

# 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 schedules 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 Rob Stokes MP  
**Minister for Planning**

Sydney

2016

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### **SCHEDULE 1**

<b>Application no.:</b>	SSI-7066
<b>Proponent:</b>	Roads and Maritime Services
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	Lots A, B, C, D and E in DP 318676 Lot 1 in DP 114323 Lot 1 in DP 926103 Lots 1 and 2 in DP 169188
<b>State Significant Infrastructure:</b>	Development for the purposes of a road being the disposal of up to 1.5 million cubic metres of excavated rock and spoil from the construction of the NorthConnex Public Infrastructure Road Project to partially fill the Hornsby Quarry, including: <ul style="list-style-type: none"><li>▪ preparatory works;</li><li>▪ site establishment works;</li><li>▪ establishment of a conveyor;</li><li>▪ spoil emplacement activities; and</li><li>▪ Site clean-up and demobilisation and rehabilitation.</li></ul>
<b>Critical State Significant Infrastructure</b>	The proposal is critical State significant infrastructure by virtue of schedule 5 clause 3 of the State and Regional Development SEPP.

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## DEFINITIONS

Act, the	<i>Environmental Planning and Assessment Act 1979</i>
AHD	Australian Height Datum
CEMP	Construction Environmental Management Plan
CO	Carbon monoxide
conditions of approval	The Minister's conditions of approval for the SSI
construction	<p>Includes all work in respect of the SSI, other than:</p> <ul style="list-style-type: none"> <li>(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.</li> <li>(b) further investigations including investigative drilling, void stability analysis, heritage surveys and archival recording, 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.</li> <li>(c) minor clearing or translocation of native vegetation, as identified in the documents listed in condition A2, or in accordance with approved reports or plans required by the conditions of this approval;</li> <li>(d) 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;</li> <li>(e) relocation of utilities;</li> <li>(f) minor void stabilisation activities not requiring the use of machinery;</li> <li>(g) quarry dewatering; and</li> <li>(h) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/utilities, temporary relocation of pedestrian and cycle paths and property access, etc).</li> </ul> <p>Construction includes all work where heritage, threatened species, populations or endangered ecological communities would be affected, unless otherwise approved by the Secretary in consultation with the Office of Environment and Heritage.</p>
Council	Hornsby Shire Council
DPI	Department of Primary Industries (including NSW Office of Water)
EIS	Environmental Impact Statement.
EPA	Environment Protection Authority
EPL	Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i>
Feasible and reasonable	<p>Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. <b>Feasible</b> relates to engineering considerations and what is practical to build. <b>Reasonable</b> relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community expectations and nature and extent of potential improvements.</p> <p>Where requested by the Secretary, the Proponent shall provide evidence as to how feasible and reasonable measures were considered and taken into account.</p>
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 <i>Heritage Act 1977</i> , and assessed as being of local, State and/or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
Hornsby TAFE	Northern Sydney Institute of TAFE NSW, Hornsby Campus
Incident	A set of circumstances that: <ul style="list-style-type: none"> <li>causes or threatens to cause material harm to the environment; and/or</li> <li>breaches or exceeds the limits or performance measures/ criteria in this approval.</li> </ul>
m AHD	Metres Australian Height Datum
Minister, the	Minister for Planning
Motorist	Includes drivers, passengers and motor bike riders
NSW Heritage Council	Heritage Council of NSW or its delegate
OEH	Office of Environment and Heritage
PIR	Preferred Infrastructure Report titled <i>Roads and Maritime Services — Hornsby Quarry Road Construction Spoil Management Project – Submissions and Preferred Infrastructure Report</i> , dated October 2015
pre-construction	All work in respect of the SSI that is excluded from the definition of construction
Publicly available	Available for inspection by a member of the general public (for example available on an internet site).
Secretary	Secretary of the Department of Planning and Environment or nominee
Secretary's approval, agreement or satisfaction	A written approval from the Secretary (or nominee) <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>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.</li> <li>The Secretary may ask for additional information if the approval, agreement or satisfaction request is considered incomplete.</li> <li>When further information is requested, the time taken for the Proponent to respond in writing will be added to the one month period.</li> </ul>
Sensitive receiver	Residence, educational 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
SSI	Means the State significant infrastructure approved under this approval and as generally described in Schedule 1 (SSI 7066)
SSI footprint	That area within the SSI boundary physically impacted by construction activities

## 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 of the SSI.

##### TERMS OF APPROVAL

- A2 The Proponent shall carry out the SSI in accordance with the conditions of this approval and generally in accordance with the:
- (a) State significant infrastructure application (SSI 7066);
  - (b) *Roads and Maritime Services — Hornsby Quarry Road Construction Spoil Management Project – Environmental Impact Statement Volume 1, 2 and 3* prepared by AECOM Australia Pty Ltd, dated August 2015; and
  - (c) *Roads and Maritime Services — Hornsby Quarry Road Construction Spoil Management Project – Submissions and Preferred Infrastructure Report*, dated October 2015.
- 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 in these reports, plans or correspondence.

##### LIMITS OF APPROVAL

- A5 This approval shall lapse 5 years after the date on which it is granted, unless the works of this SSI approval are physically commenced on or before that date.

##### TRANSPORTATION LIMITS

- A6 The Proponent shall not allow more than 70 spoil delivery truck movements to or from the site in any one hour period.

##### STATUTORY REQUIREMENTS

- A7 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.

##### OPERATION OF PLANT AND EQUIPMENT

- A8 The Proponent shall ensure that all the plant and equipment used at the site is:
- (a) maintained in a proper and efficient condition; and

- (b) operated in a proper and efficient manner.

## STAGING

- A9 The Proponent may elect to construct the SSI in stages. Where staging is proposed, the Proponent shall submit a **Staging Report** to the Secretary prior to the commencement of each proposed stage. The Staging Report shall provide details of:
- 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
  - 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

- A10 The Proponent shall ensure that any strategy, plan, program, or other document, required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) is submitted to the Secretary no later than one month prior to the commencement of the relevant stage(s), 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 activities on site are covered by relevant and 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 MONITORING AND TRACKING

- A11 The Proponent shall implement all appropriate measures to 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.
- A12 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.
- A13 In the event of a dispute between the Proponent and another public authority, in relation to an applicable requirement in this approval or relevant matters relating to the SSI, 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 unless further statutory approval is required.
- A14 The Proponent shall prepare 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 12 months following completion of spoil emplacement, subject to the Secretary's review of the outcomes of the Pre-Completion Compliance Report in condition A14(d)(iii). The operation of the program may be extended if the Secretary determines that there has been unsatisfactory compliance.

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

- provision for the notification of the Secretary prior to the commencement of construction and prior to the completion of construction of the SSI (including prior to each stage, where works are being staged);
- provision for periodic review of the compliance status of the SSI against the requirements of this approval;

- (c) provision 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) half-yearly Construction Compliance Reports, for the duration of construction, and
  - (iii) a Pre-Completion Compliance Report prior to the demobilisation of the site and handover of the site to Council;
- (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) provision for reporting environmental incidents to the Secretary during construction, in accordance with conditions A16 and A17;
- (g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and
- (h) provision for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

### **VOID STABILITY**

- A15 The Proponent shall commission a suitably qualified specialist to:
- (a) assess the stability of the slopes within the quarry void and the grounds immediately surrounding the void;
  - (b) review previous studies to determine areas within the void that may require further investigation;
  - (c) predict potential changes in void stability during the SSI, including consideration of the potential stability effects of changed groundwater conditions;
  - (d) recommend measures to be implemented to ensure stability of these areas prior to receiving spoil and during the carrying out of spoil emplacement works within and adjacent to the void;
  - (e) carry out periodic monitoring and review of the implementation of these measures; and
  - (f) advise the Proponent on spoil compaction and monitoring techniques to achieve the rehabilitation objectives in condition B43.

### **INCIDENT REPORTING**

- A16 The Proponent shall notify the Secretary and relevant public authorities of any incident with actual or potential significant on-site or off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.

*Note:*

- *Where an incident also requires reporting to the EPA and/or OEH, the incident report prepared for the purposes of notifying the EPA and/or OEH would satisfy this requirement.*

- A17 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 A16, within such period as the Secretary may require.

## PART B

### ENVIRONMENTAL PERFORMANCE

#### TRANSPORT AND ACCESS

- B1 The Proponent shall keep accurate records of all spoil delivery truck movements to and from the site (hourly, daily and weekly) and make these records available to the Secretary upon request.
- B2 The Proponent shall ensure that:
- (a) all laden trucks entering or exiting the site have their loads covered;
  - (b) appropriate measures are in place to minimise the tracking of material onto the road by vehicles leaving the site;
  - (c) all vehicles associated with the SSI are managed to prevent parking or queuing on public roads around the site;
  - (d) all spoil transport vehicles enter and leave the site via Bridge Road, unless in an emergency;
  - (e) no trucks queue at the entrance to the site before 7 am Monday to Friday and 8 am Saturday; and
  - (f) all trucks adhere to the nominated haulage routes identified in the EIS and PIR and described in the **Traffic Management Plan** required under condition B12.

#### Road Network

- B3 The Proponent shall not close vehicular access between Roper Lane and Bridge Road until after a signalised intersection at Watson Avenue and Peats Ferry Road is operational, unless Council agrees otherwise.
- B4 Notwithstanding condition B3, the temporary closure of Roper Lane during construction of Bridge Road upgrade works may occur prior to the installation of a signalised intersection at Watson Avenue and Peats Ferry Road, subject to the implementation of measures described in the **Traffic Management Plan** required under condition B12.
- B5 Prior to commencing the transport of spoil to the site, the Proponent shall upgrade the spoil haul road between Roper Lane and the spoil stockpile area on the site. The upgrades must be designed and constructed in accordance with relevant design, engineering and safety guidelines. The section of Bridge Road between Roper Lane and the site boundary shall be designed and constructed in accordance with Council specifications.
- B6 The Proponent shall:
- (a) engage a suitably qualified and experienced road safety auditor to conduct a road safety audit/s of the sections of the spoil haul routes on local roads; and
  - (b) implement the recommendations of the audit prior to transporting spoil via the roads subject of the audit,
- in consultation with the Transport Management Centre and Council.

#### Property Access

- B7 The Proponent shall ensure safe access is maintained for delivery and emergency vehicles accessing the Hornsby TAFE campus from Bridge Road during the SSI. Management measures are to be developed in consultation with TAFE and described in the **Traffic Management Plan** developed in accordance with condition B12.
- B8 The Proponent shall provide a suitable alternative teaching facility for carpentry and joinery classes currently held in and adjacent to Building J at the Hornsby TAFE. The design of the alternative teaching facility, its location and the timing of its installation shall be agreed with Hornsby TAFE prior to commencing spoil transport to the site, unless otherwise agreed by the Secretary.



- B9 Access to all other properties, except for Hornsby TAFE, shall be maintained during the SSI 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 otherwise agreed with by the property owner.
- B10 The Proponent shall maintain safe pedestrian and cyclist access through or around worksites associated with the Bridge Road upgrade works. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted.
- B11 Prior to the commencement of construction, the Proponent shall prepare a **Local Road Dilapidation Report** for local roads within Council's control. The Report shall be prepared by a suitably qualified and experienced independent expert in consultation with Council, and:
- (a) assess the current condition of the local roads to be used by heavy vehicles associated with the SSI;
  - (b) describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI;
  - (c) describe the procedures for the preparation of a report following completion of construction to assess any damage to the roads that may be caused by the construction of the SSI; and
  - (d) be submitted to the Secretary for information.

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 these conditions 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.*

### **Traffic Management Plan**

- B12 Prior to the commencement of construction, the Proponent shall prepare a **Traffic 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 Council and emergency services and shall include, but not necessarily be limited to:

- (a) identification of traffic routes and volumes on these routes;
- (b) procedures to identify and utilise the preferred spoil haul route/s, particularly during peak traffic periods;
- (c) 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;
- (d) 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;
- (e) details of vehicle management at the site, including parking, dedicated vehicle turning areas, and ingress and egress points;
- (f) details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction;
- (g) 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;
- (h) procedures to adaptively respond to any traffic, construction or other incident; and
- (i) mechanisms for the monitoring, review and amendment of this plan.

## NOISE AND VIBRATION

### Hours of Operation

- B13 Unless otherwise permitted by an EPL, activities associated with the SSI, including access and egress of spoil transport vehicles, shall be restricted to the following hours:
- (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
  - (b) 8:00am to 1:00pm Saturdays; and
  - (c) at no time on Sundays or public holidays.
- B14 Except as permitted by an EPL, activities resulting in impulsive or tonal noise emissions 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.

- B15 Works associated with the SSI may be undertaken outside the hours specified under condition B13 in the following circumstances:
- (a) activities that cause  $L_{Aeq (15 \text{ minute})}$  noise levels that are:
    - (i) no greater than 5 dB above rating background level at any residence in accordance with the *Interim Construction Noise Guideline (DECC, 2009)*; and
    - (ii) no greater than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline (DECC, 2009)* at other sensitive landuses; or
  - (b) for the delivery of materials required by the police or other authorities for safety reasons; or
  - (c) where required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
  - (d) where approved through an **Out-Of-Hours Work Protocol** prepared as part of the **Noise and Vibration Management Plan** required by condition B20, provided Council, local residents and other affected stakeholders and sensitive receivers are informed of the timing and duration at least 48 hours prior to the commencement of the works.

### Construction Noise and Vibration

- B16 The Proponent shall implement all reasonable and feasible noise mitigation measures to minimise the noise generated by the SSI, with the aim of achieving the following construction noise management levels and vibration criteria:
- (a) construction noise management levels established using the *Interim Construction Noise Guideline (DECC 2009)*;
  - (b) vibration criteria established using the *Assessing Vibration: a Technical Guide (DECC 2006)* (for human exposure); and
  - (c) the vibration limits set out in the *German Standard DIN 4150-3: Structural Vibration-effects of vibration on structures* (for structural damage).

Any construction activities identified as exceeding the construction noise management levels and/or vibration criteria shall be managed in accordance with the **Noise and Vibration Management Plan** required by condition B20.

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

- B17 The Proponent shall ensure that heavy vehicles associated with the SSI do not use compression braking, except when required to enable safe braking on Bridge Road below the intersection of Roper Lane.

B18 No blasting shall occur without the prior approval of the Secretary.

B19 The Proponent shall provide reasonable and feasible noise mitigation measures in Building H at Hornsby TAFE. The measures shall be developed in consultation with Hornsby TAFE and installed prior to commencing spoil transport to the site, unless otherwise agreed by the Secretary.

### **Noise and Vibration Management Plan**

B20 The Proponent shall prepare and implement a **Noise and Vibration Management Plan** to detail how the noise and vibration impacts of the SSI will be minimised and managed. The Plan shall be consistent with the *Interim Construction Noise Guidelines* (Department of Environment and Climate Change 2009). The plan shall be developed in consultation with NSW Health and shall include, but not be limited to:

- (a) identification of sensitive receivers, procedures to establish background noise levels at these receivers and relevant noise and vibration management levels applicable to the SSI;
- (b) details of activities and an indicative schedule for works, including the identification of key noise and/or vibration generating activities that have the potential to impact on surrounding sensitive receivers;
- (c) identification of feasible and reasonable measures proposed to be implemented to minimise and manage noise impacts (including traffic noise impacts);
- (d) an **Out-of-Hours Work Protocol** for the assessment, management and approval of works outside of the hours specified in condition B13, for the Secretary's approval. The Out-of-Hours Work Protocol must include:
  - (i) an assessment of out-of-hours works against the relevant noise and vibration criteria;
  - (ii) detailed mitigation measures for any residual impacts (that is, additional to general mitigation measures), including extent of at-receiver treatments; and
  - (iii) proposed notification arrangements;
- (e) a description of how the effectiveness of mitigation and management measures would be reviewed and monitored during the proposed works;
- (f) a description of the procedures to be implemented in response to exceedances of the applicable noise and/or vibration management levels; and
- (g) mechanisms for the monitoring, review and amendment of this plan.

## **AIR QUALITY**

### **Operating Conditions**

B21 The Proponent shall:

- (a) implement best practice management to minimise the dust emissions of the SSI;
- (b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to minimise the air quality impacts of the SSI, including during adverse meteorological conditions and extraordinary events;
- (c) implement reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site; and
- (d) minimise the area of surface disturbance and undertake progressive rehabilitation of the site.

### **Air Quality Management Plan**

B22 The Proponent shall prepare and implement an **Air Quality Management Plan** for the SSI to detail how impacts on local air quality will be minimised and managed. The Plan shall include, but not necessarily be limited to:

- (a) identification of potential sources (including stockpiles and open work areas) and quantification of airborne pollutants;
- (b) key performance indicators for local air quality during the SSI;
- (c) details of monitoring methods, including location, frequency and duration of monitoring;

- (d) a description of the mitigation measures that will be implemented to minimise impacts on local air quality, including:
  - (i) minimising areas of disturbance;
  - (ii) minimising the generation of dust during the storage and handling (transport, loading and unloading) of spoil;
  - (iii) process design and management to suppress dust generation;
  - (iv) minimising the unnecessary use of engines, including switching off plant and equipment when not in active use and while waiting to load or unload material; and
  - (v) progressive rehabilitation of disturbed areas;
- (e) procedures for record keeping and reporting against key performance indicators;
- (f) provisions for implementation of additional mitigation measures in response to issues identified during monitoring and reporting; and
- (g) mechanisms for the monitoring, review and amendment of this plan.

## **SOIL, WATER QUALITY AND HYDROLOGY**

### **Water Pollution**

B23 Except as may be provided by an EPL, the works associated with the SSI shall comply with section 120 of the *Protection of the Environment Operations Act 1997*.

### **Groundwater**

B24 Groundwater extraction and discharge for the SSI is to be carried out in accordance with the relevant licence/s issued for the site under the *Water Act 1912* and/or *Water Management Act 2000*.

### **Erosion and Sediment Control**

B25 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 SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

### **Water Use**

B26 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.

### **Soil and Water Management Plan**

B27 Prior to the commencement of construction, the Proponent shall prepare and implement a **Soil and Water Management Plan** to manage surface and groundwater impacts of the SSI. The plan shall be developed in consultation with NSW Office of Water and Council and include, but not necessarily be limited to:

- (a) details of activities and their locations which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater, including identification of all pollutants that may be introduced into the water cycle;
- (b) the identification of environmental management measures relating to surface and groundwater during construction, including water treatment, erosion and sediment control plans and stormwater management measures consistent with the measures detailed in the documents listed in condition A2;
- (c) 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
- (d) mechanisms for the monitoring, review and amendment of this plan.

## BIODIVERSITY

### Pre Clearing Surveys

- B28 Prior to the commencement of vegetation clearing activities, the Proponent shall undertake pre clearing surveys and inspections for endangered and threatened species to confirm the on-site location of those species. The surveys and inspections, and any subsequent relocation of species and associated management/offset measures, shall be undertaken under the guidance of a suitably qualified and experienced ecologist. Methodologies shall be incorporated into the **Flora and Fauna Management Plan** required under condition B31 and/or the Biodiversity Offset Package required under condition B30.
- B29 Prior to the clearing of any hollow-bearing trees, or as otherwise agreed by the Secretary, the proponent shall prepare and implement a **Nest Box Plan** to provide replacement hollows (natural and/or artificial) for displaced fauna. The Plan shall detail the number and type of nest boxes to be installed, which shall be justified based on the number and type of hollows to be removed (based on pre clearing surveys), the density of hollows in the area to be cleared and in adjacent areas, and the availability of adjacent food resources. The Plan shall also provide details of maintenance protocols for the nest boxes installed including responsibilities, timing and duration. The Plan shall be prepared as part of the **Flora and Fauna Management Plan** required under condition B31.

### Biodiversity Offsets

- B30 Within 12 months of the commencement of construction, the Proponent shall develop and implement a Biodiversity Offset Package for the approval of the Secretary. The Package shall detail how the ecological values lost as a result of the SSI will be offset. The Package shall be consistent with the *NSW Offset Principles for Major Projects (State Significant Development and State Significant Infrastructure) (OEH, 2013)* and align, as far as is feasible and reasonable, with the Biodiversity Offset Strategy requirements of the *NSW Biodiversity Offsets Policy for Major Projects (OEH 2014)*, unless otherwise agreed by the Secretary.

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

- (a) 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;
- (b) the objectives and biodiversity outcomes to be achieved;
- (c) the final suite of the biodiversity offset measures selected and secured in consultation with OEH;
- (d) the management and monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:
  - (i) the monitoring of the condition of species and ecological communities at offset (including translocation) locations;
  - (ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites; and
  - (iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH; and
- (e) 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 (d)(i) above 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. Such remedial actions shall be documented under an addendum to the Biodiversity Offset Package and the addendum be submitted for the approval of the Secretary, prior to the implementation of that addendum.

## Flora and Fauna Management Plan

- B31 The Proponent shall prepare and implement a **Flora and Fauna Management Plan** to detail how construction impacts of the SSI on ecology will be minimised and managed. The Plan shall be developed by a suitably qualified and experienced ecologist and shall include, but not necessarily be limited to:
- (a) 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 procedures for pre-clearing surveys;
  - (b) 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:
    - (i) clearing minimisation procedures (including fencing),
    - (ii) clearing procedures (including nest box plan),
    - (iii) removal and relocation of fauna during clearing,
    - (iv) habitat tree management, and
    - (v) construction worker education;
  - (c) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;
  - (d) 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) in areas potentially impacted by the SSI;
  - (e) a description of how the effectiveness of these management measures would be monitored;
  - (f) a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the OEHL, determination of appropriate mitigation measures in consultation with the OEHL (including relevant relocation measures) and updating of ecological monitoring and/ or biodiversity offset requirements; and
  - (g) mechanisms for the monitoring, review and amendment of this plan.

## HAZARDS AND RISK

- B32 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.

## HERITAGE

- B33 Except for the diatreme formation within the quarry void, the Proponent shall not harm, modify or otherwise impact any heritage items on the site and outside the SSI footprint.
- B34 This approval does not allow the Proponent to harm, modify or otherwise impact human remains as part of the SSI.
- B35 The Proponent shall prepare and implement a **Heritage Management Plan** to ensure impacts of the SSI on Aboriginal and non-Aboriginal heritage are appropriately avoided, minimised and managed.

The Plan shall be developed in consultation with OEHL and Council and shall include, but not necessarily be limited to:

- (a) the key findings and recommendations of a pre-commencement archival inspection of the diatreme by a suitably qualified and experienced heritage expert in consultation with a geologist;
- (b) a description of avoidance, mitigation and management measures for all heritage items in the study area adopted in the EIS and any heritage item in the vicinity of the study area that may be affected by the SSI.
- (c) 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 re-commence by a suitably qualified and experienced archaeologist in consultation with the OEH, NSW Heritage Council and the Secretary, assessment of the consistency of any heritage impacts against the approved impacts of the SSI, and, where relevant, notification of the Heritage Council of NSW in accordance with section 146 of the *Heritage Act 1977*;
- (d) procedures for dealing with human remains, including cessation of works in the vicinity, notification of Secretary, 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;
- (e) details of ongoing monitoring and reporting requirements for impacts on heritage items;
- (f) training and induction processes for construction personnel; and
- (g) mechanisms for the monitoring, review and amendment of this plan.

## **WASTE MANAGEMENT**

- B36 The Proponent shall maximise the reuse and/or recycling of waste materials generated on site as much as practicable, to minimise the need for treatment or disposal of those materials off site.
- B37 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).
- B38 All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.

## **PUBLIC ACCESS AND MOUNTAIN BIKE TRAILS**

- B39 The Proponent shall, where reasonable and feasible, provide adequate access to existing mountain bike trails outside the SSI footprint that are directly impacted and/or severed by the SSI. Changes to mountain bike trails shall be developed in consultation with Council and key mountain bike user groups including the provision of adequate signage and other relevant control measures.

## **UTILITIES AND SERVICES**

- B40 Utilities, services and other infrastructure potentially affected by the SSI 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.

## **VISUAL**

- B41 The Proponent shall implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, to be generally consistent with the requirements of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting*.

## **BUSHFIRE**

- B42 The Proponent shall:

- (a) ensure that the site is suitably equipped to respond to any fires on site; and
- (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

## LANDSCAPE AND REHABILITATION

B43 The Applicant shall rehabilitate the site to the satisfaction of Council. This rehabilitation must be generally consistent with the rehabilitation strategy set out in the EIS and must comply with the objectives in Table 1.

*Table 1: Rehabilitation Objectives*

<b>Feature</b>	<b>Objective</b>
Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Final landform generally consistent with Council's <i>Hornsby Park Plan of Management</i> (December 2015), or its latest version</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible</li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>• Decommissioned and removed, unless Council agrees otherwise</li> </ul>
Old Mans Valley and Quarry Pit Floor	<ul style="list-style-type: none"> <li>• Settlement potential of spoil placed in the quarry void within acceptable limits for Council's planned future use</li> <li>• Maximise the exposure of the diatreme formation in the eastern face of the quarry void</li> <li>• Areas disturbed by the SSI to be landscaped and vegetated using native tree and understorey species, unless Council agrees otherwise</li> </ul>

### Landscape and Rehabilitation Management Plan

- B44 The Proponent shall prepare and implement a **Landscape and Rehabilitation Management Plan** for the SSI. This plan must:
- (a) be prepared in consultation with Council and be submitted to the Secretary for approval within 12 months of the date of this approval, unless otherwise agreed by the Secretary;
  - (b) provide details of the conceptual final landform;
  - (c) describe the measures that would be implemented to ensure compliance with the rehabilitation objectives in **Table 1**;
  - (d) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
  - (e) identify the potential risks to the successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and
  - (f) include details of who would be responsible for monitoring, reviewing, and implementing the plan.



## 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 design and 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) 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;
  - (d) 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
  - (e) 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, including but not limited to disputes regarding rectification or compensation for impacts to third party property and infrastructure. These procedures and mechanisms may include the use of a suitably qualified and experienced independent mediator.

Issues that shall be addressed through the Community Communication Strategy include (but are not necessarily limited to):

- (i) traffic management (including property and pedestrian access, particularly for the TAFE);
- (ii) air quality;
- (iii) heritage matters;
- (iv) construction staging, hours and activities;
- (v) noise and vibration mitigation and management;
- (vi) water quality, hydrology and flooding matters; and
- (vii) biodiversity matters.

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

#### Complaints and Enquiries Procedure

- C2 Prior to the commencement of pre-construction and 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 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.

- C3 Prior to the commencement of activities on the site, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a **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 pre-construction and 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 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 listed in condition A2, 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 report, plan, or other document required under this approval;
  - (f) the outcomes of compliance tracking in accordance with condition A14 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.

## PART D

### 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 the 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);
  - (e) be given the authority to approve/reject minor amendments to the **Construction Environmental Management Plan**. What constitutes a "minor" amendment shall be clearly explained in the **Construction Environmental 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
  - (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 .
- 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.

#### CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- D3 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a **Construction Environmental Management Plan** (CEMP) for the SSI. The CEMP is to be prepared in consultation with 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);
- (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 CEMP:
- (i) measures to monitor and manage dust emissions including dust from stockpiles, handling of spoil and materials tracking from construction sites onto public roads;
  - (ii) measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos);
  - (iii) measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; reasonable and feasible strategies to maximise resource recovery; 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);
  - (iv) measures to monitor and manage hazard and risks;
  - (v) measures to monitor and rectify any impacts to third party property and infrastructure, including details of the process for rectification or compensation of affected landowners, and timeframes for rectification works or compensation processes; and
  - (vi) the issues identified in condition D4.

The CEMP shall include procedures for its periodic review and update (including the sub-plans required under condition D4), 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.

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.

### **Construction Environmental Management Plan — Sub Plans**

- D4 As part of the CEMP for the SSI, the Proponent shall prepare and implement (following approval):
- (a) a **Traffic Management Plan** prepared in accordance with condition B12;
  - (b) a **Noise and Vibration Management Plan** prepared in accordance with condition B20;
  - (c) an **Air Quality Management Plan** prepared in accordance with condition B22;
  - (d) a **Soil and Water Management Plan** prepared in accordance with condition B27
  - (e) a **Flora and Fauna Management Plan** prepared in accordance with condition B31; and
  - (f) an **Heritage Management Plan** prepared in accordance with condition B35;