

# 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 Phillip Costa MP  
**A/ Minister for Planning**

Sydney

2010

File No: S08\_01705

### SCHEDULE 1

<b>Application No:</b>	09_0049
<b>Proponent:</b>	NSW Roads and Traffic Authority
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	Land generally within and in the vicinity of the existing M2 Motorway corridor between Windsor Road, Baulkham Hills and Delhi Road, North Ryde within the Hills Shire, Ryde and Hornsby local government areas.
<b>Project:</b>	The construction and operation of a third lane on both the eastbound and westbound carriageways of the M2 Motorway for approximately 14.5 kilometres, from Windsor Road, Baulkham Hills to Lane Cove Road, Lane Cove.
<b>Major Project:</b>	The proposal is declared a major project under section 75B(1)(b) of the <i>Environmental Planning and Assessment Act 1979</i> , by virtue of an order made by the Minister for Planning and gazetted on 27 February 2009. This order was amended made by the Minister for Planning and gazetted on 6 August 2010.
<b>Critical Infrastructure:</b>	The proposal is declared to be critical infrastructure under section 75C of the <i>Environmental Planning and Assessment Act 1979</i> , by virtue of an order made by the Minister for Planning and gazetted on 27 February 2009. This order was amended made by the Minister for Planning and gazetted on 6 August 2010.

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## SCHEDULE 2

<b>Act, the</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>Ancillary Facility</b>	Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile areas.
<b>CEMP</b>	Construction Environmental Management Plan
<b>Conditions of Approval</b>	The Minister's conditions of approval for the project.
<b>Construction</b>	Includes all work in respect of the project <b>other than</b> survey; acquisitions; fencing; investigative drilling or excavation; building/road dilapidation surveys; minor clearing (except where heritage, threatened species, populations or endangered ecological communities would be affected); or other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads and adjustments to services / utilities, etc.).
<b>Relevant Councils</b>	Hills Shire, Ryde City and/ or Hornsby Council as applicable
<b>OEH</b>	<a href="#">Office of Environment and Heritage</a>
<b>Department, the</b>	<a href="#">NSW Department of Planning and Infrastructure</a>
<b>Director General, the</b>	Director General of the NSW Department of Planning (or delegate)
<b>Director General's Approval</b>	A written approval from the Director General (or delegate).  Where the Director General's approval is required under a condition of this approval, the Director General will endeavour to provide a response within one month of receiving an approval request. The Director General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.
<b>EPA</b>	<a href="#">Environment Protection Authority</a>
<b>EPL</b>	Environmental Protection Licence
<b>Feasible and Reasonable</b>	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. <b>Feasible</b> relates to engineering considerations and what is practical to build. <b>Reasonable</b> relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.  Where requested by the Director General, the proponent must provide evidence as to how feasible and reasonable measures were considered and taken into account.
<b>High noise generating activities</b>	Means jack hammering, rock breaking or hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel or other work occurring on the surface that generates noise with impulsive, intermittent, tonal or low frequency characteristics.
<b>I&amp;I NSW</b>	Industry and Investment NSW (includes divisions such as Agriculture, Forestry, Fisheries and Minerals).

<b>Minister, the</b>	<a href="#">The Minister for Planning and Infrastructure</a>
<b>NOW</b>	NSW Office of Water
<b>Operation</b>	Means the operation of the project, but <b>does not</b> include commissioning trials of equipment or temporary use of parts of the project during construction.
<b>Project</b>	The project that is the subject of Major Project Application 09_0049.
<b>Proponent</b>	<a href="#">Roads and Maritime Services</a>
<b>Publicly Available</b>	Available for inspection in hard copy and/or electronic format by a member of the general public (for example available on the project website as well as at a local display site).
<b>Relevant Aboriginal Stakeholders</b>	The Local Aboriginal Land Council and registered Aboriginal stakeholders.
<b>RMS</b>	<a href="#">Roads and Maritime Services</a>
<b>Sensitive Receiver</b>	Residence, education institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital) and religious facility (e.g. church).

Note: This approval does not negate the Proponent's obligations under any existing approvals under the *Environmental Planning and Assessment Act 1979*, applicable to the M2 Motorway (North West Transport Link - East and West).

## 1. ADMINISTRATIVE CONDITIONS

### Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with:
  - (a) Major Projects Application 09\_0049;
  - (b) *M2 Upgrade Project - Environmental Assessment* (volume 1 and volume 2, parts 1 and 2), prepared by AECOM Australia Pty Ltd and dated May 2010;
  - (c) *M2 Upgrade Project - Submissions and Preferred Project Report*, prepared by AECOM Australia Pty Ltd and dated August 2010, including the revised Statement of Commitments contained therein; and
  - (d) [Modification Application and request for modification dated 17 May 2012 \(MP09\\_0049 MOD 1\)](#), the [Lane Cove Road Eastbound On-ramp Modification Environmental Assessment dated August 2012](#) and [Submissions Report dated October 2012](#); and
  - (e) the conditions of this approval.
- 1.2 In the event of an inconsistency between:
  - (a) the conditions of this approval and any document listed from condition 1.1(a) to 1.1 (d) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
  - (b) any document listed from condition 1.1(a) to 1.1 (d) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with any reasonable requirement(s) of the Director General arising from the Department's assessment of:
  - (a) any reports, plans or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained within these reports, plans or correspondence.

### Staging

- 1.4 The Proponent may elect to construct and/or operate the project in stages provided construction/ operation is consistent with the conditions of this approval. Where stages are proposed, the Proponent shall submit a Staging Report to the Director General prior to the commencement of the relevant construction or operation activities which:
  - (a) describes the stages; and
  - (b) identifies the relevant conditions of approval for each stage and how these will be addressed across and between the stages of the project.
- 1.5 Plans, sub-plans and other management documents required by the conditions of this approval may be submitted for approval for stages of works, subject to the agreement of the Director General.

Where agreed, the plans, sub-plans and other management documents shall be submitted for the approval of the Director General no later than one month prior to the commencement of construction for works relevant to those stages, or within such period otherwise agreed by the Director General. Construction works for those stages, shall not commence until written approval has been received from the Director General.

### Limits of Approval

- 1.6 This approval shall lapse five years after the date on which it is granted, unless works the subject of any related project approval are physically commenced on or before that date.

## 2. SPECIFIC ENVIRONMENTAL CONDITIONS

### Traffic, Transport and Access Arrangements

- 2.1 The Proponent shall provide appropriate car parking and shall manage construction traffic and construction personnel to discourage and minimise construction vehicles from parking or queuing on public roads.

- 2.2 Road dilapidation reports shall be prepared for all local roads likely to be used by construction traffic prior to use by construction heavy vehicles. A copy of the relevant report shall be provided to the relevant Councils. Any damage resulting from the construction of the project, aside from that resulting from normal wear and tear, shall be repaired at the cost of the Proponent. The roads likely to be used by heavy construction vehicles should be identified in the Traffic Management Plan required under condition 6.5(a).
- 2.3 Where approved access to a property is affected by either construction or operation of the project, unless otherwise agreed with the property owner, the Proponent shall provide an alternative access of a standard that is at least equivalent to that currently existing and meets relevant road safety standards prior to commencement of construction or opening of the project to traffic, whichever is relevant. Details for provision of altered access for both construction and operation shall be determined in consultation with the landholder.
- 2.4 The Proponent shall maintain safe pedestrian and cyclist access through or around the worksite during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, the Proponent shall ensure that an alternate route is provided and signposted.
- 2.5 The Proponent shall maintain or improve existing cycleway facilities in the motorway corridor. The facilities shall be constructed in accordance with *NSW Bicycle Guidelines* and *Guide to Traffic Engineering Practice, Part 14 - Bicycles*, (Austroads, 1999), must provide access to existing network facilities and must be completed within 3 months of completion of the project.
- 2.6 The Proponent shall investigate options to enhance the safety of students crossing at the Windsor Road, Torrs Street/ Oakland Avenue intersection, Baulkham Hills, including but not limited to, the timing of traffic lights signals and installation of pedestrian barriers/traffic guard rails.

The final option/s shall be determined by the Proponent prior to the construction of the off ramp, in consultation with the relevant Council and Our Lady of Lourdes Primary School, Baulkham Hills, and to the satisfaction of the Director General.

## **Ecological Impacts**

### ***Vegetation and Watercourses***

- 2.7 The Proponent shall limit the clearing of native vegetation to the greatest extent practicable and where appropriate native vegetation should be incorporated into landscape management measures for the project.
- 2.8 An appropriate offset for the single specimen of *Syzygium paniculatum* located at 266-268 Windsor Road should be detailed in the offset strategy and package required under conditions 2.14 and 2.15 of this approval.
- 2.9 The Proponent shall restore and rehabilitate riparian vegetation in and around watercourses affected by the project in consultation with NOW and DPI and with the relevant Council. Restoration and rehabilitation measures shall be developed in consultation with those agencies, including timeframes and reporting on completion of works.
- 2.10 Watercourse crossings and culverts 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). Category 2 watercourse crossings shall be bridged where reasonable and feasible, alternatively both Category 2 and 3 watercourse culvert replacements shall incorporate a naturalised base ‘

- 2.11 Watercourses affected by the proposal shall, where feasible and reasonable, 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

### ***Fauna Roosting and Habitat Measures***

- 2.12 Prior to the commencement of construction in the vicinity of bridges and culverts, targeted survey(s) shall be undertaken of microbats roosting in existing bridges, culverts and hollow-bearing trees by a qualified and experienced microbat specialist in advance of planned widening of and/ or disturbance adjacent to, these structures. If microbats or evidence of roosting are discovered during these survey(s), no works that impact on microbats are to commence in these areas until the microbats either, move on, are temporarily relocated or are relocated consistent with a translocation proposal licensed by the EPA, if required. The works that impact on microbats is to be determined by the qualified and experienced microbat specialist.
- 2.13 The Proponent shall prepare and implement a nest box plan prior to commencement of clearing of vegetation for construction to provide replacement hollows for displaced fauna identified through SoC FF3. The plan shall detail the number and type of nest boxes to be installed which must be justified based on the number and type of hollows removed, the density of hollows in the area to be cleared and adjacent forest; and the availability of adjacent food resources. An adaptive monitoring program shall be developed in accordance with Condition 3.3 (b) that includes targets against which to measure the effectiveness of the nest boxes in providing replacement hollows.

### ***Offsets***

- 2.14 The Proponent shall develop a **Biodiversity Offset Strategy** to outline how the impacts on threatened species, ecologically endangered communities (EECs) and their habitats lost as a result of the project will be offset. The Strategy shall include, but not necessarily be limited to:
- (a) the objectives and outcomes that would be sought through the biodiversity offset package;
  - (b) verification of the identity and condition of the vegetation to be directly and indirectly impacted by the project by a qualified vegetation ecologist familiar with the endangered vegetation communities occurring in the road corridor;
  - (c) a description of the methodology to be used to determine the offsets required;
  - (d) details of the available offset measures that have been selected to compensate for the loss of threatened species and EECs, such as the provision for, or contributions towards the regeneration and/or management of the habitat of threatened species on nearby lands. The measures shall achieve a neutral or net beneficial outcome for all the ecological values of threatened species and endangered ecological communities likely to be impacted directly or indirectly during both the construction and operational phases of the proposal; and
  - (e) the decision-making framework that would be used to select the final suite of offset measures to achieve the objectives and outcomes established within the Strategy, including the ranking of offset measures.

The Biodiversity Offset Strategy shall be submitted to the Director-General for approval, in consultation with EPA, prior to the commencement of any construction work that would result in the disturbance of any threatened species and/or endangered ecological community, unless otherwise agreed by the Director-General.

- 2.15 Within 12 months of the approval of the Biodiversity Offset Strategy, the Proponent shall prepare and submit the **Biodiversity Offset Package** for the approval of the Director-General (in consultation with EPA), unless otherwise agreed by the Director-General. The Package 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 management and monitoring requirements for compensatory habitat works and other ecological amelioration measures proposed under the Biodiversity Offsets Package to ensure the outcomes of the Package are achieved; and
- (c) timing and responsibilities for the implementation of the provisions of the Package over time.

The requirements of the Biodiversity Offset Package shall be implemented by the responsible parties according to the timeframes set out in the package, unless otherwise agreed by the Director-General.

## Noise and Vibration Impacts

### **Construction Restrictions**

2.16 Standard construction hours for the duration of construction are:

- (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and
- (b) 8:00am to 1:00pm Saturdays; and
- (c) at no time on Sundays or Public Holidays.

The following exceptions (without further approval) to standard construction hours apply:

- (i) Construction work that causes LAeq(15minute) noise levels that are:
  - (a) no more than 5dB above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and
  - (b) no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses.; or
- (ii) for delivery of materials required outside these hours by the Police or other authorities for safety reasons; or
- (iii) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
- (iv) where works are in accordance with the conditions of an EPL for the project;
- (v) 24 hour tunnel excavation, where works are in accordance with the conditions or an EPL for the project; or
- (vi) [Where no EPL applies, works as approved through the out-of-hours work protocol outlined in the Construction Noise and Vibration Management Plan required under condition 6.5\(e\)](#)

2.17 Except as expressly permitted by an EPL issued for the project [or where no EPL applies, as approved in an approved Construction Noise and Vibration Management Plan as defined in 6.5e](#)), high noise impact activities and works occurring on the premises must only be undertaken:

- (a) between the hours of 8:00am to 6:00pm Monday to Friday;
- (b) between the hours of 8:00am to 1:00pm Saturday; and
- (c) in continuous blocks not exceeding 3 hours each with a minimum respite from those activities and works of not less than 1 hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a 1 hour respite between ceasing and recommencing any of the work the subject of this condition.

2.18 In scheduling construction works, the Proponent shall aim to:

- (a) minimise disruptions to traffic along the M2 motorway, Talavera Road, Windsor Road, Christie Road, Beecroft Road, Herring Road [and Lane Cove Road](#);
- (b) achieve the construction noise goal for the project (ie not exceeding the background noise level by more than 5 dB(A) during the night time period);
- (c) undertake construction activities generating the most noise intensive, tonal, impulsive or low frequency during week days (07:00 to 18:00), and on Saturdays (8:00 to 13:00); and

- (d) minimise impacts on and provide periods of respite for affected residential receivers.
- 2.19 The measures to manage and mitigate impacts on the acoustic environment during the removal and replacement of noise barriers should be detailed in the Construction Noise and Vibration Management Plan required under condition 6.5 (e).
- 2.20 Rock crushing and screening activities are not permitted, except where they have been considered and approved under condition 2.52.
- 2.21 The Proponent shall implement all reasonable and feasible mitigation measures with the aim of achieving the following construction vibration goals and ground-borne noise levels:
- (a) for structural damage vibration, the vibration limits set out in the German Standard *DIN 4150 Part 3-1999 Structural Vibration in Buildings - Effects on Structures*;
  - (b) for works in the vicinity of the heritage structures identified in Table 1 of the Environmental Assessment technical paper 7b the vibration limits set out in line 3 of the German Standard *DIN 4150-3: 1999 Structural Vibration – part 3: Effects of vibration on structures*; and
  - (c) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (DEC 2006); and
  - (d) the ground-borne noise levels set out in the *Interim Construction Noise Guidelines* (DECC, 2009).
- 2.22 The Proponent shall conduct vibration testing and monitoring to identify minimum working distances to residential dwellings with the objective of meeting the preferred values for vibration (for low probability of adverse comment) presented in *Assessing Vibration: A Technical Guideline* (DECC, February 2006). In the event that the vibration testing and monitoring shows that the preferred values for vibration at any affected residential dwelling are likely to be exceeded the Proponent shall review the construction methodology and, if necessary, where feasible and reasonable implement additional mitigation measures.
- 2.23 The Proponent shall consult with affected educational institutions to ensure that disruptive noise-generating construction works in the vicinity of the institutions are not timetabled during examination periods, unless other appropriate arrangements to the affected institutions are made at no cost to the affected institutions.
- 2.24 Blasting is not permitted.
- 2.25 The Proponent shall implement all reasonable and feasible noise mitigation measures with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (DECC, 2009). Any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan required under condition 6.5(e) of this approval.

### **Operational Noise**

- 2.26 Unless otherwise agreed to by the Director General, the Proponent shall submit for the approval of the Director General a review of proposed operational noise mitigation measures identified in the documents listed under condition 1.1 within six months of commencing construction. The review shall take into account the detailed design of the project and, where feasible and reasonable, refine the proposed measures with the objective of meeting the criteria outlined in the *Environmental Criteria for Road Traffic Noise* (NSW EPA, 1999). The review shall be undertaken in consultation with the [EPA](#).
- 2.27 Within one month of the Director General's approval of condition 2.26, the Proponent shall write to each landowner whose property is identified by the Proponent (in Table 68 of the Environmental Assessment and/or as a result of the review identified under condition 2.26) as experiencing traffic noise above 60 dB(A) (as  $L_{Aeq(9-hour)}$ ) during the night (22:00 to 07:00)

in the design year (2021) and shall offer to provide and fund reasonable and feasible acoustic treatments to reduce the impact of traffic noise at the residential premises on that property. The Proponent's offer shall remain open for acceptance by the affected landowner for 12 months from the date of the notification required under this condition.

Acoustic treatments agreed between the parties shall be implemented as soon as practicable after reaching such an agreement. Should the parties not be able to reach agreement on the scope and timing of acoustic treatments, then either party may refer the matter to the Director-General for resolution. The Director-General's decision on such a referral shall be final and binding on the parties.

- 2.28 The proponent shall develop a **Heavy Vehicle Compression Braking Strategy** for the project, to identify and trial mitigation measure/s to minimise the acoustic impacts of heavy vehicle compression braking (at the source) on identified sensitive receivers. The strategy shall detail:
- (a) Proposed mitigation measures to minimise heavy vehicle compression braking;
  - (b) Locations where measures are to be applied including the methodology used to identify and quantify areas where excessive heavy vehicle compression braking occurs along the project;
  - (c) How measures will be implemented and measured;
  - (d) Timeframes for the implementation including justification for timing; and
  - (e) Reporting outcomes of the study to the Director General and the EPA, including final reporting on the effectiveness of the measures.

The Heavy Vehicle Compression Braking Strategy shall be submitted to the Director General for approval, within twelve months of the commencement of construction unless otherwise agreed by the Director General.

## **Water and Hydrological Impacts**

### ***Water***

- 2.29 The Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters, except as may be expressly provided by an Environment Protection Licence for the project.
- 2.30 Erosion and sediment control measures shall be implemented prior to any works commencing, consistent with *Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4<sup>th</sup> Edition* (Landcom, 2004) and *Managing Urban Stormwater Soils And Construction Vols 2A and 2D Main Road Construction* (DECC 2008). Measures shall take into account the potential for flooding within and adjoining the project area.
- 2.30A The construction and operation of the Lane Cove Road eastbound, on-ramp shall be designed and managed to ensure it has no adverse impact on the Lane Cove National Park beyond that described in the Environmental Assessment dated August 2012.
- 2.31 Where available, and of appropriate chemical and biological quality, the Proponent shall use stormwater, recycled water or other water sources in preference to potable water for construction activities, including concrete mixing and dust control.

### ***Hydrological Impacts***

- 2.32 The Proponent shall ensure, to the greatest extent practicable, that the project is designed to maintain or improve existing flooding characteristics within the vicinity of the project.

Notwithstanding the above, at Culvert 26 the Proponent shall limit, to the greatest extent practicable, increases in inundation levels to a maximum of 20 millimetre, and 1 hour, in a 1 in 100 year ARI rainfall event.

- 2.33 Where flooding characteristics are altered and affect access, property or infrastructure, the Proponent shall, in consultation with the property owner, identify and implement further mitigation measures.

### **Waste and Spoil Management**

- 2.34 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).
- 2.35 All waste materials removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.

### **Air Quality Impacts**

- 2.36 The Proponent shall construct the project in a manner that minimises or prevents the emission of dust including wind blown and traffic generated dust, including but not limited to:
- (a) implementing practical measures for construction vehicles carrying loads; and
  - (b) minimising tracking of material from construction sites onto public roads.

### **Heritage Impacts**

- 2.37 The Proponent shall not destroy, modify or otherwise physically affect AHIMS 45-6-2949, (grinding grooves) located under the Terry's Creek Bridges. Measures to protect this item during construction should be detailed in the Heritage Management Plan required under condition 6.5(c).
- 2.38 The Proponent shall investigate options to minimise impacts, including vibration impacts, to AHIMS 45-6-2161, (rock shelter) during construction. These measures to protect this item during construction should be detailed in the Heritage Management Plan required under condition 6.5(c).
- 2.39 The Proponent shall manage impacts to AHIMS 45-5-1005 (isolated find) in accordance with section 9.7.4 of the Environmental Assessment.
- 2.40 Prior to the commencement of construction relating to the Windsor Road on-ramp, the Proponent shall investigate design options to minimise the impacts on the property located at 266-268 Windsor Road (Model Farms house) in the final design of the alignment.
- 2.41 The measures to protect the property located at 266-268 Windsor Road (Model Farms house) during construction should be detailed in the Heritage Management Plan required under condition 6.5(c).
- 2.42 Prior to the commencement of construction that directly impacts the property located at 266-268 Windsor Road (Model Farms house) the Proponent shall undertake an archival recording of the property and its relationship to Windsor Road, both before and after the removal of the vegetation. This work shall be undertaken by an experienced heritage consultant, in accordance with the guidelines issued by the Heritage Council of NSW. Within six months of completing the above work, the Proponent shall submit a report containing the archival recordings to the Heritage Council of NSW, the local Council and the local Historic Society.
- 2.43 Where heritage items (Aboriginal objects and relics or works) are discovered during the construction of the project all works in the vicinity of the item/s should stop and an appropriately qualified heritage consultant be contacted to provide specialist heritage advice. The measures to consider and manage this process, including approvals, should be detailed in the Heritage Management Plan required under condition 6.5(c).

- 2.44 The Proponent shall not destroy, modify or otherwise physically affect the heritage listed causeway over Devlin's Creek, located under the Beecroft Road bus ramps. The measures to protect the causeway during construction should be detailed in the Heritage Management Plan required under condition 6.5(c).

### **Visual Amenity and Urban Design**

- 2.45 The Proponent shall design and construct the project in a manner that minimises the visual setting and impact of built structures and hard landscaping elements, including noise walls, retaining walls and cuttings, and the like.

### **Lighting**

- 2.46 The Proponent shall install and operate lighting in accordance with *AS 4282-1997 Control of the Obtrusive Effect of Outdoor Lighting*.

### **Property Impacts**

- 2.47 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 customers should be notified.
- 2.48 The Proponent shall construct the project in a manner that minimises impacts to properties along the project corridor. In the event that construction of the project results in direct or indirect damage to any such property, the Proponent shall arrange and fund repair of the damage to a standard comparable to that in existence prior to the damage.
- 2.49 Prior to the commencement of construction of the project, or each part of the project that may impact on surrounding properties (including heritage items), the Proponent shall:
- (a) Identify those properties at risk from impact/ damage;
  - (b) arrange for a risk assessment by appropriately qualified and experienced geotechnical and construction engineering experts, at those properties at risk from damage, and undertake inspections of these properties prior to construction in accordance with AS 4349.1 'Inspection of Buildings';
  - (c) contact the owners of all properties on which property inspections are to be conducted at least two weeks before the inspection, or as otherwise agreed by the affected property owner, and advise of the scope and methodology for the inspection, and of the process for making a property damage claim;
  - (d) provide a copy of the property inspection report to the owner of each property inspected at least one week prior to construction that could affect the property; and
  - (e) maintain a register of all properties inspected by the Proponent, indicating whether the owner accepted or refused the property inspection offer, and provide a copy of the register to the Director-General upon request.

The Proponent shall rectify or compensate a property owner for any property damage caused directly or indirectly by the construction or operation of the project.

### **Hazards and Risk**

- 2.50 The Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:
- (a) all relevant Australian Standards;
  - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
  - (c) the DECC's Environment Protection Manual Technical Bulletin *Bundling and Spill Management*.

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

### **Ancillary Facilities**

2.51 All ancillary facilities shall be designed and operated to allow unimpeded access and egress for emergency vehicles and to fire fighting infrastructure.

2.52 Prior to the establishment of any ancillary facility, including those identified in the documents referred to under condition 1.1 of this approval and any location where rock crushing and screening is proposed, the Proponent shall obtain the Director General's approval for the establishment and management of the ancillary facility. In obtaining this approval, the Proponent shall submit an assessment of the ancillary facility which provides:

- (a) a description of the ancillary facility, its components and the surrounding environment;
- (b) details of the activities to be carried out at each ancillary facility, including the hours of use and the storage of dangerous and hazardous goods;
- (c) an assessment of the environmental impacts on the site and the surrounding environment, including, but not limited to noise, vibration, air quality, traffic, threatened species, heritage and light spill;
- (d) details of the mitigation, monitoring and management procedures specific to the ancillary facility that would be implemented to minimise environmental impacts or, where this is not possible, reasonable and feasible measures to offset these impacts and an assessment of the adequacy of the mitigation or offsetting measures. This shall include consideration of restrictions on the hours of use or exclusion of certain activities; and
- (e) identification of the timing for the completion of activities at the ancillary facility and how the site will be decommissioned (including any necessary rehabilitation).

## **3. ENVIRONMENTAL MONITORING AND AUDITING**

### **Operational Performance Audit**

3.1 Within twelve months of the completion of construction of the project, and then again at five and, thereafter if 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.

### **Noise Auditing**

3.2 No later than one year after construction completion and commencement of operation of the project, or as otherwise agreed by the Director General, the Proponent shall undertake operational noise monitoring to compare actual noise performance of the project against noise performance predicted in the review of noise mitigation measures required by condition 2.26 and prepare an Operational Noise Report. The Report shall include, but not necessarily be limited to:

- (a) noise monitoring to assess performance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition 2.26 and documents specified under condition 1.1 of this approval;

- (b) a review of the operational noise levels in terms of criteria and noise goals established in the *Environmental Criteria for Road Traffic Noise* (EPA, 1999);
- (c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which project noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;
- (d) details of any complaints and enquiries received in relation to operational noise generated by the project between the date of commencement of operation and the date the report was prepared;
- (e) any required recalibrations of the noise model taking into consideration factors such as noise monitoring undertaken and actual traffic numbers and proportions;
- (f) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all reasonable and feasible mitigation measures; and
- (g) any additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition 2.26, that would be implemented with the objective of meeting the criteria outlined in the *Environmental Criteria for Road Traffic Noise* (NSW EPA, 1999), when these measures would be implemented and how their effectiveness would be measured and reported to the Director General and the EPA.

The Proponent shall provide the Director General and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above, or as otherwise agreed by the Director General.

### **Ecological Monitoring**

- 3.3 Prior to the commencement of construction, the Proponent shall develop and implement a Monitoring Program to monitor the effectiveness of the mitigation measures identified in Condition 2.12 and 2.13 for threatened species directly impacted by the project. The Program shall be developed in consultation with the Department, and a suitably qualified ecologist(s) and shall include but not necessarily be limited to:
- (a) monitoring methodology for threatened species adjacent to the project footprint;
  - (b) an adaptive monitoring program to assess the effectiveness of the mitigation measures identified in Condition 2.12 and 2.13 and allow their modification if necessary. The monitoring program shall nominate appropriate and justified monitoring periods and targets against which effectiveness will be measured;
  - (c) monitoring shall be undertaken during construction (for construction-related impacts) and from opening of the project to traffic (for operation/ongoing impacts) until such time as the effectiveness of mitigation measures can be demonstrated to have been achieved over a minimum of three successive monitoring periods after opening of the project to traffic, or as otherwise agreed by the Director-General;
  - (d) provision for the assessment of the data to identify changes to habitat usage and if this can be attributed to the project;
  - (e) details of contingency measures that would be implemented in the event of changes to habitat usage patterns directly attributable to the construction or operation of the project; and
  - (f) provision for annual reporting of monitoring results to the Director General and the EPA, or as otherwise agreed by those agencies.

The Program shall be submitted to the Director General prior to the commencement of construction.

## **4 COMPLIANCE MONITORING AND TRACKING**

### **Compliance Tracking**

- 4.1 The Proponent shall develop and implement a program to track compliance with the requirements of this approval during construction of the project. The Program shall be submitted to the Director General for approval prior to the commencement of construction. The Program shall include, but not necessarily limited to:

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

## **5 COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT**

### **Access to Information**

- 5.1 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.
- 5.2 Prior to the commencement of construction, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the project. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:
- (a) a copy of the documents referred to under Condition 1.1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;
  - (b) a copy of this project approval;
  - (c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;
  - (d) a copy of each current strategy, plan, program or other document required under this approval; and
  - (e) the outcomes of compliance tracking in accordance with the requirements of Condition 4.1.

### **Complaints and Enquiries Procedure**

- 5.3 Prior to the commencement of construction, the Proponent shall ensure that the following are available for community complaints and enquiries during the construction period:
- (a) a telephone number on which complaints and enquiries about construction and operation activities may be registered;
  - (b) a postal address to which written complaints and enquiries may be sent; and
  - (c) an email address to which electronic complaints and enquiries may be transmitted.

The telephone number, the postal address and the email address shall be published in a newspaper circulating in the local area prior to the commencement of construction and prior

to the commencement of project operation. The above details shall also be provided on the website (or dedicated pages) required by this approval.

The Proponent must prepare and implement a Construction Complaints Management System consistent with AS 4269 Complaints Handling prior to the commencement of construction activities and must maintain the System for the duration of construction activities.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached and whether mediation was required or used, must be maintained by the Proponent and included in a complaints register. The information contained within the System must be made available to the Director General on request.

## **Community Consultation**

5.4 The Proponent shall prepare and implement a **Community Communication Strategy** for the project. This Strategy shall be designed to provide mechanisms to facilitate communication between the Proponent, the Contractor, the Environmental Representative, relevant Councils and local community (broader and local stakeholders) on the detailed design, construction progress and the related environmental management of the project. The Strategy shall include, but not necessarily be limited to:

- (a) identification of stakeholders to be consulted as part of the Strategy, including public and private transport users and affected and adjoining landowners;
- (b) procedures and mechanisms for the regular distribution of information to stakeholders on the progress of the project, detailed design and matters associated with environmental management;
- (c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management, final design and delivery of the project;
- (d) how community input will be sought, and considered, in the design and environmental management issues for the project, including ancillary facilities. The Strategy shall provide detail on the structure, scope, objectives and frequency of this input;
- (e) procedures and mechanisms through which the Proponent can respond to any enquires or feedback from stakeholders in relation to the environmental management, final design and delivery of the project; and
- (f) procedures and mechanisms that would be implemented to resolve any issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of the project. This may include the use of an appropriately qualified and experienced independent mediator.

Key issues that should be addressed in the Community Communication Strategy should include (but not necessarily be limited to):

- (i) traffic management (including access, construction vehicle management and parking);
- (ii) community infrastructure;
- (iii) landscaping/ urban design matters;
- (iv) heritage;
- (v) air quality;
- (vi) erosion and sediment control; and
- (vii) noise and vibration mitigation and management.

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

## **6 ENVIRONMENTAL MANAGEMENT**

### **Environment Representative**

6.1 Prior to the commencement of construction of the project, 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) be the principal point of advice in relation to the environmental performance of the project;
- (b) be consulted in responding to the community concerning the environmental performance of the project;
- (c) monitor the implementation of all environmental management plans and monitoring programs required under this approval;
- (d) monitor the outcome of all environmental management plans and advise the Proponent upon the achievement of all project environmental outcomes;
- (e) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and all other licences and approvals related to the environmental performance and impacts of the project;
- (f) ensure that environmental auditing is undertaken in accordance with the requirements Condition 4.1 and the project Environmental Management System(s); and
- (g) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.

### **Urban Design and Landscape Management Plan**

6.2 The Proponent shall prepare and implement an Urban Design and Landscape Plan for the operation of the project. The Plan shall be prepared in consultation with relevant Council(s) and shall present an integrated urban design for the project. The Plan shall include, but not necessarily be limited to

- (a) a principal goal of achieving the seven urban design objectives outlined in section 4.2 of Volume 2, part 2 referred to under condition 1.1(b);
- (b) graphics for key elements such as sections, sketches, perspective views, etc;
- (c) strategies to progressively landscape the project incorporating other environmental controls such as erosion and sedimentation controls, drainage, noise mitigation;
- (d) location and identification of existing and proposed vegetation including use of indigenous and endemic species where possible;
- (e) restoration of sites and rehabilitation measures;
- (f) consideration of the measures outlined in the Heritage Management Plan in the vicinity of Windsor Road;
- (g) design of Norfolk Tunnel including approaches and plantings;
- (h) design treatments for built elements including retaining walls, cuttings, bridges and noise barriers;
- (i) design treatments for pedestrian and cyclist elements including footpath location, paving types and pedestrian crossings and other fixtures such as seating, lighting, fencing and signs;
- (j) standards, procedures and methods to ensure the establishment, monitoring and ongoing maintenance of built elements and landscaped areas (including rehabilitated areas);
- (k) remedial measures to maintain landscaping works to the design standard established in the Plan, where necessary; and
- (l) a consultation strategy to seek community feedback on the proposed urban design and landscape measures.

Unless otherwise agreed to by the Director General, the Plan shall be submitted for the approval of the Director-General within six months of the commencement of construction of the project, and may be staged to suit the program for construction of the project.

### **Norfolk Tunnel Construction Management Plan**

- 6.3 Prior to the commencement of the excavation of the Norfolk tunnel, the Proponent shall prepare and implement a Management Plan for the works. The Plan shall include, but not necessarily be limited to:
- (a) Method of construction and timing of tunnel works, including construction hours;
  - (b) Traffic management during construction and opening of the tunnel to traffic;
  - (c) Provision of the detailed design of the tunnel;
  - (d) Construction noise impact statement for the tunnel including:
    - (i) Specific mitigation measures in relation to properties where night time criteria is exceeded;
    - (ii) Examination of alternative construction methods that would potentially reduce noise if the noise levels exceed criteria in the *Interim Construction Noise Guidelines*; and
    - (iii) A consultation and notification process for affected residents, including additional noise mitigation measures as negotiated with affected residents and/ or other sensitive receivers.
  - (e) Assessment of the safety issues in associated with construction widening the tunnel including specific measure to ensure public safety; and
  - (f) Proposed measures for Heritage properties.

The Plan shall be submitted for the approval of the Director General no later than one month prior to the commencement of tunnel excavation works, or within such period otherwise agreed by the Director General. Tunnel excavation works shall not commence until written approval has been received from the Director General.

#### **Construction Environment Management Plan**

- 6.4 Prior to the commencement of construction, the Proponent shall prepare and implement a Construction Environment Management Plan. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in accordance with *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The Plan shall be prepared in consultation with the relevant government agencies and include, but not necessarily be limited to:
- (a) a description of all relevant activities to be undertaken during construction of the project including an indication of stages of construction, where relevant;
  - (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 stake, and key legislation and policies;
  - (c) a description of the roles and responsibilities for all relevant 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 Plan shall be submitted for the approval of the Director General no later than one month prior to the commencement of construction, or within such period otherwise agreed by the Director General. Construction works shall not commence until written approval has been received from the Director General.

- 6.5 As part of the Construction Environment Management Plan for the project required under condition 6.4 of this approval, the Proponent shall prepare and implement the following sub plan(s):
- (a) a **Construction Traffic Management Plan**, to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic and the amenity of the surrounding environment. The Plan shall be developed prior to the generation of construction traffic or works, or each stage of works, with the potential to affect traffic flows. The Plan shall be developed in consultation with the relevant Council and include, but not necessarily be limited to:

- (i) impacts on existing traffic in the M2 corridor (including associated local roads) and the timing of the impacts (including on pedestrians, public transport, vehicles, parking and cyclists);
  - (ii) details of construction vehicle movements and parking for each stage of works, including access arrangements for construction sites and site compounds, and ingress and egress routes;
  - (iii) where reasonable and feasible, measures to minimise heavy vehicle movements, where construction vehicle routes directly pass schools or childcare centres, between 8:00am and 9:30am, and between 2:30pm and 4:00pm Monday to Friday;
  - (iv) details of traffic control measures, and changes to traffic configurations, arrangements and facilities;
  - (v) the retention of and/or provision of alternate vehicular access;
  - (vi) impacts on bus stops and the provision of safe and convenient access to all bus stops;
  - (vii) identification of impacts to pedestrian and cycle access areas, including measures to ensure safe pedestrian and cycle routes and access at all times, and the provision of alternative facilities and locations for pedestrians and cyclists;
  - (viii) a response plan which sets out the proposed response to any traffic, construction or other incident; and
  - (ix) appropriate monitoring, review and amendment mechanisms.
- (b) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on ecology will be minimised and managed. The Plan shall be developed with input from a qualified and experienced flora/fauna ecologist include, but not necessarily be limited to:
- (i) details of work practices (such as fencing and construction worker education) to minimise the potential for damage to vegetation (particularly Endangered Ecological Communities and threatened flora species and riparian vegetation) and native fauna during construction. Measures shall also be included to minimise the extent of soil disturbance during construction;
  - (ii) weed management measures focusing on early identification of invasive weeds, identifying effective management controls and methods to measure effectiveness;
  - (iii) details of the mitigation measures to be implemented and associated procedures for the installation and monitoring of these measures; and
  - (iv) 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.
- (c) 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's Heritage Branch (for non-Aboriginal heritage) and include, but not necessarily be limited to:
- (i) 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;
  - (ii) how heritage items (Aboriginal objects and relics or works) discovered during the construction of the project will be considered and managed. This shall include a component within the site induction program for construction workers on Aboriginal and non-Aboriginal heritage along the project corridor;
  - (iii) a procedure for continued consultation with the relevant Aboriginal stakeholders; and
  - (iv) procedures to be followed should non-compliance against any of the documents identified in condition 1.1 or this management plan be detected.
- (d) a **Construction Water Quality Management Plan** to detail how construction activities will be managed to minimise erosion and sedimentation impacts on water quality and

protect watercourses. The Plan shall be developed in consultation with NOW and the relevant Council and include, but not necessarily be limited to:

(i) details of control measures to be employed to manage any accumulation of water (both groundwater and surface water);

- impacts on nearby structures from potential settlement;
- groundwater inflow control;
- handling, treatment and disposal of groundwater and contaminated groundwater;
- methods for monitoring groundwater during construction and operation; and
- measures to manage exceedances and details of response actions.

(ii) management of the cumulative impacts of the project on the quality and quantity of surface and groundwater, including stormwater;

(iii) details of short and long term measures to be employed to minimise soil erosion and the discharge of sediment to land and/or waters;

(iv) identification of all potential sources of water pollution (including those resulting from maintenance activities) and a detailed description of the remedial action to be taken or management systems to be implemented to prevent discharge of these pollutants from all sources within the project sites;

(v) opportunities for recycling/re-use of stormwater or other sources;

(vi) contingency plans to be implemented in the event of major fuel spills or other chemicals; and

(vii) a program for reporting on the effectiveness of the sediment and erosion control system against performance goals.

(e) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be developed in consultation with the EPA and include, but not necessarily be limited to:

(i) details of and an indicative schedule for construction activities;

(ii) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas and identified heritage items and an assessment of these;

(iii) a detailed description of what actions and measures would be implemented to manage noise and vibration, particularly in the construction of the Norfolk tunnel and the crushing of excavated sandstone material, and the removal of noise walls;

(iv) a detailed description of the reasonable and feasible actions and measures to be implemented to ensure compliance with the relevant noise and vibration criteria/objectives;

(v) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints;

(vi) 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, procedures to be followed should non-compliance against any of the documents identified in Condition 1.1 or this management plan be detected; and

(vii) where no EPL applies, an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition 2.16, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental impact and refer high impact works for the Director General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low impact out-of-hour works, and detail a standard protocol for referring applications to the Director General

## Operational Environmental Management

- 6.6 The Proponent shall prepare and implement an Operational Environment Management Plan for the project that details the environmental management framework, practices and procedures to be followed during its operation. The Plan shall be consistent with the Department's *Guideline for the Preparation of Environmental Management Plans* (DIPNR 2004) to provide a clear environmental management framework. The Plan shall be prepared in consultation with the relevant government agencies and include, but not necessarily be limited to:
- (a) a description of all relevant activities to be undertaken during operation of the project including an indication, where relevant, of stages of operation;
  - (b) statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
  - (c) details of how the performance of the upgrade, in relation to the traffic performance (level of service), identified in the Environmental Assessment, will be monitored. In particular the following traffic performance issues shall be addressed in the plan:
    - (i) identify the methodology that will be used to measure and monitor performance;
    - (ii) the timing of the monitoring and reporting;
    - (iii) details of the long term monitoring process.
  - (d) details of how the project's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:
    - (i) measures to monitor and manage ecological factors, including effectiveness and maintenance of fauna mitigation and rehabilitation measures with reference to Condition 2.14;
    - (ii) measures to monitor and manage noise impacts with reference to Condition 2.26;
    - (iii) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to surrounding lands and/or waters;
    - (iv) measures to monitor and maintain landscaping undertaken along the project corridor until the vegetation has sufficiently been established.
  - (e) a description and contact details of the roles and responsibilities for all relevant employees involved in the operation of the project; and
  - (f) complaints handling procedures during operation.

The Plan shall be submitted for the Director-General's approval no later than one month prior to the commencement of operation, or within such period as otherwise agreed by the Director-General. Operation of the project shall not commence until written approval has been received from the Director-General.

Nothing in this condition precludes the Proponent from updating an existing Operational Environment Management Plan to meet this requirement, providing the Operational Environment Management Plan demonstrates, to the satisfaction of the Director General, where the relevant conditions of this approval have been addressed.

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