# Infrastructure approval

# Section 115ZB of the Environmental Planning & Assessment Act 1979

I grant approval to the State significant infrastructure application 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 including economic and social impacts;
- set standards and performance measures for acceptable environmental performance:
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the SSI.

The Hon Pru Goward MP Minister for Planning

March

2015

**SCHEDULE 1** 

Application no.:

SSI-6547

Proponent:

Roads and Maritime Services

**Approval Authority:** 

Minister for Planning

Land:

King Georges Road Interchange, M5 Motorway, Beverly Hills

and Narwee

State Significant Infrastructure:

WestConnex - M5 King Georges Road Interchange Upgrade

- Tying into the M5 South West Motorway west of Penshurst Road, Narwee (the western end of the project);
- Upgrading part of the M5 dual carriageways, within the project area, to retain two through lanes in each direction and accommodate the possible future construction WestConnex M5;
- Tying into the M5 East Freeway, near Kooemba Road, Beverly Hills (the eastern end of the project);
- To the west of King Georges Road, adjustment of the eastbound off-ramp and westbound on-ramp, and widening of the Penshurst Road overpass; and
- To the east of King Georges Road, extension of the eastbound on-ramp and westbound off-ramp and new bridge spans to the north and south of the Cooloongatta Road overbridge.

**Critical State Significant Infrastructure** 

The proposal is critical State significant infrastructure by virtue of schedule 5 clause 4 of the State and Regional Development SEPP.

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#### **DEFINITIONS**

Act, the

Environmental Planning and Assessment Act, 1979.

Ancillary facility

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 area.

ARI

Average Recurrence Interval: The average, or expected, value of the periods between exceedances of a given rainfall total accumulated over a given duration.

Proponent

Roads and Maritime Services (RMS)

Conditions of approval

The Minister's conditions of approval for the SSI.

Construction

Includes all work in respect of the SSI other than:

- a) survey works including general alignment survey and survey controls (including installation of global positioning system (GPS), repeater stations, survey of existing and future utilities or building/road dilapidation surveys.
- b) further investigations including investigative drilling, excavation or salvage; treatment of contaminated sites or work undertaken in accordance with a strategy or salvage operation required by the conditions of this approval.
- minor clearing or translocation of native vegetation, as identified in the Environmental Impact Statement, Submissions Report, or in accordance with approved strategies, plans, programs and other documents required by the conditions of this approval;
- d) establishing ancillary facilities/construction work sites (in locations meeting the criteria identified in the conditions of approval), or where criteria are not fully satisfied, those ancillary facility sites which have been assessed against criteria, and approved in accordance with Conditions D27 and D31. This includes the establishment of ancillary facilities access roads and the provision of services to the facility and installation of erosion and sedimentation controls.
- e) installation of environmental impact mitigation measures (including erosion and sedimentation control, temporary exclusion fencing for sensitive areas, and at-house acoustic treatment) and measures identified in approved strategies, plans, programs and other documents required by the conditions of this approval.
- f) property acquisition adjustment works including the installation of property fencing, demolition and removal of buildings;
- g) relocation of utilities;
- h) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, relocation of pedestrian and cycle paths and property access, etc);
- maintenance.

Note - work where heritage, threatened species, populations or endangered ecological communities would be affected that work is classified as construction, unless otherwise approved by the Secretary in consultation with the Office of Environment and Heritage.

Department, the

Department of Planning and Environment.

**EEC** 

Endangered ecological communities

EIS

Environmental Impact Statement

Environmental Representative

Refer to Condition D1

**EPA** 

**Environment Protection Authority.** 

**EPL** 

Environment Protection Licence under the Protection of the Environment Operations Act 1997.

Feasible and Reasonable

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 and cost of mitigation versus benefits provided, community expectations and nature and extent of potential improvements.

Where requested by the Secretary, the Proponent shall provide evidence as to how feasible and reasonable measures were considered and taken into account

Note: Community expectations must be taken into account but it is not expected that specific community consultation will be required in every instance.

Heritage

Encompasses both Aboriginal and non-Aboriginal heritage including sites that predate European settlement, and a shared history since European settlement such as a shared associations in pastoral landscapes as well as associations linked with the mission period.

Heritage Item

An item as defined under the Heritage Act 1977, and assessed as being of local, State and/or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the National Parks and Wildlife Act 1974.

Minister, the

Minister for Planning.

**NSW Heritage Council** 

Heritage Council of NSW or its delegate.

NOW

NSW Office of Water

**OEH** 

Office of the Environment and Heritage

Operation

Means the operation of the SSI, but does not include commissioning trials of

equipment or temporary use of parts of the SSI during construction.

Publicly available

Available for inspection by a member of the general public (for example

available on an internet website).

Relevant Council(s)

City of Canterbury and Hurstville City Council

Secretary

Secretary of the Department of Planning and Environment.

Sensitive receiver

Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church)

and children's day care facility.

Secretary's approval, agreement or satisfaction A written approval from the Secretary (or delegate/nominee).

Where the Secretary's approval, agreement or satisfaction is required under a condition of this approval, the Secretary will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Secretary may ask for additional information if the approval, agreement or satisfaction 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.

SSI

Means the State significant infrastructure approved under this approval and as generally described in Schedule 1 (SSI-6547).

SSI boundary

The boundary of the SSI as defined in the documents referred to in condition A2.

SSI footprint

That area within the SSI boundary physically impacted by construction activities.

Standard Construction Hours

The standard construction hours are:

- 7.00am to 6.00pm Monday to Friday;
- 8.00am to 1.00pm Saturdays; and
- at no time on Sundays or public holidays.

#### **SCHEDULE 2**

#### PART A

#### **ADMINISTRATIVE CONDITIONS**

#### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

A1 In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all feasible and reasonable measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the SSI.

# **TERMS OF APPROVAL**

- A2 The Proponent shall carry out the SSI generally in accordance with the:
  - (a) State significant infrastructure application SSI-6547
  - (b) WestConnex M5 King Georges Road Interchange Upgrade Environmental Impact Statement, prepared by Jacobs Group (Australia) Pty Ltd and dated October 2014;
  - (c) WestConnex M5 King Georges Road Interchange Upgrade Submissions Report, prepared by Jacobs Group (Australia) Pty Ltd and dated January 2015; and
  - (d) conditions of this approval.
- A3 In the event of an inconsistency between:
  - (a) the conditions of this approval and any document listed from condition A2(a) to A2(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
  - (b) any document listed from condition A2(a) to A2(c) inclusive, and any other document listed from condition A2(a) to A2(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- A4 The Proponent shall comply with any reasonable requirement(s) of the Secretary 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.

# LIMITS OF APPROVAL

A5 This approval shall lapse 10 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.

# STATUTORY REQUIREMENTS

A6 The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.

# **STAGING**

- A7 The Proponent may elect to construct and/ or operate the SSI in stages. Where staging is proposed, the Proponent shall submit a **Staging Report** to the Secretary prior to the commencement of the first proposed stage. The Staging Report shall provide details of:
  - (a) how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and
  - (b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI.

Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).

# SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM

A8 The Proponent shall ensure that all plans, sub-plans and other management documents required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Secretary no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Secretary.

#### Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Proponent will
  need to ensure that the existing operations on site are covered by suitable strategies, plans or
  programs at all times; and
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan
  or program shall clearly describe the specific stage to which the strategy, plan or program applies,
  the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or
  program.

#### COMPLIANCE

- A9 The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the requirements of the conditions of this approval relevant to their respective activities.
- A10 The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.
- A11 In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the activity, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

# **Compliance Tracking Program**

A12 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 Secretary for approval prior to the commencement of construction and operate for a minimum of 18 months following commencement of operation.

The Program shall include, but not necessarily be limited to:

- (a) provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged);
- (b) provisions for periodic review of the compliance status of the SSI against the requirements of this approval;
- (c) provisions for periodic reporting of compliance status to the Secretary, including but not limited to:
  - (i) a Pre-Construction Compliance Report prior to the commencement of construction;
  - (ii) quarterly Construction Compliance Reports, for the duration of construction; and
  - (iii) a Pre-Operation Compliance Report prior to the commencement of operation:
- (d) a program for independent environmental auditing in accordance with AS/NZS ISO 19011:2014 -Guidelines for Auditing Management Systems;
- (e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents:
- (f) provisions for reporting environmental incidents to the Secretary during construction, in accordance with conditions A13 and A14;
- (g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and
- (h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

# INCIDENT REPORTING

- A13 The Proponent shall notify the EPA in relation to any pollution incident in carrying out the SSI as required by the *Protection of the Environment (Operations) Act 1997* as required by that Act. The Proponent shall provide the Secretary with a record of any such notification.
- A14 The Proponent shall notify the Secretary (using the contact name and phone number notified by the Department from time to time) of any incident (other than those relating to the *Protection of the Environment (Operations) Act 1997*) with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident on weekdays, or the following business day on weekends. The Proponent shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.
- A15 The Proponent shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A14, within such period as the Secretary may require.

#### PART B

#### **ENVIRONMENTAL PERFORMANCE**

# SOIL, WATER QUALITY AND HYDROLOGY

B1 Except as may be provided by an EPL, the SSI shall be constructed and operated to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.

### Flooding

- B2 The SSI shall be designed to not worsen existing flood characteristics in the vicinity of the SSI. Not worsen is defined as:
  - (a) a maximum increase in inundation time of one hour in a 1 in 100 year ARI rainfall event;
  - (b) a maximum increase of 10mm in inundation at properties where floor levels are currently exceeded in a 1 in 100 year ARI rainfall event; and
  - (c) a maximum increase of 50mm in inundation at properties where floor levels would not be exceeded in a 1 in 100 year ARI rainfall event.

#### **Land Contamination**

B3 Measures to identify, handle and manage any unidentified contaminated soils and materials shall be identified in the Construction Environmental Management Plan required under conditions D30 and D31. Should a Remediation Action Plan be required, this shall be prepared to meet the relevant guidelines of the Contaminated Land Management Act 1997. If required, a Site Audit Statement(s), prepared by an accredited Site Auditor under the Contaminated Land Management Act 1997, shall be prepared verifying that the disturbed contaminated areas have been remediated to a standard consistent with the intended land use and shall be submitted to the Secretary and Relevant Councils prior to operation.

# TRANSPORT AND ACCESS

- B4 The SSI shall be designed so as not to preclude grade separated shared paths across King Georges Road so as to improve cycle and pedestrian safety and connectivity.
- B5 In relation to new or modified local road, parking, pedestrian and cycle infrastructure, the SSI shall be designed:
  - (a) in consultation with the relevant roads authority;
  - (b) to take into consideration existing and future demand, road safety and traffic network impacts;
  - (c) to meet relevant design, engineering and safety guidelines, including Austroads Guide to Road Design; and

be endorsed by a suitably qualified and experienced person that has considered the above matters.

- B6 A safety audit of the shared paths on both sides of the corridor between Belmore and Bexley Roads shall be undertaken in reference to Austroads Guides and will inform the preparation of the Cycling and Pedestrian Access Strategy required by condition B8.
- B7 The closure of M5 shoulders to cycle traffic shall not occur until shared paths have been upgraded and the revised crossings over King Georges Rd have been implemented, consistent with the approved Cycling and Pedestrian Access Strategy, unless otherwise agreed by the Secretary. Should the closure of M5 shoulders to cycle traffic be required prior to these actions being undertaken, the Proponent shall demonstrate to the Secretary that existing and/or temporary facilities will be implemented to provide safe and efficient cycle and pedestrian access.
- B8 Prior to construction, unless otherwise agreed by the Secretary, the Proponent shall prepare a Cycling and Pedestrian Access Strategy with a focus on addressing eastbound and westbound cyclist and pedestrian movements and connections, including at the King Georges Road/ M5 Motorway interchange. This Strategy shall be approved by the Secretary, and shall be prepared in consultation with relevant stakeholders including, but not limited to Relevant Councils, pedestrian and bicycle user groups, community groups, and business associations, and include, but not necessarily be limited to:

- (a) options for eastbound and westbound cyclist and pedestrian access along the M5 corridor and across King Georges Road. This shall focus on cyclist and pedestrian safety and efficiency. This shall include the introduction of a new crossing across King Georges Road generally between the M5 eastbound on and off ramps and modifying the signalling sequence at the King Georges Road east-bound off ramp for cyclists exiting the M5 to cross to the shared path with a reduced waiting time:
- (b) improvements to the shared paths and surrounding environment between Belmore and Bexley Roads and adjoining pedestrian and cycle connections. This shall consider the results of the safety audit required under condition B6 and the upgrade of shared paths between King Georges Road and Bexley Road to meet current cycle and pedestrian standards:
- (c) defining the existing and proposed cycling network and infrastructure that will be delivered; and
- endorsement by a suitably qualified and experienced person that has considered the above matters.

#### Note:

Identified mitigation measures that are not consistent with the environmental impacts described in the documents listed in condition A2, will need to be further assessed under the Environmental Planning and Assessment Act, 1979. Works will need to meet relevant design standards and be subject to independent safety audits.

#### **BIODIVERSITY**

B9 The clearing of native vegetation shall be minimised with the objective of reducing impacts to any threatened species or Endangered Ecological Communities to the greatest extent practicable. Impacted vegetation shall be rehabilitated with endemic species to the greatest extent practicable.

#### WASTE MANAGEMENT

- B10 Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence or waste exemption under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.
- B11 The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site.
- B12 All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with *Waste Classification Guidelines* (Department of Environment, Climate Change and Water, 2009).
- B13 All waste materials removed from the SSI site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.

### **UTILITIES AND SERVICES**

B14 Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Proponent.

# **URBAN DESIGN AND LANDSCAPE**

- B15 The Proponent, shall where feasible and reasonable, give consideration to the opportunities, and implement the mitigation measures identified in the *King Georges Road Interchange Upgrade Visual Amenity, Built Form and Urban Design Report, AECOM 2014.* Where an opportunity is not considered feasible or reasonable, this will be clearly demonstrated to the Secretary in conjunction with the submission of the **Urban Design and Landscape Plan** required by condition B16.
- B16 Prior to the commencement of permanent built works and/ or landscaping, or as otherwise agreed by the Secretary, an **Urban Design and Landscape Plan** shall be prepared and implemented (following approval) for the SSI. The Plan shall be prepared by suitably qualified and experienced person(s), in consultation with the Relevant Council and community, for the approval of the Secretary. The Plan shall

present an integrated urban and landscape design for the SSI, and shall include, but not necessarily be limited to:

- (a) identification of design objectives, principles and standards based on:
  - i) environmental and heritage values,
  - ii) urban design context,
  - iii) social context and infrastructure,
  - iv) sustainable design and maintenance,
  - v) community safety, amenity and privacy, including 'safer by design' principles where relevant:
  - vi) relevant design standards and guidelines; and
  - vii) King Georges Road Interchange Upgrade Visual Amenity, Built Form and Urban Design Report, AECOM 2014.
- (b) the location of existing vegetation and proposed landscaping (including use of endemic and advanced tree species where practicable). Details of species to be replanted/ revegetated shall be provided, including their appropriateness to the area and habitat for threatened species (including rehabilitation of aquatic vegetation);
- (c) a description of disturbed areas (including compounds) and details of the strategies to progressively rehabilitate, regenerate and/or revegetate these areas;
- (d) design features, built elements, lighting and building materials (including noise walls, cycle and pedestrian paths);
- (e) an assessment of the visual screening effects of existing vegetation and the proposed landscaping and built elements. Where receivers have been identified as likely to experience high visual impact as a result of the SSI, the Proponent shall in consultation with affected receivers, identify opportunities for providing at-receiver landscaping to further screen views of the SSI. Where agreed to with the landowner, these measures shall be implemented during the construction of the SSI;
- (f) graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to built elements of the SSI;
- (g) monitoring and maintenance procedures for the built elements, rehabilitated vegetation and landscaping (including weed control) including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and
- (h) evidence of consultation with the Relevant Council and community on the proposed urban design and landscape measures prior to its finalisation.

#### Note:

The Plan may be submitted in stages to suit a staged construction program of the SSI.

#### PROPERTY AND LAND USE

- B17 Any damage caused to property as a result of the SSI shall be rectified or the landowner compensated, within a reasonable timeframe, with the costs borne by the Proponent. This condition is not intended to limit any claims that the landowner may have against the Proponent.
- B18 The Proponent shall construct and operate the SSI with the objective of minimising light spillage to residential properties and be generally consistent with the requirements of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting*.

#### PART C

#### **COMMUNITY INFORMATION AND REPORTING**

# COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- C1 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative (see condition D1), the Relevant Council and community stakeholders (particularly adjoining landowners) on the construction environmental management of the SSI. The Strategy shall include, but not be limited to:
  - (a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, and community and social service organisations:
  - (b) procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management including provision of information in appropriate community languages;;
  - (c) the formation of community-based forums that focus on key environmental management issues for the SSI. 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 SSI;
  - (e) procedures and mechanisms through which the Proponent can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSI; and
  - (f) procedures and mechanisms that would be implemented to resolve issues/ disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSI. This may include the use of a suitably qualified and experienced independent mediator.

The Proponent shall maintain and implement the Strategy throughout construction of the SSI.

# Complaints and Enquiries Procedure

- C2 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:
  - (a) a 24 hour telephone number(s) on which complaints and enquiries about the SSI 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 to assist in considering complaints that are unable to be resolved through initial contact.

The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.

C3 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a **Construction Complaints Management System** consistent with *AS 4269:* Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of construction of the SSI.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.

#### **Provision of Electronic Information**

- C4 Prior to the commencement of construction, or as otherwise agreed by the Secretary, 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 SSI, for the duration of construction and for 12 months following completion of construction of the SSI. 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) information on the current implementation status of the SSI;
  - (b) a copy of the documents referred to under condition A2 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;
  - (c) a copy of this approval and any future modification to this approval;
  - (d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI:
  - (e) a copy of each current strategy, plan, program or other document required under this approval;
  - (f) the outcomes of compliance tracking in accordance with condition A12 of this approval; and
  - (g) details of contact point(s) to which community complaints and inquiries may be directed, including a telephone number, a postal address and an email address.

#### PART D

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### **ENVIRONMENTAL REPRESENTATIVE**

- D1 Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent shall appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Proponent shall employ an Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) shall:
  - (a) be the principal point of advice in relation to the environmental performance of the SSI;
  - (b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans/programs;
  - (c) have responsibility for considering, and advising the Proponent on, matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the SSI:
  - (d) ensure that environmental auditing is undertaken in accordance with the Proponent's Environmental Management System(s);
  - be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan;
  - (f) 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; and
  - (g) be available to be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Proponent and the community is required.
- D2 The Environmental Representative shall prepare and submit to the Secretary a monthly report on the Environmental Representative's actions and decision on matters specified in condition D1 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of construction of the SSI, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary.

# SOIL, WATER QUALITY AND HYDROLOGY

# **Construction Soil and Water Management**

- D3 Soil and water management measures consistent with *Managing Urban Stormwater Soils and Construction Vols 1 and 2, 4th Edition* (Landcom, 2004) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.
- D4 Where available and practicable, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used in preference to potable water for construction activities, including dust control.

# NOISE AND VIBRATION

# Vibration and Building Condition Survey

- D5 Prior to construction, properties that are risk from construction vibration shall be identified and incorporated into the Construction Noise and Vibration Management Plan as required by condition D31.
- D6 Pre and post-construction building condition surveys shall be undertaken by an appropriately qualified professional to identify the condition of at risk buildings. The results of the pre and post construction building condition surveys shall be incorporated into the Construction Noise and Vibration Management Plan as required by condition D31. Measures to address identified degradation in building condition as a result of vibration during construction of the project shall be provided.

#### **Construction Hours**

- D7 Except as permitted by an EPL, construction activities associated with the SSI shall be undertaken during the following standard construction hours:
  - (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.
- D8 Except as permitted by an EPL, high noise impact works and activities (including, but not limited to piling and saw cutting) shall only be undertaken:
  - (a) between the hours of 8:00 am to 6:00 pm Monday to Friday;
  - (b) between the hours of 8:00 am to 1:00 pm Saturday; and
  - (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.

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

- D9 Notwithstanding conditions D7 and D8 construction works outside of the standard construction hours may be undertaken in the following circumstances:
  - (a) construction works that generate:
    - LAeq(15 minute) noise levels no more than 5 dB(A) above rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009); and
    - (ii) LAeq(15 minute) noise levels no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009) at other sensitive receivers; and
    - (iii) continuous or impulsive vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.2 of Assessing Vibration: a technical guideline; and
    - (iv) intermittent vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.4 of Assessing Vibration: a technical guideline; or
  - (b) where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels cannot be achieved; or
  - (c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
  - (d) where it is required in an emergency to avoid injury or the loss of life, property and/or to prevent environmental harm; or
  - (e) construction works approved through an Out-Of-Hours Protocol prepared as part of the Construction Noise and Vibration Management Plan required by condition D31 (approved by the Secretary); or
  - (f) works approved through an EPL.

#### **Construction Noise and Vibration**

D10 The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures shall be implemented and 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 D31.

Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction NML.

- D11 The SSI shall be constructed with the aim of achieving the following construction vibration goals:
  - for structural damage to heritage structures, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration effects of vibration on structures;
  - (a) for damage to other buildings and/or structures, the vibration limits set out in the British Standard BS 7385-2:1993 Evaluation and measurement for vibration in buildings Guide to damage levels from groundbome vibration (as referenced in Australian Standard AS 2187.2-2006 Explosives Storage and use Use of Explosives); and
  - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006).

- D12 Where feasible and reasonable, piling activities shall be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles.
- D13 Where feasible and reasonable, operation noise mitigation measures shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.

#### AIR QUALITY

D14 The SSI shall be constructed in a manner that minimises dust emissions from the site, including windblown and traffic-generated dust and tracking of material onto public roads. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

#### **HERITAGE**

D15 This approval does not allow the Proponent to destroy, modify or otherwise physically affect human remains as part of the SSI. Where previously un-identified heritage items are discovered during construction of the SSI, all work should stop in the affected area and a suitably qualified and experienced heritage expert should be contacted to provide specialist heritage advice. The measures to consider and manage this process, should be specified in the Construction Heritage Management Plan required by condition D31 including approvals and, where relevant, notification of the Heritage Council of NSW in accordance with section 146 of the Heritage Act 1977 or registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.

# TRANSPORT AND ACCESS

- D16 The SSI shall be constructed, where feasible and reasonable, to avoid the use of local roads (through residential streets) by heavy vehicles to gain access to ancillary facilities.
- D17 Access to construction compounds via local roads shall be limited to standard construction hours, where practicable.
- D18 Safe pedestrian and cyclist access through or around worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted.
- D19 Construction vehicles (including staff vehicles) associated with the SSI shall be managed to:
  - (a) minimise parking or queuing on public roads;
  - (b) minimise idling and queuing in local residential streets where practicable; and
  - (c) adhere to the nominated haulage routes identified in the Construction Traffic Management Plan required under condition D31(c).
- D20 Access to all properties shall be maintained during construction, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the SSI shall be reinstated to at least an equivalent standard, unless agreed with by the property owner.
- D21 Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, a suitably qualified and experienced independent expert shall prepare a Road Dilapidation Report for all local roads utilised. The Report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI. The Report shall be submitted to the Relevant council for review prior to the commencement of haulage.

Following completion of construction, a subsequent Report shall be prepared to assess any damage to the road that may have resulted from the construction of the SSI.

Measures undertaken to restore or reinstate roads affected by the SSI shall be undertaken in a timely manner, in accordance with the reasonable requirements of the Relevant council, and at the full expense of the Proponent.

#### Note:

 Nothing in this condition restricts the Proponent commencing adjustments and minor upgrades to the existing road network to cater for construction traffic and installation of temporary project signage prior to the commencement of construction.

#### **BIODIVERSITY**

D22 The avoidance and mitigation measures identified in section 5 WestConnex M5 – King Georges Road interchange upgrade, Biodiversity Assessment, Jacobs, October 2014 shall be implemented, except as required by this approval. These measures will be incorporated into the Construction Flora and Fauna Management Plan required under condition D31.

# **Biodiversity Offsets**

D23 The Proponent shall develop and implement a **Biodiversity Offset Package**. The Package shall detail how the ecological values lost as a result of the SSI will be offset (with a focus on *Acacia pubescence* (Downy Wattle)). The Package shall be consistent with the *NSW Principles for the Use of Biodiversity Offsets in NSW* (DECCW, 2008) and align, as far as is feasible and reasonable, with the Biodiversity Offset Strategy requirements of the *NSW Biodiversity Offsets Policy for Major Projects*,2014, unless otherwise agreed by the Secretary.

The Package shall include, but not necessarily be limited to:

- the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI including the consideration of indirect impacts including weed invasion and potential edge effects;
- the objectives and biodiversity outcomes to be achieved (including consideration of the Bankstown-Liverpool Management Site of the Saving our Species project (http://www.environment.nsw.gov.au/savingourspeciesapp/ManagementSite.aspx?SiteID=2);
- (c) the final suite of the biodiversity offset measures selected and secured;
- (d) the management and monitoring requirements for the measures proposed to ensure outcomes of the package are achieved;
- (e) where a vegetation offset is proposed, the monitoring of the condition of species and ecological communities at offset (including translocation) locations;
- (f) the methodology for the monitoring program(s), including (where vegetation offsets are proposed) the number and location of offset monitoring sites, and the sampling frequency at these sites;
- (g) provisions for the annual reporting of the monitoring results for a set period of time; and
- (h) timing and responsibilities for the implementation of the provisions of the Package.

Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.

Where monitoring referred to in condition D23(e) indicates that biodiversity outcomes are not being achieved, remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.

# HAZARDS AND RISK

- D24 Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled 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 Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997).

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.

# PROPERTY AND LANDUSE

D25 The Proponent shall provide boundary screening at all construction compounds that adjoin or are adjacent to residential and/or commercial properties, with the objective of being consistent with the surrounding context.

# **ANCILLARY FACILITIES**

- D26 The location of the ancillary facilities shall be identified in the Construction Environment Management Plan required under condition D30.
- D27 Unless approved by the Secretary, the location of Ancillary Facilities shall comply with the following locational criteria:

- (a) be located more than 50 metres from a waterway;
- (b) be located within or adjacent to land where the SSI is being carried out;
- (c) have ready access to the road network;
- (d) be located to minimise the need for heavy vehicles to travel through residential areas;
- (e) be sited on relatively level land;
- (f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);
- (g) not require vegetation clearing beyond that already required by the SSI;
- (h) not impact on heritage items (including areas of archaeological sensitivity) beyond those already impacted by the SSI;
- (i) not unreasonably affect the land use of adjacent properties;
- (j) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and
- (k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.
- D28 All ancillary facilities and access points shall be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner where relevant.
- D29 The Secretary's approval is not required for minor Ancillary Facilities (e.g. lunch sheds, office sheds, and portable toilet facilities) that do not comply with the criteria set out in condition D28 and:
  - (a) are located within an active construction zone within the approved SSI footprint; and
  - (b) have been assessed by the Environmental Representative to be
    - of low amenity risk to surrounding residences, with consideration to matters such as noise and vibration impacts, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and
    - (ii) of low environmental risk in respect to waste management and impacts on flora and fauna, soil and water, and heritage; <u>and</u>
  - (c) have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in the Construction Environmental Management Plan for the project.

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- D30 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement (following approval) a Construction Environmental Management Plan (CEMP) for the SSI. The CEMP is to be prepared in consultation with relevant agencies and the Relevant Council, for the approval of the Secretary. The CEMP shall outline the environmental management practices and procedures that are to be followed during construction. The CEMP is to be prepared in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The CEMP shall include, but not necessarily be limited to:
  - (a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling);
  - statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
  - (c) a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval;
  - (d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase;
  - (e) and details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). These should include consideration of cumulative impacts in relation to staging or other major potential construction activities in the project area. In particular, the following environmental performance issues shall be addressed in the CEMP:
    - (i) measures for the handling, treatment and management of hazardous and contaminated materials, if any are identified during construction;
    - (ii) measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from

clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins);

- (iii) measures to monitor and manage hazard and risks; and
- (iv) the issues identified in condition D31.

The CEMP shall include procedures for its periodic review and update (including the sub-plans required under condition D31), as necessary (including where minor changes can be approved by the Environmental Representative).

The CEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of construction, or as otherwise agreed by the Secretary. The CEMP may be prepared in stages; however, construction works shall not commence until written approval of the relevant stage has been received from the Secretary.

Note: The approval of a CEMP does not relieve the Proponent of any requirement associated with this SSI approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this SSI approval, the requirements of this SSI approval shall prevail.

# CEMP — Sub plans

D31 As part of the CEMP for the SSI, the Proponent shall prepare and implement (following approval):

- (a) a Construction Compound and Ancillary Facilities Management Plan to detail the management of site compounds associated with the SSI. The Plan shall and include but not be limited to:
  - (i) a description of the facility, its components and the surrounding environment;
  - (ii) details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;
  - (iii) an assessment of the facility against the criteria provided in condition D27. Where proposed facilities do not meet those criteria, the assessment must justify and (where relevant) quantify potential impacts of the facility;
  - (iv) details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures;
  - (v) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and
  - (vi) appropriate monitoring, review and amendment mechanisms.
- (b) a Construction Noise and Vibration Management Plan to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the *Interim Construction Noise Guidelines* (DECC, 2009) and shall include, but not be limited to:
  - (i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI stipulated in this approval;
  - (ii) details of construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;
  - (iii) an **Out-of-Hours Work Protocol** for the assessment, management and approval of works outside of standard construction hours as defined in condition D7 of this approval, for the Secretary's approval. The Out-of-Hours Work Protocol must detail:
    - (A) assessment of out-of-hours works against the relevant noise and vibration criteria,
    - (B) detailed mitigation measures for any residual impacts (that is, additional to general mitigation measures), including extent of at-receiver treatments, and
    - (C) proposed notification arrangements:
  - identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);
  - (v) procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable safe working distances for vibration intensive works, use of low-vibration generating equipment/ vibration dampeners or alternative construction methodology, and pre- and post- construction dilapidation surveys of at risk structures where vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria); and

- (vi) a program for construction noise and vibration monitoring (including the monitoring of the effectiveness of noise and vibration mitigation measures) during construction, clearly indicating the monitoring frequency, monitoring locations, how the monitoring results would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified:
- (vii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for managing and responding to noise complaints; and
- (viii) mechanisms for the monitoring, review and amendment of this plan.
- (c) a Construction Traffic and Access Management Plan to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic, pedestrian and cyclist access, and the amenity of the surrounding environment. The Plan shall be developed in consultation with the Traffic and Transport Liaison Group, Relevant council, emergency services, and pedestrian and bicycle user groups, and include, but not necessarily be limited to:
  - (i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes;
  - details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;
  - discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, including details of oversize load movements, and the nature and duration of those impacts;
  - (iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access;
  - details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction, including provision of alternate pedestrian paths where necessary;
  - (vi) details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes;
  - (vii) details of measures to manage traffic movements, parking, loading and unloading at ancillary facilities during out-of-hours work;
  - (viii) details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists, consistent with the Community Communication Strategy required under condition C1;
  - (ix) an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and
  - (x) mechanisms for the monitoring, review and amendment of this plan.
- (d) A Construction Soil and Water Quality Management Plan to manage surface and groundwater impacts during construction of the SSI. The plan shall be developed in consultation with the EPA, and DPI (Office of Water), Sydney Water, and Relevant councils and include, but not necessarily be limited to:
  - details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, including identification of pollutants that may be introduced into the water cycle;
  - (ii) surface water impact assessment criteria;
  - (iii) management and mitigation measures;
  - (iv) a contingency plan to be implemented in the case of impacts to groundwater;
  - a contingency plan to be implemented in the case of unanticipated discovery of contaminated material;
  - (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 undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any pollution is detected how any noncompliance can be rectified; and
  - (vii) mechanisms for the monitoring, review and amendment of this plan.
- (e) a Construction Heritage Management Plan to ensure construction impacts on Aboriginal and non-Aboriginal heritage will be appropriately avoided, minimised and managed. The Plan shall include, but not necessarily be limited to:
  - (i) in relation to Aboriginal Heritage:
    - (D) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures, including when works can re-commence, by a suitably qualified and experienced

- archaeologist in consultation with Department of Planning and Environment, and Aboriginal stakeholders, and assessment of the consistency of any Aboriginal heritage impacts against the approved impacts of the SSI;
- (E) procedures for dealing with human remains, including cessation of works in the vicinity, notification of Department of Planning and Environment, NSW Police Force, OEH and Aboriginal stakeholders, and commitment to cease recommencing any works in the area unless authorised by the OEH and/or the NSW Police Force;
- (F) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and
- (G) procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI, in the event that previously unidentified Aboriginal objects are discovered; and
- (ii) in relation to non-Aboriginal Heritage:
  - (A) procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can recommence by a suitably qualified and experienced archaeologist in consultation with the OEH, NSW Heritage Council and Department of Planning and Environment, and assessment of the consistency of any heritage impacts against the approved impacts of the SSI; and
  - (B) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification, protection and conservation of non-Aboriginal cultural heritage; and
- (iii) mechanisms for the monitoring, review and amendment of this plan.
- (f) a Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan shall be endorsed by an appropriately qualified and experienced ecologist and in consultation with Relevant Councils, and shall include, but not necessarily be limited to:
  - (i) plans for impacted and adjoining areas showing vegetation communities, important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and associated habitat features;
  - (ii) the identification of areas to be cleared and details of management measures to avoid residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat such as:
    - (A) clearing minimisation procedures (including fencing),
    - (B) pre-clearing and clearing procedures.
    - (C) removal and relocation of fauna during clearing,
    - (D) habitat tree management, and
    - (E) construction worker education;
  - (iii) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;
  - (iv) a Weed Management Strategy, incorporating weed management measures focusing on early identification of invasive weeds and effective management controls (including for those related to aquatic and riparian zones);
  - (v) a description of how the effectiveness of these management measures would be monitored;
  - (vi) a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the OEH, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements and
  - (vii) mechanism for the monitoring, review and amendment of this plan.
- (g) a Construction Air Quality Management Plan to detail how construction impacts on air quality will be minimised and managed. The Plan shall be developed in consultation with the EPA and shall include, but not necessarily be limited to:
  - I. the identification of potential sources of dust and other emissions;
  - II. key performance indicators;
  - measures to monitor and manage dust emissions, including dust from stockpiles, and materials tracking from construction sites onto public roads;
  - IV. strategies to minimise air emissions from off road diesel equipment, including but not limited to graders, bulldozers and loaders;

- V. mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather); mechanisms and procedures to be implemented in the event that adverse air quality
- VI. impacts arise;
- VII. record keeping procedures;
- methods for assessing compliance against the identified key performance indicators; VIII.
- mechanisms for reporting against key performance indicators; and mechanism for the monitoring, review and amendment of this plan. IX.
- X.

#### **PART E**

# OPERATIONAL ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

# NOISE

# Operational noise

E1 The SSI shall be designed and operated with the objective of meeting the requirements of the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011).

# **Operational Noise Review**

- Unless otherwise agreed by the Secretary, within six months of commencing construction, the Proponent shall, in consultation with the EPA, submit for the approval of the Secretary, a review of the operational noise mitigation measures proposed to be implemented for the SSI. The review shall:
  - (a) confirm the operational noise predictions of the SSI based on detailed design, including maximum night time noise events (utilising an appropriately calibrated noise model which has incorporated additional noise monitoring where necessary for calibration purposes);
  - (b) review the suitability of the operational noise mitigation measures identified in the documents listed under condition A2 to achieve the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011), based on the operational noise performance of the SSI predicted under condition E1; and
  - (c) where necessary, investigate and identify additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011); and
  - (d) identify all sensitive receiver locations eligible for architectural treatments.

The review shall be undertaken by a suitably qualified and experienced acoustic specialist.

#### **Architectural Treatment at Sensitive Receivers**

- Within four weeks of the Secretary's approval of the report required by condition E2, the Proponent shall write to each landowner whose property is identified as eligible for architectural treatment. If eligible, the proponent will offer to provide and fund feasible and reasonable architectural noise mitigation treatments to reduce the impact of operational traffic noise at the affected premises. The Proponent's offer shall remain open for acceptance by the affected landowner for at least six months from the date of the notification required under this condition.
- E4 Architectural treatments agreed between the parties shall be implemented within six months of reaching such an agreement.

# **Operational Noise Compliance**

- E5 Within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary, the Proponent shall undertake operational noise monitoring to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition E2, and prepare an Operational Noise Compliance Report to document this monitoring. The Report shall include, but not necessarily be limited to:
  - (a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition E2 and documents specified under condition A2 of this approval;
  - (b) a review of the operational noise levels in terms of criteria established in the NSW Road Policy (Department of Environment, Climate Change and Water, 2011);
  - (c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;
  - (d) details on average daily traffic volumes across the project area once operational during the daytime and night-time periods based on recorded observations;
  - (e) defails of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared;
  - (f) any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions;

- (g) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and
- (h) identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition E2, if required, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.

The Proponent shall provide the Secretary 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 Secretary.

# **URBAN DESIGN AND LANDSCAPING**

The ongoing maintenance of urban design and landscaping items and works implemented as part of this infrastructure approval shall remain the Proponent's responsibility unless satisfactory arrangements have been put in place for the transfer of ownership of the item or work to another authority. The Proponent will maintain items and works to the standards established in the Urban Design and Landscape Plan required under condition B16, unless and until landscaping items have been transferred.

# **OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN**

E7 Prior to the commencement of operation, or as otherwise agreed by the Secretary, the Proponent shall review and (if necessary) revise the Operational Environmental Management Plans that cover the project area. Any revised Operational Environmental Management Plan shall be provided to the Secretary.