Infrastructure Approval

Section 115ZB of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure dated 27 February 2013, 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 development.

Chris Wilson
Executive Director
Development Assessment Systems and Approvals

15 January Sydney 2014

SCHEDULE A

Application No:	SSI-5931
Proponent:	Transport for NSW
Consent Authority:	Minister for Planning and Infrastructure
Land:	Land required for the construction and operation of the SSI, bounded generally by Tallawong Road, Schofields Road, First Ponds Creek and Oak Street, Rouse Hill.
State significant infrastructure:	**Rapid Transit Rail Facility,** including the construction and operation of: • Train stabling and maintenance facilities; • A section of track for testing; • Administration, staff and training facilities, including an Operations Control Centre; • Access and maintenance roads; and • Ancillary infrastructure, services and utilities.

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DEFINITIONS

Ancillary Facility	Temporary facility for construction, not identified in the documents listed in condition B1 (b) and (c) of this approval, 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.
Conditions of approval	The Minister's conditions of approval for the SSI. Excludes work in respect of State Significant Infrastructure Approval SSI 5100 and SSI 5414.
Construction	Includes all work in respect of the SSI other than: a) survey, acquisitions, building/ road dilapidation surveys; b) investigative drilling, excavation; c) minor clearing or translocation of native vegetation; d) establishing ancillary facilities/ construction work sites (in locations meeting the criteria identified in the Conditions of Approval); e) installation of environmental impact mitigation measures, fencing, enabling works; and f) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, etc). Work where heritage, threatened species, populations or endangered ecological communities would be affected, is classified as construction, unless otherwise approved by the Director General in consultation with the Heritage Council of NSW.
Department, the	Department of Planning and Infrastructure.
Director General, the	Director General of the Department of Planning and Infrastructure.
Director General's approval, agreement or satisfaction	A written approval from the Director General (or nominee). Where the Director General's approval, agreement or satisfaction is required under a condition of this approval, the Director General will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Director General 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.
DPI	Department of Primary Industries.
EEC	Endangered ecological community.
EIS	Environmental Impact Statement.
Enabling Works	Works which allow isolation of the site so that access for construction can be provided.
EP&A Act	*Environmental Planning and Assessment Act, 1979.*
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 views and nature and extent of potential improvements. Where requested by the Director General, the Proponent shall provide evidence as to how feasible and reasonable measures were considered and taken into account.
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement such as 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.*
ICNG	Interim Construction Noise Guideline (DEC, 2009).
INP	Industrial Noise Policy (EPA, 2000)
Minister, the	Minister for Planning and Infrastructure.
NOW	NSW Office of Water.
NWGC	North West Growth Centre.
OEH	Office of 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.
Proponent	Transport for NSW.
Publicly available	Available for inspection by a member of the general public (for example available on an internet website).
Relevant council(s)	Blacktown City Council.
RING	Rail Infrastructure Noise Guideline (EPA, 2013).
RMS	Roads and Maritime Services.
RNP	Road Noise Policy (DECCW, 2011).
Sensitive receiver	Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church), children's day care facility, community centres and recreation areas.
SSI	Means the infrastructure approved under this approval and as generally described in Schedule A.

SCHEDULE B

ADMINISTRATIVE CONDITIONS

TERMS OF APPROVAL

B1. The Proponent shall carry out the SSI generally in accordance with the:
   (a) SSI Application SSI-5931;
   (b) *Tallawong Road, Rouse Hill Rapid Transit Rail Facility: Environmental Impact Statement*, dated 29 July 2013;
   (c) *Tallawong Road, Rouse Hill Rapid Transit Rail Facility: Response to Submissions Report*, dated 21 October, 2013; and
   (d) conditions of this approval.

B2. In the event of an inconsistency between:
   (a) the conditions of this approval and any document listed from condition B1(a) to B1(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
   (b) any document listed from condition B1(a) to B1(c) inclusive, and any other document listed from condition B1(a) to B1(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.

B3. In the event of an inconsistency between the terms of this approval and the staged infrastructure approval granted in respect of the North West Rail Link on May 6 2008 (MP06_1057), as modified from time to time, the terms of this approval (including the documents listed in B1) shall prevail to the extent of the inconsistency.

B4. 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.

B5. Subject to confidentiality, the Proponent shall make all documents required under this approval publicly available.

LIMITS OF APPROVAL

B6. 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

B7. 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.

B8. Any changes to the scope of the infrastructure activity shall be subject to a consistency review. Should the review identify activity scope and environmental impacts inconsistent with the assessed infrastructure activity, a modification to the infrastructure activity approval would be required.

STAGING

B9. 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 Director

General 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).

The Proponent shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Director General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.

B10. 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 Director General no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Director General.

Note: These conditions do not relate to staged infrastructure within the meaning of section 115ZD of the EP&A Act.

B11. With the approval of the Director General, the Applicant may:

(a) submit any strategy, plan, program (or the like) required by this approval on a progressive basis; and

(b) combine any strategy, plan, program (or the like) required by this approval.

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 must 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

B12. The Proponent shall ensure that any strategy, plan, program (or the like) incorporates mitigation measures identified in the documents listed in condition B1, as relevant, and as modified by this approval.

B13. The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

B14. 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.

B15. 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 Director General for resolution. The Director General's determination of any such dispute shall be final and binding on the parties.

SCHEDULE C

ENVIRONMENTAL PERFORMANCE

ECOLOGY

Ecological Monitoring

C1. An **Ecological Monitoring Program** shall be developed to monitor the effectiveness of the biodiversity mitigation measures implemented as part of the SSI . The Program shall be developed by a suitably qualified and experienced ecologist in consultation with OEH and Blacktown City Council and shall include, but not necessarily be limited to:

(a) an adaptive monitoring program to assess the effectiveness of the mitigation measures identified within documents outlined in Condition B1 of this approval. The monitoring program shall monitor performance parameters and criteria against which effectiveness of the mitigation measures will be measured;

(b) mechanisms for developing additional monitoring protocols to assess the effectiveness of any additional mitigation measures implemented to address additional impacts in the case of design amendments or unexpected threatened species finds during construction (where these additional impacts are generally consistent with the biodiversity impacts identified for the SSI);

(c) provision for the assessment of the data to identify changes to habitat usage and whether this can be directly attributed to the SSI;

(d) 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 SSI; and

(e) provision for annual reporting of monitoring results to the Director General and Blacktown City Council, or as otherwise agreed by those agencies.

Riparian and Aquatic Ecology

C2. Riparian Buffer Widths for waterways (including First Ponds Creek and Second Ponds Creek) which are affected by the SSI are to be managed for a Total Riparian Buffer Width of between 10m to 50m dependant on the Category of Watercourse determined by the *Riparian Corridor Management Study* (DIPNR, 2004).

C3. Riparian vegetation in and around watercourses affected by the SSI shall be restored and rehabilitated to a condition equal to or better than its current state in consultation with NOW and DPI (Fisheries) and with the relevant Council/s. Consultation with NOW and DPI (Fisheries) should include duration of restoration and rehabilitation measures, including timeframes and reporting on completion of works.

C4. Watercourses affected by the SSI shall, where feasible and reasonable, be rehabilitated to emulate a natural stream system. All works undertaken on riparian land, including the rehabilitation of watercourses, shall be consistent with the *Guidelines for Controlled Activities on Waterfront Land* (NOW, 2012) and stream armouring should be minimised to the greatest extent practicable.

NOISE AND VIBRATION

C5. The Rapid Transit Rail Facility is a stationary facility and shall be designed and operated with the objective of meeting operational noise levels derived from the NSW Industrial Noise Policy (INP) (NSW Government, 2000).

Specific consideration shall be given to the following matters:

i) the limiting of truck movements during night time periods (10pm to 7am);

ii) the design of the sheds and equipment for the train wash and wheel lathe facilities would include noise mitigation as required in order to comply with the acceptable noise criteria at the nearest noise sensitive receivers;

iii) incorporation of silencers in the compressed air lines of the rolling stock to reduce noise associated with brake air release events; and
iv) investigate methods to minimise rolling stock auxiliary noise levels during procurement.

SOIL, WATER QUALITY AND HYDROLOGY

C6. 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

C7. The SSI shall be designed, to the extent that is feasible and reasonable, to not worsen existing flooding characteristics in the vicinity of the SSI. Not worsen is defined as:
(a) a maximum increase in flood levels of 50 mm in a 1 in 100 year Average Recurrence Interval (ARI) rainfall event; and
(b) a maximum increase in inundation time of one hour in a 1 in 100 year ARI rainfall event;
(c) any increase in flow velocity in a 100 year ARI event should not increase the potential for soil erosion and scouring; and
(d) the Proponent shall design and construct stormwater detention basins to maintain pre-development peak flows in First Ponds Creek, with a minimum volume of 12,750m^3 stormwater detention capacity on the site, unless otherwise agreed by the Director-General.

Flood Management Study

C8. A **Stormwater and Flooding Management Plan** shall be prepared in consultation with the Department (Strategies and Land Release), OEH and Blacktown City Council during detailed design of the SSI and prior to construction, or as otherwise agreed by the Director General. The Plan shall identify actions to ensure that the SSI addresses existing flooding characteristics within the vicinity of the SSI for a full range of flood sizes, up to and including Probable Maximum Flood. The Plan shall be prepared by an appropriately qualified person(s) and facilitate a holistic approach to detailed hydrologic assessment and stormwater management, which gives consideration to the cumulative of the SSI allocation with its construction and operation and, shall include but not be limited to
(a) the design of the permanent works of the SSI to not worsen, to the extent that it is feasible and reasonable, existing and known future flooding characteristics.
(b) the design of temporary works, compensatory and management measures to not worsen existing and known future flooding characteristics
(c) the identification of flood risks to the SSI and adjoining areas, including the consideration of local drainage catchment assessments, strategies and guidelines; and climate change implications on rainfall and drainage characteristics;
(d) the identification design and mitigation measures that would be implemented to protect proposed operations and not worsen existing flooding characteristics during construction and operation, including soil erosion and scouring. Design of mitigation measures should consider more frequent floods besides flood of design;
(e) the identification of drainage system upgrades; and
(f) the preparation of a flood/emergency management plan.

For components of the SSI located on floodplains, flood impacts shall be confirmed in accordance with the *Floodplain Development Manual* (2005), and other relevant NSW Government Guidelines.

Salinity

C9. A **Soil Salinity Report** detailing the outcomes of geotechnical investigations and groundwater monitoring, to determine the presence, extent of soil salinity within the SSI area and impacts to groundwater resources and hydrology, shall be prepared and submitted to the Director General prior to the commencement of bulk earthworks activities, or as otherwise agreed by the Director General.

The report shall be prepared in consultation with NOW and detail, where relevant, that the SSI minimises, avoids and/or mitigates impacts on local/regional salinity processes, impacts on groundwater systems, and receiving environments.

The recommendations of the Soil Salinity Report shall be incorporated into the Construction Soil and Water Quality Management Plan (condition E37(d)).

Water Quality Monitoring Program

C10. A **Water Quality Monitoring Program** shall be prepared and implemented to monitor impacts on surface and groundwater quality resources and wetlands during construction and operation. The Program shall be developed in consultation with DPI (Fisheries), NOW and Blacktown City Council and shall include, but not be limited to:

(a) identification of surface and groundwater quality monitoring locations which are representative of the potential extent of impacts from the SSI;
(b) identification of the water quality parameters to be monitored at each location;
(c) Identification of works and activities during construction and operation of the SSI, including emergencies and spill events that have the potential to impact on surface water quality of potentially affected waterways;
(d) presentation of parameters and standards against which any changes to water quality will be assessed, having regard to the principles of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* (ANZECC, 2000), and identification of 'trigger points' for further investigation for action to be taken;
(e) representative background monitoring of surface and groundwater quality parameters, to establish baseline water conditions, unless otherwise agreed by the Director General;
(f) identification of the frequency water sampling during background, and construction monitoring periods;
(g) a minimum monitoring period of three years following the completion of the construction or until the affected waterways and/or groundwater resources are certified by an independent expert as being rehabilitated to an acceptable condition;
(h) contingency and ameliorative measures in the event that adverse impacts to water quality relevant to the SSI are identified; and
(i) reporting of the monitoring results to the Department, DPI, NOW and Blacktown City Council.

Groundwater

C11. The Proponent shall design and construct the SSI as far as is feasible and reasonable, in a manner that minimises impacts to groundwater hydrology including capture, drawdown and quality.

C12. The management of groundwater and surface water ingress, including the design of capture, treatment and discharge methods shall be undertaken in consultation with the EPA. All intercepted groundwater and surface water shall be treated to ensure that relevant ANZECC water quality guidelines are met, prior to discharge.

Contamination

C13. The Proponent shall undertake further assessment of contamination to ensure that any areas of contamination are appropriately assessed and remediated prior to the commencement of construction.

C14. The following documents shall be submitted to the Director General, within the identified timeframes, unless otherwise agreed by the Director General:
   (a) reports detailing Contamination Site Investigations in areas identified as having a moderate to high risk of contamination, and a Site Auditor endorsed Remediation Action Plan (or similar), where required, prior to site preparation or construction; and
   (b) Certification by a Site Auditor, that any contaminated land has been remediated to a standard consistent with the intended land use, prior to the use of the land.

Note: Terms used in this condition have the same meaning as in the Contaminated Land Management Act 1997.

C15. Where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated spoils, materials and groundwater shall be incorporated into the Construction Environmental Management Plan (condition E36).

HAZARDS AND RISKS

C16. 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.

WASTE MANAGEMENT

C17. All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.

C18. 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 under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

C19. 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), or any superseding document.

UTILITIES AND SERVICES

C20. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction effecting the item, 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, unless otherwise agreed by the utility or service provider. The Proponent shall ensure that disruption to any service is minimised and shall be responsible for advising local residents and businesses affected prior to any planned disruption of service.

C21. All excavations adjacent to RMS road infrastructure shall meet the requirements of RMS Technical Direction GTD 2012/0001 "*Excavation adjacent to RMS infrastructure*".

C22. The Proponent shall consult with relevant Councils regarding the use of any weight restricted road by heavy construction vehicles if required.

DESIGN AND LANDSCAPING

Design and Landscape Plan

C23. The Proponent shall, prior to the commencement of permanent built works and/or landscaping, unless otherwise agreed by the Director General, prepare and implement and **Design and Landscape Plan** for the corresponding permanent built works and/or landscaping. The Plan shall be submitted to the Director General for approval and be made publicly available.

In preparing the Plan, the Proponent shall consult with the Department (Land Release), RMS, relevant Councils and the community.

The Plan shall be prepared by appropriately qualified person(s) and detail the design initiatives to integrate rail infrastructure and facilities into their existing and proposed settings, and landscaping measures to minimise, mitigate and/or offset the impacts of the SSI (including acoustic barriers and embankments/cuttings) on property and other land uses (such as open space), visual amenity and local vistas and heritage values.

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

(a) identification of design objectives and standards based on local environmental and heritage values, strategic and statutory planning, future land release form and function, sustainable design and maintenance, transport and land use integration, passenger and community safety and security, community amenity and privacy, and relevant design standards and guidelines;
(b) details to provide, mitigate and/or augment landscaped areas and elements, with landscaping works to enhance ecological values, including riparian areas and fauna corridors, the provision of water sensitive urban design initiatives and measures to mitigate impacts to heritage landscapes;
(c) design details of the built elements of the SSI, including retaining walls, embankments, noise barriers, and substations, and the measures to minimise the impact of these elements, particularly with respect to the impacts on adjoining residences, educational facilities, open space areas and heritage items and landscapes;
(d) implementation, management and monitoring strategies to ensure the establishment and ongoing maintenance of built elements and landscaped areas, including performance standards; and
(e) consideration of relevant design standards, such as the *Sustainable Design Guidelines for Stations, Commuter Car Parks and Maintenance Facilities* (2011), and *Crime Prevention Through Environmental Design Principles*, and relevant Agency and Council design standards.

The Plan shall be endorsed by an independent Design Review Panel. The Design Review Panel shall consist of appropriately skilled professionals in the fields of architecture, landscape design, transport integration and heritage.

TRANSPORT AND ACCESS

C24. The SSI shall be designed and constructed with the objective of minimising adverse changes to the efficiency, accessibility and safety of the road and associated transports networks, and where feasible and reasonable, facilitate an improved level of service, particularly in relation to permanent and operational changes. Detailed design and assessment of related traffic and accessibility impacts and changes shall be undertaken:

(a) in consultation with, and to the reasonable requirements of, the relevant road authority, transport operator and affected property owners;

(b) with consideration of existing and future demand, performance and safety requirements;
(c) to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards, and RMS (RTA) requirements and the like; and
(d) to ensure access is maintained to property and infrastructure.

Changes, both temporary and permanent, shall be certified by an appropriately qualified person(s) and certified copies of civil, structural and traffic signal design plans shall be submitted to the relevant road authority for consideration and acceptance prior to the commencement of the relevant works.

C25. The Proponent shall undertake regular consultation with the RMS to negotiate road access during construction of the SSI in conjunction with the establishment of the signalled intersection of Schofields/Tallawong Road.

C26. Without limiting the outcomes of the Construction Traffic Management Plan for the SSI, construction traffic shall be scheduled, to the greatest extent practicable, to outside of AM and PM peak traffic periods, and special events. Methods used to limit construction traffic outside of peak traffic periods shall be incorporated into the Construction Traffic Management Plan (condition E29(c)).

C27. Road network works, including infrastructure and restoration works, vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users will be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits shall be submitted to the relevant road authority and or transport operator prior to the use of the subject infrastructure and shall be made available to the Director General upon request.

CLIMATE CHANGE

C28. The Proponent shall, where feasible and reasonable, fully offset carbon emissions generated by the operation of the SSI.

SCHEDULE D

COMMUNITY INFORMATION, REPORTING AND AUDITING

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

D1. A **Stakeholder and Community Involvement Plan** shall be prepared and implemented to provide mechanisms to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative (condition E27), the relevant council, and community stakeholders (particularly adjoining landowners) on the construction environmental management of the SSI. The Plan shall include, but not be limited to:

(a) identification of community and business stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;

(b) procedures and mechanisms for the regular distribution of information to community and business stakeholders on construction progress and matters associated with environmental management;

(c) the formation of community-based forums that focus on key environmental management issues for the SSI. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based forums;

(d) procedures and mechanisms through which community and business 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 enquires or feedback from community and business 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 an appropriately qualified and experienced independent mediator.

Issues that shall be addressed through the Stakeholder and Community Involvement Plan include (but are not necessarily limited to) stormwater and flooding, visual amenity, construction traffic and access arrangements, construction noise and vibration, impacts to local businesses, land uses and community facilities, and other construction generated impacts.

The Proponent shall maintain and implement the Plan throughout construction of the SSI. The Plan shall be approved by the Director General prior to the commencement of construction, or as otherwise agreed by the Director General.

Complaints and Enquiries Procedure

D2. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:

(a) a 24 hour 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 for complaints unable to be resolved.

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. This information shall also be provided on the website (or dedicated pages) required by this approval.

D3. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall prepare and implement a **Construction Complaints Management System** consistent with *Customer satisfaction-Guidelines for complaints handling in organisations – ISO 10002:2004, MOD (formerly AS 4269: Complaints Handling)* and maintain the System for the duration of construction and up to 12 months following completion 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 Director General on request.

Provision of Electronic Information

D4. Prior to the commencement of construction, or as otherwise agreed by the Director General, 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 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 B1 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 D5 of this approval; and
(g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.

COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

D5. The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall be submitted to the Director General for approval prior to the commencement of construction and operate for a minimum of one year following commencement of operation. The Program shall include, but not necessarily be limited to:

(a) provisions for the notification of the Director General prior to the commencement of construction 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 Director General, including a Pre-Construction Compliance Report, during construction reporting, and a Post-Construction Compliance Report;
(d) a program for independent environmental auditing in accordance with ISO 19011:2003 - *Guidelines for Quality and / or Environmental Management Systems Auditing*;
(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;
(f) provisions for reporting environmental incidents to the Director General and relevant public authorities during construction;

(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

D6. The Proponent shall notify the Director General of any incident with significant off-site impacts on people or the biophysical environment within 48 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Director General within seven days of the date on which the incident occurred.

D7. The Proponent shall meet the requirements of the Director General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition D6 of this approval, within such period as the Director General may require.

SCHEDULE E

CONSTRUCTION ENVIRONMENTAL MANAGEMENT

AIR QUALITY

E1. The SSI shall be constructed in a manner that minimises dust emissions from the site, including wind-blown 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.

BIODIVERSITY

E2. The clearing of native vegetation shall be minimised with the objective of reducing impacts to any threatened species or EECs to the greatest extent practicable.

VISUAL AMENITY

E3. The SSI shall be constructed in a manner that minimises visual impacts resulting from construction sites, including retaining, where feasible and reasonable, existing vegetation around the perimeter of construction sites, providing temporary landscaping where appropriate to soften views of the construction sites, minimising light spillage, and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located.

NOISE AND VIBRATION

Land Use Survey

E4. Prior to construction, a detailed land use survey to identify potentially critical areas that are sensitive to construction noise (airborne and ground-borne) and vibration impacts shall be undertaken. The results of the survey shall be incorporated into the Construction Noise and Vibration Management Plan (condition E29(b)).

Construction Hours

E5. 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;
(c) at no time on Sundays or public holidays.

E6. Construction works outside of the standard construction hours identified in condition E5 may be undertaken in the following circumstances:

(a) construction works that generate air-borne noise that is:
  (i) no more that 5 dB(A) above rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009);
  (ii) 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;
(b) where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels cannot be achieved;
(c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons;
(d) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; and

(e) works approved through an EPL.

E7. Except as expressly permitted by an EPL, activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken:
(a) between the hours of 8:00 am to 5:00 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.

Construction Noise and Vibration

E8. The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (DECC, 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 (condition E29(b)).

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.*

E9. The SSI shall be constructed with the aim of achieving the following construction vibration goals:
(a) for structural damage, the vibration limits set out in the German Standard *DIN 4150-3: Structural Vibration - effects of vibration on structures*; 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).

E10. Where feasible and reasonable, operation noise mitigation measures, such as noise barriers shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.

E11. The Proponent shall consult with potentially-affected community, religious and educational institutions to ensure, where feasible and reasonable, that noise generating construction works in the vicinity of the institutions are not timetabled during sensitive periods, unless appropriate other arrangements are made.

E12. During construction, Proponents of other construction works in the vicinity of the SSI shall be consulted, and reasonable steps taken to coordinate works to minimise impacts on, and maximise respite for, affected sensitive receivers.

E13. Airblast overpressure generated by blasting associated with the SSI shall not exceed the criteria specified in Table 1 when measured at the most affected residence or other sensitive receiver.

Table 1 Airblast overpressure criteria

Airblast overpressure (dB(Lin Peak))	Allowable exceedance
115	5% of total number of blasts over a 12 month period
120	0%

E14. Ground vibration generated by blasting associated with the SSI shall not exceed the criteria specified in Table 2 when measured at the most affected residence or other sensitive receiver.

Table 2 Peak particle velocity criteria

Receiver	Peak particle velocity (mm/s)	Allowable exceedance
Residence on privately owned land	**5**	5% of total number of blasts over a 12 month period
	10	0%
Historic heritage structures	**3**	0%

These criteria do not apply if the Proponent has a written agreement with the relevant owner, and has advised the Department in writing of the terms of this agreement.

E15. Wherever feasible and reasonable, piling activities shall be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles.

SOIL, WATER QUALITY AND HYDROLOGY

Construction Soil and Water Management

E16. 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.

E17. Where available, 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 concrete mixing and dust control.

PROPERTY AND BUSINESS IMPACTS

E18. Access to private property shall be maintained during construction unless otherwise agreed with the property owner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least an equivalent standard, in consultation with the property owner.

E19. Any damage caused to property as a result of the SSI shall be rectified or the property owner compensated, within a reasonable timeframe, with the costs borne by the Proponent. This condition is not intended to limit any claims that the property owner may have against the Proponent.

TRANSPORT AND ACCESS

E20. Traffic generation from other major developments shall be taken into account and addressed during preparation of the Construction Traffic Management Plan (See Condition (c)).

E21. A Traffic and Transport Liaison Group shall be established by the Proponent to inform the detail design of temporary and permanent traffic and transport measures and to inform ongoing management measures prior to and during construction of the SSI. The Group shall be chaired by the Proponent and shall comprise of representatives from relevant road authorities (including RMS and councils), transport operators, and emergency services. The Group shall be consulted on and shall inform the preparation of the Construction Traffic Management Plan and associated plans.

Road Dilapidation

E22. Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, an independent and qualified person or team shall undertake a **Road Dilapidation Report**. The report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the SSI, both during and after construction. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Following completion of construction, a subsequent report shall be prepared to assess any damage 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 road authority, and at the full expense of the Proponent.

Access

E23. 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.

E24. 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;
(c) minimise the use of local roads (through residential streets and town centres) to gain access to construction sites and compounds; and
(d) adhere to the nominated haulage routes identified in the Construction Traffic Management Plan (condition E29(c)).

ANCILLARY FACILITIES

E25. Unless otherwise approved by the Director General, the location of Ancillary Facilities shall:
(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.

The location of the ancillary facilities shall be identified in the Construction Environmental Management Plan (condition E28) and include consideration of the above criteria. Where the above criteria cannot be met for any proposed ancillary facility, the Proponent shall demonstrate to the satisfaction of the Director General that there will be no significant adverse impact from that facility's construction or operation. Such assessment(s) can be submitted separately or as part of the Construction Environmental Management Plan.

E26. All Ancillary Facilities shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the landowner where relevant.

ENVIRONMENTAL REPRESENTATIVE

E27. Prior to the commencement of construction of the SSI, 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 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);
(e) 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 (condition E28);
(f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts; and
(g) 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.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

E28. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall prepare and implement (following approval) a **Construction Environmental Management Plan** for the SSI. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The Plan 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);
(b) 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; and
(e) 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). In particular, the following environmental performance issues shall be addressed in the Plan:
    (i) stormwater and flooding management;
    (ii) compounds and Ancillary Facilities management;
    (iii) noise and vibration;
    (iv) traffic and access;
    (v) soil and water quality;
    (vi) spoil management;
    (vii) groundwater management and discharge;
    (viii) air quality and dust management;
    (ix) visual amenity;
    (x) management of Aboriginal and historic heritage;
    (xi) soil contamination, hazardous material and waste management;
    (xii) management of ecological impacts; and
    (xiii) hazard and risk management.

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

The approval of a Construction Environmental Management Plan 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 prevail.

E29. As part of the Construction Environmental Management Plan for the SSI required under condition E28 the Proponent shall prepare and implement:

(a) a **Construction Compound and Ancillary Facilities Management Plan** to detail the management of Ancillary Facilities associated with the SSI. The Plan shall 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 against the locational criteria outlined in condition E25;
    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) mechanisms for the monitoring, review and amendment of this Plan.

(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). The Plan shall be developed in consultation with the EPA 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) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts), including consideration of noise walls (hoardings) to be erected around each construction site to reduce construction and construction traffic noise;
(iv) identification of feasible and reasonable procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, applicable buffer 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 sensitive structures where blasting and/ or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);
(v) if blasting is required, prepare and submit to the Director General, an assessment of the potential noise and vibration impacts, and a strategy to minimise and manage those impacts, including preparation of an appropriate community information program;
(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 reported, and, if any exceedance is detected, how any non-compliance would be rectified; and
(vii) mechanisms for the monitoring, review and amendment of this plan.

(c) a **Construction Traffic Management Plan** to manage construction traffic and access impacts of the SSI. The Plan shall be developed in consultation with the relevant road authority and shall include, but not necessarily be limited:
(i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/ spoil haulage) on these routes;
(ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;
(iii) identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements;

(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;
(v) a response plan which sets out a proposed response to any traffic, construction or other incident; and
(vi) 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 NOW and include, but not necessarily be limited to:
(i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;
(ii) details of proposed extraction, use and disposal of groundwater, and measures to mitigate potential impacts to groundwater sources, incorporating monitoring, impact trigger definition and response actions for all groundwater sources potentially impacted by the SSI;
(iii) surface water and ground water impact assessment criteria consistent with Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;
(iv) management measures to be used to minimise surface and groundwater impacts, including details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events;
(v) a contingency plan, consistent with the *Acid Sulfate Soils Manual*, to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;
(vi) management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;
(vii) 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 exceedance of the criteria is detected how any non-compliance can be rectified; and
(viii) mechanisms for the monitoring, review and amendment of this Plan.

(e) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and Historic heritage will be minimised and managed. The plan shall include, but not necessarily be limited to:
(i) In relation to Aboriginal Heritage:
I. developed in consultation with registered Aboriginal stakeholders;
II. 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 archaeologist in consultation with the Department and registered Aboriginal stakeholders and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the SSI, and registering of the new site in the OEH's Aboriginal Heritage Information Management System (AHIMS) register;

III. procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police Force, OEH and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the OEH and/ or the NSW Police Force;
IV. 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
V. procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI; and

(ii) In relation to Historic Heritage:
I. developed in consultation with the NSW Heritage Council and the relevant Council;
II. identification of Heritage items directly and indirectly affected by the SSI;
III. details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/ or measures to protect unaffected sites during construction works in the vicinity);
IV. details of monitoring and reporting requirements for impacts on heritage items; and
V. procedures for dealing with previously unidentified relics, 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 the OEH and the Department, and assessment of the consistency of any new heritage impacts against the approved impacts of the SSI.

(iii) 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 and historic heritage; and

(iv) 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 developed 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 (such as fencing, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat. Specifically, temporary fencing is to be placed around all non-certified areas in the vicinity of the construction footprint and no vegetation is permitted to be directly or indirectly affected by the works;

(iii) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;

(iv) weed management measures focusing on early identification of invasive weeds and effective management controls;

(v) a description of how the effectiveness of these management measures would be monitored; in consultation with OEH;
(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) mechanisms 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 include, but not necessarily be limited to:
(i) the identification of potential sources of dust;
(ii) dust management objectives;
(iii) mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather);
(iv) a monitoring program to assess compliance with the identified objectives;
(v) mechanisms for the monitoring, review and amendment of this Plan.

SCHEDULE F

OPERATIONAL ENVIRONMENTAL MANAGEMENT

NOISE AND VIBRATION

Operational noise and vibration criteria

F1. Rail line components of the SSI shall be designed and operated with the objective of not exceeding the airborne and ground-borne noise trigger levels at existing development, at each stage of the SSI, as presented in the *Rail Infrastructure Noise Guidelines* (EPA, 2013).

F2. Stationary components of the SSI shall be designed and operated with the objective of meeting operational noise levels derived from the *NSW Industrial Noise Policy* (EPA, 2000). Public announcement systems shall be designed and installed in accordance with best practice.

Operational noise levels shall be reviewed within two years of commencement of operations and at any subsequent time as required by the Director General. The review shall have regard to the status of land use planning, any land use changes and the background noise environment within areas adjacent to the fixed facilities at the time of the relevant review. The Proponent shall submit the results of the review to the Director General. Any proposed changes to the operational noise levels as a result of the review shall be included in a revised ONVR.

F3. The SSI shall be designed and operated with the objective of not exceeding the vibration goals for human exposure for existing sensitive receivers, as presented in *Assessing Vibration: a Technical Guideline* (DECC, 2006).

F4. The Proponent shall prepare an Operational Noise and Vibration Review (ONVR) within six months of commencing construction unless otherwise agreed by the Director General to confirm noise (air and ground-borne) and vibration control measures that will be implemented for the SSI. The ONVR shall be prepared in consultation with the Department, the EPA and relevant councils and shall:

(a) identify the appropriate operational noise and vibration objectives and levels for receiving existing development, including sensitive receivers and critical working areas;
(b) predict the operational noise and vibration impacts at receiving existing development based on the final design and operation of the SSI (this should include consideration of rail movements associated with future Tier 1 rail operations);
(c) examine all feasible and reasonable noise and vibration mitigation measures, with a focus on source control and design;
(d) identify specific physical and other mitigation measures for controlling noise and vibration at the source and at the receiver (if relevant) including location, type and timing for the erection of permanent noise barriers and/or other noise mitigation measures;
(e) include a consultation strategy to seek feedback from directly affected property owners on the noise and vibration mitigation measures; and
(f) include procedures for operational noise and vibration complaints management, including investigation and monitoring (subject to complainant agreement).

Where the noise and vibration objectives cannot be achieved, the assessment shall present an analysis of feasible and reasonable noise and vibration mitigation measures, and the 'best practice' achievable noise and vibration outcome for each activity. Noise from operations is not to exceed Project Specific Noise Levels (PSNLs) after the

application of all feasible and reasonable mitigation measures unless the acceptability of impacts above the PSNL has been considered in accordance with Chapters 8 and 9 of the INP.

The ONVR is to be verified by an independent noise and vibration expert. The scope of the verification exercise undertaken by the noise and vibration expert is to be developed by the Proponent in consultation with the EPA. The verification will be undertaken at the Proponent's expense and the independent expert shall be approved by the Director General. The ONVR and independent review is to be submitted to the Director General prior to the commencement of the laying of rail track of the construction of physical noise mitigation structures, unless otherwise agreed to by the Director General.

The Proponent shall implement the identified noise and vibration control measures prior to operation and make it publicly available.

Operational Noise and Vibration Compliance

F5. The Proponent shall undertake a noise and vibration compliance assessment to confirm the predictions of the noise assessment referred to in the ONVR (condition F4). The noise and vibration compliance assessment shall be developed in consultation with the EPA and be undertaken within twelve months of the commencement of operation of the SSI, or as otherwise agreed by the Director General. The assessment shall include, but not necessarily be limited to:

(a) noise and vibration monitoring and compliance assessment, to assess compliance with conditions F1to F3of this approval and the ONVR;
(b) methodology for assessment;
(c) details of any complaints received relating to operational noise and vibration impacts;
(d) any required recalibration of the noise and vibration model taking into account considerations such as land use change;
(e) an assessment of the performance and effectiveness of the applied noise and vibration mitigation measures; and
(f) identification, if required, of further noise and vibration mitigation measures to meet the requirements of F1 to F3 of this approval and the objectives identified in the ONVR.

A **Noise and Vibration Compliance Assessment Report** providing the results of the assessment shall be submitted to the Director General and the EPA within 60 days of its completion. If the assessment indicates an exceedance of the noise and vibration objectives identified in the ONVR, the Proponent shall implement further feasible and reasonable measures (where required) to mitigate these exceedances in consultation with affected property owners.

OPERATIONAL PERFORMANCE AUDIT REPORT

F6. Within fifteen months of the operation of the SSI, or as otherwise agreed by the Director General, the Proponent shall commission an independent qualified person or team to undertake an Operational Performance Audit of the SSI. The independent person or team shall be approved by the Director General prior to the commencement of the Audit. The 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 SSI;

(b) Assess the environmental performance of the SSI against the predictions made and conclusions drawn in the documents referred to under condition B1 of this approval; and
(c) Review the effectiveness of the environmental management of the SSI, including any environmental impact mitigation works.

OPERATIONAL ENVIRONMENTAL MANAGEMENT

F7. Prior to the commencement of operation, or as otherwise agreed by the Director General, the Proponent shall prepared and implement (following approval) an **Operation Environmental Management Plan** for the SSI. The Plan shall outline the environmental management practices and procedures that are to be followed during operation, and shall be prepared in consultation with relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:
(a) a description of activities to be undertaken during operation of the SSI (including staging and scheduling);
(b) statutory and other obligations that the Proponent is required to fulfil during operation, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
(c) overall environmental policies, guidelines and principles to be applied to the operation of the SSI;
(d) a description of the roles and responsibilities for relevant employees involved in the operation of the SSI, including relevant training and induction provisions for ensuring that employees are aware of their environmental and compliance obligations under these conditions of approval;
(e) an environmental risk analysis to identify the key environmental performance issues associated with the operation phase; and
(f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be undertaken to address identified potential adverse environmental impacts, including those safeguards and mitigation measures detailed in the documents listed under condition B1 (and any impacts arising from the staging of the construction of the SSI). In particular, the following environmental performance issues shall be addressed in the Plan:
(i) surface water, groundwater and flooding;
(ii) groundwater;
(iii) traffic and transport;
(iv) noise and vibration;
(v) visual amenity;
(vi) vegetation;
(vii) heritage;
(viii) soil and contamination;
(ix) air quality;
(x) waste and resource management; and
(xi) climate change and energy use.