

Infrastructure approval

Section 5.19 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

29/5

2018

SCHEDULE 1

Application no.:	SSI 8285
Proponent:	Transport for NSW
Approval Authority:	Minister for Planning
Land:	Land in the suburbs of Westmead, North Parramatta, Parramatta, Rosehill, Camellia, Rydalmere, Dundas, Telopea, Carlingford, Granville and Clyde
Description of Critical State Significant Infrastructure:	<p>Development for the purpose of Parramatta Light Rail (Stage 1) being the construction and operation of new passenger light rail infrastructure, including new bridges:</p> <ul style="list-style-type: none">• from Westmead to Parramatta and on to Camellia, including:<ul style="list-style-type: none">○ light rail tracks and associated works, and○ light rail stops and facilities, and• from Camellia to Carlingford, generally along the existing rail corridor including:<ul style="list-style-type: none">○ light rail tracks and associated works, and○ light rail stops and facilities, and○ stabling and maintenance facilities and an associated rail turnback.• Ancillary development including:<ul style="list-style-type: none">○ rail and bus interchange facilities○ modification of bus facilities, railway stations, public amenities, pedestrian and cycle facilities○ urban design features (including fencing, landscaping, lighting and planting trees)○ installation, modification and replacement of substations, utilities, amenities and signage○ installation and modification of roads and bridges○ removal of heavy rail equipment including tracks, sleepers, ballast, posts, signals, trackside equipment, overhead wire structures, wires and○ other equipment along the former Sandown Line and the Carlingford Line from Carlingford to Parramatta Road Level Crossing at Clyde, and○ removal of the Parramatta Road Level Crossing at Clyde.
Declaration of Critical State Significant Infrastructure	<p>The proposal is State Significant Infrastructure by virtue of Clause 16, and Schedule 5, Clause 8 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i>.</p>

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DEFINITIONS

Table 1: Definitions

Term	Definition
AA	The Acoustics Adviser for the CSSI.
Active Transport Link	An active transport link (pedestrian and cycling) connecting Carlingford to the Parramatta Valley Cycleway at Rydalmere, with bridge crossings at Parramatta River and James Ruse Drive, and ending at Alfred Street, Parramatta
Ancillary facility	A temporary facility for construction of the project including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, material stockpile area car parking compound and truck marshalling facility.
Annoying activities	As defined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009)
CEMP	Construction Environmental Management Plan
Completion of construction	The date upon which all construction works and activities described in the EIS/Submissions Report (incorporating Preferred Infrastructure Report) are completed and all requirements of the Secretary (if any) and the whole of the CSSI has been constructed to the appropriate standard for operation
Construction	Includes all works required to construct the CSSI as described in the EIS/Submissions Report (incorporating Preferred Infrastructure Report), including commissioning trials of equipment and temporary use of part of the CSSI, but excluding the following low impact work: <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 surveys of existing and future utilities and building and road dilapidation surveys; (b) investigations including investigative drilling, contamination investigations and excavation; (c) establishment of ancillary facilities in approved locations including constructing ancillary facility access roads and providing utilities to the facility; (d) operation of ancillary facilities if the ER has determined the operational activities will have minimal impact on the environment and community; (e) minor clearing and relocation of native vegetation, as identified in the EIS/Submissions Report (incorporating Preferred Infrastructure Report); (f) installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments; (g) property acquisition adjustment works including installation of property fencing, and relocation and adjustments of property utility connections including water supply and electricity; (h) relocation and connection of utilities where the relocation or connection has a minor impact to the environment as determined by the ER;

Term	Definition
	<p>(i) reconfiguration of Robin Thomas Reserve for the purposes of maintaining two sports playing fields;</p> <p>(j) archaeological testing under the <i>Code of practice for archaeological investigation of Aboriginal objects in NSW</i> (DECCW, 2010) or archaeological monitoring undertaken in association with [a]-[i] above to ensure that there is no impact to heritage items;</p> <p>(k) 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 including access and egress to construction ancillary facilities; and</p> <p>(l) maintenance of existing buildings and structures required to facilitate the carrying out of the CSSI.</p> <p>However, where heritage items, or threatened species, populations or ecological communities (within the meaning of the <i>Biodiversity Conservation Act 2016</i>) 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>Construction does not include site establishment works where such works are included as part of a Site Establishment Management Plan approved under Condition C18.</p>
CSSI	The Critical State Significant Infrastructure as described in Schedule 1 of this approval, the carrying out of which is approved under the terms of this approval.
Department	NSW Department of Planning and Environment
DECC	Former NSW Department of Environment and Climate Change
DPI	NSW Department of Primary Industries including DPI Agriculture, DPI Biosecurity and Food Safety, DPI Land and Natural Resources, DPI Water and DPI Fisheries
Eat Street	That section of Church Street between Palmer and George streets.
EIS	The Environmental Impact Statement submitted to the Secretary seeking approval to carry out the project described in it, as revised if required by the Secretary under the EP&A Act and including any additional information provided by the Proponent in support of the application for approval of the project.
EMI susceptible device	A device, equipment or system whose performance can be degraded by an electromagnetic disturbance (IEC 60050: International Electrotechnical Vocabulary 161-01-24). Other susceptible receivers may include biological resources or small animal facilities.
EMS	Environmental Management System
Environmental Representative Protocol	The document of the same title published by the Department (2017)
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPA	NSW Environment Protection Authority

Term	Definition
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</i> (NSW), a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i> (NSW), 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</i> (Cth), and an “Aboriginal object” or “Aboriginal place” as defined in section 5 of the <i>National Parks and Wildlife Act 1974</i> (NSW).
Highly Noise Intensive Works	Rock breaking, rock hammering, sheet piling, pile driving and any similar activity
ICNG	<i>Interim Construction Noise Guideline</i> (DECC, 2009)
Incident	An occurrence or set of circumstances that causes, or threatens to cause material harm. <i>Note: “material harm” is defined in this approval.</i>
Land	Has the same meaning as the definition of the term in section 1.4 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
Material harm	Is harm that: (a) involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or (b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).
Minister	NSW Minister for Planning
NCA	Noise catchment area
NML	Noise management level as derived from the <i>Interim Construction Noise Guideline</i> (DECC, 2009)
Non-compliance	An occurrence, set of circumstances or development that is a breach of this approval but is not an incident.
NSW Heritage Council	Heritage Council of NSW
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan

Term	Definition
Operation	<p>The carrying out of the CSSI (whether in full or in part) upon the completion of construction for the applicable stage (if any), excluding the following activities:</p> <ul style="list-style-type: none"> • commissioning trials of equipment; • temporary use of any part of the CSSI; and • maintenance works. <p><i>Note: There may be overlap between the carrying out of construction and operation if the phases are staged. Commissioning trials of equipment and temporary use of any part of the CSSI are within the definition of construction.</i></p>
Parramatta Strategic Planning Framework	Planning policies developed by City of Parramatta Council (in consultation with Government Architect NSW) including the Parramatta Strategic Framework, Parramatta City Link Strategy, and Parramatta River Strategy.
PIR	The Preferred Infrastructure Report submitted to the Secretary under the EP&A Act (referred to as part of the Submissions Report (including Preferred Infrastructure Report)).
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
Precinct	The precincts of Westmead; Parramatta North; Parramatta CBD; Rosehill and Camellia; and Carlingford as described in the EIS and illustrated in Figures 5.2a to 5.2h of Volume 1
Proponent	The person identified as such in Schedule 1 of this approval
Relevant Council(s)	Any or all as relevant: <ul style="list-style-type: none"> • City of Parramatta; and • Cumberland Council
Relevant Road Authority	The same meaning as the road authorities defined in the <i>Roads Act 1993</i> .
Relic	Has the same meaning as the definition of the term in section 4 of the <i>Heritage Act 1977 (NSW)</i>
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)
Sensitive receiver	<p>Includes residences, temporary accommodation such as caravan parks and camping grounds, and health care facilities (including nursing homes, hospitals).</p> <p>Also includes the following, when in use: educational institutions (including preschools, schools, universities, TAFE colleges), religious facilities (including churches), child care centres, passive recreation areas, commercial premises (including film and television studios, research facilities, entertainment spaces, restaurants, office premises and retail spaces), and others as identified by the Secretary</p>
SES	NSW State Emergency Services

Term	Definition
Submissions Report	The report comprising the Proponent's response to written submissions received in relation to the application for approval for the CSSI under the EP&A Act. The Proponent has prepared a Submissions Report (incorporating the Preferred Infrastructure Report) for the CSSI
Tree	As defined in Australian Standard AS 4970-2009 <i>Protection of trees on development sites</i> .
TMC	Transport Management Centre for NSW
Unexpected heritage find	An object or place that is discovered during the carrying out of the CSSI and which may be a heritage item but was not identified in the documents referred to in Condition A1 or suspected to be present. An unexpected heritage find does not include human remains.
Work	All physical work for the purpose of the CSSI including construction

SUMMARY OF REPORTING REQUIREMENTS

Reports and notifications that must be provided to the Secretary under the terms of this approval are listed in **Table 2**. Note that under **Condition A9** of this approval the Proponent may seek the Secretary's agreement to a later timeframe for submission (other than in relation to the immediate written notification of an incident required under **Condition A44**).

Table 2: Reports and Notifications that must be submitted to the Secretary (to be updated following conditions negotiation)

Condition	Report / Notification / Appointment	Timing ¹	Purpose
Part A – Administrative			
A13	Staging Report	No later than one month before the commencement of construction (or operation) of the proposed stages of construction	Approval
A19 / A20	Environmental Representative	No later than one month before the commencement of works	Approval
A23	Environmental Representative Monthly Reports	Within seven days following the end of each month	Information
A29	Noise and Vibration Report	Within seven days following the end of each month	Information
A30 / A31	Compliance Tracking Program	At least one month before the commencement of works	Information
A34	Pre-Construction Compliance Report	No later than one month before the commencement of construction (or each stage of construction in staging report)	Information
A38	Pre-Operation Compliance Report	No later than one month before commencement of operation	Information
A40	Environmental Audit Program	No later than one month before the commencement of construction	Information
A43	Environmental Audit Reports	Within six weeks of completing the audit	Information
A44	Notification of Incidents	Immediately after the Proponent becomes aware of an incident	Notification
A45	Incident Report	Within one week of notification of an incident	Information
A47	Notification of Incident notified under POEO	Within 24 hours after notification give to EPA	Information
Part B – Communication Information and Reporting			
B1 / B3	Community Communication Strategy	No later than one month before the commencement of works	Approval
B9 / B10	Complaints	On request	Information

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

Condition	Report / Notification / Appointment	Timing ¹	Purpose
Part C – Construction Environmental Management			
C7	Construction Environmental Management Plan	No later than one month before the commencement of construction	Approval
C16	Construction Monitoring Program	At least one month before the commencement of construction	Information
C18	Site Establishment Management Plan	One month before establishment of any construction ancillary facility	Approval
Part D – Operation Environmental Management			
D3 / D6 / D7	Operational Management Plan	No later than one month before the commencement of operation	Information
Part E – Key Issues			
Traffic and Transport			
E10	Network Management Strategy	Before works commence	Information
E11	Parking Management Strategy	Before works commence	Information
E14	Pedestrian and Cyclist Network and Facilities Strategy	Before construction of pedestrian/cyclist permanent built works	Information
E19	Operational Traffic, Transport and Access Performance Review	Within one month of completion	Information
Noise and Vibration			
E28	Out-of-Hours Work Protocol	Before commencement of any out-of-hours works	Approval
E39	Out-of-Hours Work Respite	Following consultation at three monthly intervals	Information
E48	Operational Noise and Vibration Review	Before the implementation of mitigation measures	Approval
E58	Noise and Vibration Compliance Assessment Report	Within one month of its completion	Information
E59	Noise and Vibration Compliance Assessment Report – update	Within one month of its completion	Information
Heritage			
E64	Heritage Interpretation Strategy	Before work affecting identified items	Information

Condition	Report / Notification / Appointment	Timing ¹	Purpose
E67	CHIP Hostel Options Analysis	Before commencement of construction	Approval
E75	Archaeological Excavation Report	Within 12 months of completing archaeological investigations	Information
Urban Design and Visual Amenity			
E84	Feasibility of wire-free running	Before construction commences in identified locations	Information
E85	Feasibility of grass track	Before construction commences in identified locations	Information
E87	Urban Design Requirements Report	Following review by the Design Review Panel	Approval
E93	Design Review Panel members	Before development of detailed design and before construction commences	Approval
E94	Design Review Panel Terms of Reference	Following formation of Design Review Panel	Approval
Biodiversity and Revegetation			
E102	Independent Arborist	Before works commence	Approval
E106	Tree Register	Before the removal, damage or pruning of a tree for the purposes of the CSSI	Approval
Socio-Economic, Land Use and Property			
E113	Flood Management Plan	At each design stage with potential to cause adverse flooding impacts	Information
E117	Electromagnetic Management Plan	Before commencement of operations	Information
E124	Site Audit Statement	No later than one month before commencement of operation	Information
E132	Final Hazard Analysis and Construction Safety Study	Before commencement of construction of any hazardous works or works adjacent to hazardous infrastructure	Approval
E133	Post-Startup Compliance Report	Three months after commencement of operations	Information
E137	Sustainability Strategy	Within six months of the date of approval	Information

SCHEDULE 2

PART A

ADMINISTRATIVE CONDITIONS

GENERAL

- A1 The CSSI must be carried out in accordance with the terms of this approval and generally in accordance with the description of the CSSI in the *Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Environmental Impact Statement* (dated August 2017) (the EIS) as amended by the *Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Submissions Report* (incorporating Preferred Infrastructure Report) (February 2018) (the SPIR).
- 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 Submissions Report (incorporating Preferred Infrastructure Report) unless otherwise specified in, or required under, this approval.
- A3 In the event of an inconsistency between the EIS and the Submissions Report (incorporating Preferred Infrastructure Report) 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.

Note: 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 The Proponent must comply with all written requirements or directions of the Secretary, including in relation to:
- (a) the environmental performance of the CSSI;
 - (b) any document or correspondence in relation to the CSSI;
 - (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) the terms of this approval and 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.
- A5 Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Secretary with the document or monitoring program or review. The evidence must include:
- (a) documentation of the engagement with the party(ies) identified in the relevant condition of approval before submitting the document for approval;
 - (b) log of the points of engagement or attempted engagement with the identified party(ies) and a summary of the issues raised by the identified party(ies);
 - (c) documentation of any follow-up with the identified party(ies), where feedback has not been provided, to confirm that the identified party(ies) has none or has failed to provide feedback after repeated requests;
 - (d) outline of the issues raised by the identified party(ies) and how they have been addressed, including evidence that the party(ies) is satisfied the issues have been addressed; and
 - (e) a description of any outstanding issues raised by the identified party(ies) and the reasons why.
- A6 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.

- A7 References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval, unless otherwise agreed with the Secretary.
- A8 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.
- A9 Where a condition of this approval requires the Proponent to submit a document or notification to the Secretary or obtain an approval from the Secretary within a specified time period, the Proponent may make a written request to the Secretary seeking an alternative timeframe. Any request must be made at least one (1) month before the submission timeframe stipulated in the condition of approval relating to the variation request. This condition does not apply to the immediate notification required in respect of an incident under **Condition A44**.
- A10 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 any request.

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

- A11 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 in accordance with all requirements issued by the Secretary from time to time in respect of them.

FLEXIBILITY PROVISIONS

- A12 The Proponent may undertake the flexibility provisions outlined in Appendix A. Flexibility provisions in Table 5.1 of the EIS do not apply.

STAGING

- A13 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 may be) must be prepared and submitted to the Secretary for approval. 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).
- A14 The **Staging Report** must:
- if staged construction is proposed, set out how the construction of the whole of the CSSI will be staged, including 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 and finish;
 - if staged operation is proposed, set out how the operation of the whole of the CSSI will be staged, including 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 and finish (if relevant);
 - specify how compliance with conditions will be achieved across and between each of the stage of the CSSI; and
 - set out mechanisms for managing any cumulative impacts arising from the proposed staging.
- A15 The CSSI must be staged in accordance with the **Staging Report**, as approved by the Secretary.
- A16 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 identified in the Staging Report for that stage.

- A17 Where changes are proposed to the staging of construction or operation, the Staging Report must be revised and submitted to the Secretary for approval no later than one month before the proposed change in staging.
- A18 The Proponent must use best endeavours to ensure that the duration of construction in any one location or zone, as defined to the Secretary's satisfaction, is such that any receiver is impacted by construction works for the minimum, reasonably practicable time.

The Proponent must demonstrate the principles that would be adopted to minimise the duration of construction in zones as part of the **Staging Report** required by **Condition A13**.

ENVIRONMENT REPRESENTATIVE

- A19 Works must not commence until an ER has been approved by the Secretary and engaged by the Proponent.
- A20 The Secretary's approval of an ER must be sought no later than one month before the commencement of works.
- A21 The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS or Submissions Report (incorporating Preferred Infrastructure Report), and is independent from the design and construction personnel for the CSSI and those involved in the delivery of it.
- A22 The Proponent may engage more than one ER for the CSSI, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by any ER that is approved by the Secretary for the purposes of the CSSI.
- A23 For the duration of the works until after the commencement of operation, or as agreed with the Secretary, the approved ER must:
- (a) receive and respond to communication 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 to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;
 - (d) review documents identified in Table 2 and any other documents that are identified by the Secretary, for consistency, in the opinion of the ER, with requirements in or under this approval and if so:
 - i) make a written statement to this effect before submission of such documents to the Secretary (if those documents are required to be approved by the Secretary); or
 - ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Secretary for information or are not required to be submitted to the Secretary);
 - (e) regularly monitor the implementation of the documents listed in Table 2 to ensure implementation is being carried out in accordance with the document and the terms of this approval;
 - (f) as may be requested by the Secretary, help plan, attend or undertake audits of the CSSI commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under **Condition A41** of this approval;
 - (g) as may be requested by the Secretary, assist the Department in the resolution of community complaints;
 - (h) assess the impacts of minor ancillary facilities comprising lunch sheds, office sheds and portable toilet facilities; and
 - (i) prepare and submit to the Secretary and other relevant regulatory agencies, for information, an **Environmental Representative Monthly Report** providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative

Monthly Reports.” The Environmental Representative Monthly Report must be submitted within seven days following the end of each month for the duration of the ER’s engagement for the CSSI.

- A24 The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in **Condition A23** (including preparation of the ER monthly report), as well as:
- (a) the complaints register (to be provided on a daily basis); and
 - (b) a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work).
- A25 The Secretary may at any time commission an audit of an ER’s exercise of its functions under **Condition A23**. The Proponent must:
- (a) facilitate and assist the Secretary in any such audit; and
 - (b) make it a term of their engagement of an ER that the ER facilitate and assist the Secretary in any such audit.

ACOUSTICS ADVISOR

- A26 A suitably qualified and experienced **Acoustics Advisor** (AA) must be engaged for the duration of construction and for no less than six months following completion of construction of the CSSI. The AA must provide a statutory declaration to the Secretary that they are independent of the design and construction personnel. 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 noise and vibration plans, assessments, monitoring reports and data analyses undertaken; and
 - (c) considering any recommendations to improve practices and demonstrating, to the satisfaction of the AA, why any recommendation is not adopted.
- A27 The AA must meet the following minimum requirements:
- (a) relevant experience in the last ten years as a senior acoustic specialist on major infrastructure projects, including a fieldwork and construction management component;
 - (b) tertiary qualifications in an acoustic related discipline or equivalent experience; and
 - (c) proven understanding and application of NSW State and local legislation, relevant Australian standards, NSW environmental regulatory requirements and implementation of noise mitigation and environmental best practice.
- A28 The Proponent must notify the Department in writing on the engagement of the AA including demonstrating the requirements of **Conditions A26 and A27**.
- A29 The AA must:
- (a) receive and respond to communication from the Secretary about 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) consider consultation outcomes with affected receivers to determine the adequacy of noise mitigation and management measures including work hours and respite periods;
 - (e) 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);

- (f) 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;
- (g) in conjunction with the ER, the AA must:
 - i) as may be requested by the Secretary, help plan, attend or undertake audits of noise and vibration management of the CSSI including briefings, and site visits;
 - ii) 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;
 - iii) 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;
 - iv) assess the noise impacts of minor construction ancillary facilities; and
- (h) 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 another timeframe agreed with the Secretary). The **Noise and Vibration Report** must be submitted within seven 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

- A30 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 **Conditions A13** and **A14** of this approval.
- A31 The **Compliance Tracking Program** must be endorsed by the ER and then submitted to the Secretary for information at least one (1) month before the commencement of works.
- A32 The **Compliance Tracking Program** in the form required under **Condition A30** of this approval must be implemented for the duration of works 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 Monthly 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.
- A33 The Proponent must make each compliance report publicly available and notify the Department in writing when this has been done.

CONSTRUCTION COMPLIANCE REPORTING

- A34 A **Pre-Construction Compliance Report** must be prepared and submitted to the Secretary for information no later than one (1) month before the commencement of construction (or each stage of construction identified in the Staging Report).
- A35 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 proposed commencement date for construction.
- A36 Construction must not commence until the **Pre-Construction Compliance Report** has been submitted to the Secretary.

- A37 **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 for the duration of construction. The **Construction Compliance Reports** must include:
- (a) a results summary and analysis of environmental monitoring;
 - (b) the number of 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 reviews of consistency undertaken including outcome;
 - (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 **Conditions A44** and **A46** 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

- A38 A **Pre-Operation Compliance Report** must be prepared and submitted to the Secretary for information no later than one (1) month before the commencement of operation. 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.
- A39 Operation must not commence until the **Pre-Operation Compliance Report** has been submitted to the Secretary for information.

AUDITING

- A40 An **Environmental Audit Program** for annual independent 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.
- A41 The **Environmental Audit Program**, as submitted to the Secretary, must be implemented for the duration of construction and operation.
- A42 All independent environmental audits of the CSSI must be conducted by a suitably qualified, experienced and independent auditor with, where required, a team of independent technical experts 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; and
 - (c) recommends measures or actions to improve the environmental performance of the CSSI.
- A43 The Proponent must submit a copy of the **Environmental Audit Report** to the Secretary for information, with a response to any recommendations contained in the audit report within six (6) weeks of completing the audit.

INCIDENT NOTIFICATION AND REPORTING

- A44 The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one), and set out the location and nature of the incident.
- A45 Within one week of notification of an incident under **Condition A44** of this approval, the Proponent must submit a report to the Department providing the time and date of the incident, details of the incident and must identify any consequent non-compliance with this approval.
- A46 All written requirements of the Secretary, which may be given at any point in time, to address the cause or impact of an incident must be complied with, within any timeframe specified by the Secretary or relevant public authority.
- A47 If an incident occurs or if statutory notification is given to the EPA as required under the *Protection of the Environment Operations Act 1997* in relation to the CSSI, such notification must also be provided to the Secretary 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 provide mechanisms to facilitate communication between the Proponent, the community (including adjoining affected landowners and businesses, and others directly impacted by the CSSI), the ER and Council during the design, establishment 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 and organisations to be consulted during the design and work phases;
 - (b) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the CSSI including use of construction hoardings to provide information regarding the progress of construction. The information to be distributed must include information regarding current site construction activities, schedules and milestones at each construction site;
 - (c) provide for the formation of issue or location-based community forums that focus on key environmental management issues of concern to the relevant communities; and
 - (d) 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 construction of the CSSI, including disputes regarding rectification or compensation.
- B3 The **Community Communication Strategy** must be submitted to the Secretary for approval no later than one month before commencement of any works.
- B4 Works for the purposes of the CSSI must not commence until the **Community Communication Strategy** has been approved by 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 of the CSSI.

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 construction and for a minimum 12 months following completion of construction of the CSSI.
- B7 The following information must be available to facilitate community enquiries and manage complaints within one (1) month from the date of this approval and for 12 months following the completion of construction:
- (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 enquires may be sent;
 - (c) an email address to which electronic complaints and enquiries may be transmitted; and
 - (d) a mediation system for complaints unable to be resolved.

This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.

- B8 The telephone number, postal address and email address required under **Condition B7** 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 the commencement of operation. This information must also be provided on the website required under **Condition B11** of this approval.
- B9 A **Complaints Register** must be maintained to record information on all complaints received about the CSSI during the carrying out of any works for the purposes of 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;
 - (c) means by which the complaint was addressed and whether resolution was reached, with or without mediation.
- B10 The **Complaints Register** must be provided to the Secretary upon request, within the timeframe stated in the request.

PROVISION OF ELECTRONIC INFORMATION

- B11 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 24 months following the completion of construction. Up-to-date information (excluding confidential commercial information) must be published before the relevant works commence, and maintained on the website or dedicated pages including:
- (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 each statutory approval, licence or permit required and obtained in relation to the CSSI;
 - (e) a current copy of each approved document required under the terms of this approval and any endorsements, approvals or requirements from the ER, AA 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; and
 - (f) a copy of the compliance reports required under **Condition A30** of this approval.

Information relating solely to construction may be removed from the website 12 months following the completion of construction.

PART C

CONSTRUCTION ENVIRONMENTAL MANAGEMENT

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C1 A **Construction Environmental Management Plan (CEMP)** must be must be prepared to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in **Condition A1** 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 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;
 - (d) 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 documents identified in Condition A1; and
 - ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition;
 - (e) an inspection program detailing the activities to be inspected and frequency of inspections;
 - (f) a protocol for managing and reporting any:
 - i) incidents; and
 - ii) non-compliances with this approval and with statutory requirements.
 - (g) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;
 - (h) 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;
 - (i) a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;
 - (j) for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval;
 - (k) 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 CEMP referred to in **Condition C1**:

	Required CEMP Sub-plan	Relevant government agencies to be consulted for each CEMP Sub-plan	Secretary Approval/ Information
(a)	Traffic, transport and access	Relevant Council(s), Roads and Maritime Services, Emergency Services	Information
(b)	Noise and vibration	Relevant Council(s), EPA, NSW Health	Approval
(c)	Flood Management	Relevant Council(s), OEH, Sydney Water	Information
(d)	Heritage	Relevant Council(s), OEH	Approval
(e)	Flora and Fauna Biodiversity	Relevant Council(s), OEH	Information

- C4 The **CEMP Sub-plans** must state how:
- (a) the environmental performance outcomes identified in the documents listed in **Condition A1** will be achieved;
 - (b) the mitigation measures identified in the documents listed in **Condition A1** 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 (including Relevant Council(s)). Details of all information requested by an agency to be included in a **CEMP Sub-plan** as a result of consultation, including all copies of correspondence from those agencies, must be provided to the Secretary with the relevant **CEMP Sub-plan**.
- C6 Any of the **CEMP Sub-plans** may be submitted along with, or subsequent to, the submission of the **CEMP** but in any event, no later than one month before construction.
- C7 The **CEMP** must be endorsed by the ER and then submitted to the Secretary for approval no later than one month before the commencement of construction.
- C8 Construction must not commence until the **CEMP** and any **CEMP Sub-plan** specified in **Condition C3** 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 construction of the CSSI is staged, construction of a stage must not commence until the **CEMP** and **Sub-plans** for that stage 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 for each to compare actual performance of construction of the CSSI against performance predicted in the documents listed in **Condition A1** or in the **CEMP**:

	Required Construction Monitoring Programs	Relevant government agencies to be consulted for each Construction Monitoring Program
(a)	Water Quality (Turbidity) Monitoring	DoI Water, EPA, Relevant Council(s)
(b)	Noise and Vibration Monitoring	Relevant Council(s), EPA, NSW Health (as relevant)
(c)	Grey-headed flying fox Monitoring	OEH

- 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 against relevant criteria;
 - (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 monitoring data collected during monitoring required by **Condition C9** must be available to the Proponent, ER, AA, Relevant Council(s) and the community to inform construction scheduling, the level of impacts and whether additional mitigation is required. The Department must also be provided access to this data if specifically requested.
- C12 The **Construction Monitoring Programs** must be developed in consultation with relevant government agencies and Relevant Council(s) as identified in **Condition C9** of this approval and must include, 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 submitted to the Secretary for information at least one month before the commencement of construction.
- C14 Construction must not commence until the Secretary has received 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 submitted to 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, 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**.

SITE ESTABLISHMENT WORKS

Site Establishment Management Plan

- C18 Before establishment of any construction ancillary facility as identified in the EIS and SPIR (and excluding minor construction ancillary facilities), the Proponent must prepare a **Site Establishment Management Plan** which outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facilities. The **Site Establishment Management Plan** must be prepared in consultation with the relevant council(s) and relevant government authorities. The Plan must be submitted to the Secretary for approval one (1) month before establishment of any construction ancillary facilities. The **Site Establishment Management Plan** must detail the management of the construction ancillary facilities and include:
- (a) a description of activities to be undertaken during establishment of the construction ancillary facility (including scheduling and duration of works to be undertaken at the site);
 - (b) figures illustrating the proposed operational site layout(s);
 - (c) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of site establishment works;

- (d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:
 - i) meet the performance outcomes stated in the documents listed in the documents identified Condition A1,
 - ii) to address traffic, pedestrian access and amenity around each site, and
 - iii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and
- (e) a program for monitoring the performance outcomes, including a program for construction noise monitoring consistent with the requirements of **Conditions C9** and **C11**.

Nothing in this condition prevents the Proponent from preparing individual **Site Establishment Management Plans** for each construction ancillary facility.

Boundary Screening

- C19 Boundary fencing that incorporates screening must be erected around all construction ancillary facilities that are adjacent to sensitive receivers for the duration of site establishment and construction of the CSSI unless otherwise agreed with Relevant Council(s), affected residents, business operators and/or landowners and in accordance with **Condition B2(b)**.
- C20 Boundary screening required under **Condition C19** of this approval must reduce visual, noise and air quality impacts on adjacent sensitive receivers.

IDENTIFICATION OF WORKFORCE AND PLANT

- C21 All construction spoil haulage vehicles, and construction plant must be clearly marked as being for the CSSI in such a manner to enable immediate identification within at least 50 metres of the vehicles and plant.

PART D OPERATIONAL ENVIRONMENTAL MANAGEMENT

OPERATIONAL ENVIRONMENTAL MANAGEMENT

- D1 An **Operational Environmental Management Plan (OEMP)** must be prepared to detail how the performance outcomes, commitments and mitigation measures made and identified in the documents listed in **Condition A1** will be implemented and achieved during CSSI 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 documents listed in **Condition A1** and these conditions of 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	Secretary Approval/ Information
(a)	Light rail Operations during Special Events (including access)	Relevant Council(s), RMS, Police, Western Sydney Stadium, Rosehill Racecourse and Parramatta Park Trust	Information

- D4 Each of the OEMP Sub-plans must include the information set out in **Condition D2** of this approval.
- D5 The **OEMP Sub-plans** must be developed in consultation with relevant government agencies as identified in **Condition D3** and must include information requested by an agency. Details of all information requested by an agency or Council(s) 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 month before the commencement of operation.
- 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 CSSI operation and the **OEMP** must be made publicly available before the commencement of operation.

PART E

KEY ISSUE CONDITIONS

TRAFFIC AND TRANSPORT

- E1 The CSSI must be designed, constructed and operated so that it does not adversely impact network connectivity, or the safety and efficiency of the transport system near the CSSI in a manner which is consistent with the impacts predicted in the documents referred to in **Condition A1**.
- E2 In relation to new or modified road, parking, pedestrian and cycle infrastructure, the CSSI must be designed:
- (a) in consultation with the relevant road authority;
 - (b) in consideration of existing and future demand, road safety and traffic network impacts;
 - (c) to meet relevant design, engineering and safety guidelines, including Austroads Guides; and
 - (d) is certified by an appropriately qualified and experienced person that the above matters have been appropriately considered.
- E3 An independent **Road Safety Audit(s)** must be undertaken by an appropriately qualified and experienced person in accordance with *Guidelines for Road Safety Audit Practices* (RTA, 2011), to assess the safety performance of any new or modified local road, parking, pedestrian and cycle infrastructure provided as part of the CSSI (including ancillary facilities) to ensure that the requirements of **Condition E2** are met. Audit findings and recommendations must be actioned and must be made available to the Secretary on request.
- E4 Where bus stops are required to be temporarily closed or relocated, such closure must not occur until bus stops of equivalent capacity, of comparable stop type and which meet accessibility standards (where practicable), are relocated within 400 metres walking distance of the existing bus stop and are operating, unless agreed otherwise with the Relevant Council(s) and bus services provider(s). Closure and relocation of bus stops during construction must be undertaken in consultation with the relevant bus service providers and relevant council(s). Wayfinding signage must be provided to direct commuters to relocated bus stops.

Construction Traffic and Access

- E5 Construction vehicles (including staff vehicles) associated with the CSSI must:
- (a) minimise parking or queuing on public roads and utilise the light rail corridor for construction vehicle and staff movements to the greatest extent practicable;
 - (b) not idle or queue in local residential streets;
 - (c) minimise use of routes on local roads that directly pass schools or childcare centres, or where no alternative route is available, restrict heavy vehicle movements between 8:00am and 9:30am and between 2:30pm and 4:00pm Monday to Friday, during the school term;
 - (d) not use local roads (including residential streets) to gain access to construction sites and compounds unless no alternatives are available. Construction sites must be accessed from arterial roads and the rail corridor used for transportation of construction materials and the like to work sites to the greatest extent practicable; and
 - (e) adhere to the nominated haulage routes identified in the **Construction Traffic, Transport and Access Management Plan** required under **Condition C3**.

Condition Reports

- E6 Existing condition reports for all roads and all property and infrastructure in the road reserve likely to be used or affected by works must be prepared before commencement of such works. The report must state the current condition of the asset. A copy of the report must be provided to the asset owner no later than one month before the commencement of construction of the CSSI.
- E7 If damage occurs to any item outlined in **Condition E6** resulting from the works, aside from that resulting from normal wear and tear, the Proponent must either (at the asset owner's discretion):
- (a) compensate the asset owner for the damage so caused. The amount of compensation may be agreed with the asset owner, but compensation must be paid even if no agreement is reached; or
 - (b) rectify the damage so as to restore the item to at least the condition it was in pre-works. Any repairs must be completed before the commencement of CSSI operations.

Property Access

- E8 The Proponent must maintain access to all properties during construction and operation, unless otherwise agreed by the relevant property owner or occupier, and reinstate any access physically affected by the CSSI to at least an equivalent standard at no cost to the property owner, unless otherwise agreed with the property owner. The Proponent must provide copies of plans to the Secretary on request.
- E9 Access plans must be prepared and implemented for individual properties and accesses that will be impacted by construction and operation of the CSSI. The access plans must be developed in consultation with affected parties (property owner and/or occupier, as relevant) and the Proponent must make reasonable endeavours to obtain agreement from the relevant affected parties, and evidence of consultation demonstrating this must be provided to the Secretary on request. The access plans must establish:
- (a) road and access closures and provision of alternative routes;
 - (b) provision for pedestrian and cyclist access;
 - (c) special event strategies;
 - (d) provision of servicing and delivery requirements for loading zones and waste disposal;
 - (e) access periods or alternative access arrangements for businesses, landowners or tenants affected by the CSSI;
 - (f) strategies to maintain emergency and incident response access at all times;
 - (g) potential future access strategies for the Westmead Hospital and Westmead Railway Station; and
 - (h) access to taxi ranks and loading zones.

If access is not deemed to be adequate by the property owner and/or occupier and a dispute ensues, procedures and mechanisms must be followed in accordance with **Condition B2**.

Traffic Network Management

- E10 The Proponent must prepare and implement a **Network Management Strategy** for construction of the CSSI, in consultation with RMS, Sydney Coordination Office and Relevant Council(s) before impacts on the road network (including intersections) occur. The Strategy must determine appropriate measures to manage impacts to traffic identified in the documents listed in **Condition A1**, and must include:
- (a) details of impacts to the network from road closures, directional changes, night works and traffic diversions;
 - (b) details of further appropriate network/intersection modelling and analysis undertaken since the EIS and/or Submissions Report was prepared;
 - (c) consideration of cumulative impacts from other construction projects;

- (d) details of the required intersection upgrades and traffic management measures by precinct to minimise the impacts identified above;
- (e) vehicular access changes;
- (f) special event management; and
- (g) changes to bus services.

The Strategy must focus on the management of construction related traffic impacts and be provided to the Secretary for information before works commence.

Parking Management Strategy

E11 A **Parking Management Strategy** must be prepared before works commence and implemented in consultation with the relevant road authority and Relevant Council(s) to manage car parking impacts and kerbside parking access, particularly for the Westmead, Parramatta North, and Parramatta CBD precincts, as a result of the CSSI. The **Parking Management Strategy** must include, but not be limited to:

- (a) confirmation of the timing of the removal of on and off-street parking associated with the construction of the CSSI;
- (b) comprehensive parking surveys of all parking spaces to be removed to determine current demand during peak, off-peak, school drop-off and pick-up, and weekend periods;
- (c) assessment of the impacts of changes to on and off-street parking taking into consideration outcomes of consultation with affected stakeholders;
- (d) identification of measures to manage any reduction in parking including staged removal, resident parking schemes, managed staff parking arrangements, and provision of alternative parking arrangements for accessible and service spaces;
- (e) replacement parking for specific impacted kerbside uses (e.g. accessible parking and loading zones) within the local vicinity with consideration of the *Disability Discrimination Act 1992 (DDA) Public Transport Standards and the DDA Access Code (2010)*; and
- (f) monitoring on the efficacy of these measures, including potential unintended traffic impacts and contingencies in the event that the measures implemented are not adequate.

The **Parking Management Strategy** must be submitted to the Secretary for information and the results of monitoring reported in the **Operational Traffic, Transport and Access Performance Review** required by **Condition E18**.

Pedestrian and Cyclist Access

E12 Safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an alternate equivalent route which complies with the relevant standards must be provided and signposted.

E13 Bicycle parking/rack facilities are required to be installed at all light rail stops within the Carlingford precinct, unless these facilities already exist.

Pedestrian and Cyclist Network and Facilities Strategy

E14 A **Pedestrian and Cyclist Network and Facilities Strategy** must be prepared in consultation with Relevant Council(s), RMS, Pedestrian Council of Australia and Bicycle NSW. The Strategy must identify safe and accessible pedestrian and cycle paths, during construction and operation, including facilitation of future cycle paths and dedicated cycleways as identified in the documents listed in **Condition A1**, state and local government plans, with the objective of providing seamless, coherent, visible, and safe pedestrian and cycle access throughout and adjacent to the CSSI corridor. The Strategy must consider:

- (a) existing and proposed local and regional pedestrian and cycle facilities and strategies;
- (b) safety for pedestrians in pedestrianised zones;

- (c) alternative cycle routes during construction, based on safety and efficiency, and contingencies in the event that relocated routes are found to be inadequate;
- (d) pedestrian and cycle access, including local and regional pedestrian and bicycle connections;
- (e) demand for pedestrian and cycle facilities with consideration of measures to encourage an increased pedestrian and cycle mode share;
- (f) signage and way finding;
- (g) cycle storage facilities on light rail vehicles; and
- (h) the requirements of relevant design standards, including Austroads and NSW bicycle guidelines.

The **Pedestrian and Cyclist Network and Facilities Strategy** must be submitted to the Secretary before construction of pedestrian/cyclist permanent built works (including the Active Transport Link) commences and implemented to ensure that all works are operational no later than the commencement of CSSI operations.

Emergency Vehicle Access

- E15 The Proponent must maintain emergency vehicle access, in consultation with emergency services and NSW Health, to Westmead Hospital (along Hawkesbury Road) and between the two parts of the Cumberland Hospital site as long as patients continue to be located at each facility at all times throughout the life of the CSSI. Measures must be outlined in the relevant access plan required under **Condition E9**.

Access to Businesses

- E16 During works, the Proponent must ensure all practicable measures are implemented to maintain pedestrian and vehicular access to, and parking near, businesses and affected properties.
- E17 Alternative pedestrian and vehicular access, and servicing arrangements must be developed in consultation with affected businesses and implemented before the disruption. Adequate wayfinding to businesses must be provided before, and for the duration of, any disruption in consultation with the Relevant Council(s) and/or road authority and as outlined in the Business Activation Plan required by **Condition E110**. The Proponent must make reasonable endeavours to obtain agreement from the relevant affected parties, and evidence of consultation demonstrating this must be provided to the Secretary on request.

If access is not deemed to be adequate by the affected business and a dispute ensues, procedures and mechanisms must be followed in accordance with **Condition B2**.

Operational Traffic, Transport and Access Performance Review

- E18 The Proponent must prepare an **Operational Traffic, Transport and Access Performance Review** in consultation with RMS and Relevant Council(s). The monitoring and review shall be undertaken outside a school holiday period one month and twelve months after the commencement of CSSI operations. The review shall include, but not necessarily be limited to:
- (a) collection of traffic count data from key signalised intersections;
 - (b) monitoring of changes to traffic flows, pedestrian flows, bus network changes and infrastructure associated with the CSSI;
 - (c) results of monitoring and performance of traffic flows, pedestrian flows, bus network changes and infrastructure associated with the CSSI;
 - (d) details of any complaints received relating to traffic, transport and access impacts; and
 - (e) an assessment of the performance and effectiveness of the traffic, transport and access management and mitigation measures comparing actual network performance against modelled network performance.

- E19 The **Operational Traffic, Transport and Access Performance Review** must be submitted to the Secretary, for information, and the relevant road authorities within one month of its completion. If the assessment indicates ongoing traffic, transport and access issues attributable to the CSSI (such as from intersection level of service, queue lengths, road safety, and other relevant parameters of performance), which are not consistent with the outcomes predicted in the documents listed in **Condition A1**, the Proponent must implement additional measures to mitigate these impacts in consultation with the relevant road authority.

NOISE AND VIBRATION

Land Use Survey

- E20 A detailed land use survey must be undertaken to confirm sensitive receivers (including critical working areas such as operating theatres, precision laboratories housing sensitive equipment and drama theatres) potentially exposed to construction noise and vibration, construction ground-borne noise and operational noise and vibration. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of works which generate construction or operational noise, vibration or ground-borne noise in that area. The results of the survey must be used to develop the **Noise and Vibration Management Sub-Plan** required by **Condition C3** and **Construction Noise and Vibration Impact Statements** required by **Condition E42**.

Hours of Works

- E21 Works must be undertaken during the following hours:
- (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
 - (b) 8:00am to 12:00pm Saturdays; and
 - (c) at no time on Sundays or public holidays.
- E22 Notwithstanding **Condition E21**, and with the exception of 'Eat Street', works may be undertaken during the following hours:
- (a) 6:00pm to 7:00pm Mondays to Fridays, inclusive; and
 - (b) 12:00pm to 6:00pm Saturdays.
- E23 Notwithstanding **Condition E21**, works may be undertaken in the Camellia and Rosehill precincts (east of James Ruse Drive) and the Carlingford precinct (from Parramatta River to Victoria Road) 24 hours a day, seven days a week provided that sensitive receivers are not affected by noise levels of greater than 5 dBA above the rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009), between 10.00pm and 7.00am.
- E24 Construction outside the hours identified in **Condition E21** along 'Eat Street' must be established through consultation with affected businesses as outlined in the Business Activation Plan required by **Condition E110**.
- E25 Works may be undertaken outside of the hours defined in **Conditions E21 to E22**, as applicable, but only if one or more of the following applies:
- (a) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or
 - (b) 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
 - (c) where different hours of works are permitted or required under an EPL in force in respect of the CSSI; or
 - (d) works approved under an **Out-of-Hours Work Protocol** for works not subject to an EPL; or

- (e) construction that causes $L_{Aeq(15 \text{ minute})}$ noise levels:
 - i) 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
 - ii) no more than the 'Noise affected' noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses, and
 - iii) no more than 15dBA above the night-time rating background level at any residence during the night time period, when measured using the LA1(1 minute) noise descriptor, and
 - iv) continuous or impulsive vibration values, measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006), and
 - v) intermittent vibration values measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006).

Emergency Works

- E26 On becoming aware of the need for emergency construction works, the Proponent must notify the ER of the need for those activities or works. The Proponent must also use best endeavours to notify all affected sensitive receivers of the likely impact and duration of those works.

Highly Noise Intensive Works

- E27 Except as permitted by an EPL, Highly Noise Intensive Works that result in an exceedance of the applicable NML at the same receiver must only be undertaken:
- (a) between the hours of 8:00 am to 6:00 pm Monday to Friday;
 - (b) between the hours of 8:00 am to 1:00 pm Saturday; and
 - (c) in continuous blocks not exceeding three (3) hours each with a minimum respite from those activities and works of not less than one (1) hour between each block.

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

Out of Hours Works Protocol

- E28 An **Out-of-Hours Work Protocol** must be prepared to identify a process for the consideration, management and approval of works which are outside the permitted hours defined in **Conditions E21 to E22**, where an EPL does not apply. The Protocol must be approved by the Secretary before commencement of out-of-hours works. The Protocol must be prepared and implemented in consultation with AA. The Protocol must:
- (a) provide a process for the consideration of out-of-hours works against the relevant noise and vibration criteria;
 - (b) provide a process for the identification and implementation of mitigation and management measures for residual impacts, in consultation with the community at each affected location, consistent with the requirements of **Condition E39**;
 - (c) identify an approval process that considers the risk level of activities (in accordance with AS/NZS ISO 31000:2009 "Risk Management"), proposed mitigation, management, and coordination, including where:
 - i) low and moderate risk activities can be approved by the ER in consultation with the AA, and
 - ii) high risk activities that are approved by the Secretary; and
 - (d) identify Department and community notification arrangements for approved out of hours works, which will be detailed in the Communication Strategy.
- E29 Out-of-hours works that may be regulated through an EPL or the **Out of Hours Work Protocol** as per **Condition E28** include, but are not limited to:

- (a) carrying out works that during standard hours would result in a high risk to construction personnel or public safety, based on a risk assessment carried out in accordance with AS/NZS ISO 31000:2009 "Risk Management"; or
- (b) the relevant road authority has advised the Proponent in writing that carrying out the works and activities during standard hours would result in a high risk to road network operational performance and a road occupancy licence will not be issued; or
- (c) the relevant utility service operator has advised the Proponent in writing that carrying out the works and activities during standard hours would result in a high risk to the operation and integrity of the utility network; or
- (d) where the TfNSW Transport Management Centre (or other road authority) has advised the Proponent in writing that a road occupancy licence is required and will not be issued for the works or activities during the hours specified in Condition E21 and Condition E22; or
- (e) where Sydney Trains (or other rail authority) has advised the Proponent in writing that a Rail Possession is required.

Construction Noise Mitigation Measures

- E30 Mitigation measures must be applied to construction activities that are predicted to result in the following residential ground-borne noise levels being exceeded as a result of the CSSI:
- (a) Evening (6.00pm to 10.00pm) – internal $L_{Aeq}(15 \text{ minute})$: 40 dBA; and
 - (b) Night (10.00pm to 7.00am) – internal $L_{Aeq}(15 \text{ minute})$: 35 dBA.

The mitigation measures must be outlined in the **Construction Noise and Vibration Management Sub-Plan** and the **Out of Hours Works Protocol**.

- E31 Noise generating works near places of worship, educational institutions and noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories, operating theatres, and mental health services and accommodation) must not be timetabled within sensitive periods, unless otherwise agreed with the affected institutions, and at no cost to the affected institution. This must be determined through ongoing consultation with the community during construction.
- E32 The Proponent must consult with proponents or applicants of other State Significant development and infrastructure works near the CSSI and take reasonable steps to coordinate works to minimise cumulative impacts of noise and vibration and maximise respite for affected sensitive receivers.
- E33 Construction noise mitigation measures must be implemented in accordance with Tables 4, 5, 6 and 7 of TfNSW's *Construction Noise and Vibration Strategy* (2018), regardless of the number of sensitive receivers impacted.
- E34 Piling activities that affect sensitive receivers must be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles, where practicable.
- E35 Nothing in this approval permits blasting for construction of the CSSI.

Construction Noise Mitigation – Respite

- E36 The Proponent must provide respite periods for sensitive receivers where any construction activity during the hours specified in **Condition E21** results in noise levels that exceed the Highly Noise Affected Level of 75 dB ($L_{Aeq,15 \text{ minute}}$).
- E37 Where works are undertaken outside hours specific in **Condition E21 and E22** and construction noise levels exceed 65 dB(A) $L_{Aeq} (15 \text{ mins})$ at the façade of the building of a residential receiver, the Proponent must only work 4 nights in any 7 day period. The 4 nights worked must be informed by community consultation referenced in **Condition E39**.

Outcomes of the community consultation, the identified works and respite periods and the scheduling of the likely out-of-hour works must be provided to the AA, ER and the Secretary for information.

Relocation of work following 4 nights of works in any 7 day period must be sufficiently removed so as to provide clear respite of 3 days. Works in areas of respite must be subject to noise levels of no more than 5 dB(A) above the rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009).

The requirements of this condition may be varied with the approval of the Secretary following the Secretary's review of community consultation outcomes, construction noise and vibration impacts and the implementation of noise management and mitigation measures.

- E38 All works undertaken for the delivery of the CSSI, including those undertaken by third parties (such as those undertaken by utility contractors), must be coordinated to ensure respite, including the respite required by **Condition E37**. The Proponent must:
- (a) schedule any works to provide respite to impacted noise sensitive receivers so that all respite periods are achieved; or
 - (b) consider the provision of alternative mitigation, including the provision of at receiver treatments and alternative accommodation to impacted noise sensitive receivers; and
 - (c) provide documentary evidence to the AA in support of any decision made by the Proponent in relation to respite or mitigation.
- E39 In order to undertake out-of-hours work described in **Condition E25(c) and (d)**, the Proponent must identify appropriate work and respite periods for the works in consultation with the community at each affected precinct at three monthly intervals. This consultation must be ongoing and include (but not be limited to) providing the community with:
- (a) a schedule of likely out-of-hours work for a period of no less than three (3) months;
 - (b) the potential works, location and duration;
 - (c) the noise characteristics and likely noise levels of the works; and
 - (d) likely mitigation and management measures.

The Proponent shall consider and respond to the affected community's preference for alternative hours and/or durations.

The outcomes of the community consultation, the identified respite periods and the scheduling of the likely out-of-hour works must be provided to the AA, ER and the Secretary.

- E40 The provision of respite periods does not preclude the application of other construction noise management measures, including the provision of at receiver treatments and or alternate accommodation.

Workplace Health and Safety for Nearby Workers

- E41 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.

Construction Noise and Vibration Impact Statements

- E42 **Construction Noise and Vibration Impact Statements** must be prepared and implemented for each construction site before construction noise and vibration impacts commence and include specific mitigation measures identified through consultation with affected sensitive receivers. Each **Construction Noise and Vibration Impact Statement** will supplement the **Noise and Vibration Management Sub-Plan** and must specifically address each of the major construction sites and must include but not be limited to:
- (a) a description of the proposed activities;
 - (b) predicted noise and vibration levels based on background noise levels;

- (c) examination of alternative methods of construction that would potentially reduce noise and vibration if the potential noise and vibration exceeds the relevant criteria;
- (d) description and commitment to work practices which limit noise and vibration;
- (e) description of specific noise and vibration mitigation treatments and time restrictions, including respite periods, duration, and frequency;
- (f) justification for any activities to be undertaken outside the specified construction hours defined in **Conditions E21** and **E22**;
- (g) internal noise audit systems including recording of daily hours of construction, progressive impact assessments as work proceeds, conducting informal checks by the ER, providing active and communication links to Council and surrounding residents and sensitive receivers;
- (h) assessment of potential noise from the proposed construction methods including noise from construction vehicles and noise impacts from required traffic diversions;
- (i) community consultation and notification;
- (j) all reasonable and feasible measures including adopting the least noisy available construction methods, systems and equipment;
- (k) additional noise and vibration mitigation measures as negotiated with affected residents and other sensitive receivers.

Note: Existing noise levels, pre-construction noise levels, or the like for the purposes of identifying rating background noise levels, noise management levels and construction noise impacts are noise levels that do not include any other construction related noise.

Vibration

- E43 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 dose values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures.
- E44 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.

Building Condition Survey

- E45 Before commencement of any works and with the agreement of the landowner, a structural engineer must undertake building condition surveys of all buildings identified in the documents listed in **Condition A1** as being at risk of damage. 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 landowners of the buildings surveyed, and if agreed by the landowner, the relevant Council within three weeks of completing the surveys and no later than one month before the commencement of construction.
- E46 After completion of construction and with the agreement of the landowner, **Building Condition Surveys** of all buildings for which building condition surveys were undertaken in accordance with **Condition E45** of this approval 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 landowners of the buildings surveyed, and if agreed by the landowner, the relevant Council within three weeks of completing the surveys and no later than three (3) months following the completion of construction.
- E47 Any physical damage caused to a property as a result of the CSSI shall be rectified or the property owner compensated, within a timeframe agreed to by the property owner with the

costs borne by the Proponent. This condition is not intended to limit any claims that the property owner may have against the Proponent.

Operational Noise Mitigation Measures

Noise Mitigation - Operational Noise Mitigation Measures

E48 The Proponent must prepare an **Operational Noise and Vibration Review (ONVR)** to confirm noise and vibration mitigation measures that would be implemented for the operation of the CSSI. The ONVR must be prepared in consultation with the Department, relevant council(s), other relevant stakeholders and the community and must:

- (a) identify specific noise and vibration criteria applicable to each component of the CSSI;
- (b) predict the operational noise and vibration levels at affected receivers;
- (c) identify the proposed mitigation measures to be used to meet the applicable noise and vibration criteria;
- (d) ensure uncertainties in the design process (e.g. engineering performance tolerances, modelling assumptions, transmission path assumptions etc) are identified and conservatively quantified; and
- (e) include a consultation strategy with directly affected receivers on mitigation measures.

Where the noise and vibration criteria cannot be achieved, the assessment shall present an analysis of reasonable and feasible noise and vibration mitigation measures, and the 'best practice' achievable noise and vibration outcome for each component of the CSSI.

The **ONVR** is to be verified by a suitably qualified and experienced noise and vibration expert. The **ONVR** is to be undertaken at the Proponent's expense and submitted to the Secretary for approval before the implementation of mitigation measures.

The Proponent must implement the identified noise and vibration control measures and make the **ONVR** publicly available.

E49 Noise mitigation measures as identified in **Condition E48** that will not be physically affected by works must be implemented within eighteen (18) months of the commencement of construction in the vicinity of the impacted receiver to minimise construction noise impacts, and detailed in the **Construction Noise and Vibration Management Sub-plan** for the CSSI.

Operational Noise from Light Rail Services

E50 The CSSI must be designed and operated with the objective of not exceeding the air-borne and ground-borne noise trigger levels as defined in the *Rail Infrastructure Noise Guideline* (EPA, 2012) and the vibration levels defined in the *Assessing Vibration: A Technical Guideline* (DEC, 2006).

E51 The Proponent must reassess operational noise impacts from the CSSI in accordance with the *Rail Infrastructure Noise Guideline* (EPA, 2012) and in addition, if light rail service frequencies increase as part of normal operations (i.e. excluding special events) within the first 10 years of operation. More frequent services are defined as:

- (a) a light rail service more frequent than one every 10 minutes between 5.00am and 7.00am Monday to Friday; or
- (b) a light rail service more frequent than one every 7.5 minutes between 7.00am and 7.00pm Monday to Friday; or
- (c) a light rail service more frequent than one every 15 minutes between 11.00pm and 1.00am Monday to Friday; or
- (d) a light rail service more frequent than one every 15 minutes between 5.00am and 7.00am and 11.00pm and 1.00am on weekends and public holidays; or
- (e) a light rail service more frequent than one every 10 minutes between 7.00am and 11.00pm on weekends and public holidays.

If the reassessment shows that the trigger levels are exceeded, reasonable and feasible mitigation measures shall be identified in consultation with the affected property owner. Any required mitigation measures shall be implemented before the change to service frequency.

Operational Noise from Stationary Sources

E52 Noise emanating from stationary sources must comply with the noise limits at the nearest sensitive receivers in accordance with the *Noise Policy for Industry* (2017) or as specified in **Table E1** and **Table E2**. Noise generated from these facilities must also include associated traffic movements.

Table E1: Operational Noise Limits for the Camellia Stabling and Maintenance Facility at Sensitive Receivers (dBA)

Day L _{Aeq} (15 min)	Evening L _{Aeq} (15 min)	Night L _{Aeq} (15 min)	Night (sleep disturbance) L _{Amax}
52	48	46	56

Table E2: Operational Noise Limits for Substations at Sensitive Receivers (dBA)

Location	L _{Aeq} (15 min) at all Times	Receiver Description
TPS1 – Westmead Station Stop	65 47	Commercial Residential
TPS2 – Factory Street Stop	65 42	Commercial Residential
TPS3 – Barrack Lane	65	Commercial
TPS4 – Camellia Stop	65	Commercial
TPS5 – Dundas Stop	65 40	Commercial Residential
TPS6 – Adderton Road	36	Residential
TPS7 – Carlingford Stop	65 44	Commercial Residential
TPS8 – Colquhoun Street	65	Commercial

Note: The design of the Camellia Stabling and Maintenance Facility must demonstrate consideration of the relevant criteria for the future land use proposed under the Camellia Masterplan, where sufficient detail is available at the time of design.

E53 Where practicable, audible alarm systems at the stabling facility are required to be non-tonal, and any permanent vehicles on site are required to be fitted with non-tonal reversing alarms.

Operational Noise from Rail Traffic (adjacent to existing T6 Carlingford rail corridor – Carlingford to Camellia)

E54 Ground-borne noise from rail traffic must not result in increases in existing noise levels by 3 dBA or more and exceedances of the criteria outlined in **Table E3** at the nearest receiver. If exceedances are identified, the Proponent must implement mitigation measures which may include at-receiver property treatments:

Table E3: Operational Noise Trigger Levels for Sensitive Receivers adjacent to the Carlingford Corridor (dBA)

Receiver type	Time of day	Internal Noise Trigger Level (dBA)
Residential	Daytime 7.00am to 10.00pm	40 L _{ASmax} ¹
	Night time 10.00pm to 7.00am	35 L _{ASmax}
Schools, educational institutions, places of worship	When in use	40-45 L _{ASmax} ²
Medical	When in use	35 L _{ASmax} ¹
Public buildings	When in use	40 L _{ASmax} ¹
Theatres	When in use	NR 25 ³

General Note: Ground-borne noise level values are relevant only where they are higher than the airborne noise from railways and where the ground-borne noise levels are expected to be, or are, audible within habitable rooms (RING, EPA 2013).

Note 1: L_{ASmax} refers to the maximum noise level not exceeded for 95 percent of rail pass-by events and is measured using the 'slow' response setting on a sound level meter.

Note 2: The lower value of the range is applicable where low internal noise levels are expected, such as in areas assigned to studying, listening and praying.

Note 3: NR curves are used for rating noise levels and are a set of octave band curves which provide limiting sound pressure level values. NR 15 is equivalent to approximately 20 dBA and NR 25 is approximately 30 dBA.

Operational Noise from Rail Traffic (outside existing T6 Carlingford rail corridor – Camellia to Westmead)

E55 Ground-borne noise from rail traffic must not exceed the criteria outlined in Table E4 as measured at the nearest receiver. If exceedances are identified, the Proponent must implement mitigation measures which may include at-receiver property treatments:

Table E4: Operational Noise Trigger Levels for Sensitive Receivers between Camellia and Westmead (dBA)

Receiver type	Time of day	Internal Noise Trigger Level (dBA)
Residential	Daytime 7.00am to 10.00pm	40 L _{ASmax} ¹
	Night time 10.00pm to 7.00am	35 L _{ASmax}
Schools, educational institutions, places of worship	When in use	40-45 L _{ASmax} ²
Medical	When in use	35 L _{ASmax} ¹
Public buildings	When in use	40 L _{ASmax} ¹
Theatres	When in use	NR 25 ³

General Note: Ground-borne noise level values are relevant only where they are higher than the airborne noise from railways and where the ground-borne noise levels are expected to be, or are, audible within habitable rooms (RING, EPA 2013).

Note 1: L_{ASmax} refers to the maximum noise level not exceeded for 95 percent of rail pass-by events and is measured using the 'slow' response setting on a sound level meter.

Note 2: The lower value of the range is applicable where low internal noise levels are expected, such as in areas assigned to studying, listening and praying.

Note 3: NR curves are used for rating noise levels and are a set of octave band curves which provide limiting sound pressure level values. NR 15 is equivalent to approximately 20 dBA and NR 25 is approximately 30 dBA.

Operational Noise from Ancillary Systems

- E56 The Proponent must ensure that, unless they are required for safety reasons, no public-address system is to be used as part of normal operations of the CSSI. Any emergency public address system must be designed to minimise noise spillage from the site. Speakers must be installed with their pointing axis directed away from residential buildings and sensitive receivers unless otherwise specified in the **Operational Noise and Vibration Management Sub-Plan**.
- E57 Testing of warning bells in the stabling and maintenance facility must be undertaken in an enclosed space or with all doors of the facility closed. No testing of warning bells is permitted to take place at the stabling facility unless it meets the noise goals (including for sleep disturbance) outlined in the *Noise Policy for Industry* (2017) at the nearest residential receiver as outlined in **Condition E52**.

Operational Noise and Vibration Compliance Monitoring

- E58 The Proponent must undertake noise and vibration monitoring to assess noise from the light rail, ancillary facilities and stationary sources and the adequacy of noise mitigation measures to demonstrate compliance with the noise and vibration limits and/or goals specified in this approval. This must be developed in consultation with the EPA and Relevant Council(s) and be undertaken within six months of the commencement of operation of the CSSI. A **Noise and Vibration Compliance Assessment Report** providing the results of the monitoring must be submitted to the Secretary and Relevant Council(s), for information, within one month of its completion. The report must also detail any complaints received relating to operational noise and vibration impacts in the preceding six months. If the report indicates an exceedance of the limits and/or goals specified in this approval, the Proponent must implement additional measures to mitigate these exceedances in consultation with affected property owners and/or occupiers.
- E59 In the event of a change to the frequency of services outlined in **Condition E51**, the Proponent must monitor noise and vibration to assess the adequacy of implemented mitigation measures against the limits and/or goals specified in this approval and present these in an updated **Noise and Vibration Compliance Assessment Report**. If the monitoring indicates an exceedance of the noise and vibration limits and/or goals specified, the Proponent must implement further measures to mitigate these exceedances in consultation with affected property owners and/or occupiers. A copy of the updated **Noise and Vibration Compliance Assessment Report** must be submitted to the Secretary, for information, within one month of its completion.

HERITAGE

- E60 The Proponent must not destroy, modify or otherwise physically affect heritage items (including Aboriginal objects), outside of the CSSI footprint.
- E61 Nothing in this approval permits the Proponent to harm, modify, or otherwise impact human remains uncovered during the construction and operation of the CSSI.
- E62 An **Unexpected Heritage Finds Procedure** must be prepared:
- to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or OEH; and
 - by a suitably qualified and experienced archaeologist or heritage specialist.

The Procedure must be included in the **Heritage Management Sub-plan** required by **Condition C3**.

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.

- E63 The **Unexpected Heritage Finds Procedure**, as submitted to the Secretary, must be implemented for the duration of construction and during operational maintenance works.
- E64 The Proponent must prepare a **Heritage Interpretation Strategy** before works which impact on the items identified below commence which identifies and interprets the heritage values and stories of Aboriginal and non-Aboriginal heritage items, archaeology and heritage conservation areas associated with the CSSI. The Heritage Interpretation Strategy must be prepared and implemented in consultation with OEH and the Heritage Council of NSW (or its delegate). The Heritage Interpretation Strategy must be submitted to the Secretary for information and include, but not be limited to:
- (a) a discussion of the key interpretive themes, stories, archaeological results, and messages proposed to interpret the history and significance of affected heritage items and heritage conservation areas including:
 - i) Parramatta Female Factory and Institutions Precinct within the Cumberland District Hospital Group
 - ii) Lennox Bridge;
 - iii) St Patrick's Roman Catholic Cemetery;
 - iv) The Convict Lumberyard (Arthur Phillip High School site)
 - v) Ancient Aboriginal and Early Colonial Landscape (Robin Thomas Reserve);
 - vi) Queen's Wharf Reserve and stone wall and potential archaeological site;
 - vii) Dundas Railway Station Group;
 - viii) Prince Alfred Square (and potential archaeological site);
 - ix) Royal Oak Hotel and stables (and potential archaeological site);
 - x) Clyde Carlingford Rail Bridge abutments (Northern); and
 - xi) Clyde Carlingford Rail Bridge abutments (Southern)
 - (b) Consider the information compiled in development of the **Heritage Archival Recording and Salvage Report** required in **Condition E70**.
- E65 Identified impacts to heritage items and heritage conservation areas must be minimised through both detailed design and construction in consultation with the Heritage Council (or its delegate). The measures to manage this must be detailed in the **Heritage Management Sub-Plan** required by **Condition C3**.

Non-Aboriginal Heritage

- E66 The Proponent must not destroy, modify or otherwise physically affect any structures within the Cumberland District Hospital Group or the curtilage of the Parramatta Female Factory and Institutions Precinct, except as identified in the documents listed in **Condition A1**.
- E67 The proponent must prepare an analysis of alternatives to demolition of CHIP Hostel No. 1 before the commencement of construction. The analysis must be submitted to the Secretary stating a preferred option for approval. If demolition of the CHIP Hostel No. 1 is proposed, justification must be provided which considers the following guidelines included in the *Parramatta North Urban Transformation Consolidated Conservation Management Plan* (UrbanGrowth NSW, 2017):
- (a) that there is no prudent or feasible alternative;
 - (b) demolition would result in no or minimal impacts on the heritage significance of the place or the wider Parramatta North Historic Sites; and
 - (c) demolition would be of an overall benefit to the heritage significance of the place and the wider Parramatta North Historic Sites.

Nothing in this approval permits the demolition of the CHIP Hostel No. 1 without the written approval of the Secretary.

- E68 The detailed design of the CSSI must have regard to the following heritage items to ensure that the design respects and responds to the heritage value of the items:
- (a) Lennox Bridge;

- (b) Cumberland District Hospital Group;
- (c) St Patrick's Roman Catholic Cemetery;
- (d) Prince Alfred Square (and potential archaeological site);
- (e) Ancient Aboriginal and Early Colonial Landscape (Robin Thomas Reserve);
- (f) Queen's Wharf Reserve and stone wall and potential archaeological site and
- (g) Dundas Railway Station Group.

E69 Before installing acoustic treatment at any heritage item identified in the documents listed in **Condition A1** the advice of a suitably qualified heritage architect or heritage engineer with specific experience in built heritage must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.

Heritage Archival Recording and Salvage

E70 The Proponent must prepare a **Heritage Archival Recording and Salvage Report**, including photographic recording of heritage items which have been identified for demolition in the documents referred to in **Condition A1** and outline the salvage to be undertaken from these items.

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 12 months of completing the archival recording, or as otherwise agreed with the Secretary, the Proponent must submit the **Heritage Archival Recording and Salvage Report** to the Department, the OEH, Heritage Council of NSW, Relevant Council(s), relevant local libraries and local historical societies in the local government area.

E71 Following archival recording as required by **Condition E70**, and before demolition, the Proponent must salvage from heritage items to be demolished, identify options for sympathetic reuse of salvaged material (including integrated heritage displays) on the project or for other options for repository, reuse and display. Suitable repository location(s) must be established in consultation with Relevant Council(s). For any State Heritage-listed items or elements suitable for salvage, suitable repository location(s) must be determined in consultation with the Heritage Division of the OEH.

Any residual items and materials are to be made available, through a process to be developed by the Proponent in consultation with the relevant council(s), to landowners within the locality from where the material originated.

Historical Archaeology

E72 Before works within a Historical Archaeological Management Unit (HAMU), the Proponent must engage a suitably qualified archaeologist whose experience complies with the NSW Heritage Council's *Criteria for Assessment of Excavation Directors* (July, 2011) (referred to as the Excavation Director) to oversee and advise on matters associated with historical archaeology and to prepare a **Historical Archaeological Research Design and Excavation Methodology**.

E73 The **Historical Archaeological Research Design and Excavation Methodology** must to be submitted to the Heritage Council of NSW (or its delegate) for review and comment before finalisation. The **Historical Archaeological Research Design and Excavation Methodology** must:

- (a) be consistent with NSW Heritage Council Guidelines including:
 - i) Archaeological Assessments (1996);
 - ii) Assessing Significance for Historical Archaeological Sites and Relics (2009),
 - iii) Skeletal Remains (1998), and
 - iv) Historical Archaeological Code of Practice (2009);

- (b) include provision for early physical investigation of areas of impact identified as likely to contain State significant archaeology in the research design to inform detailed design in these areas to avoid State significant archaeology. This shall include, but not be limited to:
 - i) St Patrick's Roman Catholic Cemetery;
 - ii) Ancient Aboriginal and Early Colonial Landscape / Robin Thomas Reserve; and
 - iii) The Parramatta Town Drains (where these alignments are unclear);
- (c) provide for the detailed analysis of any archaeological relics discovered during the investigations;
- (d) include management options for discovered archaeological relics (including options for avoidance, salvage, and display or interpretation);
- (e) include procedures for notifying the Heritage Council of NSW (or its delegate) and Secretary of any relic as required under s146 of the *Heritage Act 1977*; and
- (f) if the findings of the investigations are significant, provide for the preparation and implementation of a heritage interpretation strategy.

- E74 Where excavation works are required in the vicinity of potential archaeological sites, the Excavation Director must be present to advise on archaeological issues and oversee excavation works. The Excavation Director must be given the authority to advise on the duration and extent of oversight required during excavation.
- E75 In the event that archaeological relics are discovered, the Proponent must prepare an **Archaeological Excavation Report** containing the findings of any excavations, including artefact analysis and the identification of a final repository of any relics. The report must be submitted to the Secretary, for information, within 12 months of completing all archaeological investigations, unless otherwise agreed with the Secretary. The **Archaeological Excavation Report** must also be submitted to the NSW Heritage Council, the local library and the local Historical Society in the local government area. A copy of the **Archaeological Excavation Report** must be provided with the relics.

Aboriginal Heritage

- E76 The Proponent must not harm, modify or otherwise impact Aboriginal objects associated with the CSSI except as authorised by this approval.
- E77 Where previously unidentified Aboriginal objects are discovered during construction of the CSSI, all work should stop in the affected area and a suitably qualified and experienced Aboriginal heritage expert should be contacted to provide specialist heritage advice. 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) register.
- E78 Works impacting on the following Aboriginal archaeological sites, and any mitigation and salvage measures required, must be specified in the **Heritage Management Sub-Plan** required by **Condition C3**:
- (a) Cumberland Hospital East;
 - (b) Harris Street Footpath / Robin Thomas Reserve;
 - (c) PLR AFT 2; and
 - (d) Sydney Turf Club Carpark.
- E79 Any Aboriginal objects discovered must be identified in the **Heritage Interpretation Strategy** required by **Condition E65** and, where relevant, include registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.

URBAN DESIGN AND VISUAL AMENITY

- E80 The Proponent must design and construct the CSSI in a manner that reduces visual and heritage setting impacts and ensures consolidation and rationalisation of kerbside infrastructure to avoid visual clutter.
- E81 Operational safety requirements must form an integral part of the design process and be considered throughout the detailed design to avoid the need for later additions that unduly compromise the urban design objectives as set out in the **Urban Design Requirements Report** specified in **Condition E87**.
- E82 Nothing in this approval permits advertising on any element of the CSSI.
- E83 The Proponent must design and construct the CSSI in a manner that minimises opportunities for graffiti.
- E84 The Proponent must investigate the feasibility of wire-free running along 'Eat Street', across Lennox Bridge, past Riverside Theatres and Prince Alfred Park and through the Parramatta North precinct with the objective of minimising visual impacts to the heritage values and physical impacts to the heritage fabric of these items. The Proponent must provide the results of the feasibility investigation to the Secretary, for information, before construction commences in these locations. If a decision is made not to provide wire-free running in the identified locations, supporting evidence must be provided in the feasibility assessment.
- E85 The Proponent must investigate the feasibility of grass track treatment running through the Parramatta North precinct and Ancient Aboriginal and Early Colonial Landscape/Robin Thomas Reserve with the objective of minimising visual impacts to the heritage values and physical impacts to the heritage fabric of these items. The Proponent must provide the results of the feasibility investigation to the Secretary, for information, before construction commences in these locations. If a decision is made not to provide grass track treatment in the identified locations, supporting evidence must be provided in the feasibility assessment.
- E86 The CSSI must be constructed in a manner that minimises visual impacts resulting from construction sites, including protecting and retaining existing vegetation around the perimeter of compound sites, providing temporary landscaping and screening where appropriate to soften views of the construction sites and minimising light spill to adjacent residential areas.

Urban Design Requirements Report

- E87 The Proponent must prepare and implement an **Urban Design Requirements Report** for public domain, architecture, landscape architecture, identity and place making with a specific focus on stop access and design. The **Urban Design Requirements Report** must consider crime prevention through environmental design principles and relevant design standards such as:
- (a) *Better Placed* (NSW Government Architect, 2017);
 - (b) *Greener Places* (NSW Government Architect, 2018);
 - (c) *Guidelines for the Development of Public Transport Interchange Facilities* (Ministry of Transport, 2008);
 - (d) *Water Sensitive Urban Design, NSW Sustainable Design Guidelines Version 4* (TfNSW, 2017);
 - (e) *AS4282-1997 Control of the obtrusive effects of outdoor lighting*; and
 - (f) relevant agency and Council design standards including those set out in the Parramatta Strategic Planning Framework.

The Urban Design and Requirements Report must incorporate:

- (g) design principles and objectives;
- (h) identification of relevant land use changes, masterplans and initiatives;
- (i) analysis and mapping of local context and character; and

- (j) analysis and mapping of transport and land use integration and system functionality in the context of precincts.

- E88 The **Urban Design Requirements Report** must inform the detailed design of the CSSI to:
- (a) demonstrate responsiveness to local streetscape and landscape character;
 - (b) integrate with, or allow for, known land use changes, masterplans and developments;
 - (c) contribute to the character and identify of the local area;
 - (d) respond to the character, setting and fabric of heritage elements and landscapes;
 - (e) demonstrate material selection and detailing (including consideration of anti-graffiti measures);
 - (f) achieve a safe, secure, functional and efficient transport network for all street users;
 - (g) maintain community amenity and privacy;
 - (h) maintain local access and circulation for residents, business and road users;
 - (i) address sensitive receivers to minimise noise, vibration, electromagnetic interference, light spill and nuisance;
 - (j) minimise the loss of existing trees, maximise urban tree canopy, including street trees and soft landscaping;
 - (k) address flooding and drainage issues;
 - (l) contribute to the activation of precincts;
 - (m) maximise local connectivity and minimise barriers;
 - (n) maximise walk-in catchments and offer legible, direct pedestrian connections;
 - (o) demonstrate clear wayfinding;
 - (p) maximise user safety, crime prevention and comfort; and
 - (q) consider the Camellia Town Centre Masterplan and the Telopea Masterplan, and Westmead Alliance master planning.

The **Urban Design Requirements Report** must be submitted to the Secretary for approval, following review by the **Design Review Panel** required by **Condition E90**, including recommendations provided by the **Design Review Panel** and the way these have been addressed.

- E89 Construction of light rail stops, tracks and associated facilities must not commence before the **Urban Design Requirements Report** has been approved by the Secretary. The detailed design development of light rail stops and associated light rail infrastructure within or in proximity to Heritage listed items must be undertaken in consultation with the Heritage Council (or its delegate).

Design Review Panel

- E90 The Proponent must establish an independent **Design Review Panel** before development of the detailed design and before construction commences.
- E91 During design development of the CSSI, the **Design Review Panel** must provide advice and recommendations on the detailed design. The responsibilities of the Design Review Panel include:
- (a) review the design to assess whether it is consistent with the commitments and outcomes made in the documents listed in **Condition A1**, as amended by the terms of this approval including the **Urban Design Requirements Report** required by **Condition E87**; and
 - (b) 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.
- E92 The **Design Review Panel** must be chaired by the NSW Government Architect (or its nominee), and must be comprised of, where relevant, a suitably qualified, experienced and independent professional in each of the fields of:
- (a) architecture;
 - (b) urban design and place making;

- (c) landscape design;
- (d) Aboriginal cultural heritage; and
- (e) non-Aboriginal heritage.

The Chair is to invite Relevant Councils, technical experts, key stakeholders, and NSW government agencies to observe **Design Review Panel** meetings and to provide advice on local issues, context, and city outcomes. This includes the Heritage Council (or its delegate). The Proponent and its contractor(s) may be invited onto the Panel as observers only and to provide technical advice.

Observers or advisors should not be present while the Panel is deciding upon its recommendations.

The Proponent must provide independent secretarial resources to the Panel.

- E93 The **Design Review Panel** members must be nominated by the Proponent and approved by the Secretary in accordance with the timeframes in **Condition E90**.
- E94 Nomination and appointments of the **Design Review Panel** must comply with the Public Service Commission's *Appointment Standards: Boards and Committees in the NSW Public Sector* guideline.
- E95 Once the **Design Review Panel** is formed a **Design Review Panel Terms of Reference** must be developed and endorsed by all panel members and then approved by the Secretary. The Terms of Reference must be submitted to the Secretary for information and:
 - (a) establish best practice governance and protocols for the operation of the **Design Review Panel**;
 - (b) include a Code of Conduct;
 - (c) outline the agreed frequency of **Design Review Panel** meetings;
 - (d) outline secretariat functions and administration including the recording and storing of meeting agenda, minutes and actions; and
 - (e) identify cessation arrangements
- E96 The **Design Review Panel** must be operated and managed in accordance with the approved **Design Review Panel Terms of Reference** and in accordance with the NSW Government *Boards and Committees Guidelines* (Department of Premier and Cabinet, September 2015).

Lighting and CCTV

- E97 All lighting to be implemented as part of the CSSI must have regard to the location of nearby residential dwellings. Lighting impacts must be minimised to the extent possible including the use of shields to reduce light spill and annoyance to adjacent residences.
- E98 The Proponent must ensure that all external lighting associated with the operation of the CSSI (excluding light rail vehicles) is mounted, screened and directed in such a manner so as not to create nuisance to residences. The lighting must be the minimum level of illumination necessary and shall 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*.
- E99 The placement, obstruction and removal of CCTV cameras must be undertaken in consultation with the relevant public authority and Relevant Council(s).

BIODIVERSITY AND REVEGETATION

- E100 The Proponent must avoid and/or minimise the removal of native vegetation or other bushland that provides habitat for native fauna with the objective of reducing impacts to threatened species, populations and ecological communities. Impacted vegetation must be rehabilitated in proximity to the area of disturbance with a diversity of endemic species (in the first instance) and locally native tree, shrub and groundcover species to the greatest extent practicable or offset in accordance with the Proponent's Biodiversity Offset Strategy and the Flora and Fauna Management Sub-Plan required by Condition C3, in consultation with OEH, DPI Fisheries, and the Biodiversity Conservation Trust.
- E101 During construction near the Parramatta River and Cumberland Hospital East and West, the Proponent must engage a suitably qualified and experienced fauna specialist to monitor the behaviour of the Grey-headed Flying-fox camp that resides in Parramatta Park in accordance with the Grey-headed Flying Fox Monitoring Program required by **Condition C9** and implement mitigation measures, as required to minimise potential impacts to the camp. Monitoring must commence at least 12 months before the commencement of construction within 300 metres, unless otherwise agreed with the Secretary, of the camp to establish baseline behaviour. Monitoring must be undertaken regularly during construction (in consultation with OEH) with the results compiled in a monitoring report submitted to OEH each month. Monitoring should include species present, numbers, a map of the extent of the camp, breeding status, and condition of animals. If monitoring suggests that construction associated with the CSSI is changing the behaviour of the camp, the Proponent must consult with OEH to determine whether additional mitigation measures are required.

Streetscape Trees

- E102 The Proponent must commission a suitably qualified and experienced Arborist with a minimum AQF Level 5 qualification in Arboriculture, that is independent of the design and construction personnel for the duration of construction. The Arborist must be approved by the Secretary before works commence and commissioned for the duration of construction.
- E103 The Arborist must:
- (a) be the principal point of advice in relation to the assessment and management of CSSI impacts on trees;
 - (b) prepare a **Tree Register** of all trees within the CSSI footprint (either for the entire CSSI or separate areas where tree removal and/or pruning is proposed) before the removal of any trees;
 - (c) identify those trees within the footprint that must be removed for construction to proceed or for CSSI operations; and
 - (d) identify those trees where their fate is uncertain and may be retained or may be pruned (either for construction or for ongoing maintenance during operation).
- E104 The **Tree Register** must include:
- (a) the georeferenced location of each tree;
 - (b) those attributes as defined in AS 4970-2009 Protection of trees on development sites;
 - (c) the tree retention value;
 - (d) the outcomes of a visual assessment of the condition of the tree;
 - (e) where a tree requires removal, whether, in the opinion of the Arborist, it can be successfully transplanted;
 - (f) the extent of the proposed impact (complete removal or extent of pruning);
 - (g) measures for the management, protection and monitoring of compensatory vegetation, for a minimum of two years from being planted; and
 - (h) timing and responsibilities for the implementation of compensatory vegetation.
- E105 For those trees identified as requiring removal in the **Tree Register**, the Proponent must demonstrate consideration of options to avoid or minimise impacts on trees through the

detailed design and construction planning process. The options considered must include, but not be limited to:

- (a) consideration of operational requirements with existing tree locations;
- (b) consideration of the health of each tree, including its vigour and likely ability to survive *in situ* pruning or transplanting;
- (c) review of the construction methodology and layout to identify any options to avoid or minimise impacts on trees;
- (d) considering opportunities to narrow/move footpaths;
- (e) modification of the design to reduce impact to the tree (e.g. use of porous pavement);
- (f) reduction in the standard offsets required for underground services; and
- (g) where fencing, other ancillary infrastructure or services affect tree retention, relocation or alternative construction methods are considered to reduce impacts (e.g. from strip footings to pier footings for posts).

E106 The **Tree Register** and any evidence required by **Condition E105** must be submitted to the Secretary before the removal, damage or pruning of a tree for the purposes of the CSSI. The recommendations of the Arborist must be outlined in the Tree Register and implemented by the Proponent, unless otherwise agreed by the Secretary.

Tree Offset Package

E107 The Proponent must prepare and implement a **Tree Offset Package** for the CSSI in consultation with the independent Arborist required by **Condition E102**, and Relevant Council(s). The Package must consider the objectives and opportunities identified in *Sydney Green Grid West Central District* (Department of Planning and Environment, 2017), *Greener Places* (NSW Government Architect, 2017), and *Parramatta Ways (Implementing Sydney's Green Grid)* (City of Parramatta, 2017). The package must:

- (a) identify how impacts on trees and vegetation will be mitigated, managed, and compensated;
- (b) ensure that where trees are removed they are replaced at the following ratios regardless of their value, near the impact or, where this is not practicable, within other areas of the LGA or surrounding LGAs, in consultation with the relevant authority(s):
 - i) large trees (DBH greater than 60cm) – plant minimum of eight trees;
 - ii) medium trees (DBH greater than 15 cm, but less than 60 cm) – plant minimum of four trees; and
 - iii) small young trees (DBH less than 15cm) – plant minimum of two trees.
- (c) ensure a mix of species and a range of mature heights to provide visual diversity and benefits, in consultation with the Relevant Council(s);
- (d) street tree plantings are to have a minimum pot size of:
 - i) 200 litres in the Parramatta CBD precinct; and
 - ii) 75 litres in other streets;
- (e) tree planting in parks, open space, bushland, and within the Carlingford Line corridor, should be sized to suit the location, species and planting style, in consultation with the relevant authority(s); and
- (f) ensure at least 80% offset works must be completed before CSSI operations commence.

Where the requirements of this condition cannot be met, the Proponent must provide documented evidence demonstrating how the matters in (a) to (f) were considered and provide information and justification for an alternative offset option for the Secretary's approval.

Operational Maintenance

E108 The ongoing maintenance and operation costs of urban design and landscaping items (including tree offsets) and works implemented as part of this approval remain the Proponent's responsibility until satisfactory arrangements have been put in place for transfer to the relevant authority. Before the transfer, the Proponent must maintain items and works to the design standards established by the **Urban Design Requirements Report**, and the **Tree Offset Package**.

SOCIO-ECONOMIC, LAND USE AND PROPERTY

E109 The Proponent must design and construct the CSSI 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.

Business Activation Plan

E110 The Proponent must prepare and implement a **Business Activation Plan** to manage impacts to businesses on streets affected by construction of the CSSI, including those where access is altered. 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) Business Management Strategies for each stage of construction (and/or activity), identifying affected businesses and associated management strategies, including the employment of place managers and specific measures to assist small business owners adversely impacted by the construction of the CSSI;
- (c) Business Support Services Program to assist small business owners adversely impacted by construction of the CSSI. The Program must assist local businesses to develop proactive business strategies including:
 - i) marketing and promotion;
 - ii) business diversification and business planning; and
 - iii) engagement of specialists to run workshops both before and during construction.
- (d) establishment of business reference groups to provide, but not be limited to, the following services:
 - i) provide information on the CSSI;
 - ii) discuss mitigation measures to minimise impacts; and
 - iii) consult on out of hours works ('Eat Street' only) where required by **Condition E24**.
- (e) a monitoring program to assess the effectiveness of the measures including business feedback 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 Monitoring and Reporting Program** required in **Condition A30**.

WATER QUALITY AND FLOODING

Water Quality

E111 Before undertaking any works and during maintenance or construction activities, erosion and sediment controls must be implemented and maintained to prevent water pollution consistent with LandCom's *Managing Urban Stormwater* series (The Blue Book).

E112 The CSSI must be designed, 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.

Flooding

E113 A **Flood Management Plan** must be prepared and implemented in respect of the flood prone land and overland flow paths for the waterways and catchments in the CSSI's vicinity. The Plan must be prepared during detailed design to identify the potential adverse impacts of the operation of the CSSI on existing flooding characteristics for a full range of flood events up to and including the probable maximum flood (PMF). The Plan must include but not be limited to:

- (a) the results of further modelling to identify the potential impacts of the CSSI on flood behaviour including consideration of increased rainfall intensity and sea level rise under climate change conditions, consistent with the requirements of the *Floodplain Development Manual* (2005) and *Practical Consideration of Climate Change* (2007);
- (b) the identification of design measures that would be implemented to manage the impacts of flooding on the operation of the CSSI and not worsen the existing flood characteristics. Design of mitigation measures must consider the full range of design events up to the 1% AEP;
- (c) demonstration of constructability of proposed management measures;
- (d) sensitivity analyses to assess the risk that additional properties or infrastructure could be subject to changes in existing flood behaviour as a result of the CSSI (i.e. beyond those identified as being impacted in point a) above), for design events up to and including the 1% AEP flood event, namely:
 - i) assessment of 100% blockage of pits for the pre-development (existing) and post-development (with the CSSI) scenarios;
 - ii) assessment of the impact of local and regional coincident flood peaks; and
 - iii) assessment of cumulative impacts of the CSSI and other state significant developments and/or infrastructure in the CBD being constructed or that have received approval (and for which sufficient design detail is available at the time).
- (e) the identification of measures to be implemented to minimise scour and dissipate energy at locations where flood velocities are predicted to increase as a result of the CSSI;
- (f) identification of stormwater drainage system upgrades including those upgrades considered as mitigation measures; and
- (g) identification of the timing and maintenance responsibility of any necessary works.

Not worsen existing flooding characteristics within and in the vicinity of the CSSI means the following:

- (a) a material increase in the duration of inundation for all design events up to and including a 1% AEP flood event;
- (b) an increase in flood levels of more than 10 mm at properties for all design events up to and including the 1% AEP flood event; and
- (c) no increase in high hazard flooding as defined in Appendix L of the NSW Government's *Floodplain Development Manual* (2005).

The **Flood Management Plan** must be prepared by a suitably qualified and experienced person in consultation with directly affected landowners, Sydney Water, OEH, NSW State Emergency Services and the Relevant Council(s). The Plan must be independently peer reviewed by a suitably qualified and experienced hydrological engineer to confirm that the management of and response to flood events is appropriate.

The Plan and results of the peer review must be submitted to the Secretary, for information, and Relevant Council(s) at each design stage associated with the CSSI where there is potential to cause adverse flooding impacts.

E114 An **Operational Flood Management Plan** must be prepared and implemented before the commencement of CSSI operations. The Operational Flood Management Plan must identify measures to be implemented during the operational phase to minimise risks and maximise safety during flooding events, particularly for passengers and staff. The **Operational Flood Management Plan** must be prepared by a suitably qualified and experienced person in consultation with OEH, NSW State Emergency Service and the Relevant Council(s). It should take into account the outcomes of the sensitivity analyses undertaken in the **Flood Management Plan** required by **Condition E113**.

E115 All relevant flooding information must be provided to the Relevant Council(s), DPE (Urban Renewal), OEH and the NSW State Emergency Service, to assist in the preparation of any new or necessary update(s) to the relevant plans and documents relating to flooding, to reflect changes in flooding levels, flows and characteristics as a result of the CSSI. The Council, OEH and SES must be notified in writing that the information is available no later than one month following the completion of construction. Information requested by the 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, OEH and the SES.

ELECTROMAGNETIC INTERFERENCE (EMI)

E116 Before the commencement of detailed design of light rail infrastructure, the Proponent must identify EMI susceptible devices that may potentially be affected by CSSI operations and establish baseline electromagnetic field levels at the relevant EMI susceptible devices near the CSSI. Targeted consultation must be carried out with the owners/operators of the identified EMI susceptible devices. The outcomes of these consultations must be documented as part of the **Electromagnetic Management Plan** required by **Condition E117**.

E117 Before commencement of CSSI operations, the Proponent must prepare an **Electromagnetic Management Plan** in consultation with NSW Health and other owner/operators of potentially EMI susceptible devices and submit it to the Secretary for information. The Plan must identify how operational electromagnetic fields attributable to the CSSI could affect the operation of NSW Health or other existing EMI susceptible devices near the CSSI. The Plan must include, but not be limited to:

- a) identification of existing EMI susceptible devices;
- b) established baseline electromagnetic field levels at existing EMI susceptible devices;
- c) predicted operational electromagnetic field levels at existing EMI susceptible devices potentially affected by CSSI operations;
- d) identification of electromagnetic field reduction strategies, technologies, design and operational measures that will be implemented to manage potential impacts;
- e) identification of appropriate limits/criteria to minimise operational interference to existing EMI susceptible devices within the operational tolerance of the device;
- f) internal audits of compliance of electromagnetic field levels; and
- g) details of an electromagnetic field monitoring program to be completed within 18 months from commencement of CSSI operations, unless otherwise agreed with the owners/operators of the EMI susceptible device(s).

CONTAMINATION

- E118 Notification must be provided and, where relevant, approvals must be sought directly from the EPA before commencement of any works which will intersect or disturb the surface of sites which are regulated by the EPA under the *Contaminated Land Management Act 1997*.
- E119 Before commencement of any activities that would result in the disturbance of land and/or soil in Areas of Environmental Interest (AEI) identified as having a high risk of contamination, or identified as medium risk subject to further desktop assessment as specified in the documents listed in **Condition A1**, a **Site Contamination Report** must be prepared by a suitably qualified person(s) in accordance with the requirements of the *Contaminated Land Management Act 1997* and associated guidelines. The **Site Contamination Report** must outline the potential contamination risks from the AEIs to human health and receiving waterways and detail, where relevant, whether the land is suitable (for the intended land use) or can be made suitable through remediation. For AEIs where there is insufficient information and data available to draw such conclusions, the **Site Contamination Report** must also detail the outcomes of Phase 2 site contamination investigations within those AEIs.
- E120 For those AEIs where a **Site Contamination Report** is to be prepared in accordance with **Condition E119**, where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated soils, materials and groundwater must be identified in the **Site Contamination Report** and incorporated into the **CEMP** or relevant sub-plan.
- E121 For those AEIs where a **Site Contamination Report** concludes the site can be made suitable for its intended land use subject to remediation, the **Site Contamination Report** must include a **Remediation Action Plan** to address disturbed areas, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater.
- E122 For those AEIs where remediation is required, the **Site Contamination Report** and **Remediation Action Plan** must be accompanied by a **Site Audit Statement(s)**, prepared by a NSW EPA Accredited Site Auditor under the *Contaminated Land Management Act 1997*, verifying that the disturbed area has been or can be remediated to a standard consistent with the intended land use. Where land is remediated, a final **Site Audit Statement(s)** must be prepared by an accredited Site Auditor, certifying that the contaminated and disturbed areas have been remediated to a standard consistent with the intended land use.
- Note: Terms used in Condition E121 and E122 have the same meaning as in the Contaminated Land Management Act 1997.*
- E123 For those AEIs where remediation is required, the land must not be used for the purpose approved under the terms of this approval until a **Site Audit Statement** determines that the land is suitable for that purpose and any conditions on the **Site Audit Statement** have been complied with.
- E124 A copy of the final **Site Audit Statement** must be submitted to the Secretary and Relevant Council no later than one month before the commencement of CSSI operations.
- E125 An **Unexpected Contaminated Land and Asbestos Finds Procedure** must be prepared and must be implemented should unexpected contaminated land or asbestos be excavated or otherwise discovered during construction. This can be provided as part of the **CEMP** or relevant sub-plan.
- E126 The **Unexpected Contaminated Land and Asbestos Finds Procedure** must be implemented throughout construction.

WASTE MANAGEMENT

- E127 Waste generated during construction and operation must be managed in accordance with the following priorities:
- (a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced;
 - (b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and
 - (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.
- E128 The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of a current EPL for the CSSI (if applicable), or be done in accordance with a Resource Recovery Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, as the case may be.
- E129 Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, or to any other place that can lawfully accept such waste. Disposal of waste at these facilities must include GPS tracking of waste vehicles, audits of waste facility receipts and cross verification with the facility. All asbestos waste over 10m³ must be tracked through EPA's WasteLocate service.
- E130 All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.
- E131 Asbestos or asbestos-contaminated materials be uncovered during demolition and construction activities of the CSSI must be strictly managed in accordance with the requirements under the *Protection of the Environment Operations (Waste) Regulation 2014* and any guidelines or requirements in force at the date of this approval and issued by the EPA in relation to those materials.

HAZARDS

- E132 At least one month before the commencement of construction of any hazardous works or works adjacent to hazardous infrastructure, the Proponent must prepare and submit for the approval of the Secretary, the following:
- (a) A **Final Hazard Analysis** of the development consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*. The study must be prepared based on the final detailed design of the development and include:
 - i) a quantitative risk assessment;
 - ii) details of all safeguards to be implemented, in particular those at the locations of pipeline crossing;
 - iii) findings and recommendations from the Safety Management Study undertaken in consultation with the relevant dangerous goods pipeline operators and pipeline licensees;
 - iv) demonstrate that the risks from the development satisfy relevant NSW Risk Criteria as set out in HIPAP 10.
 - (b) A **Construction Safety Study**, prepared consistent with *Hazardous Industry Planning Advisory Paper No. 7 'Construction Safety'*. The **Construction Safety Study** must be prepared in consultation with the relevant dangerous goods pipeline operators and licensees and include details of the proposed safety measures to ensure the relevant underground pipelines will not be impacted by the construction of the development.

- E133 One month before the commencement of CSSI operations, the Proponent must submit to the Secretary for information, a **Pre-Startup Compliance Report** detailing compliance with **Condition E132**, including:
- (a) dates of study/plan/system submission, approval, commencement of construction and commissioning;
 - (b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
 - (c) responses to any requirement imposed by the Secretary.
- E134 Three (3) months after the commencement of CSSI operations, the Proponent must submit to the Secretary, for information, a **Post-Startup Compliance Report**, which reports on the implementation of all recommendations raised in the **Construction Safety Study** required under **Condition E132**.

INFRASTRUCTURE PROPERTY AND UTILITIES

- E135 The Proponent must identify utilities, services and other infrastructure and property potentially affected by construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the CSSI must be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The Proponent must ensure that any disruption to any service is minimised and shall be responsible for advising impact to service recipients before any planned disruption of service. The cost of any such arrangements must be borne by the Proponent, unless otherwise agreed with the utility/service provider.

SUSTAINABILITY

- E136 A **Sustainability Strategy** must be prepared to achieve a minimum project score of 65 for 'Design' and 'As built' rating under the Infrastructure Sustainability Council of Australia infrastructure rating tool.
- E137 The **Sustainability Strategy** must be submitted to the Secretary, for information, within six months of the date of this approval, or within another timeframe agreed with the Secretary, and must be implemented throughout the design, construction and operation of the CSSI.
- E138 Opportunities to reduce operational greenhouse gas emissions must be investigated during detailed design. The sustainability initiatives identified in the documents identified in **Condition A1** must be regularly reviewed, updated and implemented throughout the design development and construction, and annually during operation of the CSSI.

Appendix A – Flexibility Provisions

Project Element	Flexibility Provisions
Stop length	Minor changes (+/- 10 metres) to a stop length permitted where determined to have no more than a minor impact.
Stop arrangement side or island platform)	Changes to stop arrangement (side or island platform) permitted where determined to have no more than a minor impact.
Stop location	Minor relocation (+/- 10 metres) to stop location permitted where determined to have no more than a minor impact and the new location does not have a material impact on new receivers compared with the impact(s) assessed in the documents listed in Condition A1 .
Utility and lighting works	These works are permitted within 1 km of the project footprint where determined by the ER to have a minor impact.
Minor road network changes including off-corridor works and public transport network changes, such as line marking, car parking adjustments, signal changes, footpath or kerb adjustments and bus stops	<p>Minor changes are permitted to those activities identified in Sections 5.8 and 5.9 of the EIS.</p> <p>Minor road network changes in the vicinity of the CSSI footprint are permitted to address potential traffic impacts associated with light rail.</p> <p>In order to be considered minor, these changes must meet the following parameters:</p> <ul style="list-style-type: none"> • Environmental impacts are manageable through the implementation of environmental measures as detailed in the CEMP and/or the OEMP as relevant. • No acquisition (temporary or permanent) of property where a negotiated purchase from the property owner is not possible. • Does not involve the removal of a tree or other vegetation which is listed as a threatened species or ecological community in the <i>Biodiversity Conservation Act 2016</i> and/or <i>Environment Protection and Biodiversity Conservation Act 1999</i>; • No direct impact and no more than a minor indirect impact on a listed heritage item. • Access arrangements are provided for any impacted road intersection and, where relevant, for property access in consultation with the affected party(ies). • Does not result in operational impacts that would have more than a minor adverse traffic impact (including on intersection performance, road way capacity, bus operations and active transport network) as assessed in the documents listed in Condition A1.