

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Hon Tony Kelly MLC
Minister for Planning

Sydney

2009

File No: S08/01839

SCHEDULE 1

Application No:	08_0237
Proponent:	NSW Roads and Traffic Authority
Approval Authority:	Minister for Planning
Land:	Land generally located adjacent to the village of Woomargama, extending from approximately 7.5 north of the Woomargama village to three kilometres south of the Woomargama village, in the Greater Hume local government area.
Project:	The construction of approximately nine kilometres of dual carriageway, bypassing the Woomargama village.
Part 3A Project:	The proposal is a project to which Part 3A of the Act applies by virtue of an Order made by the Minister for Planning and Gazetted on 20 December 2007.
Critical Infrastructure:	The proposal is a critical infrastructure project by virtue of an Order made by the Minister for Planning and Gazetted on 4 March 2009.

KEY TO CONDITIONS

1. ADMINISTRATIVE CONDITIONS	5
Terms of Approval	5
Limits of Approval	5
Statutory Requirements	5
2. SPECIFIC ENVIRONMENTAL CONDITIONS	5
Ecological	5
Aboriginal Heritage	7
Non-Aboriginal Heritage	7
Noise and Vibration	7
Hydrology	9
Flooding	9
Air Quality	9
Social and Economic	10
Property	10
Spoil	10
Ancillary Construction Facilities	10
3. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT	10
Complaints and Enquiries	11
Provision of Electronic Information	11
4. ENVIRONMENTAL MONITORING AND AUDITING	12
Ecological Monitoring	12
Noise Auditing	12
5. COMPLIANCE MONITORING AND TRACKING	13
Compliance Tracking Program	13
Operational Performance Audit	13
6. ENVIRONMENTAL MANAGEMENT	14
Environmental Representative	14
Construction Environmental Management Plan	14
Operational Environmental Management	16

SCHEDULE 2

Act, the	<i>Environmental Planning and Assessment Act 1979.</i>
Ancillary Facility	Temporary facility for construction, including for example an office and amenities compound, construction compound, materials storage compound, maintenance workshop, testing laboratory or material stockpile areas.
Conditions of Approval	The Minister's Conditions of Approval for the project.
Construction	Includes all work in respect of the Project other than survey, acquisitions, fencing, investigative drilling or excavation, building/road condition surveys, minor clearing (except where threatened species, populations or ecological communities would be affected unless otherwise agreed by the ER and in consultation with DECCW), establishing Ancillary Facilities, enabling works, or other activities determined by the ER to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/utilities, etc) or or salvage of impacted Aboriginal heritage items, subject to those salvage activities being undertaken in accordance with the procedures and outcomes identified within Sections 8 and 9 and Appendix D of the report titled <i>Hume Highway Town Bypass: Woomargama Aboriginal Cultural Heritage, Cultural Heritage Assessment Report</i> , prepared by Kelleher Nightingale Consulting Pty Ltd and dated September 2009.
Council	Greater Hume Shire Council.
DECCW	NSW Department of Environment, Climate Change and Water.
Department, the	NSW Department of Planning.
I&I NSW	NSW Department of Industry and Investment.
Director-General, the	Director-General of the NSW Department of Planning (or delegate).
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's Approval is required under a condition, the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may require additional information if the approval request is considered incomplete. When further information is required the time taken for the Proponent to respond in writing will be added to the one month period.
Environment Protection Licence (EPL)	An Environment Protection Licence issued by DECCW pursuant to the <i>Protection of the Environment Operations Act 1997</i> .
NOW	NSW Office of Water.
NSWTI	NSW Transport and Infrastructure.
Operation	Means the operation of the project, but does not include commissioning trials of equipment or temporary use of parts of the project during construction.
Project	The project the subject of Major Project Application 08_0237.
Proponent	NSW Roads and Traffic Authority (RTA).
Publicly Available	Available for inspection by a member of the general public (for example, available on the project website).
Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is

	practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided.
RTA	NSW Roads and Traffic Authority.
Sensitive Receiver	Residence, education institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital) and religious facility (e.g. church), day care facility.

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with the:
- Major Project Application 08_0237;
 - Hume Highway Upgrade Woomargama Bypass – Environmental Assessment* (two volumes), prepared by Parsons Brinckerhoff Australia Pty Ltd and dated September 2009;
 - Hume Highway Upgrade Woomargama Bypass – Environmental Assessment Submissions Report*, prepared by the RTA and dated November 2009; and
 - the conditions of this approval.
- 1.2 In the event of an inconsistency between:
- the conditions of this approval and any document listed under conditions 1.1a) to 1.1c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
 - any documents listed under conditions 1.1a) to 1.1c) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with any reasonable and feasible requirement(s) of the Director-General arising from the Department's assessment of:
- any reports, plans or correspondence that are submitted in accordance with this approval; and
 - the implementation of any actions or measures contained in these reports, plans or correspondence.
- 1.4 The Proponent may elect to construct and operate the project in stages. In this case, these conditions of approval may be complied with separately for each stage, as relevant.

Limits of Approval

- 1.5 This approval shall lapse ten years after the date on which it is granted, unless the works the subject of this approval are physically commenced on or before that time.

Statutory Requirements

- 1.6 The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required with respect to the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.

Note: This includes any necessary licences required under the <i>Water Act</i>, and the necessary licences for ancillary activities that require a licence to operate under the <i>Protection of the Environment Operations Act 1997</i>.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Ecological

- 2.1 The Proponent shall limit the clearing of native vegetation and in particular Endangered Ecological Communities, to the greatest extent practicable and shall, where practicable establish native vegetation along and throughout the road reserve to provide habitat for wildlife and to improve connectivity.
- 2.2 The Proponent shall obtain advice from a suitably qualified and experienced ecologist on the need, number, location and design of crossing treatments for threatened fauna species.

The Proponent shall arrange and bear the full cost of installing and maintaining crossing treatments, including the preparation of a Wildlife Crossing Management Plan, which includes long term objectives for each crossing point and measures to be implemented if these objectives are not achieved.

Construction work shall not commence in the areas of identified crossing points, unless as otherwise agreed by the Director-General, until the need (and design objectives) of crossing points and the monitoring methodology (including timing) has been decided in consultation with DECCW. The above agreed identified areas where construction work cannot commence shall include an appropriately sized buffer area to ensure any necessary design or preconstruction monitoring requirements are not unduly restricted or impacted by construction work occurring within the adjoining area.

- 2.3 The Proponent shall install nest boxes and relocated hollows to offset the loss of tree hollows/habitat. Structures to replace hollows shall be installed prior to or during the early stages of clearing, other than minor clearing (except where threatened species, populations or communities would be impacted).

The location and/or guiding criteria for the selection of locations for the above nest boxes and relocated hollows shall be specified within the Construction Flora and Fauna Management Plan, as required by condition 6.3a) of this approval.

- 2.4 The relocation of any cleared timber within terrestrial habitats shall be undertaken in a manner that provides priority to supporting areas of retained native vegetation that is of low/moderate condition, and which avoids any additional negative impacts upon the retained native vegetation.
- 2.5 The Proponent shall amend and apply the Biodiversity Offset Strategy approved under Concept Plan Approval 06_0314, to reflect the type and location of vegetation communities impacted by the project and the *Principles for the use of Biodiversity Offsets in NSW* (2008). The amended Strategy shall be prepared in consultation with DECCW and approved by the Director-General prior to the clearing of any Endangered Ecological Community, unless otherwise agreed by the Director-General.
- 2.6 Within 12 months of the approval of the Biodiversity Offset Strategy, the Proponent shall submit the **Biodiversity Offset Package** for the approval of the Director-General, unless otherwise agreed by the Director-General. The Package shall be developed in consultation with DECCW and shall include, but not necessarily be limited to:
- a) the final suite of the biodiversity offset measures selected in accordance with the Biodiversity Offset Strategy;
 - b) the monitoring requirements for compensatory habitat works and other ecological amelioration measures proposed under the Biodiversity Offsets Package. This shall include:
 - i) the monitoring of the condition of vegetation communities and the monitoring of threatened species populations at all offset locations;
 - ii) the methodology for the monitoring program(s), including the number and location of offsets monitoring sites, and the sampling frequency at these sites;
 - iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with DECCW; and;
 - iv) timing and responsibilities for the implementation of the provisions of the Package.
- 2.7 The Proponent shall minimise impacts to riparian areas and rehabilitate riparian areas in consultation with I&I NSW.
- 2.8 Watercourses affected by the proposal shall, where reasonable and feasible, be rehabilitated to emulate a natural stream system. The rehabilitation of watercourses shall be consistent with the *Guidelines for Controlled Activities: In-stream Works* (DWE, 2008) and stream armouring should be minimised to the greatest extent practicable.

- 2.9 Watercourse crossings and culverts (both permanent and temporary) shall be designed and constructed to be consistent with the *Guidelines for Controlled Activities Watercourse Crossings* (DWE, 2008) and *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (NSW Fisheries, 2003).

Aboriginal Heritage

- 2.10 The Proponent shall ensure management procedures and outcomes are implemented in accordance with Sections 8 and 9 and Appendix D of the report titled *Hume Highway Town Bypass: Woomargama Aboriginal Cultural Heritage, Cultural Heritage Assessment Report*, prepared by Kelleher Nightingale Consulting Pty Ltd and dated September 2009.

Non-Aboriginal Heritage

- 2.11 Prior to the commencement of construction, the Proponent shall undertake an archaeological survey of the assessment area not accessed during the targeted survey. Should any further items or additional impacts be identified, an assessment of the significance of the identified must be undertaken in accordance with the *NSW Heritage Manual Assessing Heritage Significance* (NSW Heritage Office, 2001) and a Statement of Heritage Impact prepared in consultation with the Department.

Should excavation and/or archival recordings be required for these sites as a result of the investigation, the Proponent shall undertake these works in the same manner as required by condition 2.12 of this approval.

- 2.12 The Proponent shall complete all excavations and/or archival recordings, including photographic records prior to the commencement of construction work in proximity to item WHI (Mount Raven Cottage Site). All recordings shall be undertaken and completed in accordance with the guidelines issued by the Heritage Council of NSW. The area surrounding the item shall be clearly identified and fenced until the completion of the archaeological excavations and/or archival recordings.

Any excavation work required shall be overseen by a suitably qualified archaeologist and in accordance with the research design and archaeological excavation methodology that have been developed in consultation with the Department prior to commencing any archaeological excavation. The Construction Heritage Management Plan required under 6.3b) of this approval shall be suitably updated to incorporate the mitigation and management measures associated with the excavation works.

Within six months of completing the above work, the Proponent shall submit a report containing the findings of the excavations and archival recordings to Department, the local Council and the local Historic Society. This report shall nominate an agreed repository for the relics salvaged from any excavations along the proposed corridor.

Noise and Vibration

Construction and Blasting Hours

- 2.13 The Proponent shall only undertake construction activities associated with the project, other than blasting, during the following hours:
- a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;
 - b) 8:00 am to 1:00 pm on Saturdays; and
 - c) at no time on Sundays or public holidays.
- 2.14 Concrete paving, concrete batching (including deliveries) related to paving, and concrete saw cutting activities may be undertaken outside the hours identified in condition 2.13, if required for technical reasons, excluding Sundays and public holidays, subject to negotiated agreements (consistent with condition 2.15 c)) being in place with receivers that are within 800m of a batch plant. The Construction Noise and Vibration Management Plan required under condition 6.3c) shall specifically identify these activities, technical reasons, expected

impacts, negotiated agreements and address notification and mitigation measures for these activities. This condition does not relate to any other activity.

2.15 Notwithstanding conditions 2.13 and 2.14, construction works associated with the project, other than blasting, may be undertaken outside the hours specified under those conditions in the following circumstances:

- a) the works do not cause construction noise that exceed the noise management levels prescribed in the *Interim Construction Noise Guideline* (DECC, 2009); or
- b) the Proponent has demonstrated to the Director-General and the DECCW that there is a justified need for the works and that the works are supported by the affected community in accordance with the requirements of section 2.3 of the *Interim Construction Noise Guideline* (DECC, July 2009); or
- c) where a negotiated agreement has been reached with affected receivers, where the prescribed noise levels cannot be achieved. In the formation of the negotiated agreement, the receiver shall be provided an explanation of the scope and time frame of works, the predicted noise impacts and how these are likely to affect the receiver and be provided the option to terminate the agreement on request. Negotiated agreements shall be made available to the Director-General upon request; or
- d) for the delivery of materials required by the police or other authorities for safety reasons; or where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
- e) for works as approved through the out of hours protocol outlined in condition 6.3c); or
- f) for high risk out of hours work identified in an Environmental Protection Licence applying to the project.

2.16 The Proponent shall only undertake blasting activities associated with the project during the following hours, unless otherwise approved by the Director-General:

- a) 9:00 am to 5:00 pm, Mondays to Fridays, inclusive;
- b) 9:00 am to 1:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons.

Construction and Blasting Limits

2.17 Construction Noise Management Levels (CNML) shall be established using the *Interim Construction Noise Guidelines* (DECCW, 2009). Any construction activities identified as exceeding the CNML shall be managed in accordance with the Construction Noise and Vibration Management Plan referred to in condition 6.3c) of this approval.

Note: The ICNG (DECCW, 2009) identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the CNML.

2.18 The Proponent shall ensure that air blast overpressure generated by blasting associated with the project does not exceed the criteria specified in Table 1 when measured at the most affected residence or other sensitive receiver.

Table 1 – Air blast Overpressure Criteria

Air blast Overpressure (dB(Lin Peak))	Allowable Exceedance
115	5% of total number of blasts over a 12 month period
120	Never

2.19 The Proponent shall ensure that ground vibration generated by blasting associated with the project does not exceed the criteria specified in Table 2 when measured at the most affected residence or other sensitive receiver.

Table 2 – Peak Particle Velocity Criteria

Peak Particle Velocity (mms^{-1})	Allowable Exceedance
5	5% of total number of blasts over a 12 month period
10	Never

Operational Noise

- 2.20 Unless otherwise agreed by the Director-General, the Proponent shall submit for the approval of the Director-General a review of the operational noise mitigation measures for the project within six months of commencing construction. The Review shall take into account the detailed design of the project and shall be prepared in consultation with the DECCW. Consideration of operational noise mitigation measures, if required, shall include, but not necessarily be limited to, low noise pavements, roadside noise barriers and architectural acoustic treatments (AAT). Detailed justification shall be provided should AAT be preferred over 'in-corridor' treatments (low noise pavement and roadside barriers).

The Review shall include confirmation from the RTA that they endorse, as correct, the traffic data used in the detailed noise modelling. Also, the Review shall include model validation that compares traffic noise measurements against modelled noise levels.

Hydrology

- 2.21 Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.
- 2.22 The Proponent shall ensure that the design of the project, maintains to the greatest extent practicable, existing water course hydrology, including existing flow distribution, water quality, and flooding behaviour. The design of water course crossings, drainage and water management measures shall be undertaken in consultation with DECCW, NOW and I&I NSW (where relevant).
- 2.23 The Proponent shall, prior to construction, undertake a geotechnical investigation in consultation with NOW, to assess the risk of aquifer compaction from road construction through areas of shallow groundwater. If appropriate, this investigation shall be accompanied by suitable mitigation measures to be incorporated into the Construction Environmental Management Plan.
- 2.24 Erosion and sediment control measures shall be implemented prior to any works commencing, consistent with the measures outlined in the Landcom manual *Managing Urban Stormwater: Soils and Construction – Volume 1* (Landcom, 2006) and *Volume 2D, Main Road Construction* (DECC, 2008).

Flooding

- 2.25 The Proponent shall ensure that the detailed design of the project does not significantly increase flooding characteristics and limit to the greatest extent practicable, increases in inundation levels to a maximum of 50mm, and 1 hour, in a 1 in 100 year ARI rainfall event.
- 2.26 Where flooding characteristics are significantly increased and affect access, property or infrastructure, the Proponent shall, in consultation with the landowner, identify and implement further mitigation measures as necessary.

Air Quality

- 2.27 The Proponent shall construct the project in a manner that minimises dust impacts generated by construction works, including wind-blown and traffic-generated dust, on the receiving environment, including sensitive receivers and road users.

Social and Economic

- 2.28 The Proponent shall ensure that access is maintained to provide continued use of the surrounding properties existing functions. This is to be done in consultation with all potentially affected landowners and/or land lease holders.
- 2.29 In consultation with the owners and/or land lease holders of the residences, the Proponent shall provide reasonable and feasible landscaping measures to provide visual screening to residences which have been identified as likely to experience significant visual impact as a result of the project. Subject to the consultation, these measures shall integrate with and complement the habitat values of the adjoining area(s).

Property

- 2.30 The Proponent shall design and construct the project in a manner that mitigates indirect and direct impacts to property and property infrastructure, including landscaping, fencing, walls, dams, bores and the like. The Proponent, in consultation with the property owner, shall arrange and fund the repair of damage to a standard comparable to that in existence prior to the damage. Should reinstatement of property not be achievable, the Proponent shall compensate the property owner for the value of the infrastructure and associated costs and losses.
- 2.31 The Proponent shall identify utilities and services potentially affected by construction to determine requirements for diversion, protection and/or support. Alterations to services shall be determined by negotiation with the service providers. The Proponent in consultation with service providers shall ensure that potential disruption to services resulting from the activity are minimised and advised to customers.

Spoil

- 2.32 All waste and fill materials, whether imported or generated on site, shall be assessed, classified, managed and disposed of in accordance with the *Waste Classification Guidelines* (DECC, 2008).
- 2.33 All waste materials removed from the site shall only be directed to a waste management facility or reuse activity lawfully permitted to accept the materials.

Ancillary Construction Facilities

- 2.34 The Proponent shall ensure that ancillary facilities are located so as to satisfy the following criteria, unless otherwise approved by the Director-General:
- a) be located within or adjacent to the project;
 - b) have ready access to the road network;
 - c) be located to minimise the need for heavy vehicles to travel through residential areas;
 - d) be sited on relatively level land;
 - e) be separated from nearest residences by at least 200 metres;
 - f) not require vegetation clearing beyond that already assessed as required for the project;
 - g) not impact on heritage sites beyond those already assessed as impacted by the project; and
 - h) not affect the land use of adjacent properties.

The location of the Ancillary Facilities shall be identified within the relevant Construction Environmental Management Plan for the project.

3. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- 3.1 Subject to confidentiality, the Proponent shall make all documents required under this approval publicly available.
- 3.2 The Proponent shall prepare and implement a **Community Communication Strategy** to provide mechanisms to facilitate communication between the Proponent (and its

contractors), the Environmental Representative and community stakeholders (particularly adjoining landowners) on construction progress and management. The Strategy shall include, but not be limited to:

- a) identification of stakeholders to be consulted as part of the Strategy;
- b) procedures and mechanisms for the regular dissemination of information to community stakeholders and users of the road network on construction progress and matters associated with environmental management;
- c) the formation of community-based forums that focus on key environmental management issues for the project. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based forums;
- d) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of the project;
- e) procedures and mechanisms through which the Proponent can respond to any enquires or feedback from the community stakeholders in relation to the environmental management and delivery of the projects;
- f) procedures and mechanisms to be implemented to resolve any issues/disputes that arise between parties on the matters relating to environmental management and the project delivery.

Issues that shall be addressed through the Community Communication Strategy include (but are not necessarily limited to): traffic management (including access and construction vehicle management), landscaping, and noise, vibration mitigation and management, including construction hours.

The Proponent shall maintain and implement the Strategy throughout construction. The Strategy shall be approved by the Director-General prior to the commencement of construction.

Complaints and Enquiries

3.3 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:

- a) a 24-hour 1800 telephone number(s) on which complaints and enquiries about the project may be registered;
- b) a postal address to which written complaints and enquires may be sent;
- c) an email address to which electronic complaints and enquiries may be transmitted; and
- d) a mediation system for complaints unable to be resolved.

The telephone number, the postal address and the email address must be published in a newspaper(s) circulating in the local area prior to and during construction. This information must also be provided on the Proponent's website.

3.4 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent must prepare and implement a Complaints Management System consistent with *ISO 10002:2006 Customer satisfaction – Guidelines for complaints handling in organisations* and maintain the System for the duration of construction and up to 12 months following completion of the project. Information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, must be included in the construction compliance reports referred to under condition 5.1 and made available to the Director-General on request.

Provision of Electronic Information

3.5 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall develop and implement a project website, for the provision of electronic information associated with the project, for the duration of construction and for up to 12

months following completion of the project. The Proponent shall publish and maintain up-to-date information on these pages, including:

- a) the documents referred to under condition 1.1 of this approval, and any documentation supporting modifications to this approval that may be granted;
- b) this approval and each relevant environmental approval, licence or permit required and obtained in relation to the project;
- c) subject to confidentiality requirements, a copy of each strategy, plan and program required under this approval; and
- d) the outcomes of compliance tracking in accordance with condition 5.1 of this approval.

4. ENVIRONMENTAL MONITORING AND AUDITING

Ecological Monitoring

- 4.1 The Proponent shall develop and implement a **Flora and Fauna Monitoring Program** for the project, to monitor the impacts of the project on threatened species and populations and to monitor the effectiveness of the mitigation measures (including offsets located within the project corridor) implemented for these species as part of the project.

The Program shall be developed in consultation with the DECCW and I&I NSW (where relevant) and shall include, but not necessarily limited to:

- a) determination of the threatened species populations to be monitored;
- b) the monitoring of a representative sample of the threatened species populations in and adjacent to the footprint of the project prior to the commencement of construction. The methodology, such as monitoring technique, number and location of study populations, shall be decided in consultation with the DECCW and I&I NSW;
- c) a program for monitoring the effectiveness of the crossing points, including the number of fatalities registered by species type;
- d) a program for monitoring the health (mortality) and habitat utilisation of populations before the construction of the project, during the construction of the project and for a period of not less than three years after the commencement of operation of the project, unless otherwise agreed by the Director-General. The monitoring intervals for the sample populations shall be decided in consultation with the DECCW and I&I NSW;
- e) provision for the assessment of the data for each sample population to identify the changes in population health (mortality) or habitat over time and possible causes for these changes in the event of an identified decline;
- f) details of the contingency measures that would be implemented in the event of an identified decline in the population health (mortality) as a direct result of the construction or operation of the project; and
- g) provision for annual reporting of monitoring results to the Director-General, the DECCW and I&I NSW, or as otherwise agreed by those agencies.

The Program shall be submitted to the Director-General prior to the commencement of construction, unless otherwise agreed by the Director-General.

Noise Auditing

- 4.2 Within one year of commencement of operation of the project, or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operational traffic conditions, the Proponent shall undertake an operational noise monitoring program to confirm the noise performance of the project and prepare an Operational Noise Report. The Report shall include, but not necessarily limited to:

- a) noise monitoring to assess compliance with the operational noise outcomes predicted in the operational noise Review required under condition 2.20 of this approval;
- b) methodologies, locations and frequencies for noise monitoring, to be undertaken in accordance with the *Environmental Noise Management Manual* (RTA, 2001);
- c) identification of monitoring sites at which background noise and project noise levels can be ascertained, with specific reference to locations indicative of impacts on residential receptors and sensitive land uses;

- d) the actual traffic volumes and composition after opening shall be compared to predicted volumes used for noise modelling, and where different, the impact on noise outcomes is to be identified;
 - e) details of any complaints and enquiries received in relation to noise generated by the project within the year of operation;
 - f) an assessment of the performance and effectiveness of applied noise mitigation measures; and
 - g) any additional noise mitigation measures and timetables for implementation.
- 4.3 Within 60 days of completing the operational noise monitoring program referred to under condition 4.2 of this approval, the Proponent shall provide the Director-General and the DECCW with a copy of the Operational Noise Report. If the Report identifies any non-compliance with the noise objectives specified in the *Environmental Criteria for Road Traffic Noise* (EPA, 1999), the Proponent shall detail what additional measures would be implemented to ensure compliance, clearly indicating who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Director-General.

5. COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

- 5.1 The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall be submitted to the Director-General for approval prior to the commencement of construction and operation of the project, and shall include, but not necessarily limited to:
- a) provisions for periodic review of the compliance status of the project against the requirements of this approval;
 - b) provisions for the notification of the Director-General prior to the commencement of construction and operation of the project;
 - c) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;
 - d) provisions for the timely reporting of environmental incidents to the Director-General during construction;
 - e) a program for independent environmental auditing construction and operation stages in accordance with *ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing*;
 - f) provisions for periodic reporting of compliance status and environmental auditing to the Director-General during construction and operation of the project; and
 - g) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance.

Operational Performance Audit

- 5.2 Within twelve months of the completion of construction of the project, and then again as required by the Director-General, the Proponent shall commission an independent, qualified person or team to undertake an Operational Performance Audit of the project. The independent person or team shall be approved by the Director-General prior to the commencement of the Audit. An **Operational Performance Audit Report** shall be submitted to the Director-General within one month of the completion of the Audit, unless otherwise agreed by the Director-General. The Audit shall:
- a) assess compliance with the requirements of this approval, and other licences and approvals that apply to the project;
 - b) assess the operational performance of the project against the aims and objectives for the project specified in the documents referred to under condition 1.1 of this approval
 - c) assess the environmental performance of the project against the predictions made and conclusions drawn in the documents referred to under condition 1.1 of this approval; and
 - d) review the effectiveness of the environmental management of the project, including any environmental impact mitigation works.

6. ENVIRONMENTAL MANAGEMENT

Environmental Representative

- 6.1 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Proponent shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director-General. The Environment Representative(s) shall:
- a) oversee the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
 - b) undertake any roles/activities assigned to the Environmental Representative(s) in this approval;
 - c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval and Statement of Commitments;
 - d) oversee the implementation of the environmental auditing of the project in accordance with the requirements of this approval and all relevant project Environmental Management System(s); and
 - e) be given the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will likely occur.

Construction Environmental Management Plan

- 6.2 The Proponent shall prepare and implement a Construction Environment Management Plan, outlining the environmental management practices and procedures that are to be followed during construction. The Plan shall be prepared in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004) and shall include, but not necessarily limited to:
- a) a description of all relevant activities to be undertaken during construction of the project;
 - b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - c) a description of the roles and responsibilities for all relevant and key employees involved in the construction of the project;
 - d) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts; and
 - e) complaints handling procedures during construction.

The Construction Environmental Management Plan shall be approved by the Director-General prior to the commencement of any construction work associated with the project (or stage as relevant), unless otherwise agreed by the Director-General.

- 6.3 As part of the Construction Environmental Management Plan for the project required under condition 6.2 of this approval, the Proponent shall prepare and implement:
- a) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on terrestrial and aquatic ecology will be minimised and managed. The Plan shall be developed in consultation with the DECCW and I&I NSW and shall include, but not necessarily limited to:
 - i) details of work practices (such as fencing, clearing protocols, and construction worker education) to minimise the potential for damage to vegetation (particularly

- EECs) and native fauna during construction. Measures shall also be included to ensure the extent of soil disturbance during construction work is minimised;
 - ii) weed management measures focusing on early identification of invasive weeds and determining effectiveness of management controls;
 - iii) details of the mitigation measures that would be implemented and the associated procedures for the installation and monitoring of these measures, for example the location, maintenance and monitoring of nest boxes, relocated hollows and fauna fencing;
 - iv) detail how the construction activities and structures within or in proximity to riparian areas would be appropriately designed and managed to ensure the integrity, function and condition of these areas are maintained and/or suitably rehabilitated;
 - v) a procedure detailing the timing for the implementation and monitoring of the mitigation and management measures; and
 - vi) a description of how the effectiveness of the mitigation and management measures would be monitored during the proposed works and, if any non-compliance is detected how any non-compliance would be rectified.
- b) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and non-Aboriginal heritage will be minimised and managed. The Plan shall be developed in consultation with the Department and the DECCW, and shall include, but not necessarily be limited to:
- i) the recommendations arising from the cultural heritage assessment report and the requirements of this approval;
 - ii) a strategy for the salvage and curation of salvaged objects, giving consideration to measures for managing and housing objects;
 - iii) specific measures to be applied to works undertaken in close proximity to identified Aboriginal and non-Aboriginal heritage items to minimise and avoid impacts on these items. This shall include a component within the site induction program for construction workers on Aboriginal and non-Aboriginal heritage along the project corridor;
 - iv) a program for construction work practices and an auditing program to ensure that there is no impact on heritage items additional to that already permitted; and
 - v) procedures that would be followed should auditing detect an impact on any known and/or any previously unidentified heritage item be discovered during construction.

Note: The salvage of impacted items may proceed in the absence of an approved Construction Environmental Management Plan subject to those salvage activities being undertaken in accordance with the procedures and outcomes identified within Sections 8 and 9 and Appendix D of the report titled *Hume Highway Town Bypass: Woomargama Aboriginal Cultural Heritage, Cultural Heritage Assessment Report*, prepared by Kelleher Nightingale Consulting Pty Ltd and dated September 2009.

- c) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts would be minimised and managed. The Plan shall be consistent with the guidelines contained in the *Interim Construction Noise Guidelines* (DECCW, 2009), and developed in consultation with the DECCW and shall include, but not necessarily limited to:
- i) details of construction activities and an indicative schedule for construction works;
 - ii) identification of nearby residences and other sensitive land uses, and the relevant noise management levels and blasting and vibration goals;
 - iii) identification of construction activities, including ancillary activities, that have the potential to generate noise and/ or vibration impacts on surrounding land uses, particularly residential areas;
 - iv) an assessment of noise and vibration impacts on receivers;
 - v) detail what reasonable and feasible actions and measures would be implemented to minimise noise and vibration impacts (including negotiated agreements);

- vi) detailing concrete paving, concrete batching (including deliveries) related to paving, and concrete saw cutting activities described in condition 2.14, including technical reasons for out-of-hours works, and associated impacts, negotiated agreements, notification and mitigation measures for these activities;
 - vii) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition 2.13 of this approval, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer high risk works for the DECCWs consideration, pursuant to condition 2.15 f). The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the DECCW, and the high risk/low risk classification criteria developed in consultation with DECCW; and
 - viii) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported; and, if any exceedance is detected how any non-compliance would be rectified.
- d) a **Construction Soil and Water Quality Management Plan** to detail how excavated and imported materials will be managed and water courses protected through construction. The Plan shall be developed in consultation with the DECCW and I&I NSW and shall include, but no necessarily be limited to:
- i) how spoil and fill material generated by the project will be sought, handled, stockpiled, reused and disposed, including the identification of spoil and stockpile volumes and locations;
 - ii) how soil erosion, discharge of sediment or water pollutants from the site will be managed, including the consideration of flood events and the identification of mitigation, management and monitoring measures;
 - iii) details of contaminated soil and appropriate management, remediation, disposal and monitoring measures; and
 - iv) a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction.

Operational Environmental Management

6.4 Prior to the commencement of operation, the Proponent shall incorporate the project into existing environmental management systems applying to the road network.