoring of ambient air quality in the vicinity of the ventilation stacks is already underway, and that monitoring data is publicly available.

Construction progress to date has been good; Connector Motorways is confident that the tunnel and ramps will open earlier than the contract date of May 2007. There are still important construction milestones to achieve before a specific opening date can be announced. During the construction phase there has been substantial ongoing consultation with local communities, people affected by construction activities, and potential users of the tunnel and ramps.

## **1 Introduction**

This submission by Connector Motorways (formerly Lane Cove Tunnel Company) responds to the invitation from the Joint Select Committee on the Cross City Tunnel, dated 20 April 2006.

The submission provides background information about the company, the Lane Cove Tunnel project's scope, the contractual framework, changes to surface roads, tolls, traffic forecasts, air quality and progress on the project to date. Within the context described in that background, we then address the Committee's terms of reference (g), (h) and (i), as requested in the invitation.

This submission should be read in conjunction with the separate submissions prepared by Thiess John Holland and ABN AMRO.

## **2 Connector Motorways**

In December 2003, Connector Motorways (then known as Lane Cove Tunnel Consortium) was appointed by the NSW Government to finance, design, construct, maintain and operate the Lane Cove Tunnel and the new ramps at the Falcon Street Gateway for a 33-year concession period, after which the tunnel and ramps will be returned to the RTA.

The company (by then known as Lane Cove Tunnel Company) commenced operations at that time. Its name has been changed recently to Connector Motorways to better reflect its role of helping connect people and places around Sydney. It will be the primary point of contact for users of both the Lane Cove Tunnel and Falcon Street Gateway when these roads open.

Connector Motorways is a privately owned corporate group, established solely for the Lane Cove Tunnel project. The group structure is typical of that employed for the delivery of public infrastructure projects. There is a trust that will own the newly created assets, and an operating company that will operate the assets, be responsible for their maintenance, and collect tolls. There are two holding companies, and a finance company that has raised the debt required to fund the works. The identity of and relationships between these companies are set out in Figure 3 of the RTA's document *Lane Cove Tunnel: Summary of contracts*, dated July 2004.

Connector Motorways' shareholders are Australian and international institutional investors specialising in infrastructure investment. The current shareholders are:

- AMP
- Cheong Kong Infrastructure
- John Holland
- Seamax (Li Ka Shing Foundation)
- Motor Trades Association of Australia
- Thiess
- Westscheme
- Equisuper.

### **3 The Lane Cove Tunnel Project**

#### *Overview*

The \$1.1 billion Lane Cove Tunnel project is the missing link in Sydney's orbital network. It involves the financing, design, construction, operation and maintenance of:

- two 3.6 km-long tunnels (one eastbound, one westbound) beneath Epping Road, connecting the M2 Motorway at North Ryde with the Gore Hill Freeway at Artarmon
- two north-facing ramps at the Falcon Street Gateway in North Sydney/Cammeray connecting the Warringah Freeway with Falcon Street and Military Road, providing access to the widened Gore Hill Freeway.

Further, the project involves the financing, design and construction of associated improvements to existing surface roads and intersections, including:

- widening 3 km of the Gore Hill Freeway from four to six lanes with the addition of a T2 transit lane in each direction
- improved public transport facilities, such as a new bus interchange and pedestrian bridge at Lane Cove, and 24-hour dedicated bus lanes on Epping Road
- a 7.5 km continuous shared cycle and pedestrian path from Wicks Road in North Ryde to Naremburn
- a new untolled south-facing ramp at the Falcon Street Gateway connecting the Warringah Freeway with Falcon Street.

When construction is complete, Epping Road, the Gore Hill Freeway and the south-facing ramps at the Falcon Street Gateway will be returned to, and operated and maintained by, the RTA. The tunnel itself and the north-facing ramps at the Falcon Street Gateway will be operated by Connector Motorways as tollroads for the remainder of the concession period, i.e. some 30 years.

The tunnel bypasses up to five sets of traffic lights along Epping Road. Motorists using the Falcon Street Gateway to access the Warringah Freeway will bypass up to 26 sets of traffic lights on the Pacific Highway.

#### *Stages 1 and 2*

The terms 'Stage 1 works' and 'Stage 2 works' are often used in describing the project. The Stage 1 works comprise all construction required to open the Lane Cove Tunnel and Falcon Street Gateway to traffic, and include the widening of the Gore Hill Freeway to six lanes. The Stage 2 works comprise the changes to and associated landscaping of Epping Road, and the new bus interchange and pedestrian bridge at Lane Cove.

## **4 Contractual Framework**

### ***Project Deed***

The primary contract for the delivery of the project is the Lane Cove Tunnel Project Deed executed on 4 December 2003 between the RTA, the then Lane Cove Tunnel Company Pty Ltd (the Company) and Lane Cove Tunnel Nominee Company Pty Ltd (the Trustee).

The Project Deed grants the Trustee the right to, and imposes on the Trustee the obligation to, finance, plan, design, construct and commission the Project Works (i.e. all those works required including the Motorway and the local road works). The Project Deed grants the Company the right to, and imposes on the Company the obligation to operate, maintain and repair the Motorway (i.e. the tunnel and the new ramps at Falcon Street), and to levy and collect tolls.

The Project Deed (at clause 18.1) makes clear that the RTA and Government retain a number of significant rights, including to:

- develop, construct operate and/or maintain other tollways, tunnels, freeways and other roads
- maintain, manage, change or extend the Sydney road and transport network or any traffic or transport system
- extend, alter, close or upgrade existing tollways, freeways or other roads
- extend, alter or upgrade existing public transport routes or services
- construct new public transport routes or establish new transport services
- develop the transport network generally
- otherwise do anything which they are empowered to do by law.

This operates subject to the deed itself. Clause 18.2 acknowledges that Connector Motorways will be undertaking works which have the effect of changing Longueville Road and Epping Road in the ways described in section 7 of this submission. An alteration to those restrictions—which would require Ministerial approval—is one of the events which are defined to constitute a material adverse effect for the purposes of the deed (clause 18.4(b)). The other specified events which relate to traffic flow are the closure of connections to the Motorway, and the opening of a competitor road tunnel (clause 18.4(b) and (c)).

### ***Scope of Works and Technical Criteria***

The project to be delivered by Connector Motorways is comprehensively defined in Exhibit A to the Project Deed, the *Scope of Works and Technical Criteria*, which sets out in a core document and 65 detailed appendices:

- the strategic objectives of the project
- the scope of the project works
- the technical, operational and performance specifications and requirements.

### ***Minister's Conditions of Approval***

In December 2002, the Minister for Planning granted approval for the RTA to carry out the project, subject to 259 conditions. Under the Project Deed, most of these conditions of approval have been passed to the Company and the Trustee to meet. The RTA has retained some conditions, such as preparation of local area traffic management plans.



### ***Other contracts and further information***

There are several other contracts that define the roles and responsibilities of the various parties involved in the delivery of the project.

A more detailed explanation of the contractual framework is provided in the RTA's document *Lane Cove Tunnel: Summary of contracts*, dated July 2004.

## **5 Connector Motorways' Project Partners**

In order to deliver this large and complex project, Connector Motorways has contracted with a number of parties. Key members of this team and their roles are outlined briefly below.

### ***ABN AMRO***

The funding for the project is a combination of equity provided by the shareholders, and debt provided by bonds. All debt funding required for the project has been raised.

Investment bank ABN AMRO organised and underwrote all the debt for the project. ABN AMRO continues to have a role as bond manager and financial advisor.

ABN AMRO was an initial shareholder in the company until it sold its shareholding in July 2004.

Further information concerning ABN AMRO is being provided in a submission prepared by ABN AMRO.

### ***Thiess John Holland***

In December 2003, Connector Motorways contracted with an unincorporated joint venture between Thiess Pty Ltd and John Holland Pty Ltd to design and construct the Lane Cove Tunnel project.

Further information concerning Thiess John Holland is being provided in a submission prepared by Thiess John Holland.

### ***Transfield Services***

Also, in December 2003, Connector Motorways contracted with Transfield Services (Australia) Pty Ltd to operate and maintain the Lane Cove Tunnel and north-facing ramps of the Falcon Street Gateway. Transfield Services (TSL) provides similar services for other tunnels and tollroads in Australia, and other road maintenance services in Sydney and elsewhere.

Once the Lane Cove Tunnel and Falcon Street Gateway are open to traffic, TSL will:

- operate the tunnel mechanical and electrical systems (e.g. emergency systems and ventilation system)
- operate the toll collection system
- manage traffic in the tunnel and on the ramps (in conjunction with the RTA)
- respond to traffic accidents and other incidents
- provide routine maintenance.

## 6 Project History

There has been community interest to build the Lane Cove Tunnel for almost 20 years to reduce traffic on Epping Road. For the past decade there has been considerable community demand for the Lane Cove Tunnel, the reduction of traffic on Epping Road, improved public transport and improved facilities for cyclists.

In 1997 a task force comprising the mayors of Lane Cove, Willoughby, North Sydney and Ryde, together with the Parliamentary Secretary for Roads, was formed to lead community discussion on potential options for a better connection between the M2 Motorway and the Gore Hill Freeway.

Six route options for a tunnel were placed on public display in 1998, and community feedback on these options was obtained through discussion with the task force, public meetings and a questionnaire.

In 1999 public comment was sought on the *Lane Cove Tunnel Overview Report* which summarised the findings of these initial investigations and identified a preferred tunnel option. This report also proposed widening the Gore Hill Freeway to six lanes, the construction of north-facing ramps to and from the Warringah Freeway at Falcon Street, and funding the project by tolls.

More detailed investigations and community consultation continued through 2000 and 2001, culminating in the exhibition in November 2001 of an *Environmental Impact Statement (EIS)* for the project.

The RTA received 340 submissions in response to the EIS. The modifications resulting from these submissions were outlined in the RTA's *Preferred Activity Report* dated June 2002. These included:

- relocation of the western ventilation stack
- a new bus interchange at the Epping Road / Longueville Road / Parklands Avenue intersection with a new pedestrian bridge over this intersection
- changes to the shared cycleway and pedestrian path along the Gore Hill Freeway.

In December 2002, the Minister for Planning granted planning approval for the project, subject to the meeting of 259 conditions.

On 1 October 2003, following a 19-month tendering process, the Minister for Roads announced the selection of the then Lane Cove Tunnel Consortium (now known as Connector Motorways) as the preferred tenderer to finance, design, build, maintain and operate the tunnel. The Project Deed was signed on 4 December 2003, and financial close occurred on 9 December 2004.

Further details on the project history can be found in *Lane Cove Tunnel: Summary of contracts*.

## **7 Changes to Surface Roads**

As a result of the project approvals process described in section 6, there are several changes to surface roads being implemented as part of the Lane Cove Tunnel project. These changes are consistent with the RTA's *Preferred Activity Report* of June 2002, and are required in the Project Deed and the Planning Minister's Conditions of Approval. The changes are outlined in detail below.

Among the principal aims of the project are the reduction of traffic on Epping Road, improvements to public transport services and rehabilitation of the local amenity of an area blighted by traffic congestion. To achieve this, Epping Road will be improved with the addition of bus lanes, wider footpaths, and a cycle way; two right hand turns into local streets from Epping Road will be reinstated.

These changes to Epping Road have been publicly supported by local Councils, community groups and members of Parliament.

### ***Epping Road eastbound (heading toward the city)***

The left turn from Delhi Road into Epping Road will be increased from one turning lane into two turning lanes.

The existing morning peak T2 lane from Delhi Road to Mowbray Road West will be converted to a T3 lane.

The Lane Cove River Bridge has been widened to allow one general traffic lane and one T3 lane to Epping Road, and two eastbound lanes into the new tunnel.

Traffic that previously and illegally merged left from the M2 Motorway onto Epping Road (over Lane Cove Bridge) in order to make a left turn into Mowbray Road West now exits the M2 at Delhi Road and proceeds along Epping Road in order to turn left into Mowbray Road West. This was implemented on 20 March 2006, improving safety for motorists.

Traffic from the M2 Motorway to Epping Road Lane Cove (i.e. not using the Lane Cove Tunnel) will exit the M2 at Delhi Road to join Epping Road.

From Mowbray Road West to Longueville Road the one morning peak T2 lane and two general traffic lanes will be changed to one 24-hour bus lane and one general traffic lane. Intersections along this route will widen to provide turning lanes and in some cases two general traffic lanes.

Turning lanes at all intersections will ensure through traffic flows are not affected by turning traffic.

### ***Epping Road westbound (heading away from the city)***

From Longueville Road to Centennial Avenue, three general traffic lanes will be converted to one 24-hour bus lane and two general traffic lanes.

From Centennial Avenue to Sam Johnson Way, three general traffic lanes will be converted to two lanes—one 24 hour bus lane and one general traffic lane.

From Sam Johnson Way to Mowbray Road West, three general traffic lanes will be converted to one 24 hour bus lane and two general traffic lanes.

Two right hand turns from Epping Road will be reinstated (at Centennial Avenue and Parklands Avenue) and turning lanes at all intersections will ensure through traffic flows are not affected.

A shared two-way cycleway and pedestrian path will be constructed along the south side of Epping Road from the Pacific Highway in Lane Cove to Wicks Road in North Ryde.

Traffic that previously turned right from Mowbray Road West onto the M2 will need to turn right onto Epping Road then access the M2 via Delhi Road. This change is due to safety and the physical constraints around the M2/Epping Road/Lane Cove Tunnel interchange.

From Lane Cove River to Wicks Road one general traffic lane has been added.

#### ***Mowbray Road West***

All existing movements will be retained at the intersection of Mowbray Road West and Epping Road.

#### ***Pacific Highway Intersection***

North and southbound traffic on the Pacific Highway will be able to access the Lane Cove Tunnel westbound, via a loop tunnel under Alto Place, Artarmon.

Access from the Pacific Highway onto Longueville Road and Gore Hill Freeway will not change.

The Longueville Road off ramp that currently provides access to Pacific Highway northbound only (i.e. left-hand turn), will in future provide access to Pacific Highway both north and southbound (i.e. left and right-hand turns).

The existing westbound Longueville Road loop ramp (under the Pacific Highway), that has provided access to the Pacific Highway southbound only (i.e. left-hand turn), will become the Lane Cove Tunnel exit ramp, providing access to Pacific Highway both north and southbound.

The existing westbound Gore Hill Freeway exit ramp to the Pacific Highway will continue to allow access to the Pacific Highway northbound, but will no longer provide access to Pacific Highway southbound. This change addresses road safety requirements. Motorists seeking access to Pacific Highway southbound can use the Reserve Road exit.

#### ***Gore Hill Freeway***

A new T2 lane in each direction is being added to the Gore Hill Freeway from Pacific Highway, Artarmon, to Merrenburn Avenue in Naremburn. This widening from four lanes to six over approximately 3 km of the Gore Hill Freeway is required to accommodate extra traffic flows including those to and from the new north-facing ramps at the Falcon Street Gateway.

#### ***Falcon Street Gateway***

The introduction of the new ramps at the Falcon Street Gateway does not close or change any existing roads or access points.

Traffic heading away from the city northbound on the Warringah Freeway will have improved right turn access to Falcon Street and Military Road via a new exit ramp that will not be tolled. This ramp will open to public use in early June 2006.

Traffic heading west or east on Falcon Street will continue to access the Warringah Freeway southbound (i.e. towards the city) via the existing untolled ramp.

Traffic heading southbound on the Warringah Expressway will be able to exit via a new tolled ramp, to turn left onto Falcon Street and Military Road.

Traffic heading east or west on Falcon Street and Military Road will be able to access the Warringah Freeway northbound via a new tolled ramp.

## **8 Improvements to the Project**

Since planning approval, and within the Minister's Conditions of Approval, a number of engineering solutions have been adopted to improve the project. These changes have no material effect on the objectives of the project and no impact on the traffic forecasts or justification of the project. There are no changes to the proposals for Epping Road. The changes were proposed to minimise construction impacts or to improve the traffic network.

The entrance to the westbound tunnel, and exit from the eastbound tunnel, on the Gore Hill Freeway has been relocated further east to bring the two portals together. This overcame the need to have the portals separated by an on/off ramp to Longueville Road, and improved overall amenity. It has also reduced the amount of cut and cover construction thus reducing construction impacts.

Reconfiguration of the Reserve Road ramps and the central location of the main carriageway has reduced the amount of paved area and provides more generous landscaped medians.

The Motorway Control Centre has been located at the western ventilation station at Sirius Road, Lane Cove West, rather than at the eastern ventilation station at Marden Street, Artarmon.

The configuration of the Falcon Street Gateway has been modified by relocating one of the north-facing ramps and adding the new untolled south-facing ramp. These changes have improved the traffic flow efficiency and safety of the intersection and its surrounds.

The ventilation design has changed to improve its efficiency and function by re-configuring the ventilation tunnels, including minor adjustments to address sub-surface ground conditions.

## **9 Tolling**

### ***Electronic tolling***

Under the Project Deed, toll collection on the Lane Cove Tunnel and the two new north-facing ramps of the Falcon Street Gateway is fully electronic. There can be no cash collection and no toll booths. The toll collection points are:

- for the Lane Cove Tunnel, inside each tunnel at the western end
- for the Falcon Street Gateway, at the bottom of each new north-facing ramp.

All existing electronic tags available in Australia will operate on the Lane Cove Tunnel and Falcon Street Gateway. For motorists without a tag, the 'pass' products currently available from some tag issuers will also be accepted on the Lane Cove Tunnel and Falcon Street Gateway.

### ***Toll charge***

At opening, the tolls in the tunnel and on the ramps will be no more than \$2.60 and \$1.30 respectively for cars.

The toll charge is set by the Project Deed (refer to Schedule 8). The 'base toll' in the Lane Cove Tunnel is set at 30 June 1999 at \$2.00 for cars and \$4.00 for trucks. The base toll for each north-facing ramp at the Falcon Street Gateway is set at 30 June 1999 at \$1.00 for cars and \$2.00 for trucks. These amounts are escalated quarterly in line with the Consumer Price Index (CPI). If the tunnel and ramps were to open today (May 2006) the tolls would be \$2.46 and \$1.23 respectively for cars. The actual toll charge at opening will depend on when the tunnel and ramps are open and the change in CPI up to that time.

Buses providing a regular passenger service are exempt from paying the tolls.

The Falcon Street Gateway toll pays for the new north-facing ramps and the additional two lanes over 3 km of the Gore Hill Freeway required to accommodate the additional traffic on the freeway generated by the new ramps.

### ***Toll free period***

Connector Motorways has announced there will be a one-month toll free period immediately after the tunnel and ramps are opened to traffic. This toll free period is an incentive to motorists to understand the benefits of the tunnel and ramps, and to help motorists find the tunnel and ramps and plan travel routes, by trying them free of charge. The toll free period is also a means of Connector Motorways thanking Sydney's motorists in the corridor for their patience during construction.

## 10 Traffic Forecasts

### *Ramp up*

When a new tollroad is opened to traffic, potential users tend to experiment with it, making value judgements regarding the benefits of using the new road versus alternatives. There are a number of factors that influence the initial take up of new road infrastructure, for instance:

- learning and understanding how the road and its connections work
- experiencing the travel time savings made, and valuing these saving against the toll charge.

The period from opening until the tollroad reaches 'steady state' traffic volumes is typically known as the 'ramp up period' and varies in duration from tollroad to tollroad. In the case of the Lane Cove Tunnel and Falcon Street Gateway, the ramp up period is expected to be about 18 months to two years.

### *Traffic volumes*

At the end of the ramp up period the traffic volumes are expected to be about 100,000 to 115,000 vehicles per day in the Lane Cove Tunnel, and about 35,000 to 40,000 vehicles per day on the new ramps of the Falcon Street Gateway. These volumes form the basis of revenue calculations in the project's Base Case Financial Model.

In the early stages of the ramp up period, traffic volumes are expected to be much less than this.

The figure of 140,000 vehicles per day sometimes quoted in the media is the total combined forecast traffic volume for both the Lane Cove Tunnel and Falcon Street Gateway.

### *Patronage forecasting*

These traffic volume projections are based on a comprehensive patronage forecast prepared for the Connector Motorways bid consortium during the tender period. This work was undertaken by a team of specialist consultants who are highly experienced in patronage forecasting in Sydney.

The traffic forecasting process adopted a very well established methodology, using standard transport planning techniques to assign future demand for travel to the road network. The network used in the model included known and likely changes in the network over the life of the concession period.

Demand inputs to the model were based on economic forecasting of population and employment growth and trends in Sydney generally and in the Lane Cove Tunnel corridor in particular. This work was commissioned specifically for the Lane Cove Tunnel project by the bid consortium. Inputs to the model also included estimates of how various types of motorist value travel time savings.

An independent specialist consultant appointed by the financiers reviewed the patronage forecast at several critical steps throughout its preparation.

## 11 Air quality

The EIS and subsequent studies show the Lane Cove Tunnel will substantially improve local air quality by reducing traffic volumes on Epping Road. A recent study shows the tunnel will result in a 30% to 40% decrease in total emissions from motor vehicles in the Lane Cove Tunnel / Epping Road corridor.

The tunnel will be ventilated by two stacks: one at the western end at Sirius Road in the Lane Cove West Business Park, and one at the eastern end in the Artarmon industrial area, between the western end of Marden Street and the Pacific Highway. A fresh air intake is located near the mid-point of the tunnel at 130 -132 Epping Road, Lane Cove. The Lane Cove Tunnel has more than double the air handling capacity of other tunnels in Sydney.

The Planning Minister's Conditions of Approval set out several strict air quality requirements including in-tunnel, stack and ambient limits and goals for pollution concentrations, and in-tunnel, stack and ambient air quality monitoring requirements.

Monitoring of ambient air quality is already being undertaken at six locations near the ventilation stacks:

- two community-based air monitoring stations, at Artarmon Public School and at the tennis courts in Hallam Avenue in Lane Cove West
- two other ground level monitoring stations, at the Lane Cove Country Club golf course and at Magdala Park, North Ryde
- two elevated monitoring stations on the roofs of the Corinthian Building at 401 Pacific Highway, Artarmon, and the former Haier building at Orion Road, Lane Cove West.

All monitoring stations are independently operated, and the collection of data from this air quality monitoring network is subject to independent auditing. The data is available to the public on the Connector Motorways website before and after the tunnel opens.

An Air Quality Community Consultative Committee (AQCCC) was formed to provide input on air quality monitoring and reporting during the design, construction and operation of the Lane Cove Tunnel. The AQCCC is overseeing the establishment and operation of the monitoring stations.



## 12 Design & Construction Progress

Construction of the project commenced in June 2004. Construction progress to date has been good and Connector Motorways is confident that the Lane Cove Tunnel and Falcon Street Gateway will open ahead of the contractual date for completion of Stage 1 of 9 May 2007. There are still several complex construction milestones to be achieved, so it is too early to be specific about an opening date. Nevertheless, the tunnel and ramps could be open as early as late this year.

Of note is the very good safety record associated with the construction of the project. In five million hours worked to date, there have been only four lost time injuries. The resultant lost time injury frequency rate of 0.82 lost time injuries per million hours compares with a construction industry average of more than 20.

A more detailed description of construction progress is provided in the separate submission by Thiess John Holland.



Gore Hill Freeway construction works showing cut and cover entrance/exit to the eastern end of the Lane Cove Tunnel in the foreground and the Reserve Road ramps reconfiguration underway in the background.

### **13 Terms of Reference**

Against the background provided above, Connector Motorways makes the following comments on the specific paragraphs of the terms of reference on which Connector Motorways has been asked to comment:

#### ***(g) The role of Government agencies in relation to the negotiation of the contract with Lane Cove Tunnel Consortium***

While it is the responsibility of Connector Motorways and its contractors to deliver the contract in accordance with its terms, it is for the Government to ensure that the terms themselves are appropriate.

Prior to being awarded the contract, and throughout its negotiations, the Lane Cove Tunnel Consortium's role was essentially that of a contractor bidding for the right to build and operate a complex project, in accordance with a specification that had been developed by Government, acting principally through the RTA.

The RTA's Request for Proposals required the bidders to comply with all relevant approvals. All proposals were required to comply with the requirements of the relevant environmental documents and substantially comply with the Scope of Works and Technical Criteria.

We understand that during the period leading to the award of the project to the consortium, all dealings were with the RTA only and in writing. After that there were a small number of face to face meetings with the RTA, which on some occasions were attended by a Treasury representative.

We understand that all negotiations were conducted in a professional manner, with each side having access to fully independent legal and commercial advice.

#### ***(h) The extent to which the substance of the Lane Cove Tunnel contract was determined through community consultation***

The history of the project as recorded in section 6 of this submission reflects a considerable degree of community consultation in the development of the project, as would be expected for a project of this size and complexity. It is not for Connector Motorways to comment on the adequacy of that process.

The Project Deed and the Planning Minister's Conditions of Approval have detailed requirements for consultation with the community during the construction and operation phases. Through the contract between Connector Motorways and TJH, most of the construction phase consultation obligations have been passed to TJH to fulfil. During the bid, TJH undertook consultation with local community groups in order to better understand the potential impacts of construction activity.

TJH has conducted a thorough and extensive consultation process throughout the construction phase. The consultation undertaken has been significantly greater than is usual for construction of large infrastructure projects; details of the consultation undertaken are provided in TJH's separate submission. Connector Motorways has been consulting with key community leaders and potential users of the tunnel and ramps.

The Minister's Conditions of Approval require the formation of Construction Community Liaison Groups and an Air Quality Community Consultative Committee. These groups have been chaired by independent, professional consultants appointed by Connector Motorways.

***(i) The methodology used by the RTA for tendering and contract negotiations in connection with the Lane Cove Tunnel***

The methodology adopted by the RTA was as described in its publication *Lane Cove Tunnel: Summary of contracts*, dated July 2004.

All negotiations with the RTA were questions and answers conducted in writing until the Lane Cove Tunnel Consortium was selected as preferred tenderer. The questions and answers related to clarifying and modifying the consortium's offer to ensure it totally complied with RTA's prescribed requirements.

The Commitment Deed Poll entered into by the Lane Cove Tunnel Consortium when it was nominated as preferred tenderer locked in the consortium's commercial position. The negotiations following preferred status, some of which involved face-to-face meetings, were focused on finalising the contractual documentation in line with the position agreed in the Commitment Deed Poll.

This methodology appears appropriate for a project of this size and complexity, but it is ultimately a matter for Government to define its methodology.



## 14 Conclusion

The Lane Cove Tunnel is the missing link in the Sydney's orbital motorway network. It is more than a tunnel—it is an integrated transport solution that enhances public transport in the corridor, reduces traffic on Epping Road (a residential street), and provides new facilities for cyclists.

The project is a large and complex piece of urban transport infrastructure involving many parties over a long period of time. Connector Motorways and its contractors are delivering the project in accordance with the very specific requirements of the Government as set out in the Project Deed and the Planning Minister's Conditions of Approval. The project being delivered is essentially as defined at the end of the planning approvals process, with the exception of minor modifications that have no material change to the objectives of the project or the Government's fundamental requirements.



Longueville Road, May 2006