



Critical State Significant Infrastructure

Sydney Metro City & Southwest
Chatswood to Sydenham
Conditions of Approval



Infrastructure approval

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

I grant approval to the carrying out of the Critical State significant infrastructure (CSSI) referred to in Schedule 1, subject to the conditions in Schedule 2.

Minister for Planning

Sydney

9th January 2017

SCHEDULE 1

Application no.:

SSI 15_7400

Proponent:

Transport for NSW

Approval Authority:

Minister for Planning

Land:

Multiple properties and land comprised in Willoughby, Lane Cove, North Sydney, City of Sydney and Inner West Council areas.

Description of Critical State Significant Infrastructure:

Construction and operation of a metro rail line, approximately 16.5 kilometres long (of which approximately 15.5 kilometres is located in underground rail tunnels) between Chatswood and Sydenham, including the construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations, and associated ancillary infrastructure.

Declaration as Critical State Significant Infrastructure

The proposal is Critical State Significant Infrastructure by virtue of clause 5 of Schedule 5 of the *State Environmental Planning Policy (State and Regional Development) 2011 (NSW)* and section 115V of the *Environmental Planning and Assessment Act 1979 (NSW)*.

TABLE OF CONTENTS

SCHEDULE 1	2
DEFINITIONS	5
SUMMARY OF REPORTING REQUIREMENTS	9
SCHEDULE 2	14
PART A	14
ADMINISTRATIVE CONDITIONS	14
GENERAL	14
STAGING	15
ANCILLARY FACILITIES	15
ENVIRONMENT REPRESENTATIVE	17
ACOUSTICS ADVISOR	18
COMPLIANCE TRACKING PROGRAM	19
CONSTRUCTION COMPLIANCE REPORTING	19
PRE-OPERATION COMPLIANCE REPORT	20
AUDITING	20
INCIDENT NOTIFICATION	21
PART B	22
COMMUNITY INFORMATION AND REPORTING	22
COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT	22
COMPLAINTS MANAGEMENT SYSTEM	22
PROVISION OF ELECTRONIC INFORMATION	24
PART C	25
CONSTRUCTION ENVIRONMENTAL MANAGEMENT	25
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN	25
CONSTRUCTION MONITORING PROGRAMS	26
PART D	28
OPERATIONAL ENVIRONMENTAL MANAGEMENT	28
OPERATIONAL ENVIRONMENTAL MANAGEMENT	28
OPERATIONAL PERFORMANCE	29
OPERATIONAL MONITORING	29
PART E	31
KEY ISSUE CONDITIONS	31

SUBURBAN AND INTER-URBAN RAIL	31
UTILITIES AND SERVICES	31
MATERIALS STORAGE	31
AIR QUALITY	31
TREES	31
FLOODING	32
HERITAGE	32
Non-Aboriginal Heritage	32
NOISE AND VIBRATION	36
SOCIO-ECONOMIC, LAND USE AND PROPERTY	41
SOILS	42
SUSTAINABILITY	43
TRAFFIC, TRANSPORT AND PEDESTRIAN ACCESS	43
URBAN DESIGN AND VISUAL AMENITY	47
WASTE	49
WATER	49

DEFINITIONS

The definitions below apply to terms used in this approval, unless otherwise stated or the context indicates otherwise.

Table 1: Definitions relevant to all CSSI projects

Term	Definition
Aboriginal object	The same meaning as in the <i>National Parks and Wildlife Act 1974</i> (NSW)
Ancillary facility	A facility established for construction of the project which will be decommissioned at the end of construction including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory and material stockpile area
Annoying activities	As defined by the <i>Interim Construction Noise Guideline</i> to include: <ul style="list-style-type: none"> • use of 'beeper' style reversing or movement alarms, particularly at night-time • use of power saws, such as used for cutting timber, rail lines, masonry, road pavement or steel work • grinding metal, concrete or masonry • rock drilling • line drilling • vibratory rolling • rail tamping and regulating • bitumen milling or profiling • jackhammering, rock hammering or rock breaking • impact piling
CEMP	Construction Environmental Management Plan
Completion of construction	The date on which all construction works and activities described in the EIS as amended by the PIR are completed, all construction related requirements of the Secretary (if any) have been met
Consistency assessment	An assessment of whether a proposed activity for the purpose of the CSSI is consistent with the terms of this approval



Term	Definition
Construction	<p>Includes all physical work required to construct the CSSI, including demolition, other than the following low impact work:</p> <ul style="list-style-type: none">(a) survey works including carrying out general alignment survey, installing survey controls (including installation of global positioning system (GPS)), installing repeater stations, carrying out survey of existing and future utilities and building and road dilapidation surveys;(b) investigations including investigative drilling and excavation;(c) heritage excavation and salvage works, subject to addressing related requirements of this approval, including Conditions E10-E27;(d) treatment of contaminated sites subject to the recommendations of a Site Contamination Report prepared in accordance with Condition E66.(e) establishment of ancillary facilities, except where demolition is required, in approved locations or in locations meeting the criteria identified in Condition A16 and Condition A18 of this approval, including constructing ancillary facility access roads and providing utilities to the facility;(f) operation of ancillary facilities if the ER has determined the operational activities will have minimal impact on the environment and community;(g) minor clearing and relocation of native vegetation, as identified in the EIS as amended by the description in the PIR;(h) installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments;(i) property acquisition adjustment works including installation of property fencing, and relocation and adjustments of utilities to property including water supply and electricity;(j) relocation and connection of utilities where the relocation or connection has a minor impact to the environment as determined by the ER;(k) archaeological testing under the <i>Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010)</i> or archaeological monitoring undertaken in association with (a)-(j) above to ensure that there is no impact on heritage items;(l) other activities determined by the ER to have minimal environmental impact which may include construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access; and(m) maintenance of existing buildings and structures required to facilitate the carrying out of the CSSI. <p>However, where heritage items, or threatened species, populations or ecological communities (within the meaning of the EP&A Act) are affected or potentially affected by any low impact work, that work is construction, unless otherwise determined by the Secretary in consultation with OEH or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation).</p> <p>The low impact work described in this definition becomes construction with the approval of a Construction Environmental Management Plan</p>



Term	Definition
CSSI	The Critical State Significant Infrastructure, as generally described in Schedule 1, the carrying out of which is approved under the terms of this approval
Department	NSW Department of Planning and Environment
DPI	NSW Department of Primary Industries including DPI Agriculture, DPI Biosecurity and Food Safety, DPI Land and Natural Resources, DPI Water and DPI Fisheries
EIS	The <i>Sydney Metro City and Southwest Chatswood to Sydenham</i> Environmental Impact Statement dated 3 May 2016 submitted to the Secretary seeking approval to carry out the CSSI and as revised if required by the Secretary under the EP&A Act
EMS	Environmental Management System
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
ER	The Environmental Representative for the CSSI
Heritage Division	The Heritage Division of OEH
Heritage item	A place, building, work, relic, archaeological site, tree, movable object or precinct of heritage significance that is listed under one or more of the following registers: the State Heritage Register under the <i>Heritage Act 1977 (NSW)</i> , a heritage item registered under a Local Environmental Plan under the EP&A Act, the World, National or Commonwealth Heritage lists under the <i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i> , and an Aboriginal object or Aboriginal place as defined in section 5 of the <i>National Parks and Wildlife Act 1974 (NSW)</i>
ICNG	<i>Interim Construction Noise Guideline</i>
Incident	An occurrence or set of circumstances that causes, or threatens to cause, material harm to the environment, community or any member of the community, being actual or potential harm to the health or safety of human beings or to threatened species, endangered ecological communities or ecosystems that is not trivial <i>Note: This meaning of "material harm" applies for the purpose of this approval only</i>
Land	Has the same meaning as in the EP&A Act
Landowner	Has the same meaning as "owner" in the <i>Local Government Act 1993</i> and in relation to a building means the owner of the building
Minister	NSW Minister for Planning
Noise Management Level	As derived from the <i>Interim Construction Noise Guideline</i>
Non-residential zones	Any other zone than defined as <i>Residential zone</i> in this approval
NSW Heritage Council	Heritage Council of NSW
OEH	NSW Office of Environment and Heritage



Term	Definition
OEMP	Operational Environmental Management Plan
Operation	The operation of the CSSI (whether in full or in part) for its intended purpose, excluding the following activities carried out during construction: <ul style="list-style-type: none">• commissioning trials of equipment;• temporary use of any part of the CSSI; and• maintenance works <p><i>Note: Construction and Operation are not mutually exclusive</i></p>
Over Station Development	Includes non-rail related development that may occupy land or airspace above, within or in the immediate vicinity of the CSSI but excluding spaces and interface works such as structural elements may be constructed as part of the CSSI to make provision for future developments
Perceptible level of vibration	The value identified in the Preferred Peak velocity (mm/s) column in Table C1.1 <i>Criteria for exposure to continuous and impulsive vibration in the Assessing Vibration: A technical guideline</i> (DEC 2006)
PIR	<i>The Sydney Metro City and Southwest Chatswood to Sydenham Submissions and Preferred Infrastructure Report</i> dated October 2016 submitted to the Secretary under the EP&A Act
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
Proponent	The person or organisation identified as the proponent in Schedule 1 of this approval
Registered Aboriginal Parties	As defined in the <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i>
Relevant Council(s)	Any or all as relevant, Willoughby, Lane Cove, North Sydney, City of Sydney or Inner West
Relevant Road Authority	The same meaning as the Roads authorities defined in the <i>Roads Act 1993</i>
Relic	The same meaning as in the <i>Heritage Act 1977 (NSW)</i>
Residential zones	As defined by the relevant Local Environment Plan including Zone R1 General Residential, Zone R2 Low Density Residential, Zone R3 Medium Density Residential, Zone R4 high Density Residential
RMS	NSW Roads and Maritime Services
Secretary	Secretary of the NSW Department of Planning and Environment or nominee, whether nominated before or after the date on which this approval was granted



Term	Definition
Sensitive receiver	Includes residences, educational institutions (including preschools, schools, universities, TAFE colleges), health care facilities (including nursing homes, hospitals), religious facilities (including churches), child care centres, passive recreation areas (including outdoor grounds used for teaching), active recreation areas (including parks and sports grounds), commercial premises (including film and television studios, research facilities, entertainment spaces, temporary accommodation such as caravan parks and camping grounds, restaurants, office premises, retail spaces and industrial premises), and others as identified by the Secretary
Sensitive periods	Period of time determined in consultation with affected sensitive receiver
SES	NSW State Emergency Services
TBM	Tunnel Boring Machine
TMC	Transport Management Centre of Transport for NSW
Tree	Long lived woody perennial plant greater than (or usually greater than) 3 m in height with one or relatively few main stems or trunks
Unexpected heritage find	A potential heritage item discovered (usually during construction) but not identified in the EIS or PIR, where assessment is required to determine if the item has heritage significance, or is an Aboriginal object. Unexpected heritage finds does not include human remains
Works	All physical activities to construct the CSSI

SUMMARY OF REPORTING REQUIREMENTS

Reports and notifications that must be provided to the Secretary under the terms of this approval are listed in **Table 3**.

Table 3: Reports and Notifications that must be submitted to the Secretary

Condition	Report / Notification	Timing ¹	Purpose
Part A – Administrative			
A7	As Required	As required	As required
A9	Consultation Completed	As required by Condition of Approval	As Required
A12	Staging Report	No later than one month before the commencement of construction (or operation if only staged operation is proposed) of the first of the proposed stages or within another timeframe agreed with the Secretary	Information
A17	Ancillary Facilities Management Plan	One month before installation of the relevant ancillary facilities	Approval

¹ Where a project is staged, all required approvals must be obtained before the commencement of the relevant stage.



Condition	Report / Notification	Timing ¹	Purpose
A21	Consideration of Alternatives – Victoria Cross	Before construction	Approval
A22	Approval of Environmental Representative	No later than one month before the commencement of works or another timeframe agreed with the Secretary	Approval
A24(f) A24(h)	ER Notified of Incident	As required by Condition of Approval 40	As required
A24(l)	Environmental Representative Report	Within seven days following the end of each month for the duration of works and construction or as otherwise agreed with the Secretary	Information
A25	Approval of Acoustic Advisor	Two months before commencement of works or within another timeframe agreed with the Secretary	Approval
A27(b) A27(f) A26(g)(iii) A26(g)(vi)	Noise and Vibration Reports	Monthly and within seven days following the end of each month for the duration of construction or as otherwise agreed with the Secretary	Information
A29	Compliance Tracking Program	Before commencement of works or within another timeframe agreed with the Secretary	Information
A31	Pre-Construction Compliance Report	No later than one month before commencement of construction or within another timeframe agreed with the Secretary	Information
A34	Construction Compliance Reports	Every 6 months from the date of the commencement of construction or within another timeframe agreed with the Secretary, for the duration of construction	Information
A35	Pre-Operation Compliance Report	No later than one month before commencement of operation or within another timeframe agreed with the Secretary	Information
A37	Environmental Audit Program	No later than one month before commencement of construction or within another timeframe agreed with the Secretary	Information
A40	Environmental Audit Report	Within 6 weeks of completing the audit, or within another timeframe agreed with the Secretary.	Information
A41	Notification of incident	As soon as possible and within 24 hours of any incident	Information
A44	Notification of incident notified to the EPA under the POEO Act	Within 24 hours of notifying the Environment Protection Authority (EPA)	Information
Part B - Communication Information and Reporting			
B3	Community Communication Strategy	No later than three months from the date of this approval or one month before commencement of any work, whichever is the latter	Approval
B8	Complaints Register	On request during or request within the timeframe stated in the request	Information
B11	Nomination of the Community Complaints Commissioner	Within one month of the date of this approval or within another timeframe agreed with the Secretary	Approval



Condition	Report / Notification	Timing ¹	Purpose
Part C - Construction Environmental Management			
C5	Agency requests for CEMP	Where not included in the CEMP with CEMP submission	Information
C6	CEMP sub-plans	With or subsequent to CEMP submission but no later than one month before commencement of construction	Approval
C7	CEMP	No later than one months before the commencement of construction	Approval
C11	NVBMP – Real Time Data	Department must be provided with access to real time monitoring data	Information
C12	Construction Monitoring Programs	Include information requested by agencies during consultation to the written satisfaction of the Secretary with Construction Monitoring Program	For information as required
C13	Construction Monitoring Programs	At least one month before commencement of construction or within another timeframe agreed with the Secretary	Approval
C16	Construction Monitoring Report	As specified in Construction Monitoring Program	Information
Part D - Operation Environmental Management			
D5	OEMP Sub-plans – Justification for not including Agency Comments	One month before commencement of operation or within another timeframe agreed with the Secretary	Information
D7	OEMP or EMS	No later than one month before commencement of operation or within another timeframe agreed with the Secretary	Information
D9	Ground-borne Noise Specialist	Ground borne noise specialist nominee must be submitted before the review commences	Approval
D9	Ground-borne Noise Review	The review must be submitted at least one month before the installation of track	As required for Information
D11	Approval of Independent Auditor	Within 15 months of the completion of construction, or any other timeframe as agreed with the Secretary, and prior to the Audit	Approval
D11	Operational Performance Audit	Within one month of the completion of the Audit or other timeframe as agreed with the Secretary	Information
D14	Operational Noise and Vibration Report	Within 3 months following the identification of an exceedance of the design objectives	Information
Part E – Key Issues			
Flora and Fauna			
E6	Tree Report	Before the removal, damage and/or pruning of any trees, including those affected by the site establishment works.	Information
E7	Assessment of potential impact to large fig at Blues Point Reserve	Any proposal to prune either canopy or tree roots of large fig tree at eastern end of Blues Point Reserve	Approval



Condition	Report / Notification	Timing ¹	Purpose
Heritage			
E13	Heritage Archival Recording Report	Within two years of completing the archival recording	Information
E18	Nominate an Excavation Director	Before excavation of archaeological management sites	Information
E20	Relic discovery	At the same time as the Heritage Council of NSW and of consultation outcome with the Heritage Council of NSW	As required
E21	Heritage Interpretation Plan	Before commencement of construction	Information
E27	Exhumation Management Plan	Before commencement of excavation works	Information
Noise and Vibration			
E32	Construction Noise and Vibration Strategy	At least one month before construction commences	Approval
E47	Out of Hours Work Protocol	Before construction commences for work not subject to an EPL	Approval
E53	Blast Management Strategy	One month before blasting commence	Information
E56	Notification of blasting schedule	Fortnightly and in advance of blasting schedule	Information
E62	Independent Property Impact Assessment Panel	Before relevant construction work commencing	Information
E63	Result of settlement monitoring	On request by Secretary	Information
E64 1(f)	Monitoring Results	As part of Compliance Tracking Reports	As Required
Contaminated Sites			
E68	Site Audit Statement and Site Audit Report	No later than one month before commencement of operation	Information
Sustainability			
E72	Sustainability Strategy	Within six months of the date of this approval or within another timeframe agreed with the Secretary	Information
Traffic, Transport and Pedestrian Access			
E76	Safety Audits	On request by Secretary	Information
E81	Construction Traffic Management Framework	No later than one (1) month before the commencement of construction or within any other timeframe agreed with the Secretary	Approval
E84	Investigation of non-road spoil haulage and material delivery	Before commencement and before completion of tunnel spoil generation as relevant	For information as required
E87	Safety audits	Available to the secretary on request	Information

Condition	Report / Notification	Timing ¹	Purpose
Interchange (Station) Access Plans			
E92	Interchange (Station) Access Plans	Before commencement of permanent aboveground facilities at any stations site.	For information as required
Station Design and Precinct Plan			
E101	Station Design and Precinct Plans (SDPP)	Before commencement of permanent aboveground work	Approval

SCHEDULE 2

PART A

ADMINISTRATIVE CONDITIONS

GENERAL

- A1 The CSSI must be constructed generally in accordance with the description of the CSSI in the EIS as amended by the description in the PIR and the terms of this approval.
- A2 The CSSI must be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the EIS as amended by the PIR unless otherwise specified in, or required under, this approval.
- A3 In the event of an inconsistency between the EIS as amended by the description in Chapters 2, 3 and 9 of the PIR, or any other document required under this approval, and a term of this approval, the term of this approval prevails to the extent of the inconsistency. For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document.
- A4 Except to the extent described in the EIS or PIR, any over station development, including associated future uses, does not form part of this CSSI and will be subject to the relevant assessment pathway prescribed by the EP&A Act.
- A5 The Proponent must comply with all requirements of the Secretary in relation to:
 - (a) the environmental performance of the CSSI;
 - (b) any document or correspondence;
 - (c) any notification given to the Secretary under the terms of this approval;
 - (d) any audit of the construction or operation of the CSSI;
 - (e) compliance with the terms of this approval (including anything required to be done under this approval); and
 - (f) the carrying out of any additional monitoring or mitigation measures.
- A6 In the event that there are differing interpretations of the terms of this approval, including in relation to a condition of this approval, the Secretary's interpretation is final.
- A7 Where the terms of approval provide the Secretary the discretion to alter the requirements of the approval, the Proponent must provide supporting evidence so that the Secretary can consider the need, environmental impacts and consistency of the alteration.

Note: Inaction and/or expedience will not be supported as justifications for need unless it can be demonstrated that there is beneficial environmental impacts for the project and the affected environment.

- A8 Without limitation, all strategies, plans, programs, reviews, audits, report recommendations, protocols and the like required by the terms of this approval must be implemented by the Proponent and in accordance with all requirements issued by the Secretary from time to time in respect of them.

- A9 Where the terms of this approval require consultation with identified parties, details of the consultation undertaken, matters raised by the parties, and how the matters were considered must accompany the strategies, plans, programs, reviews, audits, protocols and the like submitted to the Secretary.
- A10 This approval lapses five (5) years after the date on which it is granted, unless works for the purpose of the CSSI are physically commenced on or before that date.
- A11 The Proponent is responsible for any breaches of the conditions of this approval resulting from the actions of all persons that it invites onto any site, including contractors, sub-contractors and visitors.

STAGING

- A12 The CSSI may be constructed and operated in stages. Where staged construction or operation is proposed, a **Staging Report** (for either or both construction and operation as the case requires) must be prepared and submitted to the Secretary for information. The **Staging Report** must be submitted to the Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation), or within another timeframe agreed with the Secretary.
- A13 The **Staging Report** must:
 - (a) if staged construction is proposed, set out how the construction of the whole of the CSSI will be staged, including general details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence;
 - (b) if staged operation is proposed, set out how the operation of the whole of the CSSI will be staged, including general details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence;
 - (c) specify the relevant conditions of approval that apply to each stage and how compliance with those conditions will be achieved across and between each of the stages of the CSSI; and
 - (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.
- A14 The CSSI must be staged in accordance with the **Staging Report**, as submitted to the Secretary.
- A15 Where staging is proposed, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.

ANCILLARY FACILITIES

- A16 Ancillary facilities that are not identified by description and location in the EIS as amended by the PIR must meet the following criteria, unless otherwise approved by the Secretary:
 - (a) the facility is development of a type that would, if it were not for the purpose of the CSSI, otherwise be exempt or complying development; or
 - (b) the facility is located as follows:
 - i. at least 50 metres from any waterway unless an erosion and sediment control plan is prepared and implemented so as not to adversely affect water quality in the waterway in accordance with Managing Urban Stormwater series;
 - ii. within or adjacent to land upon which the CSSI is being carried out unless it can be demonstrated that performance criteria established in this approval can be met and that there will be a reduction in impact at other sites and a reduction in the construction program;



- iii. with ready access to a road network;
 - iv. to prevent heavy vehicles travelling on local streets or through residential areas in order to access the facility, except as identified in the EIS and amended by the PIR;
 - v. on level land;
 - vi. so as to be in accordance with the *Interim Construction Noise Guideline* (DECC 2009) or as otherwise agreed in writing with affected landowners and occupiers;
 - vii. so as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing;
 - viii. so as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval;
 - ix. so as not to unreasonably interfere with lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence;
 - x. to enable operation of the ancillary facility during flood events and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure; and
 - xi. so as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries required outside standard construction hours.
- A17 Before establishment of any ancillary facility that satisfies the criteria in Condition A16, the Proponent must prepare an **Ancillary Facilities Management Plan** which outlines the environmental management practices and procedures to be implemented for the establishment and operation of the ancillary facility. The **Ancillary Facilities Management Plan** must be prepared in consultation with the EPA and the relevant council(s) and submitted to the Secretary for approval one month before installation of the relevant ancillary facilities. The **Ancillary Facilities Management Plan** must detail the management of the ancillary facilities and include:
- (a) a description of activities to be undertaken during construction (including scheduling of construction);
 - (b) a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI; and
 - (c) details of how the activities described in subsection (a) of this condition will be carried out to:
 - i. meet the performance outcomes stated in the EIS as amended by the PIR; and
 - ii. manage the risks identified in the risk analysis undertaken in subsection (b) of this condition.
- A18 Minor ancillary facilities comprising lunch sheds, office sheds, and portable toilet facilities, that are not identified in the EIS as amended by the PIR and which do not satisfy the criteria set out in Condition A16 of this approval must satisfy the following criteria:
- (a) have no greater environmental and amenity impacts than those that can be managed through the implementation of environmental measures detailed in the CEMP required under Condition C1 of this approval; and
 - (b) have been assessed by the ER to have:
 - i. minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the *Interim Construction Noise Guideline* (DECC 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts;
 - ii. minimal environmental impact with respect to waste management and flooding; and
 - iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.

- A19 Boundary fencing that incorporates screening must be erected around all ancillary facilities that are adjacent to sensitive receivers for the duration of construction unless otherwise agreed with Relevant Council(s), and affected residents, business operators or landowners.
- A20 Boundary screening required under Condition A19 of this approval must minimise visual, noise and air quality impacts on adjacent sensitive receivers.
- A21 The Proponent must undertake a further detailed analysis of alternative locations for construction of a services building to support Victoria Cross Station. The analysis must include a rigorous options assessment which considers constructability, property impacts, operational efficiency and comparative impacts, including construction and operational noise impacts in consultation with the Acoustics Advisor required by Condition A25. The analysis must be submitted to the Secretary and where the analysis identifies a better alternative to the Victoria Cross North site identified in the EIS, the Proponent must submit the recommendation to the Secretary for approval before commencement of construction at the Victoria Cross North construction site.

ENVIRONMENT REPRESENTATIVE

- A22 A suitably qualified and experienced Environmental Representative (ER) who is independent of the design and construction personnel must be nominated by the Proponent, approved by the Secretary and engaged for the duration of construction of the CSSI. Additional ERs may be engaged for the purpose of this condition in which case the obligations to be carried out by an ER under the terms of this approval may be satisfied by any ER that is approved by the Secretary. The details of nominated ER(s) must be submitted to the Secretary for approval no later than one month before the commencement of works, or within another timeframe agreed with the Secretary.
- A23 Works must not commence until an ER nominated under Condition A22 of this approval in respect of such works has been approved by the Secretary.
- A24 From commencement of construction until completion of construction, the approved ER must:
 - (a) receive and respond to communications from the Secretary in relation to the environmental performance of the CSSI;
 - (b) consider and inform the Secretary on matters specified in the terms of this approval;
 - (c) consider and recommend any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;
 - (d) review all documents required to be prepared under the terms of this approval, ensure they address any requirements in or under this approval and if so, endorse them before submission to the Secretary (if required to be submitted to the Secretary) or before implementation (if not required to be submitted to the Secretary);
 - (e) regularly monitor the implementation of all documents required by the terms of this approval for implementation in accordance with what is stated in the document and the terms of this approval;
 - (f) notify the Secretary of an incident in accordance with Condition A41 of this approval;
 - (g) as may be requested by the Secretary, help plan, attend or undertake Department audits of the CSSI, briefings, and site visits;
 - (h) if conflict arises between the Proponent and the community in relation to the environmental performance of the CSSI, follow the procedure in the **Community Communication Strategy** approved under Condition B3 of this approval to attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary;
 - (i) review any draft consistency assessment that may be carried out by the Proponent, and provide advice on any additional mitigation measures required to minimise the impact of the work;
 - (j) consider any minor amendments to be made to the **CEMP**, **CEMP sub-plans** and monitoring programs that comprise updating or are of an administrative nature, and are consistent with

the terms of this approval and the **CEMP**, **CEMP sub-plans** and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;

- (k) assess the impacts of minor ancillary facilities as required by Condition A18 of this approval; and
- (l) prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly **Environmental Representative Report** detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month (or other timeframe agreed with the Secretary). The **Environmental Representative Report** must be submitted within seven (7) days following the end of each month for the duration of works and construction of the CSSI, or as otherwise agreed with the Secretary.

ACOUSTICS ADVISOR

A25 A suitably qualified and experienced Acoustics Advisor (AA), who is independent of the design and construction personnel, must be nominated by the Proponent and engaged for the duration of construction and for no less than six (6) months following operation of the CSSI.

The details of the nominated AA must be submitted to the Secretary for approval no later than one (1) month before commencement of works, or within another timeframe as agreed with the Secretary.

The Proponent must cooperate with the AA by:

- (a) providing access to noise and vibration monitoring activities as they take place;
- (b) providing for review of noise and vibration plans, assessments, monitoring reports, data and analyses undertaken; and
- (c) considering any recommendations to improve practices and demonstrating, to the satisfaction of the AA, why any recommendation is not adopted.

A26 Any activities generating noise and vibration in excess of the Noise Management Level derived from the *Interim Construction Noise Guideline* must not commence until an AA, nominated under Condition A25 of this approval, has been approved by the Secretary.

A27 The approved AA must:

- (a) receive and respond to communication from the Secretary in relation to the performance of the CSSI in relation to noise and vibration;
- (b) consider and inform the Secretary on matters specified in the terms of this approval relating to noise and vibration;
- (c) consider and recommend, to the Proponent, improvements that may be made to work practices to avoid or minimise adverse noise and vibration impacts;
- (d) review all noise and vibration documents required to be prepared under the terms of this approval and, should they be consistent with the terms of this approval, endorse them before submission to the Secretary (if required to be submitted to the Secretary) or before implementation (if not required to be submitted to the Secretary);
- (e) regularly monitor the implementation of all noise and vibration documents required to be prepared under the terms of this approval to ensure implementation is in accordance with what is stated in the document and the terms of this approval;
- (f) notify the Secretary of noise and vibration incidents in accordance with Condition A41 of this approval;
- (g) in conjunction with the ER, the AA must:
 - i. consider requests for out of hours construction activities and determine whether to endorse the proposed activities in accordance with Condition E47;



- ii. as may be requested by the Secretary or Complaints Commissioner, help plan, attend or undertake audits of noise and vibration management of the CSSI including briefings, and site visits;
- iii. if conflict arises between the Proponent and the community in relation to the noise and vibration performance during construction of the CSSI, follow the procedure in the Community Communication Strategy approved under Condition B3 of this approval to attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary;
- iv. consider relevant minor amendments made to the CEMP, relevant sub-plans and noise and vibration monitoring programs that require updating or are of an administrative nature, and are consistent with the terms of this approval and the management plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, endorse the amendment. This does not include any modifications to the terms of this approval;
- v. assess the noise impacts of minor ancillary facilities as required by Condition A18 of this approval; and
- vi. prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly Noise and Vibration Report detailing the AAs actions and decisions on matters for which the AA was responsible in the preceding month (or other timeframe agreed with the Secretary). The Noise and Vibration Report must be submitted within seven (7) days following the end of each month for the duration of construction of the CSSI, or as otherwise agreed with the Secretary.

COMPLIANCE TRACKING PROGRAM

- A28 A **Compliance Tracking Program** to monitor compliance with the terms of this approval must be prepared, taking into consideration any staging of the CSSI that is proposed in a **Staging Report** submitted in accordance with Condition A12 and Condition A13 of this approval.
- A29 The **Compliance Tracking Program** must be endorsed by the ER then submitted to the Secretary for information before the commencement of works or within another timeframe agreed with the Secretary.
- A30 The **Compliance Tracking Program** in the form required under Condition A28 of this approval must be implemented for the duration of construction and for a minimum of one (1) year following commencement of operation, or for a longer period as determined by the Secretary based on the outcomes of independent environmental audits, **Environmental Representative Reports** and regular compliance reviews submitted through **Compliance Reports**. If staged operation is proposed, or operation is commenced of part of the CSSI, the **Compliance Tracking Program** must be implemented for the relevant period for each stage or part of the CSSI.

CONSTRUCTION COMPLIANCE REPORTING

- A31 A **Pre-Construction Compliance Report** must be prepared and submitted to the Secretary for information no later than one month before the commencement of construction or within another timeframe agreed with the Secretary.
- A32 The **Pre-Construction Compliance Report** must include:
- (a) details of how the terms of this approval that must be addressed before the commencement of construction have been complied with; and
 - (b) the commencement date for construction.
- A33 Construction must not commence until the **Pre-Construction Compliance Report** has been submitted to the Secretary.

A34 **Construction Compliance Reports** must be prepared and submitted to the Secretary for information every six (6) months from the date of the commencement of construction or within another timeframe agreed with the Secretary, for the duration of construction. The **Construction Compliance Reports** must include:

- (a) a results summary and analysis of environmental monitoring;
- (b) the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints;
- (c) details of any review of, and minor amendments made to, the **CEMP** as a result of construction carried out during the reporting period;
- (d) a register of any consistency assessments undertaken and their status;
- (e) results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit;
- (f) a summary of all incidents notified in accordance with Condition A41 and Condition A44 of this approval; and
- (g) any other matter relating to compliance with the terms of this approval or as requested by the Secretary.

PRE-OPERATION COMPLIANCE REPORT

A35 A **Pre-Operation Compliance Report** must be prepared and submitted to the Secretary for information no later than one month before the commencement of operation or within another timeframe agreed with the Secretary. The **Pre-Operation Compliance Report** must include:

- (a) details of how the terms of this approval that must be addressed before the commencement of operation have been complied with; and
- (b) the commencement date for operation.

A36 Operation of the CSSI must not commence until the **Pre-Operation Compliance Report** has been submitted for information to the Secretary.

AUDITING

A37 An **Environmental Audit Program** for independent annual environmental auditing against the terms of this approval must be prepared in accordance with AS/NZS ISO 19011:2014 - *Guidelines for Auditing Management Systems* and submitted to the Secretary for information no later than one month before the commencement of construction or within another timeframe agreed with the Secretary.

A38 The **Environmental Audit Program**, as submitted to the Secretary, must be implemented for the duration of construction and operation.

A39 All independent environmental audits of the CSSI conducted under Conditions A35 and A36 must be conducted by a suitably qualified, experienced and independent team of experts in auditing and be documented in an **Environmental Audit Report** which:

- (a) assesses the environmental performance of the CSSI, and its effects on the surrounding environment;
- (b) assesses whether the project is complying with the terms of this approval;
- (c) reviews the adequacy of any document required under this approval; and
- (d) recommends measures or actions to improve the environmental performance of the CSSI, and improvements to any document required under this approval.

- A40 The Proponent must submit a copy of the **Environmental Audit Report** to the Secretary with a response to any recommendations contained in the audit report within six (6) weeks of completing the audit, or within another timeframe agreed with the Secretary.

INCIDENT NOTIFICATION

- A41 The Secretary must be notified as soon as possible and in any event within 24 hours of any incident.
- A42 Notification of an incident under Condition A41 of this approval must include the time and date of the incident, details of the incident and must identify any non-compliance with this approval.
- A43 Any requirements of the Secretary or Relevant Public Authority (as determined by the Secretary) to address the cause or impact of an incident reported in accordance with Condition A41 of this approval, must be met within the timeframe determined by the Secretary or relevant public authority.
- A44 If statutory notification is given to the EPA as required under the POEO Act in relation to the CSSI, such notification must also be provided to the Secretary for information within 24 hours after the notification was given to the EPA.

PART B

COMMUNITY INFORMATION AND REPORTING

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- B1 A **Community Communication Strategy** must be prepared to facilitate communication between the Proponent, and the community (including Relevant Councils, adjoining affected landowners and businesses, and others directly impacted by the CSSI), during the design and construction of the CSSI and for a minimum of 12 months following the completion of construction of the CSSI.
- B2 The **Community Communication Strategy** must:
- (a) identify people or organisations to be consulted during the design and construction phases;
 - (b) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the CSSI;
 - (c) identify opportunities to provide accessible information regarding regularly updated site construction activities, schedules and milestones at each construction site including use of construction hoardings to provide information regarding construction, specific to the location;
 - (d) identify opportunities for the community to visit construction sites (taking into consideration workplace, health and safety requirements);
 - (e) involve construction personnel from each construction site in engaging with the local community;
 - (f) provide for the formation of issue or location-based community forums that focus on key environmental management issues of concern to the relevant community(ies) for the CSSI;
 - (g) set out procedures and mechanisms:
 - i. through which the community can discuss or provide feedback to the Proponent;
 - ii. through which the Proponent will respond to enquiries or feedback from the community; and
 - iii. to resolve any issues and mediate any disputes that may arise in relation to environmental management and delivery of the CSSI.
- B3 The **Community Communication Strategy** must be submitted to the Secretary for approval no later than three months from the date of this approval or one (1) month before commencement of any work, whichever is the latter.
- B4 Work for the purposes of the CSSI must not commence until the **Community Communication Strategy** has been approved by the Secretary, or within another timeframe agreed with the Secretary.
- B5 The **Community Communication Strategy**, as approved by the Secretary, must be implemented for the duration of the works and for 12 months following the completion of construction.

COMPLAINTS MANAGEMENT SYSTEM

- B6 A **Complaints Management System** must be prepared before the commencement of any works in respect of the CSSI and be implemented and maintained for the duration of works and for a minimum for 12 months following completion of construction of the CSSI.

- B7 The **Complaints Management System** must include a **Complaints Register** to be maintained recording information on all complaints received about the CSSI during the carrying out of any works associated with the CSSI and for a minimum of 12 months following the completion of construction. The **Complaints Register** must record the:
- (a) number of complaints received;
 - (b) number of people affected in relation to a complaint; and
 - (c) nature of the complaint and means by which the complaint was addressed and whether resolution was reached, with or without mediation.
- B8 The **Complaints Register** must be provided to the Secretary upon request, within the timeframe stated in the request.
- B9 The following facilities must be available within one (1) month from the date of this approval and for 12 months following the completion of construction and appropriately broadcast to collect community enquiries and complaints:
- (a) a 24 hour telephone number for the registration of complaints and enquiries about the CSSI;
 - (b) a postal address to which written complaints and enquiries may be sent;
 - (c) an email address to which electronic complaints and enquiries may be transmitted; and
 - (d) place-based community manager for each of the station locations available to meet with community members on request.
- B10 The telephone number, postal address and email address required under Condition B9 of this approval must be published in a newspaper circulating in the local area and on site hoarding at each construction site before commencement of construction and published in the same way again before commencement of operation. This information must also be provided on the website required under Condition B15 of this approval.
- B11 A **Community Complaints Commissioner** that is independent of the design and construction personnel must be nominated by the Proponent, approved by the Secretary and engaged during all works associated with the CSSI. The nominated **Community Complaints Commissioner** must be submitted to the Secretary for approval within one month of the date of this approval or within another timeframe agreed with the Secretary.
- B12 The role of the **Community Complaints Commissioner** is to follow up on any complaint where a member of the public is not satisfied by the Proponent's response. Any member of the public that has lodged a complaint which is registered in the Complaints Management System identified in Condition B6 may ask the Community Complaints Commissioner to review the Proponent's response. The application must be submitted in writing and the Community Complaints Commissioner must respond within 28 days of the request being made or other specified timeframe agreed between the Complaints Commissioner and the member of the public.
- B13 The **Community Complaints Commissioner** will:
- (a) review the Proponent's unresolved disputes between the project and members of the public if the procedures and mechanisms under Condition B2(g)(iii) do not satisfactorily address complaints; and
 - (b) make recommendations to the Proponent to satisfactorily address complaints, resolve disputes or mitigate against the occurrence of future complaints or disputes.
- B14 The **Community Complaints Commissioner** will not act before the Proponent has provided an initial response to a complaint and will not consider issues such as property acquisition where other dispute processes are provided for in this approval, or clear government policy and resolution processes are available, or matters which are not within the scope of the CSSI.

PROVISION OF ELECTRONIC INFORMATION

B15 A website providing information in relation to the CSSI must be established before commencement of works and maintained for the duration of construction, and for a minimum of 12 months following the completion of construction or other timeframe as agreed with the Secretary. The following up-to-date information (excluding confidential, private and commercial information) must be published prior to the relative works commencing and maintained on the website or dedicated pages:

- (a) information on the current implementation status of the CSSI;
- (b) a copy of the documents listed in Condition A1 and Condition A2 of this approval, and any documentation relating to any modifications made to the CSSI or the terms of this approval;
- (c) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval;
- (d) a copy of any Environment Protection Licence required and obtained in relation to the CSSI; and
- (e) a current copy of each document required under the terms of this approval and any endorsements, approvals or requirements from the ER and Secretary, all of which must be published before the commencement of any works to which they relate or before their implementation as the case may be.

PART C

CONSTRUCTION ENVIRONMENTAL MANAGEMENT

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C1 A **Construction Environmental Management Plan (CEMP)** must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the PIR and the Department's *Guideline for the Preparation of Environmental Management Plans* to detail how the performance outcomes, commitments and mitigation measures specified in Chapter 11 of the PIR will be implemented and achieved during construction.
- C2 The **CEMP** must provide:
- (a) a description of activities to be undertaken during construction (including the scheduling of construction);
 - (b) details of environmental policies, guidelines and principles to be followed in the construction of the CSSI;
 - (c) a schedule for compliance auditing;
 - (d) a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI;
 - (e) details of how the activities described in subsection (a) of this condition will be carried out to:
 - i. meet the performance outcomes stated in the EIS as amended by the PIR; and
 - ii. manage the risks identified in the risk analysis undertaken in subsection (d) of this condition;
 - (f) an inspection program detailing the activities to be inspected and frequency of inspections;
 - (g) a protocol for managing and reporting any:
 - i. incidents; and
 - ii. non-compliances with this approval and with statutory requirements;
 - (h) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;
 - (i) a list of all the **CEMP sub-plans** required in respect of construction, as set out in Condition C3. Where staged construction of the CSSI is proposed, the **CEMP** must also identify which **CEMP sub-plan** applies to each of the proposed stages of construction;
 - (j) a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;
 - (k) for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval;
 - (l) for periodic review and update of the **CEMP** and all associated plans and programs.
- C3 The following **CEMP sub-plans** must be prepared in consultation with the relevant government agencies identified for each **CEMP sub-plan** and be consistent with the **CEMF** and **CEMP** referred to in Condition C1. The Construction Traffic Management Plan must also be prepared in accordance with the **Construction Traffic Management Framework** as required by Condition E81.

	Required CEMP sub-plan	Relevant government agencies to be consulted for each CEMP sub-plan
(a)	Noise and vibration	Relevant Council(s)
(b)	Biodiversity	OEH and Relevant Council(s)
(c)	Air quality	N/A

	Required CEMP sub-plan	Relevant government agencies to be consulted for each CEMP sub-plan
(d)	Soil and Water	DPI Water, Relevant Council(s), OEH, SES, NSW Fire and Rescue
(e)	Groundwater	DPI Water
(f)	Blasting	N/A
(g)	Heritage	Heritage Council (or its delegate) and Relevant Council(s)
(h)	Construction Traffic	Relevant Road Authorities, RMS, Sydney Coordination Office

C4 The **CEMP sub-plans** must state how:

- (a) the environmental performance outcomes identified in the EIS as amended by the PIR as modified by these conditions will be achieved;
- (b) the mitigation measures identified in the EIS as amended by the PIR as modified by these conditions will be implemented;
- (c) the relevant terms of this approval will be complied with; and
- (d) issues requiring management during construction, as identified through ongoing environmental risk analysis, will be managed.

C5 The **CEMP sub-plans** must be developed in consultation with relevant government agencies. Where an agency(ies) request(s) is not included, the Proponent must provide the Secretary justification as to why. Details of all information requested by an agency to be included in a **CEMP sub-plan** as a result of consultation and copies of all correspondence from those agencies, must be provided with the relevant **CEMP sub-plan**.

C6 Any of the **CEMP sub-plans** may be submitted to the Secretary along with, or subsequent to, the submission of the **CEMP** but in any event, no later than one (1) month before commencement of construction.

C7 The **CEMP** must be endorsed by the ER and then submitted to the Secretary for approval no later than one (1) month before the commencement of construction or within another timeframe agreed with the Secretary.

C8 Construction must not commence until the **CEMP** and all **CEMP sub-plans** have been approved by the Secretary. The **CEMP** and **CEMP sub-plans**, as approved by the Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been approved by the Secretary.

CONSTRUCTION MONITORING PROGRAMS

C9 The following **Construction Monitoring Programs** must be prepared in consultation with the relevant government agencies identified for each **Construction Monitoring Program** to compare actual performance of construction of the CSSI against predicted performance.

	Required Construction Monitoring Programs	Relevant government agencies to be consulted for each Construction Monitoring Program
(a)	Noise and Vibration	EPA and Relevant Council(s)
(b)	Blasting	EPA and Relevant Council(s)
(c)	Water Quality	EPA and Relevant Council(s)
(d)	Groundwater	DPI Water

C10 Each **Construction Monitoring Program** must provide:

- (a) details of baseline data available;
- (b) details of baseline data to be obtained and when;
- (c) details of all monitoring of the project to be undertaken;
- (d) the parameters of the project to be monitored;
- (e) the frequency of monitoring to be undertaken;
- (f) the location of monitoring;
- (g) the reporting of monitoring results;
- (h) procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and
- (i) any consultation to be undertaken in relation to the monitoring programs.

C11 The **Noise and Vibration and Blast Monitoring Plan** must include provision of real time noise and vibration monitoring data. The real time data must be available to the construction team, Proponent, ER and AA. The Department and EPA must be provided with access to the real time monitoring data.

C12 The **Construction Monitoring Programs** must be developed in consultation with relevant government agencies as identified in Condition C9 of this approval and must include, to the written satisfaction of the Secretary, information requested by an agency to be included in a **Construction Monitoring Programs** during such consultation. Details of all information requested by an agency including copies of all correspondence from those agencies, must be provided with the relevant **Construction Monitoring Program**.

C13 The **Construction Monitoring Programs** must be endorsed by the ER and then submitted to the Secretary for approval at least one (1) month before commencement of construction or within another timeframe agreed with the Secretary.

C14 Construction must not commence until the Secretary has approved all of the required **Construction Monitoring Programs**, and all relevant baseline data for the specific construction activity has been collected.

C15 The **Construction Monitoring Programs**, as approved by the Secretary including any minor amendments approved by the ER, must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Secretary, whichever is the greater.

C16 The results of the **Construction Monitoring Programs** must be submitted to the Secretary for information, and relevant regulatory agencies, for information in the form of a **Construction Monitoring Report** at the frequency identified in the relevant **Construction Monitoring Program**.

C17 Where a relevant **CEMP sub-plan** exists, the relevant **Construction Monitoring Program** may be incorporated into that **CEMP sub-plan**.

PART D

OPERATIONAL ENVIRONMENTAL MANAGEMENT

OPERATIONAL ENVIRONMENTAL MANAGEMENT

- D1 An **Operational Management Plan (OEMP)** must be prepared in accordance with the Department's *Guideline for the Preparation of Environmental Management Plans* to detail how the performance outcomes, commitments and mitigation measures made and identified in the EIS as amended by the PIR as modified by these conditions will be implemented and achieved during operation. This condition does not apply if Condition D2 of this approval applies.
- D2 An **OEMP** is not required for the CSSI if the Proponent has an **Environmental Management System (EMS)** or equivalent as agreed with the Secretary, and can demonstrate, to the written satisfaction of the Secretary, that through the **EMS**:
- (a) the performance outcomes, commitments and mitigation measures, made and identified in the EIS as modified by the PIR and these conditions, and requirements specified in the conditions of this approval can be achieved;
 - (b) issues identified through ongoing risk analysis can be managed; and
 - (c) procedures are in place for rectifying any non-compliance with this approval identified during compliance auditing, incident management or any other time during operation.

- D3 Where an **OEMP** is required, the Proponent must include the following **OEMP sub-plans** in the **OEMP**:

	Required OEMP sub-plan	Relevant government agencies to be consulted for each OEMP sub-plan
(a)	Noise and vibration	EPA
(b)	Groundwater Management	EPA and DPI Water
(c)	Traffic and Transport	Sydney Coordination Office, Relevant Road Authority and non-private transport operators
(d)	Flooding and hydrology (including emergency response planning)	Directly affected landowners, OEH, DPI Water, SES and Relevant Council(s)

- D4 Each of the **OEMP sub-plans** must include the requirements set out in Condition D2 (a), (b) and (c).
- D5 The **OEMP sub-plans** must be developed in consultation with relevant government agencies as identified in Condition D3. Where an agency(ies) request(s) is not included in an **OEMP sub-plan**, the Proponent must provide the Secretary justification as to why. Details of all information requested by an agency to be included in an **OEMP sub-plan** as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant **OEMP sub-plan**.
- D6 The **OEMP sub-plans** must be submitted to the Secretary as part of the **OEMP**.
- D7 The **OEMP** or **EMS** or equivalent as agreed with the Secretary, must be submitted to the Secretary for information no later than one (1) month before the commencement of operation unless another timeframe is agreed with the Secretary.

- D8 The **OEMP** or **EMS** or equivalent as agreed with the Secretary, as submitted to the Secretary and amended from time to time, must be implemented for the duration of operation and the **OEMP** or **EMS** must be made publicly available before the commencement of operation.

OPERATIONAL PERFORMANCE

Track Attenuation and Operational Ground-borne Noise Review

- D9 The Proponent must nominate, for the Secretary's approval, a ground-borne noise specialist who is independent of the design and construction personnel, to review:
- the appropriateness of the proposed design (noise) objectives for ground-borne noise sensitive receivers; and
 - predictions for operational ground-borne noise impacts, before the installation of track, in order to confirm the appropriate track attenuation required to meet the design (noise) objectives identified in (a).

The ground borne noise specialist must be submitted for the Secretary's approval before the review commences and the review must be submitted to the Secretary at least one month before the installation of track.

Urban Design and Landscaping

- D10 The ongoing maintenance and operation costs of urban design and landscaping items and works implemented as part of this approval must remain the Proponent's responsibility until satisfactory arrangements have been put in place for the transfer of the asset to the relevant entity. Before the transfer of assets, the Proponent will maintain items and works to the design standards established in the **Station Design and Precinct Plan** required by Condition E101.

Operational Performance Audit

- D11 Within 15 months of the completion of construction, or any other timeframe as agreed with the Secretary, the Proponent must commission an independent, qualified person or team to undertake an Operational Performance Audit of the CSSI. The independent person or team must be approved by the Secretary before commencement of the Audit. The Operational Performance Audit Report must be submitted to the Secretary within one month of the completion of the Audit or other timeframe agreed with the Secretary. The Audit must:
- assess compliance with the requirement of this approval;
 - assess the environmental performance of the CSSI against the predictions made and conclusions drawn in the EIS as amended by the PIR; and
 - review the effectiveness of the environmental management of the CSSI, including any environmental impact mitigation.

OPERATIONAL MONITORING

Traffic

- D12 Traffic on local roads around each station must be monitored 12 months before the CSSI commences operation and for a period of no less than 12 months after commencement of operation. If monitoring indicates unacceptable traffic intrusion on local roads/streets as a result of operation of the CSSI beyond those that could reasonably be predicted in the EIS and/or Interchange Access Plan(s) in Condition E92, appropriate traffic management measures to mitigate the monitored impacts must be implemented following consultation with the Sydney Coordination Office and Relevant Road Authorities.

Noise and Vibration

- D13 The Proponent must prepare an **Operational Noise and Vibration Monitoring Program** to confirm that the operational noise and vibration levels meet the CSSI proposed design objectives as determined in the **Track Attenuation and Operational Ground-borne Noise Review** in Condition D9 following the commencement of operations.
- D14 Should the operational noise and vibration levels exceed the CSSI design objectives, the Proponent is to prepare a report, outlining actions that will be taken so that the CSSI meets the design objectives in the future. The report is to be prepared within three (3) months following the identification of the exceedance and be forwarded to the Secretary for information. All recommendations in the report must be implemented within three (3) months of the date of the report or as agreed with the Secretary.

PART E

KEY ISSUE CONDITIONS

SUBURBAN AND INTER-URBAN RAIL

- E1 The Proponent must manage operational and asset interface risks to ensure the successful operational integration of the CSSI and the heavy railway network and the protection of physical and operational Sydney Trains' assets and services during construction and operation.

UTILITIES AND SERVICES

- E2 Utilities, services and other infrastructure potentially affected by construction must be identified before works affecting the item, to determine requirements for access to, diversion protection, and/or support. The relevant owner and/or provider of services must be consulted to make suitable arrangements for access to diversion, protection, and/or support of the affected infrastructure as required. The Proponent must ensure that disruption to any service is minimised and be responsible for advising local residents and businesses affected before any planned disruption of service.
- E3 All excavations adjacent to RMS road infrastructure must meet the requirements of RMS Technical Direction (GTD 2012/0001) *Excavation adjacent to RMS infrastructure*.

MATERIALS STORAGE

- E4 Dangerous goods, as defined by the *Australian Dangerous Goods Code*, must be stored and handled strictly in accordance with:
- all relevant Australian Standards;
 - for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management* technical bulletin (EPA, 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.

AIR QUALITY

- E5 In addition to the performance outcomes, commitments and mitigation measures specified in PIR, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the construction and operation of the CSSI.

TREES

- E6 The CSSI must be designed to retain as many trees as possible and provide replacement trees such that there a net increase in the number of trees. The Proponent must commission an independent, experienced and suitably qualified arborist to prepare a comprehensive **Tree Report** before removing any trees as detailed in the EIS, as amended by the PIR and the terms of this approval. The **Tree Report** must include:
- a visual assessment to note the condition of the tree(s) with inputs from the Design Review Panel, landscape architect, and construction team;

- (b) consideration of all options to avoid tree removal, including relocation of services, redesign or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and
- (c) measures to avoid tree removal, minimise damage to, and ensure the health and stability of those trees to be retained and protected. This includes details of any proposed canopy or root pruning, root protection zone, excavation, site controls on waste disposal, vehicular access, materials storage and protection of public utilities.

In the event that tree removal cannot be avoided, then replacement trees are to be planted within, or in close proximity to the CSSI or other location in consultation with the Relevant Councils and agreed by the Secretary. Replacement trees will be no smaller than a 75 litre pot size. A copy of the Tree Report must be submitted to the Secretary before the removal, damage and/or pruning of any trees, including those affected by the site establishment works. All recommendations of the Tree Report must be implemented by the Proponent, unless otherwise agreed by the Secretary.

The Tree Report may be prepared for the entire CSSI or separate reports may be prepared for individual areas where tree removal and/or pruning is proposed.

- E7 The large fig tree at the eastern end of Blues Point Reserve (approximate coordinates latitude:33.848764 and longitude: 151.204568) must be retained. Any proposal to prune either the canopy or roots of the tree must be submitted to the Secretary for approval and accompanied by an assessment of the potential impact to its long term viability by a suitably qualified arborist, consistent with Condition E6.

FLOODING

- E8 Measures identified in Chapter 11 of the PIR to maintain or improve flood characteristics must be incorporated into the detailed design of the CSSI. The incorporation of these measures into the detailed design, including modelling, must be reviewed and endorsed by a suitably qualified and experienced person in consultation with directly affected landowners and businesses, DPI Water, OEH, NSW State Emergency Service (SES) and Relevant Councils.
- E9 Flood information including flood reports, models and geographic information system outputs, and work as executed information from a registered surveyor certifying finished ground levels and the dimensions and finished levels of all structures within the flood prone land, must be provided to the relevant Councils, OEH and the SES. The Relevant Councils, OEH and the SES must be notified in writing that the information is available no later than one month following the completion of construction and be provided with that information. Information requested by the relevant Council, OEH or the SES must be provided no later than six months following the completion of construction or within another timeframe agreed with the Relevant Council(s), OEH and the SES.

HERITAGE

Non-Aboriginal Heritage

- E10 The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Condition A1.
- E11 The Proponent must design and construct the Sydney Yard Access Bridge so as to minimise its impact on the heritage value of Mortuary Station. The design must address the design objectives and principles identified in section 2.5 of the PIR.
- E12 Bus shelters to be temporarily removed at Victoria Cross and Blues Point must be reinstated prior to operation, in consultation with North Sydney Council.

Heritage Archival and Salvage

E13 The Proponent must prepare a **Heritage Archival Recording Report**, including photographic recording of the heritage items identified in documents referred to in Condition A1.

Archival recording must include but not be limited to the following heritage items:

- (a) any component of the Blues Point Waterfront Group and the McMahons Point South heritage conservation area to be directly affected or altered, including vegetation and significant landscape features;
- (b) Hickson Road wall in the vicinity of proposed ventilation risers and skylights for Barangaroo Station or any other project elements to be located in front of the Hickson Road wall;
- (c) Martin Place, between Elizabeth and Castlereagh Streets, Sydney;
- (d) the Rolling Stock Officers' Garden, Rolling Stock Officers' Building and Cleaners' Amenities Building in Sydney Yard and any other component of the Sydney Terminal and Central Railway Stations group to be removed or altered; and
- (e) views from Mortuary Station before construction of the Sydney Yard Access Bridge.

The archival recording must be undertaken by a suitably qualified heritage specialist and prepared in accordance with NSW Heritage Office's *How to Prepare Archival Records of Heritage Items* (1998) and *Photographic Recording of Heritage Items Using Film or Digital Capture* (2006).

Within two (2) years of completing the archival recording, or any other later time agreed by the Secretary, the Proponent must submit the **Heritage Archival Recording Report** to the Department, the OEH, Heritage Council of NSW, Relevant Council(s), relevant local libraries and local historical societies in the respective local government area(s).

E14 In addition to the archival recording as required by Condition E13, the Proponent must, prior to demolition, undertake external photography of all buildings and structures to be demolished, in consultation with and to the standards of the relevant Council. The recordings must be made available to the relevant Council.

E15 The Proponent must salvage items of heritage value from heritage listed buildings and structures to be demolished before demolition, and assess options for its sympathetic reuse (including integrated heritage displays) on the project or other options for repository, reuse and display. Suitable repository locations must be established in consultation with Relevant Council(s). Any State listed items or elements suitable for salvage must be determined in consultation with the Heritage Division of the OEH.

E16 The Proponent must prepare a **Salvage Report**, including photographic recording of the heritage items identified for salvage in documents referred to in Condition A1. The **Salvage Report** must include:

- (a) the internal heritage fabric removed from within the curtilage of Mowbray House, Chatswood;
- (b) the interior, exterior and setting of the shop at 187 Miller Street, North Sydney;
- (c) the fabric and setting of the North Sydney bus shelters;
- (d) the interior, exterior and setting of the 'Flat Building' at 7 Elizabeth Street, Sydney;
- (e) the heritage fabric of the existing Martin Place Station affected by the project; and
- (f) directly impacted parts of the Congregational Church at Waterloo.

Archaeology

E17 The **Archaeological Assessment Research Design Report (AARD)** in the PIR must be implemented. Final Archaeological Method Statements must be prepared in consultation with the Heritage Council of NSW (or its delegate) before commencement of archaeological excavation works. The final methodology must:

- (a) provide for the detailed analysis of any heritage items discovered during the investigations;
- (b) include detailed site specific archaeological management and artefact management strategies;
- (c) include cored soil samples for soil and pollen for the Pitt Street site within the Tank Stream Valley; and
- (d) provide for a sieving strategy.

E18 Before excavation of archaeological management sites, the Proponent must nominate a suitably qualified Excavation Director who complies with the Heritage Council of NSW's *Criteria for Assessment of Excavation Directors* (July 2011) to oversee and advise on matters associated with historic archaeology and advise the Department and OEH.

Where archaeological excavation is required, the Excavation Director must be present to oversee excavation and advise on archaeological issues. The Excavation Director must be given the authority to advise on the duration and extent of oversight required as informed by the provisions of the approved AARD and Excavation Methodology.

A final archaeological report must be submitted to the Heritage Council of NSW within two (2) years of the completion of archaeological excavation on the project. The report must include information on the entire historical archaeological program relating to the CSSI.

E19 An **Unexpected Heritage Finds Procedure** must be prepared:

- (a) to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or OEH; and
- (b) by a suitably qualified and experienced heritage specialist.

The procedure must be included in the **AARD** and must be implemented for the life of the project.

E20 In the event that a Relic is discovered, relevant construction must cease in the affected area and the **Excavation Director** must be notified and assess the finds, identify their significance level and provide mitigation advice according to the significance level and the impact proposed. Depending on the significance of the find, the Excavation Director must attend the site.

The Secretary must be notified at the same time as the Heritage Council of NSW (or its delegate) of any Relic found.

An **Archaeological Relic Management Plan** specific to the Relic must be prepared in consultation with the Heritage Council of NSW (or its delegate) to outline measures to be implemented to avoid and/or minimise harm to and/or salvage the Relic.

Construction in the vicinity of the discovery must not recommence until the requirements of the ARMP have been implemented, in consultation with the **Excavation Director**. The Proponent must notify the Secretary in writing of the outcome of consultation with the Heritage Council of NSW.

Heritage Interpretation

E21 The Proponent must prepare a **Heritage Interpretation Plan** which identifies and interprets the key Aboriginal and Non-Aboriginal heritage values and stories of heritage items and heritage conservation areas impacted by the CSSI. The **Heritage Interpretation Plan** must inform the **Station Design and Precinct Plan** referred to in Condition E101. The **Heritage Interpretation Plan** must be prepared in accordance with the *NSW Heritage Manual*, the NSW Heritage Office's *Interpreting Heritage Places and Items: Guidelines* (August 2005), and the NSW Heritage Council's *Heritage Interpretation Policy* and include, but not be limited to:

- (a) a discussion of key interpretive themes, stories and messages proposed to interpret the history and significance of the affected heritage items and sections of heritage conservation areas including, but not limited to the Central Station and Martin Place Station Precincts;
- (b) identification and confirmation of interpretive initiatives implemented to mitigate impacts to archaeological Relics, heritage items and conservation areas affected by the CSSI including:
 - i. use of interpretative hoardings during construction
 - ii. community open days
 - iii. community updates
 - iv. station and precinct design; and
- (c) Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken.

The **Heritage Interpretation Plan** must be prepared in consultation with the Heritage Council of NSW (or its delegate), Relevant Councils and Registered Aboriginal Parties, and must be submitted to the Secretary before commencement of construction.

E22 The design and construction of the Martin Place Railway Station must minimise the removal of identified heritage fabric. Any items removed must be:

- (a) salvaged and opportunities for reuse as part of the station maximised in accordance with Condition E15; and
- (b) documented as required by the **Heritage Interpretation Plan**.

Aboriginal Heritage

E23 The Proponent must take all reasonable steps so as not to harm, modify or otherwise impact any Aboriginal object associated with the CSSI except as authorised by this approval.

E24 Before excavation, the Proponent must implement the **Aboriginal Cultural Heritage Assessment** prepared for the CSSI and included in the PIR. Excavation and/or salvage must be undertaken by a qualified archaeologist in consultation with the Registered Aboriginal Parties for the CSSI.

E25 Where previously unidentified Aboriginal objects are discovered during construction of the CSSI, construction must stop in the vicinity of the affected area and a suitably qualified and experienced Aboriginal heritage expert must be contacted to provide specialist heritage advice, before works recommence. The measures to consider and manage this process must be specified in the **Heritage Management sub-plan** required by Condition C3 and, where relevant, include registration in the OEH's Aboriginal Heritage Information Management System (AHIMS).

Human Remains

- E26 This approval does not allow the Proponent to harm, modify, or otherwise impact human remains uncovered during the construction and operation of the CSSI, except in accordance with the **Exhumation Management Plan** (Condition E27).
- E27 An **Exhumation Management Plan** must be prepared to guide the relocation of recovered human remains. The **Exhumation Management Plan** must be prepared:
- (a) in consultation with, and meeting the requirements of, the OEH and NSW Health; and
 - (b) in accordance with the *Guidelines for Management of Human Skeletal Remains* (NSW Heritage Office, 1998b) and *NSW Health Policy Directive – Exhumation of human remains* (December, 2013), and other relevant guidelines and standards prepared by the Heritage Council of NSW or OEH.

The **Exhumation Management Plan** must be provided to the Secretary for information before the commencement of excavation works.

Note: Human remains that are found unexpectedly during works are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.

NOISE AND VIBRATION

Vibration

- E28 The Proponent must ensure that vibration from construction activities does not exceed the vibration limits set out in the British Standard BS 7385-2:1993 *Evaluation and measurement for vibration in buildings. Guide to damage levels from groundborne vibration*
- E29 Owners of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before construction that generates vibration commences in the vicinity of those properties. These properties must be considered in the **Noise and Vibration management sub plan** required by Condition C3.
- E30 The Proponent must conduct vibration testing before and during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In the event that the vibration testing and monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures.
- E31 The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring of heritage-listed structures.

Construction Noise and Vibration Strategy

- E32 The Proponent must review the *Sydney Metro City and Southwest Construction Noise and Vibration Strategy* in the PIR during detailed construction planning to consider scale and duration of impacts, the requirements of this approval and all measures to limit construction noise impacts to sensitive receivers including:
- (a) at property or architectural treatment;
 - (b) relocation; and
 - (c) other forms of mitigation where impacts are predicted to be long term and significant.

The revised *Sydney Metro City and Southwest Construction Noise and Vibration Strategy* must be submitted to the Secretary for approval at least one (1) month before construction commences.

- E33 Construction Noise and Vibration Impact Statements must be prepared for each construction site before construction noise and vibration impacts commence and include specific mitigation measures identified through consultation with affected sensitive receivers.
- E34 Noise generating works in the vicinity of potentially-affected community, religious, educational institutions and noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) must not be timetabled within sensitive periods, unless other reasonable arrangements to the affected institutions are made at no cost to the affected institution or as otherwise approved by the Secretary.
- E35 The Proponent must review alternative methods to rock hammering and blasting for excavation as part of the detailed construction planning with a view to adopting methods that minimise impacts on sensitive receivers. Construction Noise and Vibration Impact Statements must be updated for each location or activity to adopt the least impact alternative in any given location unless it can be demonstrated, to the satisfaction of the AA, why it should not be adopted.

Standard Construction Hours

- E36 Construction, except as allowed by Condition E48 (excluding cut and cover tunnelling), must only be undertaken during the following standard construction 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.

Respite for Receivers

- E37 The Proponent must identify all receivers at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Central likely to experience internal noise levels greater than $L_{eq(15\ minute)}$ 60 dB(A) inclusive of a 5 dB penalty, if rock breaking or any other annoying activity likely to result in regenerated (ground-borne) noise or a perceptible level of vibration is planned (including works associated with utility adjustments), between 7am – 8pm.
- E38 The Proponent must consult with all receivers identified in accordance with Condition E37 with the objective of determining appropriate hours of respite so that construction noise (including ground-borne noise), does not exceed internal noise levels of:
 - (a) $L_{eq(15\ minute)}$ 60 dB(A) inclusive of a 5 dB penalty if rock breaking or any other annoying activity likely to result in ground-borne noise or a perceptible level of vibration is planned between 7am – 8pm for more than 50 percent of the time; and
 - (b) $L_{eq(15\ minute)}$ 55 dB(A) inclusive of a 5 dB penalty if rock breaking or any other annoying activity likely to result in ground-borne noise or a perceptible level of vibration is planned between 7am – 8pm for more than 25 percent of the time,

unless an agreement is reached with those receivers. This condition does not apply to noise associated with the cutting surface of a TBM as it passes under receivers.

Note *This condition requires that noise levels be less than $L_{eq(15\ minute)}$ 60 dB(A) for at least 6.5 hours between 7am and 8pm, of which at least 3.25 hours must be below $L_{eq(15\ minute)}$ 55 dB(A). Noise equal to or above $L_{eq(15\ minutes)}$ 60 dB(A) is allowed for the remaining 6.5 hours between 7am and 8pm.*

- E39 The Proponent must consult with proponents of other construction works in the vicinity of the CSSI and take reasonable steps to coordinate works to minimise cumulative impacts of noise and vibration and maximise respite for affected sensitive receivers.
- E40 The Proponent must ensure all works (including utility works associated with the CSSI where undertaken by third parties) are coordinated to provide the required respite periods identified in accordance with the terms of this approval.

Mitigation – Non Residential Zones

- E41 The Proponent must ensure that residential receivers, located in non-residential zones, likely to experience an internal noise level exceeding $L_{eq(15\text{ minute})}$ 60 dB between 8pm and 9pm or $L_{eq(15\text{ minute})}$ 45 dB between 9pm and 7am (inclusive of a 5 dB penalty if rock breaking or any other annoying activity likely to result in regenerated noise, or a perceptible level of vibration is planned (including works associated with utility adjustments)) must be offered additional mitigation in accordance with the *Sydney Metro City and South West Noise and Vibration Strategy* referenced in Condition E32.

Mitigation – Residential receivers in residential zones

- E42 The Proponent must ensure that residential receivers in residential zones likely to experience an internal noise level of $L_{eq(15\text{ minute})}$ 45 dB or greater between 8pm and 7am (inclusive of a 5 dB penalty if rock breaking or any other annoying activity likely to result in ground-borne noise, or a perceptible level of vibration is planned (including works associated with utility adjustments)) must be offered additional mitigation in accordance with the *Sydney Metro City and South West Noise and Vibration Strategy* referenced in Condition E32.

Workplace health and safety for nearby workers

- E43 At no time can noise generated by construction exceed the National Standard for exposure to noise in the occupational environment of an eight-hour equivalent continuous A-weighted sound pressure level of $L_{Aeq,8h}$, of 85dB(A) for any employee working at a location near the CSSI.

Variation to Standard Construction Hours

- E44 Notwithstanding Condition E36 construction associated with the CSSI may be undertaken outside the hours specified under those conditions in the following circumstances:
- for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or
 - where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or
 - where different construction hours are permitted or required under an EPL in force in respect of the construction; or
 - construction that causes $L_{eq(15\text{ minute})}$ noise levels:
 - no more than 5 dB(A) above the rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009), and
 - no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses, and
 - continuous or impulsive vibration values, measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006), and

- iv. intermittent vibration values measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006); or
 - (e) where a negotiated agreement has been reached with a substantial majority of sensitive receivers who are within the vicinity of and may be potentially affected by the particular construction, and the noise management levels and/or limits for ground-borne noise and vibration (human comfort) cannot be achieved. All agreements must be in writing and a copy forwarded to the Secretary at least one (1) week before the works commencing; or
 - (f) construction approved through an **Out of Hours Work Protocol** referred to in Condition E47, provided the relevant council, local residents and other affected stakeholders and sensitive receivers are informed of the timing and duration at least five (5) days and no more than 14 days before the commencement of the works.
- E45 On becoming aware of the need for emergency construction in accordance with Condition E44(b), the Proponent must notify the AA, the ER and the EPA (if an EPL applies) of the need for those activities or work. The Proponent must also use best endeavours to notify all affected sensitive receivers of the likely impact and duration of those works.
- E46 Notwithstanding Conditions E44 and E48, rock breaking and other particularly annoying activities are not permitted outside of standard construction hours, except at Central, unless the noise management level derived from the *Interim Construction Noise Guideline* can be achieved at sensitive receivers.

Out of Hours Work Protocol

- E47 An **Out of Hours Work Protocol** for the assessment, management and approval of work outside of standard construction hours, as defined in Condition E36 of this approval, must be prepared in consultation with the EPA and submitted to the Secretary for approval before construction commences for works not subject to an EPL. The protocol must include:
- (a) the identification of low and high risk construction activities;
 - (b) a risk assessment process in which the AA reviews all proposed out of hours activities and identifies their risk levels;
 - (c) a process for the endorsement of out of hours activities by the AA and approval by the ER for construction activities deemed to be of:
 - i. low environmental risk; or
 - ii. high risk where all construction works cease by 9pm.

All other high risk out of hours construction must be submitted to the Secretary for approval unless otherwise approved through an EPL.

The protocol must detail standard assessment, mitigation and notification requirements for high and low risk out of hours works, and detail a standard protocol for referring applications to the Secretary.

24 Hour Construction

- E48 Notwithstanding Condition E36 of this approval and subject to Condition E47, the following activities may be undertaken 24 hours per day, seven (7) days per week:
- (a) tunnelling and associated support activities (excluding cut and cover tunnelling);
 - (b) excavation within an acoustic enclosure;
 - (c) excavation at Central without an acoustic enclosure;
 - (d) station and tunnel fit out; and
 - (e) haulage and delivery of spoil and materials.

E49 All acoustic sheds must be erected as soon as site establishment works at the facilities are completed and before undertaking any works or activities which are required to be conducted within the sheds.

Blasting Management

E50 A **Blast Management Strategy** must be prepared and include:

- (a) sequencing and review of trial blasting to inform blasting;
- (b) regularity of blasting;
- (c) intensity of blasting;
- (d) periods of relief; and
- (e) blasting program.

E51 The **Blast Management Strategy** must be endorsed by a suitably qualified and experienced person and reviewed by an independent specialist.

E52 The **Blast Management Strategy** must be prepared so that all blasting and associated activities are carried out so as not to generate unacceptable noise and vibration impacts or pose a significant risk to sensitive receivers. The **Blast Management Strategy** must be prepared in accordance with relevant guidelines including the principles outlined in *Hazardous Industry Planning Advisory Paper No 6: Hazard Analysis* (Department of Planning, January 2011) and *Assessment Guideline: Multi-Level Risk Assessment* (Department of Planning and Infrastructure, May 2011) for the handling and storage of hazardous materials and include:

- (a) details of blasting to be performed, including location, timing, method and justification of the need to blast;
- (b) identification of all potentially affected noise and vibration sensitive sites including heritage buildings and utilities;
- (c) establishment of appropriate criteria for blast overpressure and ground vibration levels at each category of noise sensitive site;
- (d) details of the storage and handling arrangements for explosive materials and the proposed transport of those materials to the construction site;
- (e) identification of hazardous situations that may arise from the storage and handling of explosives, the blasting process and recovery of the blast site after detonation of the explosives;
- (f) determination of potential noise and vibration and risk impacts from blasting and appropriate best management practices; and
- (g) community consultation procedures.

E53 The **Blast Management Strategy** must be submitted to the Secretary one (1) month before blasting commences, or as agreed by the Secretary. The **Blast Management Strategy** as submitted to the Secretary, must be implemented for all blasting activities.

E54 Blasting associated with the CSSI must not exceed the following criteria, measured at the most affected residence or other sensitive receiver as specified below:

- (a) airblast overpressure ($\text{dB}_{\text{Lin Peak}}$) 125 dBL; and
- (b) vibration (PPV): 25mm/s generally or 7.5mm/s for heritage structures.

E55 Blasting must be limited to a single detonation in any one day, and a maximum of six per week, at each station location, or any other frequency agreed by the Secretary.

Note: for the purpose of this Condition, a single detonation may involve a number of individual blasts fired in quick succession in a discrete area.

- E56 Blasting associated with the project must be undertaken at a time to have the least impact on the nearby sensitive receivers determined in consultation with those receivers. All sensitive receivers affected by any blast must be advised fortnightly of the proposed blasting schedule. The Secretary must also be advised of the advance blasting schedule for any location.

SOCIO-ECONOMIC, LAND USE AND PROPERTY

Blues Point

- E57 Works at the Blues Point Temporary site must be avoided during key harbour viewing events (with the key harbour viewing events determined in consultation with Events NSW, North Sydney and City of Sydney council(s)).

Building Condition Survey

- E58 The CSSI must be designed and constructed with the objective of minimising impacts to, and interference with, third party property and infrastructure, and that such infrastructure and property is protected during construction.
- E59 Before commencement of construction, all property owners of buildings identified as being at risk of damage must be offered a building condition survey. Where an offer is accepted a structural engineer must undertake the survey. The results of the surveys must be documented in a **Building Condition Survey Report** for each building surveyed. Copies of **Building Condition Survey Reports** must be provided to the owners of the buildings surveyed, and if agreed by the owner, the Relevant Council within three (3) weeks of completing the Survey Report and no later than one (1) month before the commencement of construction.
- E60 Within three (3) months of the completion of construction, all property owners of buildings for which a building condition survey was carried out in accordance with Condition E59 must be offered a second building condition survey. Where an offer is accepted, building condition surveys must be undertaken by a structural engineer. The results of the surveys must be documented in a **Building Condition Survey Report** for each building surveyed. Copies of **Building Condition Survey Reports** must be provided to the owners of the buildings surveyed within one (1) month of the survey being completed.
- E61 The Proponent must install appropriate equipment to monitor areas in proximity to construction sites and the tunnel route during construction and for a period of not less than six (6) months after settlement has stabilised with particular reference to risk areas identified in the building and infrastructure condition surveys required by conditions E59 and E60 and/or the geotechnical analysis as required. If monitoring during construction indicates exceedance of the criteria, then all construction affecting settlement must cease immediately and must not resume until fully rectified or a revised method of construction is established that will ensure protection of affected buildings.
- E62 The Proponent must establish an **Independent Property Impact Assessment Panel** before relevant works commencing. The Secretary must be informed of the Panel Members and the Panel must comprise geotechnical and engineering experts independent of the design and construction team. The Panel will be responsible for independently verifying surveys undertaken under conditions E59 and E60, the resolution of property damage disputes and the establishment of ongoing settlement monitoring requirements.

Either the affected property owner or the Proponent may refer unresolved disputes arising from potential and/or actual property impacts to the Panel for resolution. All costs incurred in establishing and implementing the Panel must be borne by the Proponent.

- E63 The Proponent must monitor settlement for any period beyond the minimum timeframe requirements of condition E61 if directed so by the Independent Property Impact Assessment Panel following its review of the monitoring data from the period not less than six (6) months after settlement has stabilised, consistent with Condition E61. The results of the monitoring must be made available to the Secretary on request.

Business Management Plan

- E64 The Proponent must prepare and implement a **Business Management Plan** to minimise impact on businesses adjacent to major construction sites during construction of the CSSI. The Plan must be prepared before construction and must include but not necessarily be limited to:
- (a) measures to address amenity, vehicular and pedestrian access during business hours and visibility of the business appropriate to its reliance on such, and other reasonable matters raised in consultation with affected business;
 - (b) a Business Consultation forum linked to the Community Communication Strategy required by Condition B1;
 - (c) Business Management Strategies for each construction sites (and/or activity), identifying affected businesses and associated management strategies, including the employment of place managers and specific measures to be put in place to assist small business owners adversely impacted by the construction of the CSSI;
 - (d) a Small Business Owners' Support Program to provide assistance to small business owners adversely impacted by construction of the CSSI. The Program must be administered by a Retail Advisory/Support Panel established by the Proponent. The Program must have appropriate specialist representatives and must report to the Proponent;
 - (e) a monitoring program to assess the effectiveness of the measures including the nomination of performance parameters and criteria against which effectiveness of the measures will be measured; and
 - (f) provision for reporting of monitoring results to the Secretary, as part of the **Compliance Tracking Program** required in Condition A28.

SOILS

- E65 All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise any water pollution. When implementing such controls, any relevant guidance in the *Managing Urban Stormwater Series* must be considered.

Contaminated sites

- E66 A **Site Contamination Report**, documenting the outcomes of Phase 1 and Phase 2 contamination assessments of land upon which the CSSI is to be carried out, that is suspected to be, or known to be, contaminated must be prepared by a suitably qualified and experienced person in accordance with guidelines made or approved under the *Contaminated Land Management Act 1997* (NSW).
- E67 If a **Site Contamination Report** prepared under Condition E66 finds such land contains contamination, a site audit is required to determine the suitability of a site for a specified use. If a site audit is required, a **Site Audit Statement** and **Site Audit Report** must be prepared by a NSW EPA Accredited Site Auditor. Contaminated land must not be used for the purpose approved under the terms of this approval until a **Site Audit Statement** is obtained that declares the land is suitable for that purpose and any conditions on the **Site Audit Statement** have been complied with.

- E68 A copy of the **Site Audit Statement** and **Site Audit Report** must be submitted to the Secretary and Council for information no later than one (1) month before the commencement of operation.
- E69 An **Unexpected Contaminated Land and Asbestos Finds Procedure** must be prepared and must be followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during construction.
- E70 The **Unexpected Contaminated Land and Asbestos Finds Procedure** must be implemented throughout construction.

SUSTAINABILITY

- E71 The proponent must seek to achieve a best practice level of performance for the CSSI using market leading sustainability ratings tools (including a minimum 'Design' and 'As built' rating score of 65 using the Infrastructure Sustainability Council of Australia infrastructure rating tool, or an equivalent level of performance using a demonstrated equivalent rating tool).
- E72 The Proponent must prepare a **Sustainability Strategy** to be submitted to the Secretary within six (6) months of the date of this approval, or within another timeframe agreed with the Secretary, which must be implemented throughout design, construction and operation of the CSSI. The Sustainability Strategy must include:
 - (a) details of the sustainability objectives and targets for the design, delivery and operation of the CSSI;
 - (b) details of the sustainability initiatives which will be investigated and / or implemented; and
 - (c) a description of how the strategy will be implemented for the CSSI.
- E73 Opportunities to reduce operational greenhouse gas emissions must be investigated during detailed design. The sustainability initiatives identified must be implemented, reviewed and updated regularly throughout design development and construction, and annually during operation.
- E74 The Proponent must fully offset the greenhouse gas emissions associated with consumption of electricity during operation of the CSSI.

TRAFFIC, TRANSPORT AND PEDESTRIAN ACCESS

- E75 The CSSI must be designed, constructed and operated with the objective of integrating with existing and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and, accessibility of the networks, and facilitate an improved level of service in relation to permanent and operational changes. Detailed design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken:
 - (a) in consultation with, and to the reasonable requirements of the Traffic and Transport Liaison Group(s) established under Condition E77;
 - (b) in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements;
 - (c) to minimise and manage local area traffic impacts;
 - (d) to ensure access is maintained to property and infrastructure; and
 - (e) to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards, and RMS (RTA) requirements.

Copies of civil, structural and traffic signal design plans shall be submitted to the Relevant Road Authority for consultation before the commencement of the relevant works.

- E76 Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the Traffic and Transport Liaison Group before the completion and use of the subject infrastructure and must be made available to the Secretary upon request.

Traffic and Transport Liaison Group

- E77 The Proponent must establish a Traffic and Transport Liaison Group(s) (TTLGs) to inform traffic and transport management measures during construction and operation of the CSSI. Management measures must be coordinated with and approved by the RMS following endorsement by the Sydney Coordination Office and consultation with the Relevant Roads Authority.

The TTLG must comprise representatives from the Relevant Road Authority(ies) (including the RMS, relevant Councils, and the Barangaroo Delivery Authority as appropriate), transport operators (including bus and taxi operators), emergency services and Port Authority of NSW as required. The TTLG must be consulted on to inform the preparation of the Construction Traffic Management Plan(s) and Interchange Access Plan(s).

- E78 The Proponent must undertake supplementary analysis and modelling as required by the TTLG to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations, public including changes to and the management of pedestrian, bicycle and public transport networks transport services, pedestrian and cyclist movements. Revised traffic management measures, must be incorporated into the Construction Traffic Management Plan(s), Interchange Access Plan(s) and Station Design and Precinct Plan(s).

Construction Transport and Access

- E79 The Proponent must consult with the Relevant Road Authority regarding the use of any weight restricted road by heavy vehicles.
- E80 The Proponent must minimise truck movements during peak periods within commercial centres. Peak periods are 7am to 10am and 4pm to 7pm Monday to Friday.
- E81 The Proponent must prepare and implement a Construction Traffic Management Framework (CTMF). The CTMF must be prepared in consultation with TTLG(s) and submitted to the Secretary for approval no later than one (1) month before the commencement of construction (or within any other timeframe agreed with the Secretary). The CTMF will set out the approach to managing issues across the CSSI and include but not be limited to:
- (a) construction site access, including the efficient and safe egress and ingress of vehicles, consistent relevant Austroads, Australian Standards and RMS requirements;
 - (b) the erection and maintenance of hoardings, scaffolds and associated structures on roads;
 - (c) short and long term lane and road closures including those associated with plant, crane and other operations between the road reservation and construction site;
 - (d) cumulative construction vehicle management from surrounding developments;
 - (e) bus stop and associated facilities relocation and service rerouting;
 - (f) short and long term works zones on roads adjacent to the construction site;
 - (g) mail zone and associated facilities relocation;
 - (h) short and long term works within the road reservation;
 - (i) regulatory, advisory and other signage changes and modifications;
 - (j) parking management, including on and off street and remote parking and access;

- (k) heavy vehicle management, the restriction (unless otherwise approved) of heavy vehicles to certain routes and the minimisation of heavy vehicle traffic in peak traffic periods;
 - (l) special event management;
 - (m) the retention and reinstatement of emergency and property access;
 - (n) the retention of user and passenger safety, including pedestrians, cyclists, public transport users, including at stops and related facilities;
 - (o) incident response planning around construction worksites; and
 - (p) monitoring of transport and access related impacts attributable to the CSSI.
- E82 Construction Traffic Management Plans (CTMPs), consistent with the CTMF required in Condition E81, must be prepared for each construction site in consultation with the TTLG(s), and submitted to the RMS for approval following Sydney Coordination Office endorsement before construction commences at the relevant construction site.
- E83 Where construction results in a worsening of the matters identified in Condition E81(a)-(o), the Proponent must review the measures identified in the CTMPs in consultation with the TTLG(s), as relevant. Any changes to the CTMPs must be submitted to the RMS for approval following Sydney Coordination Office endorsement and implemented.
- E84 Notwithstanding the above, the Proponent must investigate opportunities to maximise spoil removal by non-road methods and schedule final track laying as soon as practicable following completion of tunnelling with a view to transporting materials and equipment for station fit-out, systems and commissioning by rail to minimise truck movements in town centres and the Sydney CBD. The findings of the investigation must be reported to the Secretary before commencement and before completion of tunnel spoil generation as relevant. A decision to not adopt spoil haulage or materials delivery by non-road methods must be demonstrated to the satisfaction of the Secretary.
- E85 Heavy vehicle haulage must not use local roads unless no feasible alternatives are available.
- E86 During construction, measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected businesses. Such arrangements must be outlined in the **Business Management Plan** required in Condition E64 and implemented as required. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.
- E87 Permanent road works, including 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 must be included within each relevant CTMP and carried out in consultation with the TTLG before the completion and use of the subject infrastructure and must be made available to the Secretary on request.
- E88 Details of haulage routes and heavy vehicle sizes to transport material to and from any construction site must be specified in the **Construction Traffic Management Plan(s)** and be approved by the RMS following endorsement by Sydney Coordination Office and the Relevant Roads Authority.
- E89 The Proponent must implement traffic and transport management measures with the aid of a truck marshalling and logistics facility located within close proximity to the Sydney and North Sydney CBDs. The facility must be operational in advance of tunnel spoil generation. Details of the facility must be documented in the **Ancillary Facilities Management Plan** required by Condition A16.

Road Dilapidation

- E90 A **Road Dilapidation Report** must be prepared for local roads proposed to be used by heavy vehicles for the purposes of the CSSI before the commencement of use by such vehicles. Copies of the **Road Dilapidation Report** must be provided to the Relevant Council within three (3) weeks of completing the surveys and no later than one (1) month before the use of local roads by heavy vehicles.
- E91 If damage to roads occurs as a result of construction of CSSI, the Proponent must either (at the landowner's discretion):
- compensate the landowner for the damage so caused. The amount of compensation may be agreed with the landowner; or
 - rectify the damage so as to restore the road to at least the condition it was before construction commenced as identified in the Road Dilapidation Report(s).

Interchange Access Plans

- E92 The Proponent must develop an **Interchange Access Plan** for each station to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station. The Interchange Access Plan(s) must consider walking and cycling catchments and take into account:
- station access hierarchy consistent with the transport planning principles defined in the EIS;
 - safe, convenient, efficient and sufficient access to stations and transfer between transport modes (including subterranean connections and the safeguarding of additional entrances in response to land use change and patronage demand);
 - the maintenance or improvement of pedestrian and cyclists level of service within a justified proximity to stations;
 - current transport initiatives and plans;
 - opportunities and constraints presented by existing and proposed transport and access infrastructure and services;
 - patronage changes resulting from land use, population, employment, transport infrastructure and service changes;
 - integration with existing and proposed transport infrastructure and services;
 - pedestrian, cycle, bus, taxi, vehicle and emergency vehicle access and parking infrastructure and service changes;
 - legislative requirements and applicable guidelines;
 - safety audits, including but not limited to a review of traffic facility and cycle changes to ensure compliance with Austroads design criteria;
 - final design, infrastructure, management and service measures and the level of access and service to be achieved for all users; and
 - the contents of the Interchange Operations and Maintenance Plan (IOMP) and operational management provisions for future operational requirements, including maintenance, security and management responsibilities.

The Interchange Access Plan(s) must be prepared in consultation with the TTLG and the Design Review Panel and must be supported by traffic and transport analysis. Where necessary, consultation must also be undertaken with major landholders adjoining station precincts. The Plan(s) must detail a delivery and implementation program which must be provided to and agreed by the Secretary before commencement of permanent aboveground facilities at any station site.

- E93 In developing the Interchange Access Plan(s), the Proponent must consider:
- traffic and accessibility design requirements; and

(b) the Station Design and Precinct Plan(s) required by Condition E101.

- E94 The Proponent must in consultation with the TTLG review the need and opportunities for lift access between Hickson Road and High Street and which meets the objective of increasing the patronage catchment to Barangaroo Station and improved community accessibility. The review must be presented in the Interchange Access Plan and the findings implemented by the Proponent.
- E95 The Proponent must in consultation with the TTLG review the need and opportunities for a pedestrian and cycle bridge across the rail corridor to replace the Nelson Street Bridge. The review must be presented in the Interchange Access Plan(s) and the findings implemented by the Proponent.
- E96 The Interchange Access Plan(s) must be reviewed by a qualified traffic and transport professional(s), independent of the detailed design process for the CSSI, having regard to the requirements of this approval.

Bicycle Infrastructure

- E97 The Proponent must provide adequate bicycle infrastructure at stations that form part of the project, and provide adequate areas for future expansion of that infrastructure.
- E98 The Proponent must undertake an audit of bicycle patronage at stations and end-of-trip facility adequacy 12 and 36 months following commencement of operation of the project to ensure the level of bicycle parking and end-of-trip facilities available are adequate in terms of both quantity and quality. The audit must be undertaken with the Relevant Council(s), RMS, Bicycle NSW and relevant local bike user groups.

URBAN DESIGN AND VISUAL AMENITY

Visual Amenity

- E99 The CSSI must be constructed in a manner that minimises visual impacts of construction sites, including, providing temporary landscaping where appropriate to soften views of the construction sites, minimising light spill, and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located.

Design Review Panel

- E100 The Proponent must establish a Design Review Panel (DRP) to refine design objectives for place making, public realm and urban and heritage integration applicable to the length of the project and provide advice on the application of the objectives to key design elements in relation to place making, architecture, heritage, urban and landscape design and artistic aspects of the CSSI.

The DRP must:

- (a) comprise five members who are experts in one of the identified design elements;
- (b) include:
 - i. the NSW Government Architect as Chair;
 - ii. a representative from the Heritage Council,
- (c) meet at least four times a year, or any other timeframe agreed by the DRP; and
- (d) keep meeting minutes and a schedule of action items arising from each meeting.

Relevant Council(s) and other key stakeholders such as UrbanGrowth NSW and must be invited to participate in DRP meetings to advise on local issues and applicability of design review outcomes as they relate to the local context of each station location.

E101 Before commencement of permanent built surface works and/or landscaping, the Proponent must prepare **Station Design and Precinct Plans (SDPP)** for each station. The SDPP must be prepared by a suitably qualified and experienced person(s), in collaboration and consultation with relevant stakeholders including but not limited to relevant council(s), UrbanGrowth NSW, the Department, Chambers of Commerce and the local community. The SDPP(s) must present an integrated urban and place making outcome for each station or end state element. The SDPP(s) must be approved by the Secretary following review by the DRP and before commencement of permanent aboveground work.

Each SDPP must include, but not be limited to:

- (a) identification of specific design objectives, principles and standards based on -
 - i. the project design objectives as refined by the DRP;
 - ii. maximising the amenity of public spaces and permeability around entrances to stations;
 - iii. local environmental, heritage and place making values;
 - iv. urban design context;
 - v. sustainable design and maintenance;
 - vi. community safety, amenity and privacy, including 'safer by design' principles where relevant;
 - vii. relevant urban design and infrastructure standards and guidelines (including relevant council standards, policies and guidelines);
 - viii. minimising the footprint of the project (including at operational facilities);
- (b) opportunities for public art;
- (c) landscaping and building design opportunities to mitigate the visual impacts of rail infrastructure and operational fixed facilities (including the Chatswood Dive, Marrickville Dive, Artarmon Substation, station structures and services, noise walls etc.);
- (d) the incorporation of salvaged historic and artistic elements onto the project design, including but not limited to the Tom Bass P&O fountain, the Douglas Annand glass screen (if present), the Douglas Annand wall frieze and heritage fabric from Martin Place Station, unless otherwise agreed by the Secretary;
- (e) details on the location of existing vegetation and proposed landscaping (including use of endemic and advanced tree species where practicable). Details of species to be replanted/revegetated must be provided, including their appropriateness to the area and habitat for threatened species;
- (f) a description of the CSSI design features, including graphics such as sections, perspective views and sketches for key elements of the CSSI;
- (g) the location, design and impacts of operational lighting associated with the CSSI and measures proposed to minimise lighting impacts;
- (h) details of where and how recommendations from the DRP have been considered in the plan;
- (i) the timing for implementation of access, landscaping and public realm initiatives;
- (j) monitoring and maintenance procedures for vegetation and landscaping (including weed control), performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and
- (k) evidence of consultation with the community, local Councils and agencies in the preparation of on the SDPP(s) and how feedback has been addressed before seeking endorsement by the DRP.

Elements covered by SDPP(s) must be complete no later than the commencement of operation of the Sydney Metro to paid services, unless otherwise agreed with the Secretary.

Note: The SDPP may be submitted in stages to address the built elements of the CSSI and landscaping aspects of the CSSI.

E102 The SDPP must achieve a minimum visual impact rating of at least "Minor Benefit" as defined in the EIS for all design elements of the project, where feasible and reasonable. Where it can be demonstrated, to the DRP's satisfaction, that a "Minor Benefit" is not achievable, then a "Negligible" visual impact rating must be achieved as a minimum.

E103 The Proponent must apply reasonable endeavours to negotiate with the Barangaroo Delivery Authority to integrate station ancillary components (i.e. traction substation, ventilation risers and skylights) associated with Barangaroo Station within the Barangaroo development complex. Should an integrated outcome for ancillary components not be achieved, the location and design outcome must be consistent with design objectives and endorsed by the DRP.

Lighting and Security

E104 All permanent external lighting must be the minimum level of illumination necessary and must comply with AS: 4282:1997 – *Control of the Obtrusive Effects of Outdoor Lighting* and relevant Australian Standards in the series AS/NZ 1158 – *Lighting for Roads and Public Spaces*.

E105 The placement of CCTV cameras associated with the CSSI must be undertaken in consultation with the relevant public authority and the NSW Police.

WASTE

E106 Waste generated during construction and operation is to be dealt with in accordance with the following priorities:

- (a) waste generation is to be avoided and where avoidance is not reasonably practicable, waste generation is to be reduced;
- (b) where avoiding or reducing waste is not possible, waste is to be re-used, recycled, or recovered; and
- (c) where re-using, recycling or recovering waste is not possible, waste is to be treated or disposed of.

WATER

E107 The CSSI must be constructed and operated so as to maintain the *NSW Water Quality Objectives* where they are being achieved as at the date of this approval, and contribute towards achievement of the *NSW Water Quality Objectives* over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the *NSW Water Quality Objectives*, in which case those requirements must be complied with.

E108 Drainage feature crossings (permanent and temporary watercourse crossings and stream diversions) and drainage swales and depressions must be undertaken in accordance with relevant guidelines and designed by a suitably qualified and experienced person.

E109 Any works within Sydney Harbour will be undertaken in consultation with the Harbour Master and RMS as owner of the seabed.