Appendix A Environmental Policy

Environmental Policy

Our Principles

Parklife Metro JV believe that the future should be founded on the recognition of the existing interdependence between economic growth and environmental and social improvement, at the local and global level. We believe that the environment must be protected throughout the delivery of all services provided, with consideration to the whole-of-life environmental, social and economic impacts, waste minimisation, recycling of natural resources and prevention of pollution. We strive to balance our economic and operational requirements with our social responsibilities to minimise impact on the environment and surrounding communities. Parklife Metro JV, is committed to the continual improvement of its environmental performance and ongoing review and improvement of its current processes and activities.

Our Objectives

Parklife Metro JV are committed to:

- Integrate whole-of-life environmental, sustainability, social and economic requirements throughout the design, construction and operation processes.
- Comply with all legal and corporate requirements with respect to environmental and sustainable outcomes: Promote ZERO environmental accidents.
- Promote a culture of innovation, accountability and participation, engaging our employees, suppliers and stakeholders in the continuous improvement of environmental and sustainable performance!
- Encourage ethical environmental and sustainable practice and behaviour including respect for indigenous culture and community values.
- Increase resilience to future climate change.
- Adopt opportunities to mitigate negative impacts and create liveable places
- Optimise resource efficiency (materials, energy, land and water) and waste management.
- Maintain an Environmental Management System that meets the requirements of *ISO 14001* and is dedicated to continual improvement.
- Sustainable procurement throughout the supply chain.

Our Approach

To assist us in achieving our environmental and sustainable objectives we will undertake the following:

- Demonstrate environmental and sustainability leadership, and continual improvement.
- Establish environmental and sustainability objectives and targets and monitor performance.
- Embed and integrate sustainability requirements within our procurement strategies, processes and contracts!
- Encourage everyone's right and responsibility to intervene if any doubt arises concerning the environment being compromised in any way. Establish an open reporting culture to ensure that all environmental incidents that may occur in the workplace are appropriately reported and assessed to minimise potential future occurrence.
- Encourage innovation with our partners, suppliers and stakeholders envisaging cost effective new and improved technologies to minimise environmental impacts and reduce embodied carbon.
- Environmental and sustainability training for all our employees, suppliers and clients through induction, training, workshops and toolbox talks
- Assess environmental, sustainable and climate change risks and integrate design and mitigation measures to manage risk and improve performance throughout our processes, activities and workplaces.
- Conduct planned and risk based internal workplaces audits and inspections to monitor compliance with statutory, clients, license/permits and the business management system requirements.
- Identify and partner with local communities and stakeholders to enhance worker skills, education, employment opportunities, apprenticeships and to support sustainable development initiatives.
- Maximise local employment, social procurement, and training and development opportunities.
- Publicly report on performance outcomes

Our Senior Management will endeavour to review the Policy and business management system for continuing suitability on an annual basis as part of Business Management Review and communicate outcomes to the various levels and functions.

Marco Assorati
Branch Manager, Webuild S.p.A.
Draft date: 26 January 2023

Andrea Galati
Director, Salini Australia Pty Ltd
Review date: 12 January 2024

Appendix B Compliance Table

Details on compliance with relevant requirements are provided in the following sections:

- Conditions of Approval, including SSI 10051 MOD 1 determined 14 April 2022 (refer to Appendix B.1)
- Revised Environmental Mitigation Measures (REMMs) (refer to Appendix B.2)
- Construction Environmental Management Framework (CEMF) requirements (refer to Appendix B.3)

Appendix B.1 Conditions of Approval (SSI 10051)

Includes MOD 1 determined 14 April 2022.

Ref	Description	Reference	How Addressed
A1	The Proponent must carry out the CSSI in accordance with the terms of this approval and generally in accordance with: (a) Sydney Metro – Western Sydney Airport Environmental Impact Statement dated 21 October 2020; and (b) Sydney Metro – Western Sydney Airport Submissions Report submitted April 2021.	This CEMP	This CEMP provides a framework for ensuring compliance with the requirements of the SSI 10051 Planning Approval and REMMs
A2	The CSSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.	This CEMP	This CEMP provides a framework for ensuring compliance with the requirements of the SSI 10051 Planning Approval and REMMs.
A3	In the event of an inconsistency between: (a) the conditions of this approval and any document listed in Condition A1, the conditions of this approval will prevail to the extent of the inconsistency; and (b) any document listed in Condition A1, the most recent document will prevail to the extent of the inconsistency. Note: For the purpose of this condition, there is 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.	N/A	Condition noted
A4	In the event that there are differing interpretations of the conditions of this approval, including in relation to a condition of this approval, the Planning Secretary's interpretation is final.	N/A	Condition noted
A5	The Proponent must comply with all written requirements or directions of the Planning 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 Planning 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); (f) the carrying out of any additional monitoring or mitigation measures; and (g) in respect of ongoing monitoring and management obligations, compliance with an updated or revised version of a guideline, protocol, Australian Standard or policy required to be complied with under the terms of this approval.	N/A	Condition noted. In the event that a written requirement or direction is received from the Planning Secretary, relevant information and/or records will be provided to Sydney Metro for submission.
A6	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 Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval; (b) a log of the dates of engagement or attempted engagement with the identified party and a	This CEMP	This CEMP has been prepared in accordance with Conditions C2 and C3. This Plan will be submitted to the ER for endorsement and lodged with DPE for approval. There are no agency consultation requirements triggered in the preparation of this CEMP.

Ref	Description	Reference	How Addressed
	summary of the issues raised by them; (c) documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that the party(s) has none or has failed to provide feedback after repeated requests; (d) outline of the issues raised by the identified party(s) and how they have been addressed; and (e) a description of the outstanding issues raised by the identified party(s) and the reasons why they have not been addressed.		Evidence of required consultation has been included in relevant sub-plans.
A7	This approval lapses five (5) years after the date on which it is granted, unless work has physically commenced on or before that date.	N/A	This Condition is the responsibility of Sydney Metro, noting that work has commenced under SSI-10051
A8	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.	N/A	Condition noted
A9	Any document that must be submitted or action taken within a timeframe specified in or under the conditions of this approval may be submitted or undertaken within a later timeframe agreed with the Planning Secretary. This condition does not apply to the written notification required in respect of an incident under Condition A39.	N/A	Timeframes of submission or actions will be adhered to unless in agreement with the Planning Secretary.
A10	The CSSI may be constructed and operated in stages. Where staged construction is proposed and/or operation, a Staging Report must be prepared and submitted to the Planning Secretary for information. The Staging Report must be submitted to the Planning Secretary for information no later than one (1) month before the lodgement of any CEMP or CEMP sub plan for the first of the proposed stages of construction (or if only staged operation is proposed, one (1) month before the commencement of operation of the first of the proposed stages of operation), unless otherwise agreed with the Planning Secretary.	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro. Details on construction staging, as relevant to the SSTOM Works, are provided in Section 1.4
A11	The Staging Report must: (a) set out how 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; (b) if staged operation is proposed, set out how the operation of the whole of the CSSI will be staged, including details of each stage and the general timing of when operation of each stage will commence; (c) specify conditions that apply to each stage of construction and operation including how compliance with conditions will be achieved across and between each of the stages of the CSSI; and (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging; and (e) for the purposes of informing Conditions C2, C7 and C17, include an assessment of the predicted level of environmental risk and potential level of community concern posed by the construction activities required to construct each stage of the CSSI. With respect to (e) above, the risk assessment must use an appropriate process consistent with AS/NZS ISO 31000: 2009; Risk Management - Principles and Guidelines and must be endorsed by the ER. Note: 1. A Staging Report may reflect the staged construction and operation of the project through	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro. Details on construction staging, as relevant to the SSTOM Works, are provided in Section 1.4

Ref	Description	Reference	How Addressed
	geographical activities, temporal activities or activity-based staging. 2. The risk matrix must reflect the stages of construction identified in the Staging Report		
A12	The CSSI must be staged in accordance with the Staging Report, as submitted to the Planning Secretary for information.	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro. Details on construction staging, as relevant to the SSTOM Works, are provided in Section 1.4
A13	Where staging is proposed, the terms of this approval that apply or are relevant to the work or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro. Details on construction staging, as relevant to the SSTOM Works, are provided in Section 1.4
A14	Where changes are proposed to the staging of construction or operation, a revised Staging Report must be prepared and submitted to the Planning Secretary for information before the commencement of changes to the stage of construction or the stage of operation.	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro. Details on construction staging, as relevant to the SSTOM Works, are provided in the CEMP. A revised Staging Report has been prepared by Sydney Metro and submitted to the Planning Secretary prior to commencement of the changes.
A15	Where changes are proposed to the risk assessment related to the staging of construction or operation, a revised Staging Report must be submitted to the Planning Secretary for information one (1) month before the lodgement of any CEMP or CEMP sub plan associated with the stage where change in risk assessment is proposed.	CEMP - Section 1.4	The Staging Report is prepared by Sydney Metro, with information as relevant provided by Parklife Metro D&C. A revised Staging Report has been prepared by Sydney Metro, in consultation with Parklife Metro D&C, and submitted to the Planning Secretary prior to commencement of the changes.
A16	The Proponent may submit any strategies, plans or programs required by this approval on a progressive basis, within each stage of the CSSI. Notes: 1. While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing activities on site are covered by suitable strategies, plans or programs at all times; and 2. If the submission of any strategy, plan or program is to be submitted on a progressive basis, then the relevant strategy, plan or program must clearly describe the activities to which the strategy, plan or program applies, the relationship of this activity to any future activities within the stage, and the trigger for updating the strategy, plan or program. 3. The staged submission of strategies, plans or programs may reflect the construction and operation of the project through geographical activities, temporal activities or activity-based staging.	N/A	Condition Noted The Staging Report is prepared by Sydney Metro.
A17	Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 can only be established and used in each case if: (a) they are located within or immediately adjacent to the Construction Boundary of the CSSI; and (b) they are not located next to sensitive land use(s) (including where an access road is between the facility and the receiver), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location; and (c) they have no impacts on Heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and (d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.	CEMP - Section 1.5	Ancillary facilities, including site-layouts, are detailed in the CEMP, reflecting requirements of Condition C3.

Ref	Description	Reference	How Addressed
	Note: This condition does not apply to any ancillary facilities or work that are exempt or complying development, established before the commencement of construction under this approval or minor ancillary facilities established under Condition A22.		
A18	Before establishment of any ancillary facility (excluding exempt or complying development, minor ancillary facilities determined by the ER to have minimal environmental impact and those established under Condition A22 and those considered in an approved CEMP), 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 ancillary facilities. The Site Establishment Management Plan must be prepared in consultation with the Relevant Council(s) and relevant government agencies. The Site Establishment Management Plan must include: (a) a description of activities to be undertaken during establishment of the ancillary facility (including scheduling and duration of work to be undertaken at the site); (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land use(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 work; (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 Condition A1; and Before establishment of any ancillary facility (excluding exempt or complying development, minor ancillary facilities determined by the ER to have minimal environmental impact and those established under Condition A22 and those considered in an approved CEMP), 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 ancillary facilities. The Site Establishment Management Plan must be prepared in consultation with the Relevant Council(s) and relevant government agencies. The Site Establishment Management Plan must include: (a) a description of activities to be undertaken during establishment of the ancillary facility (including scheduling and duration of work to be undertaken at the site); (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land use(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 work; (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 Condition A1; and (ii) 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, where appropriate or required.	CEMP - Section 1.5 Appendix F	Ancillary facilities, including site-layouts, are detailed in the CEMP. Reflecting requirements of Condition C3.

Ref	Description	Reference	How Addressed
	Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each ancillary facility.		
A19	With the exception of a Site Establishment Management Plan expressly nominated by the Planning Secretary to be endorsed by the ER, all Site Establishment Management Plans must be submitted to the Planning Secretary for approval one (1) month before the establishment of any ancillary facilities.	CEMP - Section 1.5	Noted. If an SEMP is prepared, it will be submitted to the Planning Secretary for approval and/or endorsed by the ER.
A20	A Site Establishment Management Plan expressly nominated by the Planning Secretary to be endorsed by the ER must be submitted to the ER for endorsement one (1) month before the establishment of that ancillary facility or as otherwise agreed with the ER.	CEMP - Section 1.5	Ancillary facilities, including site layouts, are included in the CEMP, which will be endorsed by the ER, in accordance with Condition C3. Given that the ancillary facilities were included within an endorsed CEMP, a Site Establishment Management Plan is not triggered at this time.
A21	The use of ancillary facility for construction must not commence until the CEMP required by Condition C1 relevant CEMP Sub-plans required by Condition C5 and relevant Construction Monitoring Programs required by Condition C13 have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable). Note: This condition does not apply to Condition A22 or where the use of an ancillary facility is Low Impact Work or for Low Impact Work.	CEMP - Section 1.7	Ancillary facilities, including site-layouts, are detailed in the CEMP. Reflecting requirements of Condition C3
A22	Lunch sheds, office sheds, portable toilet facilities and the like, can be established and used where they have been assessed in the documents listed in Condition A1 or satisfy the following criteria: (a) are located within or adjacent to the Construction Boundary; and (b) have been assessed by the ER to have - (i) minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the ICNG, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and (ii) minimal environmental impact with respect to waste management and flooding, and (iii) no impacts on biodiversity, soil and water, and Heritage items beyond those already approved under other terms of this approval.	CEMP - Section 1.5	Lunch sheds, office sheds, portable toilet facilities and the like, will be assessed in accordance with the requirements of this condition and endorsed by the ER prior to establishment
A23	Boundary screening must be erected around ancillary facilities that are adjacent to sensitive land use(s) for the duration that the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners.	VAMP	Ancillary facilities, including site-layouts, are detailed in this CEMP. Reflecting requirements of Condition C3 The VAMP includes details to minimise visual impacts.
A24	Boundary screening required under Condition A23 must minimise visual impacts on adjacent sensitive land use(s).	VAMP	Ancillary facilities, including site-layouts, are detailed in this CEMP. Reflecting requirements of Condition C3. The VAMP includes details to minimise visual impacts.
A25	All Independent Appointments required by the terms of this approval must have regard to the Department's guideline Seeking approval from the Department for the appointment of independent experts (DPIE, 2020) and hold current membership of a relevant professional body, unless otherwise agreed by the Planning Secretary.	N/A	Sydney Metro is responsible for the engagement of independent appointments.

Ref	Description	Reference	How Addressed
A26	The Planning Secretary may at any time commission an audit of how an Independent Appointment has exercised their functions. The Proponent must: (a) facilitate and assist the Planning Secretary in any such audit; and (b) make it a term of their engagement of an Independent Appointment that the Independent Appointment facilitate and assist the Planning Secretary in any such audit.	N/A	Condition noted
A27	Upon completion of an audit under Conditions A26 above, the Planning Secretary may withdraw its approval of an Independent Appointment should they consider the Independent Appointment has not exercised their functions in accordance with this approval. Note: Conditions A26 and A27 apply to all Independent Appointments including the ER and Independent Auditor.	N/A	Condition noted
A28	Work must not commence until an Environmental Representative (ER) has been nominated by the Proponent and approved by the Planning Secretary.	N/A	The ER has been nominated by Sydney Metro and approved by the planning secretary
A29	The proposed ER must be a suitably qualified and experienced person(s) who was not involved in the preparation of the documents listed in Condition A1 and is independent from the design and construction personnel for the CSSI and those involved in the delivery of it.	N/A	The ER has been nominated by Sydney Metro and approved by the planning secretary in accordance with the requirements of this condition
A30	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 Planning Secretary for the purposes of the SSI.	N/A	The ER has been nominated by Sydney Metro and approved by the planning secretary in accordance with the requirements of this condition
A31	The ER must meet the requirements of the Department's Environmental Representative Protocol (DPE, 2018).	N/A	The ER has been nominated by Sydney Metro and approved by the planning secretary.
A32	For the duration of the work until the commencement of operation, or as agreed with the Planning Secretary, the approved ER must: (a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; (b) consider and inform the Planning 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 Conditions A10, A18, A20, C1, C5 and C13 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: (i) endorse the documents before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or (ii) endorse the documents before the implementation of such documents (if those documents are only required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary / Department); (iii) provide a written statement to the Planning Secretary advising the documents have been endorsed. (e) for documents that are required to be submitted to the Planning Secretary / Department for information under (d)(ii) above, the documents must be submitted as soon as practicable to the Planning Secretary / Department after endorsement by the ER, unless otherwise agreed by the Planning Secretary; (f) regularly monitor the implementation of the documents listed in Conditions A10, A18, A20, C1,	CEMP - Section 3.5.3	The ER has been nominated by Sydney Metro and approved by the planning secretary. Roles and responsibilities of the ER are detailed in Section 3.5.3

Ref	Description	Reference	How Addressed
	C5 and C13 to ensure implementation is being carried out in accordance with the document and the terms of this approval; (g) as may be requested by the Planning Secretary, help plan or attend audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A36; (h) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints received directly by the Department; (i) consider or assess the impacts of minor ancillary facilities comprising lunch sheds, office sheds and portable toilet facilities and the like as required by Condition A22; and (j) consider any minor amendments to be made to the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction monitoring programs without increasing impacts to nearby sensitive land use(s), and are consistent with the terms of this approval and the Site Establishment Management Plan, CEMP, CEMP Sub-plans and construction monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; (k) prepare and submit to the Planning 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 (7) days following the end of each month for the duration of the ER's engagement for the CSSI or as otherwise agreed by the Planning Secretary; and (l) assess the impacts of activities as required by the Low Impact Work definition. With respect to (d) above, the ER is not required to endorse the specialist content in documents requiring specialist review and / or endorsement.		
A33	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 A32 (including preparation of the ER monthly report), as well as: (a) the Complaints Register (to be provided on a weekly basis or as requested); 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).	CEMP - Section 3.5.3	Roles and responsibilities of the ER are detailed in Section 3.5.3
A34	The Department, and relevant Councils must be notified in writing of the date of commencement of construction at least seven (7) days before the commencement of construction.	N/A	This Condition is the responsibility of Sydney Metro and has already been satisfied ahead of FIW.
A35	If construction of the CSSI is to be staged, the Department, Liverpool City Council and Penrith City Council must be notified in writing at least seven (7) days before the commencement of each stage, of the date of the commencement of that stage.	CEMP - Section 2.2	This Condition is the responsibility of Sydney Metro who will notify DPE and relevant Councils of the date of commencement. Endorsement and Approval requirements are detailed in Section 2.2.
A36	Independent Audits of the CSSI must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (DPIE, 2020).	N/A	Sydney Metro is responsible for the delivery of Independent Audits. The requirement to undertake Independent Audits during the SSTOM Works is detailed in the CEMP.

Ref	Description	Reference	How Addressed
A37	Notwithstanding Condition A36, the Proponent may prepare an audit program to outline the scope and timing of each independent audit that will be undertaken during construction. If prepared, the audit program must be developed in consultation with, and approved by, the Planning Secretary prior to commencement of the first audit and implemented throughout construction.	N/A	Sydney Metro is responsible for the preparation of an audit program. Parklife Metro D&C will participate in independent audits as relevant to the SSTOM works.
A38	Proposed independent auditors must be approved by the Planning Secretary before the commencement of an Independent Audit.	N/A	Sydney Metro is responsible for the delivery of Independent Audits
A39	The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in the Independent Audit Post Approval Requirements (DPIE, 2020), upon giving at least four (4) weeks' notice (or timing as stipulated by the Planning Secretary) to the Proponent of the date upon which the audit must be commenced.	N/A	Condition noted
A40	Independent Audit Reports and the Proponent's response to audit findings must be submitted to the Planning Secretary within two (2) months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements (DPIE, 2020), unless otherwise agreed by the Planning Secretary.	N/A	Sydney Metro is responsible for the delivery of independent audits.
A41	The Planning Secretary must be notified via phone or in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. Any notification via phone must be followed up by a notification in writing via the Major Projects website within 24 hours of the initial phone call. The written 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 general nature of the incident.	CEMP - Section 3.8 CEMP - Section 3.8.3.1 CEMP - Appendix E	Notification to the Planning Secretary of incidents will be undertaken in accordance with the requirements of this condition. The CEMP includes processes for managing incidents an incident reporting, which is consistent with the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure
A42	Any incident within or potentially affecting the Controlled Areas of the WaterNSW Pipelines corridor must also be reported to WaterNSW on the WaterNSW 24-hour Incident Notification Number 1800 061 069.	CEMP - Section 3.8.3.5	Any incident within or potentially affecting Warragamba Pipeline will be reported to WaterNSW.
A43	Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix A.	CEMP - Section 3.8 CEMP - Appendix E	A subsequent notification and report will be submitted to DPE within seven days in accordance with the requirements set out in Appendix A of the Infrastructure Approval. The CEMP includes processes for managing incidents an incident reporting, which is consistent with the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure
A44	The Planning Secretary must be notified in writing via the Major Projects website within seven (7) days after the Proponent becomes aware of any non-compliance with the terms of this approval.	CEMP - Section 3.9.5.1 CEMP - Appendix E	Notification to the Planning Secretary of non-compliances will be undertaken in accordance with the requirements of this condition. The CEMP includes processes for managing incidents an incident reporting, which is consistent with the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure

Ref	Description	Reference	How Addressed
A45	A non-compliance notification must identify the CSSI (including the application number for it), set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be undertaken to address the non-compliance. Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	CEMP - Section 3.9.5 CEMP - Appendix E	Notification to the Planning Secretary of incidents will be undertaken in accordance with the requirements of this condition. The CEMP includes processes for managing non-compliances.
A46	All Heavy Vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application number to enable immediate identification by a person viewing the Heavy Vehicle standing 20 metres away.	CTMP	Condition noted
A47	The CSSI name, application number, telephone number, postal address and email address required under Condition B3 must be available on site boundary fencing / hoarding at each ancillary facility before the commencement of construction. This information must also be provided on the website required under Condition B11.	CTMP	Condition noted
B1	The Overarching Community Communication Strategy as provided in the documents listed in Condition A1, or updated Strategy must be implemented for the duration of the work. Should the Overarching Community Communication Strategy be updated, a copy must be provided to the Planning Secretary for information.	OCCS	Sydney Metro has developed an OCCS for the Sydney Metro Western Sydney Airport project. The OCCS incorporates both on and off-airport works, with the on airport components being developed in consultation with Western Sydney Airport
B2	A Complaints Management System must be prepared and implemented before the commencement of any work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the CSSI.	OCCS	The Complaints Management System will be established by Sydney Metro prior to commencement of any work. Parklife Metro D&C will implement the Complaints Management System for the duration of construction of the SSTOM Works.
B3	The following information must be available to facilitate community enquiries and manage complaints before the commencement of work 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.	OCCS	As detailed in the Community Communication Strategy, the requirements of this Condition have been satisfied by Sydney Metro.
B4	A Complaints Register must be maintained recording information on all complaints received about the CSSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The Complaints Register must record the: (a) number of complaints received; (b) date and time of the complaint; (c) number of people (in the household) affected in relation to a complaint, if relevant; (d) method by which the complaint was made; (e) any personal details of the complainant which were provided by the complainant or, if no such	OCCS	Sydney Metro will maintain the Complaints Register during the Project and for a minimum of 12 months following completion of construction. The requirements of this Condition will be captured within the Complaints Register by Parklife Metro D&C.

Ref	Description	Reference	How Addressed
	details were provided, a note to that effect; (f) issue of the complaint; (g) means by which the complaint was addressed and whether resolution was reached, with or without mediation; and (h) if no action was taken, the reason(s) why no action was taken.		
B5	Complainants must be advised of the following information before, or as soon as practicable after, providing personal information: (a) the Complaints Register may be forwarded to government agencies, including the Department (Department of Planning Industry and Environment, 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150), to allow them to undertake their regulatory duties; (b) by providing personal information, the complainant authorises the Proponent to provide that information to government agencies; (c) the supply of personal information by the complainant is voluntary; and (d) the complainant has the right to contact government agencies to access personal information held about them and to correct or amend that information (Collection Statement). The Collection Statement must be included on the Proponent or development website to make prospective complainants aware of their rights under the Privacy and Personal Information Protection Act 1998 (NSW). For any complaints made in person, the complainant must be made aware of the Collection Statement.	OCCS	Parklife Metro D&C will participate in the implementation of the Complaints Management System and provide the Sydney Metro with all information it requires to comply with the Condition.
B6	The Complaints Register must be provided to the Planning Secretary upon request, within the timeframe stated in the request. Note: Complainants must be advised that the Complaints Register may be forwarded to Government agencies to allow them to undertake their regulatory duties.	OCCS	Sydney Metro is responsible for submission of the Complaints Register to the Planning Secretary.
B7	A Community Complaints Mediator that is independent of the design and construction personnel must be engaged by the Proponent, upon the referral of the complaint by the ER in accordance with the Overarching Community Communication Strategy.	OCCS	Sydney Metro is responsible for the engagement of the Community Complaints Mediator. Further details on the Community Complaints Mediator are provided in the Communication Strategy
B8	The role of the Community Complaints Mediator is to provide independent mediation services for any reasonable and unresolved complaint referred by the ER where a member of the public is not satisfied by the Proponent's response. Where a Community Complaints Mediator is required, a mediator accredited under the National Mediator Accreditation System (NMAS), administered by the Mediator Standards Board must be appointed.	OCCS	Sydney Metro is responsible for the engagement of the Community Complaints Mediator. Further details on the Community Complaints Mediator are provided in the Communication Strategy
B9	The Community Complaints Mediator will: (a) review any unresolved disputes, referred by the ER in accordance with the Overarching Community Communication Strategy; (b) make recommendations to the Proponent to satisfactorily address complaints, resolve disputes or mitigate against the occurrence of future complaints or disputes; and (c) provide a copy of the recommendations, and the Proponent's response to the	OCCS	Sydney Metro is responsible for the engagement of the Community Complaints Mediator. Further details on the Community Complaints Mediator are provided in the Communication Strategy

Ref	Description	Reference	How Addressed
	recommendations, must be submitted to the Planning Secretary within one month of the recommendations being made.		
B10	Community Complaints Mediation will not be enacted before the Complaints Management System required by Condition B2 has been executed for a complaint and will not consider issues such as property acquisition, where other dispute processes are provided for in this approval, statute or clear government policy and resolution processes are available, or matters which are not within the scope of this CSSI.	OCCS	Sydney Metro is responsible for the engagement of the Community Complaints Mediator. Further details on the Community Complaints Mediator are provided in the Communication Strategy
B11	A website or webpage providing information in relation to the CSSI must be established before commencement of work and maintained for the duration of construction, and for a minimum of 24 months following the completion of all stages of construction of the CSSI. Up-to-date information (excluding confidential, private, commercial information or other documents as agreed to by the Planning Secretary) must be published before the relevant work commencing 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 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, or links to the referenced documents where available; (d) a copy of each statutory approval, licence or permit required and obtained in relation to the CSSI, or where the issuing agency maintains a website of approvals, licences or permits, a link to that website; (e) a current copy of each document required under the terms of this approval, which must be published within one (1) week of its approval or before the commencement of any work to which they relate or before their implementation, as the case may be; and (f) a copy of the audit reports required under this approval.	OCCS	The Project website has been established by Sydney Metro. In accordance with this Condition, Parklife Metro D&C will provide documents for inclusion on the website, as required.
C1	Construction Environmental Management Plans (CEMPs) and CEMP Sub-plans must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in Condition A1 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.	CEMP	This CEMP has been developed in accordance with the CEMF
C2	With the exception of any CEMPs expressly nominated by the Planning Secretary to be endorsed by the ER, all CEMPs must be submitted to the Planning Secretary for approval. Note: The Planning Secretary will consider the assessment of the predicted level of environmental risk and potential level of community concern required under Condition A11(e) when deciding whether any CEMP's may be endorsed by the ER	CEMP - Section 2.2	This CEMP will be submitted to the ER for endorsement and lodged with DPE for approval, as per DPE advice.
C3	The CEMP(s) not requiring the Planning Secretary's approval must be submitted to the ER for endorsement no later than one (1) month before the commencement of construction or where construction is staged no later than one (1) month before the commencement of that stage. That CEMP must obtain the endorsement of the ER as being consistent with the conditions of this approval and all undertakings made in the documents listed in Condition A1.	CEMP - Section 2.2	This CEMP will be submitted to the ER for endorsement and lodged with DPE for approval, as per DPE advice.

Ref	Description	Reference	How Addressed
C4	Any CEMP to be approved by the Planning Secretary must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction or where construction is staged no later than one (1) month before the commencement of that stage.	CEMP – Section 2.2	This CEMP will be submitted to the ER for endorsement and lodged with DPE for approval, as per DPE advice.
C5	Of the CEMP Sub-plans required under Condition C1, the following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. Details of issues raised by a government agency during consultation (as required by Condition A6) must be provided as part of the relevant CEMP Sub-Plan when submitted to the Planning Secretary / ER (whichever is applicable). Where a government agency(ies) request(s) is not included, the Proponent must provide the Planning Secretary / ER (whichever is applicable) justification as to why. Refer to table in MCoA Note: CEMP Sub-plan(s) may reflect the construction of the project through geographical activities, temporal activities or activity based staging.	CEMP – Section 2 Sub-plans	CEMP Sub-plans have been prepared in consultation with the agencies identified in this Condition.
C6	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 (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles.	Sub-plans	The relevant CEMP Sub-plans have been prepared in accordance with this Condition.
C7	With the exception of any CEMP Sub-plans expressly nominated by the Planning Secretary to be endorsed by the ER, all CEMP Sub-plans must be submitted to the Planning Secretary for approval.	CEMP – Section 2 SM Staging Report	In accordance with the Staging report, the approval authority for CEMP Sub-plans is detailed in Section 2 of the CEMP
C8	The CEMP Sub-plans not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the conditions of approval and all relevant undertakings made in the documents listed in Condition A1. Any of these CEMP Sub-plans must be submitted to the ER with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is staged no later than one (1) month before the commencement of that stage.	CEMP – Section 2 SM Staging Report	In accordance with the Staging report, the approval authority for CEMP Sub-plans is detailed in Section 2 of the CEMP
C9	Any of the CEMP Sub-plans to be approved by the Planning Secretary must be submitted to the Planning Secretary with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is staged no later than one (1) month before the commencement of that stage.	CEMP – Section 2 SM Staging Report	In accordance with the Staging report, the approval authority for CEMP Sub-plans is detailed in Section 2 of the CEMP
C10	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable), unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary or	CEMP – Section 2	The SSTOM Works will not commence until this CEMP and Sub-Plans have been endorsed by the ER and/or approved by the planning secretary

Ref	Description	Reference	How Addressed
	endorsed by the ER (whichever is applicable), including any minor amendments approved by the ER, must be implemented for the duration of construction.	SM Staging Report	
C11	In addition to the relevant requirements of the CEMF, the Flora and Fauna CEMP Sub-plan must include but not be limited to: (a) details of how the requirements of Conditions E11 are met; (b) details of a dewatering plan of farm dams including: (i) supervision of dewatering by a suitably qualified ecologist; (ii) a methodology for the transfer of native fauna species known to inhabit and/or use the dam; (iii) the location and suitability of the proposed relocation sites; and (iv) any potential impacts of relocating the fauna to the relocation sites; (c) protocols for incidental finds of threatened species and ecological communities within the construction boundary.	FFMP	The Flora and Fauna management plan has been prepared in accordance with this condition
C12	In addition to the relevant requirements of the CEMF, the Soil and Water CEMP Sub-Plan must include but not be limited to: (a) details how the requirements of Conditions E127, E128 and E129 will be met; (b) the unexpected contaminated finds protocol required by Condition E98.	SWMP	The Soil and Water management plan has been prepared in accordance with this condition
C13	The following Construction Monitoring Programs must be prepared in consultation with the relevant government agencies (as required by Condition A6) identified for each to compare actual performance of construction of the CSSI against the performance predicted in the documents listed in Condition A1 or in the CEMP. Where a government agency(ies) request(s) is not included, the Proponent must provide the Planning Secretary / ER (whichever is applicable) justification as to why. Required Construction Monitoring Programs Relevant government agencies to be consulted for each Construction Monitoring Program Refer to table in MCoA	AQMP SWMP NVMP	Construction monitoring programs have been prepared and included in the relevant CEMP Sub-plan. The Staging Report and the assessment of environmental management applicability to each stage has determined that a Groundwater Monitoring Program will be handed over from previous contracts once their responsibility for Groundwater Monitoring is complete. A Groundwater Monitoring Program will be prepared prior to Parklife Metro D&C assuming responsibility for groundwater monitoring.
C14	Each Construction Monitoring Program must provide: (a) details of baseline data available including the period of baseline monitoring; (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 and analysis results against relevant criteria; (h) details of the methods that will be used to analyse the monitoring data; (i) procedures to identify and implement additional mitigation measures where the results of the monitoring indicated unacceptable project impacts; (j) a consideration of SMART principles; (k) any consultation to be undertaken in relation to the monitoring programs; and (l) any specific requirements as required by Conditions C15 to C16.	AQMP SWMP NVMP	Construction monitoring programs have been prepared in accordance with this Condition

Ref	Description	Reference	How Addressed
C15	The Noise and Vibration Construction Monitoring Program must include: (a) noise and vibration monitoring at representative residential and other locations (including at the worst- affected residences), subject to property owner approval, to confirm construction noise and vibration levels; (b) monitoring undertaken during the day, evening and night-time periods throughout the construction period and cover the range of activities being undertaken; (c) method and frequency for reporting monitoring results; and (d) a process to undertake real time noise and vibration monitoring. The results of the monitoring must be readily available to the construction team, the Proponent and ER. The Planning Secretary and EPA must be provided with access to the results on request.	NVMP	The Noise and Vibration Construction Monitoring Program, as part of the Noise and Vibration Management Sub-plan, has been prepared in accordance with this Condition.
C16	Groundwater Construction Monitoring Program must include: (a) groundwater monitoring networks at each construction excavation site predicted to intercept groundwater in the documents listed in Condition A1; (b) detail of the location of all monitoring bores with nested sites to monitor both shallow and deep groundwater levels and quality; (c) define the location of saltwater interception monitoring where sentinel groundwater monitoring bores will be installed between the saline sources of the estuary or river and that of each construction excavation site predicted to intercept groundwater in the documents listed in Condition A1; (d) results from existing monitoring bores; (e) monitoring and gauging of groundwater inflow to the excavations, appropriate trigger action response plan for all predicted groundwater impacts upon each noted neighbouring groundwater system component for each excavation Ancillary facility; (f) trigger levels for groundwater quality, salinity and groundwater drawdown in monitoring bores and / or other groundwater users; (g) daily measurement of the amount of water discharged from the water treatment plants; (h) water quality testing of the water discharged from treatment plants; (i) management and mitigation measures and criteria including measures to address impacts on groundwater dependent ecosystems; (j) groundwater inflow to the excavations to enable a full accounting of the groundwater take from the Sydney Basin Central Groundwater Source; (k) reporting of groundwater gauging at excavations, groundwater monitoring, groundwater trigger events and action responses; and (l) methods for providing the data collected to Sydney Water where discharges are directed to their assets.	SWMP	The Staging Report and the assessment of environmental management applicability to each stage has determined that a Groundwater Monitoring Program will be handed over from previous contracts once their responsibility for Groundwater Monitoring is complete. A Groundwater Monitoring Program is included in the Groundwater Management Procedure in Appendix G of the SWMP and will be updated if required prior to Parklife Metro D&C assuming responsibility for groundwater monitoring.
C17	With the exception of any Construction Monitoring Programs expressly nominated by the Planning Secretary to be endorsed by the ER, all Construction Monitoring Programs must be submitted to the Planning Secretary for approval.	CEMP – Section 2	Noted.
C18	The Construction Monitoring Programs not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the conditions of approval and all undertakings made in the documents listed in Condition A1. Any of these Construction Monitoring Programs must be submitted to the ER for endorsement at least one (1) month before the	CEMP – Section 2 AQMP	The SSTOM Works will not commence until the ER has endorsed and/or the Planning Secretary has approved the construction monitoring programs, as required.

Ref	Description	Reference	How Addressed
	commencement of construction or where construction is staged no later than one (1) month before the commencement of that stage.	SWMP NVMP	
C19	Any of the Construction Monitoring Programs which require Planning Secretary approval must be endorsed by the ER and then submitted to the Planning Secretary for approval at least one (1) month before the commencement of construction or where construction is staged no later than one (1) month before the commencement of that stage.	AQMP SWMP NVMP	In accordance with the Staging Report, the approval authority for CEMP Subplans and construction monitoring programs is detailed in Section 2 of the CEMP
C20	Unless otherwise agreed with the Planning Secretary, construction must not commence until the Planning Secretary has approved, or the ER has endorsed (whichever is applicable), all of the required Construction Monitoring Programs and all relevant baseline data for the specific construction activity has been collected.	AQMP SWMP NVMP	The SSTOM Works will not commence until the ER has endorsed and/or the Planning Secretary has approved the CEMP, CEMP Sub-plans and monitoring programs, as required
C21	The Construction Monitoring Programs, as approved by the Planning Secretary or the ER has endorsed (whichever is applicable), 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 Planning Secretary or the ER (whichever is applicable), whichever is the greater.	AQMP SWMP NVMP	This CEMP and Sub-plans, inclusive of the applicable construction monitoring programs, will be implemented for the duration of the SSTOM Works.
C22	The results of the Construction Monitoring Programs must be submitted to the Planning Secretary, ER and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program. Note: Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.	AQMP SWMP NVMP	Compliance reporting will be prepared in accordance with the relevant construction monitoring programs
D1	An Operational Environmental Management Plan (OEMP) must be prepared having regard to the Environmental Management Plan Guideline for Infrastructure Projects (Department Planning, Industry and Environment 2020). The OEMP must 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 operation. This condition (Condition D1) does not apply if Condition D2 of this approval applies.	N/A	This Condition is related to operation and not applicable to construction.
D2	An OEMP is not required for the CSSI if the Proponent has an Environmental Management System (EMS) or equivalent as agreed with the Planning Secretary, and demonstrates, to the satisfaction of the Planning Secretary, that through the EMS or equivalent: (a) the performance outcomes, commitments and mitigation measures, made and identified in the documents listed in Condition A1, and specified relevant terms of this approval can be achieved; (b) issues identified through ongoing risk analysis can be managed; and (c) procedures are in place for rectifying any non-compliance with this approval identified during compliance auditing, incident management or any other time during operation.	N/A	This Condition is related to operation and not applicable to construction.
D3	Where an OEMP is required, the Proponent must include the following OEMP Sub-plans in the OEMP:	N/A	This Condition is related to operation and not applicable to construction.

Ref	Description	Reference	How Addressed
	Required OEMP Sub-plan - Relevant government agencies to be consulted for each OEMP Sub-plan (a) Groundwater Management - DPIE Water (b) Bushfire Management Plan - NSW Rural Fire Service (c) Flood Emergency Management Plan - EES Group, DPIE Water, SES and Relevant Council(s)		
D4	Each of the OEMP Sub-plans must include the information set out in Condition D2 of this approval.	N/A	This Condition is related to operation and not applicable to construction.
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 to be included in an OEMP Sub-plan during such consultation. Details of all information requested by an agency to be included in an OEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant OEMP Sub-Plan.	N/A	This Condition is related to operation and not applicable to construction.
D6	The OEMP Sub-plans must be submitted to the Planning Secretary as part of the OEMP.	N/A	This Condition is related to operation and not applicable to construction.
D7	The OEMP or EMS or equivalent as agreed with the Planning Secretary, must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of operation.	N/A	This Condition is related to operation and not applicable to construction.
D8	The OEMP or EMS or equivalent as agreed with the Planning Secretary, as submitted to the Planning Secretary and amended from time to time, must be implemented for the duration of operation and the OEMP or EMS or equivalent must be made publicly available before the commencement of operation.	N/A	This Condition is related to operation and not applicable to construction.
E1	All reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during construction.	AQMP	The requirements of this Condition are addressed in the Air Quality Management Sub-plan.
E2	The clearing of native vegetation must be minimised to the greatest extent practicable with the objective of reducing impacts to threatened ecological communities and threatened species habitat.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E3	Impacts to plant community types must not exceed those identified in the documents listed in Condition A1, unless otherwise approved by the Planning Secretary. In requesting the Planning Secretary's approval, an assessment of the additional impact(s) to plant community types and an updated ecosystem and / or species credit requirement under Condition E4 below, if required, must be provided.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.

Ref	Description	Reference	How Addressed
E4	Prior to impacts on the biodiversity values set out in Table 3 and Table 4, the number and classes of ecosystem credits and species credits (like-for-like) must be retired.	FFMP	Sydney Metro is responsible for the retirement of ecosystem credits and species credits in accordance with the requirements of this Condition. Parklife Metro D&C is facilitating this requirement. The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.

Table 3: Ecosystem credits

Plant Community Type (PCT) ID and name	Number of Credits
724: Broad-leaved Ironbark – Grey Box – Melaleuca decora grassy open forest on clay/gravel soils of the Cumberland Plain, Sydney Basin Bioregion	246
835: Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion	217
849: Grey Box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	202 ~~204~~
1800: Swamp Oak open forest on riverflats of Cumberland Plain and Hunter Valley	181
TOTAL	~~846 848~~

Ref	Description	Reference	How Addressed

Table 4: Species credits required

Species	Number of Credits
~~*Acacia bynoeana* (Bynoe's Wattle)~~	~~31~~
~~*Acacia pubescens* (Downy Wattle)~~	~~54~~
~~*Allocasuarina glareicola*~~	~~47~~
~~*Cynanchum elegans* (White-flowered Wax Plant)~~	~~18~~
Dillwynia tenuifolia	21 ~~72~~
Grevillea juniperina subsp. juniperina (Juniper-leaved Grevillea)	57 ~~153~~
~~*Grevillea parviflora subsp. parviflora* (Small-flower Grevillea)~~	~~32~~
~~*Marsdenia viridiflora subsp. viridiflora* (Endangered population *Marsdenia viridiflora* R. Br. subsp *viridiflora*~~	~~137~~
~~*Micromyrtus minutiflora*~~	~~47~~
~~*Pimelea curvilora var. curviflora*~~	~~18~~
~~*Pimelea spicata* (Spiked Rice-flower)~~	~~22~~
Pultenaea parviflora	10 ~~31~~
Meridolum corneovirens Cumberland Plain Land Snail	159
Myotis Macropus (Southern Myotis)	292
TOTAL SPECIES CREDITS	539 ~~1,113~~

Note: Credits have been calculated using the Biodiversity Assessment Method.

E5	The requirement to retire like-for-like ecosystem credits and species credits in Condition E4 may be satisfied by payment to the Biodiversity Conservation Fund of an amount equivalent to the number and classes of ecosystem credits and species credits.	FFMP	Sydney Metro is responsible for the retirement of ecosystem credits and species credits in accordance with the requirements of this Condition. Parklife Metro D&C is facilitating this requirement. The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan
E6	Where evidence of compliance with the Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules has been provided to the Planning Secretary, variation rules may be applied to retire the relevant ecosystem credits and species credits as set out in the BAM Biodiversity Credit Report (Variation)	FFMP	Sydney Metro is responsible for the retirement of ecosystem credits and species credits in accordance with the requirements of this Condition. Parklife Metro D&C is facilitating this requirement. The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.

Ref	Description	Reference	How Addressed
E7	Evidence of the retirement of credits in satisfaction of Condition E4 or payment to the Biodiversity Conservation Fund in satisfaction of Condition E5 must be provided to the Planning Secretary prior to impacts on the biodiversity values.	FFMP	Sydney Metro is responsible for the retirement of ecosystem credits and species credits in accordance with the requirements of this Condition. Parklife Metro D&C is facilitating this requirement. The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E8	The Proponent must minimise impacts to Key Fish Habitat (KFH) as defined in Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013 update). Residual impacts to KFH, following the implementation of habitat rehabilitation or other environmental compensation measures, must be offset at a ratio of 2:1 habitat offset requirement in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013 update) and in consultation with DPI Fisheries.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E9	Where offsets are required in accordance with Condition E8, payment of the habitat offset requirement must be made to the DPI Fish Conservation Trust Fund prior to the commencement of Work that impacts KFH.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E10	Where offsets are required in accordance with Condition E8, the Proponent must submit to the Planning Secretary a receipt confirming payment to the DPI Fish Conservation Trust Fund within one (1) month of making the payment.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E11	Nest Boxes must be installed one (1) month prior to any removal of existing tree hollows and/or the release of any captured hollow dependent fauna.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E12	Re-use of Timber E9 Prior to vegetation clearing, the Proponent must identify where it is practicable for the CSSI to reuse native trees and vegetation that are to be removed. If it is not possible for the CSSI to reuse removed native trees and vegetation, the Proponent must consult with the relevant council(s), NSW National Parks & Wildlife Service, Western Sydney Parklands Trust, Greater Sydney Local Land Services, Landcare groups, DPI Fisheries and any additional relevant government agencies to determine if: (a) hollows, tree trunks (greater than 25-30 centimetres in diameter and 2-3 metres in length), mulch, bush rock and root balls salvaged from native vegetation impacted by the CSSI; and (b) collected plant material, seeds and/or propagated plants from native vegetation impacted by the CSSI, could be used by others in habitat enhancement and rehabilitation work, before pursuing other disposal options.	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
E13	Revegetation and the provision of replacement trees must be informed by a Tree Survey undertaken during detailed design. The Tree Survey must identify the number, type and location of any trees to be removed. The Tree Survey must be submitted to the Planning Secretary for information with the Place, Urban Design and Corridor Landscape Plan required under Condition E79. Where trees are to be removed, the Proponent must provide a net increase in the number of replacement trees at a ratio of 2:1, except trees that are offset under Condition E4. Replacement trees must have a minimum pot size consistent with the relevant authority's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant authority(ies).	FFMP	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan. The tree survey will be submitted to the Planning Secretary as a sub-plan to the project PUDCLP

Ref	Description	Reference	How Addressed
	Note: For the purposes of this condition, the relevant authority is that State or local government authority that owns or manages the land on which the replacement trees will be planted.		
E14	The Proponent must design the watercourse crossings and the east-west regional corridor (Patons Lane) crossing to achieve the following objectives: (a) design of viaducts to retain and minimise clearing/disturbance of native vegetation and maximise native plant growth under the structures, (i) maintain and/or improve riparian/terrestrial connectivity under the viaduct and bridge structures to maximise the corridor function; (ii) maximise the viaduct and bridge structures span over the riparian corridor and/or remnant native vegetation whichever is the widest; (iii) minimise the clearing/disturbance of native vegetation and native riparian vegetation; and (iv) maximise light and moisture penetration under the viaduct and bridge structures to support native plant growth; (b) design of culverts and other crossings incorporate the following into the design to provide for movement of aquatic and terrestrial fauna, (i) elevated "dry" cells to encourage terrestrial movement, and recessed "wet" cells to facilitate the movement of aquatic fauna; (ii) maximise light penetration into the culvert structures; (iii) a naturalised base along the bed of the culvert; and 'fauna furniture' (such as rocks, logs, ropes and ledges) to facilitate fauna movement to maintain connectivity and provide fauna passage; (c) design of scour protection using natural solutions such as the revegetation of banks with local native species; and (d) details of remnant native vegetation including riparian vegetation. The Proponent must consult with DPIE EES, DPI Fisheries and engage suitably qualified experts in fauna crossing design to achieve the outcomes of this condition. Note: These design objectives must form part of the Place, Urban Design and Corridor Landscape Plan required under Condition E79.	N/A	Design reports will be prepared to document that this condition is satisfied.
E15	The CSSI must be designed and constructed with the objective of not exceeding the flood impacts presented in the documents listed in Condition A1 or the flood impact criteria in Table 5, whichever is greater, within and in the vicinity of the CSSI for all flood events up to and including the one (1) per cent Annual Exceedance Probability (AEP) flood event. Flood impact criteria defined in Table 5 of the conditions of approval. Measures identified in the documents listed in Condition A1 to limit flooding impacts or measures that achieve the same outcome must be incorporated into the detailed design of the CSSI.	N/A	The requirements of this condition relating to design are addressed in Design Reports.
E16	Updated modelling that incorporates these measures and is calibrated and validated with consideration of the results of the Wianamatta-South Creek Catchment Flood Assessment prepared by Infrastructure NSW as part of Stage 2 of the South Creek Sector Review must be prepared by a suitably qualified flood consultant The modelling must identify changes in post-development flood behaviour including cumulative flood impacts associated with Western Sydney International Airport and the M12, where this information is available, prior to detailed design being finalised.	N/A	The requirements of this condition relating to design are addressed in Design Reports.

Ref	Description	Reference	How Addressed
E17	Where flooding characteristics exceed the levels identified in Condition E15 above the Proponent must undertake the following: (a) consult with affected landowners for properties adversely flood affected as a result of the CSSI regarding appropriate mitigations; and (b) consult with the NSW State Emergency Service (SES) and Relevant Council(s) regarding the management of any continuous and residual flood risk from rarer flood events larger than the 1 per cent AEP and up to the probable maximum flood. In the event that the Proponent and the affected landowner cannot agree on the measures to mitigate the impact as described in Condition E15, the Proponent must engage a suitably qualified and experienced independent person to advise and assist in determining the impact and relevant mitigation measures.	N/A	The requirements of this condition relating to design are addressed in Design Reports.
E18	Flood information including flood reports, models and geographic information system outputs must be provided to the DPIE PDPS, Relevant Council(s), DPIE EES and the SES in order to assist in preparing relevant documents and to reflect changes in flood behaviour as a result of the CSSI. The DPIE PDPS, Relevant Council(s), DPIE EES and the SES must be notified in writing that the information is available no later than one (1) month following the completion of construction. Information requested by the DPIE PDPS, Relevant Council(s), DPIE EES or the SES must be provided no later than six (6) months following the completion of construction or within another timeframe agreed with the DPIE PDPS, Relevant Council(s), DPIE EES and the SES. The project flood models and data must be uploaded to the NSW Flood Data Portal and access must be provided to the DPIE PDPS, Relevant Council(s), DPIE EES and SES no later than one (1) month following the completion of construction.	OCCS	Provision of project information with stakeholders will be undertaken in accordance with the SSTOM Communications Strategy.
E19	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Condition A1.	NAHMP	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
E20	The dismantling and reassembly of the jib crane at St Marys Station, if required, must only be undertaken under the supervision of a consultant experienced in the conservation of heritage machinery.	NAHMP	No impacts to the jib crane at St Marys Station is proposed as part of SSTOM Works.
E21	The St Marys Goods Shed must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in Condition A1.	NAHMP	Mitigation measures will be implemented to avoid impacts to St Marys Goods Shed, unless those impacts or changes are identified in the documents listed in Condition A1.
E22	The Archaeological Research Design included in the documents listed in Condition A1 must be implemented during construction.	NAHMP	The requirements of the ARD are included in the Non-Aboriginal Heritage Management Sub-plan.
E23	Before commencement of archaeological excavation, the Proponent must, in consultation with Heritage NSW, nominate a suitably qualified Excavation Director, who complies with Heritage Council of NSW's Criteria for Assessment of Excavation Director (September 2019), to oversee and advise on matters associated with historical archaeology for the approval of the Planning Secretary. The Excavation Director must be present to oversee excavation, advise on archaeological issues, advise on the duration and extent of oversight required during archaeological excavations consistent with the Archaeological Research Design and Excavation Methodology(s) identified in the	NAHMP	The ED has been appointed by Sydney Metro and approved by the Planning Secretary.

Ref	Description	Reference	How Addressed
	documents listed in Condition A1. More than one Excavation Director may be engaged for CSSI to exercise the functions required under the conditions of this approval.		
E24	Archival photographic digital recording must be undertaken for all listed heritage items which will be affected by the CSSI. The recordings must be undertaken prior to the commencement of Work which may impact the items and documented in an Archival Recording Report. The recordings must include buildings, structures and landscape features and detailed maps showing the location of features. The archival recording must be prepared in accordance with How to Prepare Archival Records of Heritage Items (NSW Heritage Office, 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office, 2006).	NAHMP	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
E25	The Archival Recording Report must be submitted to the Planning Secretary, relevant councils and Heritage NSW for information within 12 months of completing all work described in the documents listed in Condition A1 in relation to heritage items. Copies of the Archival Recording Report must also be provided to relevant local historical societies.	NAHMP	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
E26	Following completion of all work described in the documents listed in Condition A1 in relation to heritage items, a non-Aboriginal Archaeological Excavation Report including the details of further historical research either undertaken or to be carried out and archaeological excavations (with artefact analysis and identification of a final repository for finds) and addressing the research design, must be prepared in accordance with any guidelines and standards required by the Heritage Council of NSW and Heritage NSW.	NAHMP	The non-Aboriginal Archaeological Excavation Report will be completed as part of the archaeological investigation program managed as part of the SBT Works. No further action required prior to SSTOM Works.
E27	The non-Aboriginal Archaeological Excavation Report must be submitted to the Planning Secretary, relevant councils and Heritage NSW for information within 12 months of completing all Work described in the documents listed in Condition A1 in relation to heritage items. Copies of the Report must also be provided to relevant local historical societies and local libraries.	NAHMP	The non-Aboriginal Archaeological Excavation Report will be completed as part of the archaeological investigation program managed as part of the SBT Works. No further action required prior to SSTOM Works
E28	All reasonable steps must be taken so as not to harm, modify or otherwise impact Aboriginal objects or places of cultural significance except as authorised by this approval.	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.
E29	The Registered Aboriginal Parties (RAPs) must be kept regularly informed about the CSSI. The RAPs must continue to be provided with the opportunity to be consulted about the Aboriginal cultural heritage management requirements of the CSSI throughout construction.	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.
E30	The Aboriginal Cultural Heritage Management Plan included in the documents listed in Condition A1 must be updated to include: (a) a methodology for the completion of pedestrian surveys for all areas within the project footprint yet to be surveyed; (b) procedures for undertaking further test excavation and, if necessary, salvage excavations prior to the commencement of works in areas subject to further test excavation; (c) mapping that clearly outlines all areas yet to be subject to survey, test excavations, and salvage excavations; (d) a procedure to update mapping following the completion of survey, test excavations, and salvage excavations that detail the archaeological works conducted across the project footprint; (e) a procedure for updating the predictive model following the identification of new Aboriginal heritage items; and	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.

Ref	Description	Reference	How Addressed
	(f) a procedure to report and update the effectiveness of the Aboriginal Cultural Heritage Management Plan following the completion of survey, test excavation activities or significant artefact finds. The updated Plan must be submitted to the Planning Secretary for information prior to works in areas identified for further test excavations. Note: Salvage excavation in the areas identified for salvage in documents in Condition A1 may occur prior to additional test excavations occurring.		
E31	The updated Aboriginal Cultural Heritage Management Plan must be implemented for the duration of salvage activities and construction.	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.
E32	At the completion of Aboriginal cultural heritage test and salvage excavations, an Aboriginal Cultural Heritage Excavation Report(s) must be prepared by a suitable qualified expert. The Aboriginal Cultural Heritage Excavation Report(s) must: (a) be prepared in accordance with the Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW, OEH 2011 and the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, DECCW 2010; and (b) document the results of the archaeological test excavations and any subsequent salvage excavations (with artefact analysis and identification of a final repository for finds). The RAPs must be given a minimum of 28 days to consider the report(s) and provide comments before the report(s) is finalised. The final report(s) must be provided to the Planning Secretary, Heritage NSW, the relevant Councils, Gandangara LALC and Deerubbin LALC, the RAPs and local libraries within 24 months of the completion of the Aboriginal archaeological excavations (both test and salvage).	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.
E33	Where previously unidentified Aboriginal objects or places of cultural significance are discovered, all work must immediately stop in the vicinity of the affected area. Works potentially affecting the previously unidentified objects or places must not recommence until Heritage NSW has been informed. The measures to consider and manage this process must be specified in the Unexpected Heritage Finds and Human Remains Procedure required by Condition E34 and include registration in the Aboriginal Heritage Information Management System (AHIMS), where required.	Sydney Metro ACHMP	Sydney Metro have prepared an Aboriginal Cultural Heritage Management Plan (ACHMP), which includes mitigation measures that satisfy this condition.
E34	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds (heritage items and values) in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW.	N/A	Unexpected Heritage Finds and Human Remains Procedure was prepared by Sydney Metro in accordance with this condition and is included in the NAHMP
E35	The Unexpected Heritage Finds and Human Remains Procedure must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW (with respect to non-Aboriginal cultural heritage) and in relation to Aboriginal cultural heritage, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010) and submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction.	NAHMP ACHMP	Unexpected Heritage Finds and Human Remains Procedure was prepared by Sydney Metro in accordance with this condition and is included in the NAHMP
E36	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of construction.	NAHMP	Unexpected Heritage Finds and Human Remains Procedure was prepared by Sydney Metro in

Ref	Description	Reference	How Addressed
	Where archaeological investigations have been undertaken as a result of Unexpected Finds notifications then a Final Archaeological Report must be provided in accordance with Heritage Council guidance and standard requirements for final reporting under Excavation Permits. Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately. Management of human remains in NSW is subject to requirements set out in the Public Health Act 2010 (NSW) and Public Health Regulation 2012 (NSW). Nothing in these conditions prevents separate procedures for the Unexpected Heritage Finds and Human Remains Procedure.		accordance with this condition and is included in the NAHMP
E37	A detailed land use survey must be undertaken to confirm sensitive land use(s) (including critical working areas such as operating theatres and precision laboratories) potentially exposed to construction noise and vibration and construction ground-borne noise. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of work which generate construction noise, vibration or ground-borne noise in that area. The results of the survey must be included in the Detailed Noise and Vibration Impact Statements required under Condition E47.	NVMP	Land use survey will be undertaken prior to any works that result in construction noise and vibration impacts.
E38	Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays.	NVMP	Reflecting the requirements of this Condition, standard construction hours are detailed in Section 1.8 as well as the Noise and Vibration Management Sub-plan.
E39	Except as permitted by an EPL or approved in accordance with the Out of Hours Works Protocol required by Condition E42, highly noise intensive work 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) if continuously, then not exceeding three (3) hours, with a minimum cessation of work of not less than one (1) hour. For the purposes of this condition, 'continuously' includes any period during which there is less than one (1) hour between ceasing and recommencing any of the work.	NVMP	Reflecting the requirements of this Condition, standard construction hours are detailed in the Noise and Vibration Management Sub-plan and in Section 1.8 of this CEMP.
E40	This approval does not permit blasting.	N/A	No blasting is proposed as part of the SSTOM Works.
E41	Notwithstanding Conditions E38 and E39 work may be undertaken outside the hours specified in the following circumstances: (a) Safety and Emergencies, including: (i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (ii) 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 (b) Low impact, including: (i) construction that causes LAeq(15 minute) noise levels: • no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and • no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); and	NVMP	Work may be undertaken outside standard hours in specific circumstances as detailed in the requirements of this condition. Approval from the EPA via the EPL will be obtained for OOHW in accordance with Condition E41(c). Key examples include essential local area and utility works which cannot be performed during standard hours and require a road occupancy licence and/or disruption to services that is minimised by undertaking night works. Notification of emergency work (conducted in accordance with Condition E41(a)(ii))

Ref	Description	Reference	How Addressed
	(ii) construction that causes: • continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), or • intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006). (c) By Approval, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or (ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition E42; or (iii) negotiated agreements with directly affected residents and sensitive land user(s). (d) By Prescribed Activity, including: (i) tunnelling and ancillary support activities (excluding cut and cover tunnelling and surface works not directly supporting tunnelling) are permitted 24 hours a day, seven days a week; or (ii) grout batching at the Orchard Hills ancillary facility is permitted 24 hours a day, seven days a week; or (iii) delivery of material that is required to be delivered outside of standard construction hours in Condition E38 to directly support tunnelling activities, except between the hours 10:00 pm and 7:00 am to / from the Orchard Hills ancillary facility; or (iv) haulage of spoil except between the hours of 10:00 pm and 7:00 am to / from Orchard Hills ancillary facility; or (v) work within an acoustic enclosure are permitted 24 hours a day, seven days a week where there is no exceedance of noise levels or intermittent vibration levels under Low impact circumstances identified in Condition E41(b), unless otherwise agreed with the Planning Secretary; or (vi) tunnel and underground station box fit out works are permitted 24 hours per day, seven days per week. On becoming aware of the need for emergency work in accordance with (a)(ii) above, the ER, the Planning Secretary and the EPA must be notified of the reasons for such work. The Proponent must use best endeavours to notify as soon as practicable all noise and/or vibration affected sensitive land user(s) of the likely impact and duration of those work. Notes: 1. Tunnelling does not include station box excavation. 2. Tunnelling ancillary support activities includes logistics support and material handling and delivery		will occur in accordance with the requirements of this condition. OOHW that are not subject to an EPL will be conducted in accordance with the Sydney Metro OOHW Protocol.
E42	An Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of work (not subject to an EPL) that is outside the hours defined in Conditions E38 and E39. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours work. The Protocol must be prepared in consultation with the ER. The Protocol must provide: (a) justification for why out-of-hours work need to occur; (b) identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where:	NVMP	Work undertaken outside of standard hours will occur in accordance with an approved EPL. OOHW that are not subject to an EPL will be conducted in accordance with the Sydney Metro OOHW Protocol, which is included in the NVMP.

Ref	Description	Reference	How Addressed
	(i) the ER reviews all proposed out-of-hours activities and confirms their risk levels; (ii) low risk activities can be approved by the ER; and (iii) high risk activities that are approved by the Planning Secretary; (c) a process for the consideration of out-of-hours work against the relevant NML and vibration criteria; (d) a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of Condition E56. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events; (e) procedures to facilitate the coordination of out-of-hours work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and (f) notification arrangements for affected receivers for all approved out-of-hours works and notification to the Planning Secretary of approved low risk out-of-hours works. This condition does not apply if the requirements of Condition E41 are met. Note: Out-of-hours work is any work that occurs outside the construction hours identified in Condition E38 and E39.		
E43	Mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration criteria: (a) construction 'Noise affected' noise management levels established using the Interim Construction Noise Guideline (DECC, 2009); (b) preferred vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure); (c) Australian Standard AS 2187.2 - 2006 "Explosives - Storage and Use - Use of Explosives" (for human exposure); (d) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and (e) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). Any work identified as exceeding the noise management levels and / or vibration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan. Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction Noise Management Level.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E44	All reasonable and feasible mitigation measures must be applied when the following residential ground-borne noise levels are exceeded: (a) evening (6:00 pm to 10:00 pm) — internal LAeq(15 minute): 40 dB(A); and (b) night (10:00 pm to 7:00 am) — internal LAeq(15 minute): 35 dB(A). The mitigation measures must be outlined in the Noise and Vibration CEMP Sub-plan, including in any Out-of-Hours Work Protocol, required by Condition E42.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.

Ref	Description	Reference	How Addressed
E45	Noise generating work in the vicinity of potentially-affected community, religious, educational institutions and noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) resulting in noise levels above the NMLs must not be timetabled within sensitive periods, unless other reasonable arrangements with the affected institutions are made at no cost to the affected institution.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E46	Industry best practice construction methods must be implemented where reasonably practicable to ensure that noise and vibration levels are minimised around sensitive land use(s). Practices may include, but are not limited to: (a) use of regularly serviced low sound power equipment; (b) at source control, temporary noise barriers (including the arrangement of plant and equipment) around noisy equipment and activities such as rock hammering and concrete cutting; (c) use of non-tonal reversing alarms; and (d) use of alternative construction and demolition techniques.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E47	Detailed Noise and Vibration Impact Statements (DNVIS) must be prepared for any work that may exceed the NMLs, vibration criteria and / or ground-borne noise levels specified in Conditions E43 and E44 at any residence outside construction hours identified in Condition E38, or where receivers will be highly noise affected or subject to vibration levels above those otherwise determined as appropriate by a suitably qualified structural engineer under Condition E87. The DNVIS must include specific mitigation measures identified through consultation with affected sensitive land user(s) and the mitigation measures must be implemented for the duration of the works. A copy of the DNVIS must be provided to the ER before the commencement of the associated works. The Planning Secretary and the EPA may request a copy (ies) of the DNVIS.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E48	Owners and occupiers of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before works that generate vibration commences in the vicinity of those properties. If the potential exceedance is to occur more than once or extend over a period of 24 hours, owners and occupiers are to be provided a schedule of potential exceedances on a monthly basis for the duration of the potential exceedances, unless otherwise agreed by the owner and occupier. These properties must be identified and considered in the Noise and Vibration CEMP Sub-plan.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E49	Where sensitive land use(s) are identified in Appendix B as exceeding the highly noise affected criteria during typical case construction, mitigation measures must be implemented with the objective of reducing typical case construction noise below the highly noise affected criteria at each relevant sensitive landuse(s). Activities that would exceed highly noise affected criteria during typical case construction must not commerce until the measures identified in this condition have been implemented, unless otherwise agreed with the Planning Secretary. Note: Mitigation measures may include path barrier controls such as acoustic sheds and/or noise walls, at-property treatment, or a combination of path and at-property treatment.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E50	For all construction sites where acoustic sheds are installed, the sheds must be designed, constructed and operated to minimise noise emissions. This would include the following considerations: (a) all significant noise producing equipment that would be used during the night-time would be inside the sheds, where feasible and reasonable; (b) noise generating ventilation systems such as compressors, scrubbers, etc, would be located inside the sheds and external air intake/discharge ports would be appropriately acoustically treated; and	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.

Ref	Description	Reference	How Addressed
	(c) the doors of acoustic sheds would be kept closed during the night-time period. Where night-time vehicle access is required at sites with nearby residences, the shed entrances would be designed and constructed to minimise noise breakout.		
E51	Where Condition E49 determines that at-property treatment (temporary or permanent) is the appropriate measure to reduce noise impacts, this at-property treatment must be offered to landowners of residential properties for habitable living spaces, unless other mitigation or management measures are agreed to by the landowner. Landowners must be advised of the range of options that can be installed at or in their property and given a choice as to which of these they agree to have installed. A copy of all guidelines and procedures that will be used to determine at-property treatment at their residence must be provided to the landowner.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E52	Any offer for at-property treatment or the application of other noise mitigation measures in accordance with Condition E51 does not expire until the noise impacts specified in Condition E49 affecting that property are completed, even if the landowner initially refuses the offer. Note: If an offer has been made but is not accepted, this does not preclude the commencement of construction under Condition E49.	NVMP	Noted
E53	The implementation of at-property treatment does not preclude the application of other noise and vibration mitigation and management measures including temporary and long term accommodation.	N/A	Noted.
E54	Vibration testing must be conducted during vibration generating activities that have the potential to impact on Heritage items to verify minimum working distances to prevent cosmetic damage. In the event that the vibration testing and attended monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures. Such measures must include, but not be limited to, review or modification of excavation techniques.	NVMP NAHMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan and the Non-Aboriginal Heritage Management Plan
E55	The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring at Heritage items.	NVMP NAHMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan and the Non-Aboriginal Heritage Management Plan
E56	All work undertaken for the delivery of the CSSI, including those undertaken by third parties (such as utility relocations), must be coordinated to ensure respite periods are provided. The Proponent must: (a) reschedule any work to provide respite to impacted noise sensitive land use(s) so that the respite is achieved in accordance with Condition E57; or (b) consider the provision of alternative respite or mitigation to impacted noise sensitive land use(s); and (c) provide documentary evidence to the ER in support of any decision made by the Proponent in relation to respite or mitigation. The consideration of respite must also include all other approved Critical SSI, SSI and SSD projects which may cause cumulative and / or consecutive impacts at receivers affected by the delivery of the CSSI.	NVMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan.
E57	In order to undertake out-of-hours work outside the work hours specified under Condition E38, appropriate respite periods for the out-of-hours work must be identified in consultation with the community at each affected location on a regular basis. This consultation must include (but not be limited to) providing the community with:	NVMP	Approval from the EPA via the Environment Protection Licence (EPL) will be obtained for out of hours works (OOHW) in accordance with Condition D41(c). OOHW that are not subject to an EPL will be conducted in

Ref	Description	Reference	How Addressed
	(a) a progressive schedule for periods no less than three (3) months, of likely out-of-hours work; (b) a description of the potential work, location and duration of the out-of-hours work; (c) the noise characteristics and likely noise levels of the work; and (d) likely mitigation and management measures which aim to achieve the relevant NMLs under Condition E43 (including the circumstances of when respite or relocation offers will be available and details about how the affected community can access these offers). The outcomes of the community consultation, the identified respite periods and the scheduling of the likely out-of-hour work must be provided to the ER, EPA and the Planning Secretary prior to the out-of-hours work commencing. Note: Respite periods can be any combination of days or hours where out-of-hours work would not be more than 5 dB(A) above the RBL at any residence.		accordance with the Sydney Metro OOHW Protocol. A DNVIS will be prepared if OOHW exceed the NML (as per Condition E47). Community consultation will be undertaken during the Project to identify appropriate respite periods for OOHW. The outcomes of the community consultation, the identified respite periods and the scheduling of the likely OOHW will be provided to the ER, EPA and the Planning Secretary prior to the work commencing.
E58	The Proponent must prepare an Operational Noise and Vibration Review (ONVR) to confirm noise and vibration control measures that would be implemented for the Operation of the CSSI for the ultimate service. The ONVR must be prepared as part of the iterative design development and in consultation with the EPA, relevant council(s), other relevant stakeholders and must: (a) identify appropriate Operational noise and vibration objectives and levels for surrounding development, including existing and potential future (as known at the time of ONVR preparation) sensitive land use(s); (b) confirm the operational noise and vibration predictions based on the expected final design. Confirmation must be based on an appropriately calibrated noise model; (c) identify sensitive landuses that are predicted to exceed: (EPA, 2013), Noise Policy for Industry (EPA, 2017); and (ii) vibration goals for human exposure for existing sensitive land use(s), as presented in Assessing Vibration: a Technical Guideline (DECC, 2006); (d) identify all noise and vibration mitigation measures including location, type and timing of mitigation measures, with a focus on: (i) source control and design; (ii) at the receiver (if relevant); and (iii) 'best practice' achievable noise and vibration outcome for each activity; (e) describe the final suite of mitigation measures that will be implemented to achieve: (i) the noise criteria outlined in the Rail Infrastructure Noise Guideline (EPA, 2013) and Noise Policy for Industry (EPA, 2017); and (ii) vibration goals for human exposure for existing sensitive land use(s), as presented in Assessing Vibration: a Technical Guideline (DECC, 2006); (f) include a consultation strategy to seek feedback from directly affected landowners on the noise and vibration mitigation measures being offered; (g) include procedures for operational noise and vibration complaints management, including investigation and monitoring (subject to complainant agreement). The ONVR must be peer reviewed by a suitably qualified and experienced noise and vibration expert who is independent of the CSSI.	N/A	N/A

Ref	Description	Reference	How Addressed
	The ONVR must be undertaken at the Proponent's expense and submitted to the Planning Secretary for approval within three (3) months of the commencement of construction. The Proponent must implement the identified noise and vibration control measures and make the ONVR publicly available. Note: The design of noise barriers and the like must be undertaken in consultation with the relevant stakeholders, including affected landowners and businesses (or a representative of a business), Western Parklands City Authority and relevant council(s) as part of the Place, Urban Design and Corridor Landscape Plan required under Condition E79.		
E59	Operational noise mitigation measures as identified in Condition E58 that will not be physically affected by work, must be implemented within six months of submitting the ONVR, unless otherwise agreed by the Planning Secretary. Where implementation of operational noise mitigation measures are not proposed to be implemented in accordance with this requirement, the Proponent must submit to the Planning Secretary a report providing justification as to why, along with details of temporary measures that would be implemented to reduce construction noise impacts, until such time that the operational noise mitigation measures are implemented. The report must be submitted to the Planning Secretary within six months of submitting the ONVR. Note: Not having finalised detailed design is not sufficient justification for not implementing the proposed mitigation measures.	N/A	N/A
E60	Within 12 months of the commencement of operation of the CSSI, the Proponent must undertake monitoring of operational noise to compare actual noise performance of the CSSI against the noise performance predicted in the review of noise mitigation measures required by Condition E58. An Operational Noise and Vibration Compliance Report (ONVCR) must be prepared to document this monitoring and include, but not necessarily be limited to: (a) noise and vibration monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under Condition E58; (b) methodology, location and frequency of noise and vibration monitoring undertaken, including monitoring sites at which CSSI noise and vibration levels are ascertained, with specific reference to locations indicative of impacts on receivers; (c) a review of the performance of the CSSI against the: (i) operational noise levels in terms of criteria and noise goals established in the NSW Rail Infrastructure Noise Guideline (EPA 2013) and Noise Policy for Industry (EPA, 2017); (ii) vibration goals for human exposure for existing sensitive land use(s), as presented in Assessing Vibration: a Technical Guideline (DECC, 2006); (d) details of any complaints and enquiries received in relation to Operational noise and vibration generated by the CSSI (between the date of commencement of Operation and the date the report was prepared); (e) an assessment of the performance and effectiveness of applied noise and vibration mitigation measures together with a review and if necessary, reassessment of mitigation measures; (f) identification of:	N/A	N/A

Ref	Description	Reference	How Addressed
	(i) additional measures to meet the criteria outlined in the NSW Rail Infrastructure Noise Guideline (EPA 2013) and Noise Policy for Industry (EPA, 2017), (ii) additional measures to meet the vibration goals for human exposure for existing sensitive land, as presented in Assessing Vibration: a Technical Guideline (DECC, 2006); (iii) when these measures are to be implemented; and (iv) how their effectiveness is to be measured and reported to the Planning Secretary and the EPA. The ONVCR must be submitted to the Planning Secretary and the EPA within 60 days of completing the Operational noise and vibration monitoring and made publicly available. Note: Refer to Condition B5 about how personal information will be handled.		
E61	Wayfinding information must be incorporated on temporary hoardings to guide pedestrians around the St Marys construction site and enhance their understanding and experience of the locality and space.	VAMP	The requirements of this Condition are addressed in the Visual Amenity Management Sub-plan.
E62	The CSSI must be constructed in a manner that minimises visual impacts of construction sites including, providing temporary landscaping and vegetative screening, minimising light spill, and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located, wherever practicable.	VAMP	The requirements of this Condition are addressed in the Visual Amenity Management Sub-plan.
E63	The CSSI must be designed with consideration of: the design objectives, principles and guidelines identified in documents listed in Condition A1; the principles and objectives of the draft Connecting with Country Framework; relevant land use changes, masterplans and initiatives, where this information is known and/or available; existing and proposed future local context and character; and transport and land use integration and system functionality in the context of precincts, to the extent it is known and/or defined.	PUDCLP VAMP	The requirements of this Condition are addressed in the PUDCLP for the SSTOM package.
E64	The CSSI must be constructed and operated with the objective of minimising light spill to surrounding properties. All lighting associated with the CSSI must be consistent with the requirements of: ASINZS 4282:2019 Control of the obtrusive effects of outdoor lighting, relevant Australian Standards in the series ASINZS 1158 - Lighting for Roads and Public Spaces; NASF Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports; and NASF Guideline C: Managing the risk of wildlife strikes in the vicinity of airports. Mitigation measures must be provided to manage residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	VAMP	The requirements of this Condition are addressed in the Visual Amenity Management Sub-plan.
E65	Designs must have regard to the Movement and Place Framework relevant guidance including the Walking Space Guide: Towards Pedestrian Comfort and Safety (TfNSW, 2020) and the Cycleway Design Toolbox: Designing for Cycling and Micromobility (TfNSW, 2020).	CTMP CTMF	The requirements of this Condition will be addressed in the detailed design and will be reflected in the site specific Construction Traffic Management Plans.
E66	Active transport facilities must be designed, constructed and/or rectified in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling (Austroads, 2017) and relevant Australian Standards (AS) such as AS 1428.1-2009 Design for access and mobility. The active transport links must also incorporate relevant Crime Prevention Through Environmental Design principles.	CTMP	Noted

Ref	Description	Reference	How Addressed
E67	The Proponent must establish an independent DRP to provide advice and recommendations to the Proponent during the CSSI's design development and construction to facilitate quality design and place outcomes. The DRP must be formed and hold its first meeting within six months of the date of this approval, or as otherwise agreed with the Planning Secretary. Note: Nothing in this approval prevents the use of an existing design panel as the Design Review Panel convened for this project where the function and composition of that panel complies with the terms of this approval.	N/A	Sydney Metro are responsible for the establishment of the DRP
E68	The responsibilities of the Design Review Panel include: (a) providing advice and recommendations to the Proponent for consideration in the design development of the CSSI (b) provide advice on the application of Sydney Metro – Western Sydney Airport Submissions Report – Appendix D Design Guidelines to key design elements in relation to place making, architecture, heritage, urban and landscape design and artistic aspects of the CSSI; and (c) reviewing and endorsing any updates to the Sydney Metro – Western Sydney Airport Submissions Report – Appendix D Design Guidelines. The Panel's advice must be consistent with the CSSI as approved.	N/A	Sydney Metro are responsible for the establishment of the DRP
E69	The DRP must be chaired by the NSW Government Architect (or its nominee), and must be comprised of, where relevant, by suitably qualified, experienced and independent professional(s) in each of the fields of: (a) urban design and place making (including active transport); (b) landscape architecture; (c) architecture. The Panel may seek advice from suitably qualified, experienced independent professionals in other fields as required including but not limited to sustainability, active transport and non-Aboriginal heritage. The Panel must also seek appropriate expertise to ensure Aboriginal cultural heritage and cultural values inform its advice.	N/A	Sydney Metro are responsible for the establishment of the DRP
E70	Panel members must be sourced from the NSW State Design Review Panel Pool, or otherwise be approved by the NSW Government Architect.	N/A	Sydney Metro are responsible for the establishment of the DRP
E71	Prior to forming the DRP, a Design Review Panel Terms of Reference is to be developed and endorsed by the NSW Government Architect. The Terms of Reference must be submitted to the Planning Secretary for information and: (a) must be generally consistent with the NSW State Design Review Panel Terms of Reference (version 5); (b) outline the frequency of DRP meetings, coordinated with the Proponent's program requirements, as outlined in Condition E76 to ensure timely advice and design adjustment; and (c) identify cessation arrangements.	N/A	Sydney Metro are responsible for the establishment of the DRP and endorsement of the DRP terms of reference
E72	The DRP must be operated and managed in accordance with the Design Review Panel Terms of Reference.	N/A	Sydney Metro are responsible for the establishment of the DRP
E73	The NSW Government Architect must, after consultation with the Proponent, appoint an appropriately qualified and experienced design advisor to the DRP. The advisor must attend	N/A	Sydney Metro are responsible for the establishment of the DRP

Ref	Description	Reference	How Addressed
	meetings of the Panel. The advisor may also be invited by the Panel to assist with decisions regarding the Panel's recommendations and record the Panel's advice and recommendations.		
E74	The relevant council may be invited to the meetings of the Panel as observers or to provide feedback on key design elements of the CSSI.	N/A	Sydney Metro are responsible for the establishment of the DRP
E75	DRP advice and recommendations, as issued by the Panel, and the Proponent's response to each recommendation must be included when submitting the final PUDCLP to the Planning Secretary for information.	N/A	The preparation of the PUDCLP will be in accordance with this Condition.
E76	The Proponent must provide the design development schedule to the DRP prior to its first meeting, including details of when relevant elements of the detailed design will be available for review by the Panel. The schedule must be updated every three months until the detailed design process is complete.	N/A	Sydney Metro are responsible for the establishment of the DRP
E77	A PUDCLP must be prepared to document and illustrate the permanent built works and landscape design of the CSSI and how these works are to be maintained. The PDCLP must be: a) prepared by a suitably qualified and experienced person(s) in consultation with the community (including the affected landowners and businesses or a representative of the businesses), Western Parklands City Authority, Western Sydney Planning Partnership and relevant council(s); b) reviewed by an independent and suitably qualified and experienced person nominated by the DRP; c) submitted to the Planning Secretary prior to the construction of permanent built surface works and/or landscaping, excluding those elements which for ecological requirements, or technical requirements, or requirements as agreed by the Planning Secretary do not allow for alternate design outcomes; and d) implemented during construction and operation of the CSSI. Note: The PUDCLP may be developed and considered in stages to facilitate design progression and construction. Any such staging and associated approval would need to facilitate a cohesive final design and not limit final design outcomes.	N/A	Design Management Plan and PUDCLP preparation, which is underway.
E78	The PUDCLP must document how the following matters have been considered in the design and landscaping of the project: a) the requirements of Conditions E63 to E65, and b) advice and recommendations from the DRP.	Design Reports PUDCLP	Noted
E79	The PUDCLP must include descriptions and visualisations (as appropriate) of: a) design of the permanent built elements of the CSSI, including stabling and maintenance and ancillary facilities, service facilities and tunnel portals; b) plans for station precincts including but not limited to: i) justification of the spatial scope of each station precinct plan; ii) provision for public art and heritage interpretation installations; iii) placemaking opportunities, having regard to placemaking initiatives in Western Sydney Aerotropolis planning documents; iv) interchange access plans developed in consultation with the Traffic and Transport Liaison Group; v) active transport connections and end of trip facilities, design of pedestrian and cycle access, facilities and fixtures;	Design Reports PUDCLP	Noted

Ref	Description	Reference	How Addressed
	vi) design of commuter car parking elements, where relevant; c) landscaping and building design opportunities to mitigate visual impacts and minimise light spill on the nearby residences; d) the design of watercourse crossings and east-west corridor movements to give to effect of Condition E14; e) landscaping: i) landscape plan, hard and soft elements, for the corridor and the station precincts; ii) use of native species from the relevant native vegetation community (or communities), where identified as appropriate; iii) water sensitive urban design initiatives vii) management and routine maintenance standards and regimes for design elements and landscaping work (including weed management) to ensure the success of the design; viii) measures to prevent wildlife strike risk in proximity to Western Sydney International Airport; f) details of strategies to rehabilitate, regenerate or revegetate disturbed areas, where relevant; g) management and routine maintenance standards and regimes for design elements and landscaping work (including weed management) to ensure the success of the design; h) operational maintenance standards; and i) the timing and responsibilities for implementation of elements included within the PUDCLP.		
E80	The ongoing maintenance and operation costs of urban design, open space, landscaping and recreational items and work implemented as part of this approval remain the Proponent's responsibility until satisfactory arrangements have been put in place for the transfer of the asset to the relevant authority. Before the transfer of assets, the Proponent must maintain items and work to at least the design standards established in the PUDCLP, required by Condition E75 and SDPP(s) required by Condition E79. The Planning Secretary must be advised prior to the transfer of the asset(s) to the relevant authority.	PUDCLP	Implement the PUDCLP
E81	Should any plant loss occur during the maintenance period the plants must be replaced by the same plant species unless it is determined by a suitably qualified person that a different species is more suitable for that location.	PUDCLP FFMP	Noted.
E82	The CSSI must be designed and constructed with the objective of minimising impacts to, and interference with third party property, and that such infrastructure and property is protected during construction.	CEMP CTMP	Minimising impacts to, and interference with third party property, will be achieved through the implementation of ECMs, inspection activities, implementation of controls in the CTMP
E83	The utilities and services (hereafter "services") potentially affected by construction must be identified to determine requirements for diversion, protection and / or support. Alterations to services must be determined by negotiation between the Proponent and the service providers. Disruption to services resulting from construction must be avoided, wherever possible, and advised to customers where it is not possible.	NVMP CEMP	Noted.
E84	A suitably qualified and experienced person must undertake condition surveys of all buildings, structures, utilities and the like identified in the documents listed in Condition A1 and the further assessment carried out under mitigation measure GW1 of the Submissions Report as being at risk of damage before commencement of any work that could impact on the subject surface / subsurface structure. The results of the surveys must be documented in a Pre-construction Condition Survey	NVMP	The requirements of this Condition are managed in accordance with the Noise and Vibration Management Sub-plan.

Ref	Description	Reference	How Addressed
	Report for each item surveyed. Copies of Pre-construction Condition Survey Reports must be provided to the relevant owners of the items surveyed in the vicinity of the proposed work, and no later than one (1) month before the commencement of the work that could impact on the subject surface / subsurface structure.		
E85	Condition surveys of all items for which condition surveys were undertaken in accordance with Condition E84 must be undertaken by a suitably qualified and experienced person after completion of the work identified in Condition E84. The results of the surveys must be documented in a Post-construction Condition Survey Report for each item surveyed. Copies of Post-construction Condition Survey Reports must be provided to the landowners of the items surveyed, and no later than three (3) months following the completion of the work that could impact on the subject surface / subsurface structure.	NVMP NAHMP	The requirements of this Condition are managed in accordance with the Noise and Vibration Management Sub-plan.
E86	The Proponent, where liable, must rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the work at no cost to the owner. Alternatively, the Proponent may pay compensation for the property damage as agreed with the property owner. Rectification or compensation must be undertaken within 12 months of completion of the work identified in Condition E84 unless another timeframe is agreed with the owner of the affected surface or sub-surface structure or recommended by the Independent Property Impact Assessment Panel (IPIAP).	N/A	Where liable, Parklife Metro D&C will rectify or compensate property owners for any damage caused directly or indirectly by the SSTOM Works. The rectification or compensation will be undertaken within 12 months of completion of the works unless agreed with the property owner.
E87	Appropriate equipment to monitor areas in proximity of ancillary facilities and the tunnel route must be installed during construction has stabilised with particular reference to at risk buildings, structures and utilities identified in the condition surveys required by Condition E84 and / or geotechnical analysis as required. If monitoring during construction indicate exceedance of the vibration criteria identified in the DNVIS prepared under Condition E47, or levels otherwise determined as appropriate by a suitably qualified structural engineer, then all construction affecting settlement must cease immediately and must not resume until fully rectified or a revised method of construction is established that will ensure protection of affected buildings.	NVMP	The requirements of this Condition are managed in accordance with the Noise and Vibration Management Sub-plan.
E88	An IPIAP must be established prior to tunnelling activities commencing. The Planning Secretary must be informed of the members of the IPIAP and must comprise geotechnical and engineering experts independent of the design and construction team. The IPIAP will be responsible for independently verifying condition surveys undertaken under Conditions E84 and E85, the resolution of property damage disputes and the establishment of ongoing settlement monitoring requirements.	N/A	Not applicable to SSTOM package in accordance with Staging Report.
E89	Either the affected property owner or the Proponent may refer unresolved disputes arising from potential and/or actual property impacts to the IPIAP for resolution. All costs incurred in the establishing and implementing of the panel must be borne by the Proponent regardless of which party makes a referral to the IPIAP. The findings and recommendations of the IPIAP are final and binding on the Proponent.	N/A	Not applicable to SSTOM package in accordance with Staging Report.
E90	Settlement must be monitored for any period beyond the minimum timeframe requirements of Condition E87 if directed so by the IPIAP following its review of the monitoring data from the period not less than six (6) months after settlement has stabilised, consistent with Condition E87. The results of the monitoring must be made available to the Planning Secretary upon request.	N/A	Not applicable to SSTOM package in accordance with Staging Report
E91	Small Business Owners Engagement Plan(s) must be prepared for St Marys and implemented in accordance with the Overarching Community Communication Strategy to minimise impact on small businesses directly affected by construction activities at St Marys during construction. The plan must	N/A	Not applicable to SSTOM package in accordance with Staging Report

Ref	Description	Reference	How Addressed
	be prepared and submitted to the Planning Secretary for information before the commencement of construction at St Marys.		
E92	Before commencement of any construction that would result in the disturbance of medium to high risk contaminated sites as identified in the documents identified in Condition A1, Detailed Site Investigations (for contamination) must be conducted to determine the full nature and extent of the contamination. The Detailed Site Investigation Report(s) and the subsequent report(s), must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The Detailed Site Investigations must be undertaken in accordance with guidelines made or approved under section 105 of Contaminated Land Management Act 1997 (NSW). Note: Nothing in this condition prevents the Proponent from preparing individual Detailed Site Investigation Reports (for contamination) for separate sites.	SWMP	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E93	Should remediation be required to make land suitable for the final intended land use, a Remedial Action Plan must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The Remedial Action Plan must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997 (NSW) and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the Remedial Action Plan is implemented. Note: Nothing in this condition prevents the Proponent from preparing individual Remedial Action Plans for separate sites.	SMWP RAPs, EMPs	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E94	Before commencing remediation, a Section B Site Audit Statement(s) must be prepared by an NSW EPA-accredited Site Auditor that certifies that the Remedial Action Plan(s) is/are appropriate and that the site can be made suitable for the proposed use. The Remedial Action Plan(s) must be implemented and any changes to the Remedial Action Plan(s) must be approved in writing by the NSW EPA-accredited Site Auditor. Note: Nothing in this condition prevents the Proponent from engaging an NSW EPA-accredited Site Auditor to prepare individual Site Audit Statements for Remedial Action Plans for separate sites.	SWMP RAPs, EMPS, SAS, SAR	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E95	Validation Report(s) must be prepared in accordance with Consultants Reporting on Contaminated Land: Contaminated Land Guidelines (EPA, 2020) and relevant guidelines made or approved under section 105 of the Contaminated Land Management Act 1997 (NSW). Note: Nothing in this condition prevents the Proponent from preparing individual Validation Reports for separate sites.	N/A	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E96	A Section A1 or Section A2 Site Audit Statement (accompanied by an Environmental Management Plan) and its accompanying Site Audit Report, which state that the contaminated land disturbed by the work has been made suitable for the intended land use, must be submitted to the Planning Secretary and the Relevant Council(s) after remediation and before the commencement of operation	N/A	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.

Ref	Description	Reference	How Addressed
	of the CSSI. Note: Nothing in this condition prevents the Proponent from obtaining Section A Site Audit Statements for individual parcels of remediated land.		
E97	A copy of Detailed Site Investigation Report(s), Remedial Action Plan(s), Validation Report(s), Site Audit Report(s) and Site Audit Statement(s) must be submitted to the Planning Secretary and the Relevant Council(s) for information	DSI, RAPs, SARs, SASs, EMPs	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E98	An Unexpected Contaminated Land and Asbestos Finds Procedure must be prepared before the commencement of construction and must be followed should unexpected contaminated land or asbestos (or suspected contaminated land or asbestos) be excavated or otherwise discovered during construction.	SWMP	The Unexpected Contaminated Land and Asbestos Finds Procedure is included in the SWMP
E99	The Unexpected Contaminated Land and Asbestos Finds Procedure must be implemented throughout construction.	SWMP	The Unexpected Contaminated Land and Asbestos Finds Procedure is included in the SWMP
E100	A Sustainability Plan must be prepared to achieve an Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating of +75 (Version 1.2) (or equivalent level of performance using a demonstrated equivalent rating tool) or a 5-Star Green Star rating (or equivalent level of performance using a demonstrated equivalent rating tool).	SMP	The requirements of this Condition are addressed in the Sustainability Management Plan.
E101	The Sustainability Plan must be submitted to the Planning Secretary for information within six (6) months of the date of this approval and must be implemented throughout construction and operation. Note: Nothing in this condition prevents the Proponent from preparing separate Sustainability Strategies for the construction and operational stages of the CSSI.	SMP	Sydney Metro is responsible for this condition and have prepared a Sustainability Plan.
E102	A Water Reuse Strategy must be prepared, which sets out options for the reuse of collected stormwater and groundwater during construction and operation. The Water Reuse Strategy must include, but not be limited to: (a) evaluation of reuse options; (b) details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required; (c) measures to avoid misuse of recycled water as potable water; (d) consideration of the public health risks from water recycling; and (e) time frame for the implementation of the preferred reuse option(s). The Water Reuse Strategy must be prepared based on best practice and advice sought from relevant agencies, as required. The Strategy must be applied during construction. Justification must be provided to the Planning Secretary if it is concluded that no reuse options prevail. A copy of the Water Reuse Strategy must be made publicly available. Note: Nothing in this condition prevents the Proponent from preparing separate Water Reuse Strategies for the construction and operational stages of the CSSI.	SMP	The requirements of this Condition are addressed in the Sustainability Management Plan.

Ref	Description	Reference	How Addressed
E103	Construction Traffic Management Plans (CTMPs) must be prepared in accordance with the Construction Traffic Management Framework. A copy of the CTMPs must be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed within the relevant CTMP.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E104	The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E105	Local roads proposed to be used by Heavy Vehicles to directly access ancillary facilities / construction sites that are not identified in the documents listed in Condition A1 must be approved by the Planning Secretary and be included in the CTMP.	CTMP NVMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E106	All requests to the Planning Secretary for approval to use local roads under Condition E105 above must include the following: (a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to (d) of this condition.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E107	Before any local road is used by a Heavy Vehicle for the purposes of construction of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of the CSSI.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E108	If damage to roads occurs as a result of the construction of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E109	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive use (s); (d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	CTMP	The requirements of this Condition will be addressed in the detailed design and will be reflected in the site specific Construction Traffic Management Plans.
E110	Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	CTMP CEMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans

Ref	Description	Reference	How Addressed
E111	The Proponent must maintain access to properties during the entirety of works unless an alternative access is agreed in writing with the landowner(s) whose access is impacted by the CSSI works.	CTMP CEMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.
E112	Where construction of the CSSI restricts a property's access to a public road, the Proponent must, until their primary access is reinstated, provide the property with temporary alternate access to an agreed road decided through consultation with the landowner, at no cost to the property landowner, unless otherwise agreed with the landowner.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.
E113	Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access must be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.
E114	During construction, all reasonably practicable measures must be implemented to maintain pedestrian, cyclist and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian, cyclist and vehicular access, and parking arrangements must be developed in consultation with affected businesses and landowners and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.
E115	Safe pedestrian and cyclist access must be maintained around the St Marys construction site during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.
E116	A Traffic and Transport Liaison Group(s) must be established in accordance with the Construction Traffic Management Framework to inform the development of CTMP.	OCTMP	Sydney Metro will establish the TTLG, and Parklife Metro D&C will attend and take part in the TTLG.
E117	Supplementary analysis and modelling as required by TfNSW and / or the Traffic and Transport Liaison Group(s) must be undertaken to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the CTMP. Permanent road works included in the CSSI must be designed, constructed and operated with the objective of integrating with existing and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and, accessibility of the network. Design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken: a) in consultation with, and to the reasonable requirements of the relevant Traffic and Transport Liaison Group; b) in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements; c) to minimise and manage local area traffic impacts; d) to, where possible and appropriate, retain or reinstate parking in St Marys; e) to ensure access is maintained to property and infrastructure f) to address relevant design, engineering and safety guidelines, including Austroads, Australian	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plans.

Ref	Description	Reference	How Addressed
	Standards and TfNSW requirements. Copies of civil, structural and traffic signal design plans shall be submitted to the Relevant Road Authority for consultation during design development and before completion of construction of the CSSI.		
E118	As part of Condition E117 the Traffic and Transport Liaison Group(s) is to identify opportunities to improve the intersection performance during operation at: a) Queen Street/Great Western Highway/Mamre Road in St Marys; b) Glossop Street/ Forrester Road in St Marys; and c) Glossop Street / Great Western highway in St Marys. Identified improvements must be implemented prior to the commencement of operation.	N/A	Noted
E119	Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the relevant Traffic and Transport Liaison Group before the completion and use of the subject infrastructure and must be made available to the Planning Secretary upon request.	CTMP Design Reports	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E120	The CSSI must be designed and constructed with the objective of minimising impacts to, and interference with utilities infrastructure, and that such infrastructure and property is protected during construction. Utilities, services and other infrastructure potentially affected by construction must be identified before works affecting the item, to determine requirements for access to, diversion protection, and / or support. The relevant owner(s) and / or provider(s) of services must be consulted to make suitable arrangements for access to diversion, protection, and / or support of the affected infrastructure as required. The Proponent must ensure that disruption to any service is minimised and be responsible for advising local residents and businesses affected before any planned disruption of service.	CTMP	The requirements of this Condition are addressed in the Construction Traffic Management Plan.
E121	The proponent must consult with WaterNSW regarding design, construction and operational management where the proposal interacts with the Warragamba to Prospect Water Supply Pipeline, and ensure that proposed construction and operational agreements are consistent with the "Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines" and implement all practical measures to protect the Warragamba to Prospect Water Supply Pipelines infrastructure, or as otherwise agreed to by WaterNSW.	NVMP NAHMP	The requirements of this Condition are addressed in the Noise and Vibration Management Sub-plan and the Non-Aboriginal Heritage Management Sub-plan.
E122	Waste generated during construction and operation must be dealt with 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.	WMP	The requirements of this Condition are addressed in the Waste Management Sub-plan.
E123	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of the current EPL for the CSSI, 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.	WMP	The requirements of this Condition are addressed in the Waste Management Sub-plan.

Ref	Description	Reference	How Addressed
E124	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.	WMP	The requirements of this Condition are addressed in the Waste Management Sub-plan.
E125	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	WMP	Noted.
E126	The CSSI must be designed and constructed so as to maintain the NSW Water Quality Objectives (NSW WQO) where they are being achieved as at the date of this approval, and contribute towards achievement of the NSW WQO 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 WQO, in which case those requirements must be complied with.	SWMP	Noted.
E127	The Proponent must consider the Guidelines for controlled activities on waterfront land riparian corridors (Department of Industry 2018) when carrying out work within 40 metres of a watercourse, including its bed.	SWMP	Noted.
E128	Before undertaking any work and during maintenance or construction activities, erosion and sediment controls must be implemented and maintained to prevent water pollution consistent with Managing Urban Stormwater: Soils and Construction Vol 1 4th ed. By Landcom, 2004 (The Blue Book).	SWMP	ESCPs will be developed and implemented for the works.
E129	Unless an EPL is in force in respect to the CSSI and that licence specifies alternative criteria, discharges from construction wastewater treatment plants to surface waters must not exceed: (a) the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018 (ANZG (2018)) default guideline values for toxicants at the 95 per cent species protection level; (b) for physical and chemical stressors, the guideline values set out in Tables 3.3.2 and 3.3.3 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC/ARMCANZ); and (c) for bioaccumulative and persistent toxicants, the ANZG (2018) guidelines values at a minimum of 99 per cent species protection level. Where the ANZG (2018) does not provide a default guideline value for a particular pollutant, the approaches set out in the ANZG (2018) for deriving guideline values, using interim guideline values and/or using other lines of evidence such as international scientific literature or water quality guidelines from other countries, must be used.	SWMP	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.
E130	If construction stage stormwater discharges are proposed, a Water Pollution Impact Assessment will be required. Any such assessment must be prepared in consultation with the EPA and be consistent with the National Water Quality Guidelines, with a level of detail commensurate with the potential water pollution risk. Note: If an EPL is required the Water Pollution Impact Assessment will be required to inform licensing consistent with section 45 of the POEO Act.	N/A	If required, a WPIA will be prepared in consultation with NSW EPA.
E131	Drainage feature crossings (permanent and temporary watercourse crossings and stream diversions) and drainage swales and depressions must be carried out in accordance with relevant guidelines and designed by a suitably qualified and experienced person.	SWMP	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan.

Ref	Description	Reference	How Addressed
E132	Unless an EPL is in force in respect to the CSSI and that licence specifies alternative criteria, discharges from operational water treatment plants to surface waters must not exceed: (a) the ANZG 2018 default guideline values for toxicants at the 95 per cent species protection level; (b) for physical and chemical stressors, the guideline values set out in Tables 3.3.2 and 3.3.3 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000); and (c) for bioaccumulative and persistent toxicants, the ANZG 2018 guideline values at a minimum of 99 per cent species protection level. Where the ANZG 2018 does not provide a default guideline value for a particular pollutant, the approaches set out in the ANZG 2018 for deriving guideline values, using interim guideline values and/or using other lines of evidence such as international scientific literature or water quality guidelines from other countries, must be used.	N/A	Noted
E133	Make good provisions for groundwater users must be provided in the event of a material decline in water supply levels, quality or quantity from registered existing bores associated with groundwater changes from either construction and/or ongoing operational dewatering caused by the CSSI.	GMP	The requirements of this Condition are addressed in the Groundwater Management Procedure in the CEMP.
E134	The Proponent must submit a revised Groundwater Modelling Report to the Planning Secretary for information before bulk excavation at the relevant construction location. The Groundwater Modelling Report must include: (a) for each construction site where excavation will be undertaken, cumulative (additive) impacts from nearby developments, parallel transport projects and nearby excavation associated with the CSSI; (b) predicted incidental groundwater take (dewatering) including cumulative project effects; (c) potential impacts for all latter stages of the CSSI or detail and demonstrate why these later stages of the CSSI will not have lasting impacts to the groundwater system, ongoing groundwater incidental take and groundwater level drawdown effects; (d) actions required to minimise the risk of inflows (including in the event latter stages of the CSSI are delayed or do not progress) and a strategy for accounting for any water taken beyond the life of the operation of the CSSI; (e) saltwater intrusion modelling analysis, from saline groundwater in shale, into metro station sites; and (f) a schematic of the conceptual hydrogeological model.	N/A	Bulk excavation is not applicable to the SSTOM Works.

Appendix B.2 Revised Environmental Mitigation Measures (REMMs)

Ref	Description	How Addressed
AH1	Aboriginal stakeholder consultation would continue to be carried out in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (NSW Office of Environment and Heritage, 2010). Registered Aboriginal Parties would be provided with opportunities to participate in survey and testing in unverified areas of Aboriginal archaeological sensitivity, archaeological salvage works and unexpected find assessments (if required).	Sydney Metro is responsible for the requirements of this REMM.
AH2	Areas of unverified Aboriginal archaeological sensitivity would be subject to archaeological survey, if required, and test excavation prior to construction in accordance with the Aboriginal Cultural Heritage Management Plan	Sydney Metro is responsible for the requirements of this REMM.
AH3	Not used	N/A
AH4	Not used	N/A
AH5	All Aboriginal objects recovered from the construction footprint as a result of test excavation and salvage works would be appropriately secured and under the care of the archaeological consultant while options for their long-term management, as determined through consultation with Registered Aboriginal Parties, are being investigated	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH6	Aboriginal Heritage Information Management System site cards would be produced for all newly identified sites other than those identified on Commonwealth land. These should be submitted to the Aboriginal Heritage Information Management System Registrar as soon as practicable within one month of being identified. Newly identified sites within the revised boundaries of Defence Establishment Orchard Hills (Commonwealth land) would be reported to the Department of Defence to be managed in accordance with the relevant provisions of the Defence Establishment Orchard Hills Heritage Management Plan	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH7	Aboriginal Site Impact Recording forms for sites subject to archaeological salvage would be submitted to the Aboriginal Heritage Information Management System register within one month of the completion of salvage works within their bounds	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH8	If any suspected human remains or unexpected Aboriginal cultural heritage objects are discovered within the on-airport area, all activity would cease and the unexpected finds protocol and discovery of human remains protocol specified in the Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan would be followed	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH9	Works within the bounds of existing Aboriginal Heritage Impact Permit areas should be undertaken in accordance with the conditions of those permits and with permission from the relevant Aboriginal Heritage Impact Permit holder. Works undertaken within the revised boundaries on Defence Establishment Orchard Hills (Commonwealth land) should be undertaken in accordance with the Defence Establishment Orchard Hills Heritage Management Plan	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH10	Impacted Aboriginal Sites would be managed in accordance with the Aboriginal Cultural Heritage Management Plan	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH11	Measures would be implemented to ensure that Aboriginal sites located outside of the construction footprint, but within 100m of it, would not be affected by construction activities	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AH12	An Archaeological Salvage Report detailing the results of the archaeological salvage program (including the results of any post-excavation analyses) would be completed within two years of the completion of the fieldwork component of the program. The Archaeological Salvage Report would be consistent with the best practice guidelines suggested by the Code of Practice for Archaeological	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.

Ref	Description	How Addressed
	Investigation of Aboriginal Objects in NSW (DECCW 2010) and the Aboriginal Cultural Heritage Standards & Guidelines Kit (NSW NPWS 1997)	
AH13	Measures to manage and protect the identified cultural values would be developed collaboratively through a consultation process with knowledge holders to inform construction planning and design development	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
AQ1	The Air Quality Management Plan for the project would incorporate the following best-practice odour management measures which would be implemented as appropriate during relevant construction works: •the extent of opened and disturbed contaminated soil at any given time would be minimised •temporary coverings or odour supressing agents would be applied to excavated areas where appropriate •regular odour monitoring would be conducted during excavation to verify that no offensive odours are being generated	The requirements of this REMM are addressed in the Air Quality Management Sub-plan
AQ2	Where acoustic sheds are proposed these would be designed and managed to prevent/minimise the escape of dust emissions	The requirements of this REMM are addressed in the Air Quality Management Sub-plan
AQ3	Air quality monitoring, consistent with the Western Sydney Airport Air Quality Construction Environmental Management Plan would be carried out during construction to ensure that works meet the requirements under Schedule 1 of the Airports (Environment Protection) Regulations 1997	The requirements of this REMM are addressed in the Air Quality Management Sub-plan
CL1	A Cumulative Construction Impacts Management Plan would be developed and would detail co-ordination and consultation requirements with the following stakeholders (as relevant) to manage the interface of projects under construction at the same time: • Western Sydney Airport • Transport for NSW • Western Parkland City Authority • Sydney Water • Emergency service providers • Utility providers Co-ordination and consultation requirements with these stakeholders would be detailed in the plan to include: • provision of regular updates to the detailed construction program, construction sites and haul routes • identification of key interfaces with other construction projects • development of mitigation strategies to manage cumulative impacts associated with these interfaces	The Cumulative Construction Impacts Management Plan has been prepared by Sydney Metro.
FF1	The Biodiversity Construction Environmental Management Plan (on airport)/ and Flora and Fauna Management Plan (off-airport) would be prepared by a suitably qualified and experienced person to minimise and manage the clearing of native vegetation and habitat by: • seeking to locate site offices, site compounds and ancillary facilities in areas where there are limited biodiversity values (e.g. cleared land) • delaying the removal of vegetation until absolutely necessary • avoiding the removal of hollow-bearing trees, where possible • using a qualified surveyor and suitably qualified ecologist to mark out exclusion zones and clearing/project boundaries prior to construction • providing contractors with regularly updated sensitive area maps (showing clearing boundaries and exclusion zones) • investigating opportunities for salvage and storage of felled native trees for potential use in landscape	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.

Ref	Description	How Addressed
	design The Biodiversity Construction Environmental Management Plan (on airport) and Flora and Fauna Management Plan (off-airport) would be implemented throughout construction.	
FF2	A Nest Box Strategy would be prepared to minimise habitat loss to hollow-dependent fauna in accordance with the Flora and Fauna Management Plan and would include the following requirements: • hollow-bearing trees would be marked/tagged and mapped prior to their removal. The size, type, number and location of nest boxes required would be based on the results of the pre-clearing survey • about 70 per cent of nest boxes would be installed about one month prior to any vegetation removal to provide alternate habitat for hollow-dependent fauna displaced during clearing	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF3	Works on-airport would be undertaken in consultation with Western Sydney Airport subject to the wildlife hazard management requirements	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF4	A targeted microbat survey (including Eastern Coastal Free-tailed Bat, Large Bent-winged bat and or Eastern False Pipistrelle) of dwellings and structures proposed for demolition, removal or modification would be undertaken in accordance with 'Species credit' threatened bats and their habitats NSW survey guide for the Biodiversity Assessment Method (OEH, 2018) prior to disturbance. Other human-made structures such as culverts and other under-road structures within the construction footprint would be surveyed for threatened microbats (e.g. particularly the Southern Myotis) in accordance with the Biodiversity Assessment Method (OEH, 2018). If threatened microbats are detected, a Microbat Management Plan would be developed as part of the Flora and Fauna Management Plan and implemented by a suitably qualified bat specialist.	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF5	Works on-airport would be managed in accordance with the Western Sydney Airport Microbat Management Plan and in consultation with Western Sydney Airport	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF6	During construction, shading and artificial light impacts would be minimised in areas adjoining remnant bushland that is in intact condition	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF7	Fish passage and fish habitat associated with Cosgrove Creek and Blaxland Creek would be protected in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI (Fisheries NSW), 2013)	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF8	A Dewatering Plan would be prepared and implemented for the dewatering of rural dams which are impacted as a result of the construction of the project. This would include measures to manage the transfer of native aquatic fauna, if required, prior to dewatering and removing of dams	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF9	A Dewatering Plan would be prepared and implemented for the dewatering of rural dams which are impacted as a result of the construction of the project. This would include measures to manage the transfer of native aquatic fauna, if required, prior to dewatering and removing of dams. The plan would be consistent with the Western Sydney Airport Biodiversity Construction Environmental Management Plan (on-airport)	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.
FF10	The impact of Key Threatening Processes as a result of the project would be managed and minimised where possible through: •implementation of weed management measures to prevent the introduction and spread of weeds including exotic vines and scramblers, Olea europaea (African Olive), Chrysanthemoides monilifera, Lantana camara, and exotic perennial grasses •implementation of pathogen management measures to prevent the introduction and spread of pathogens including amphibian chytrid, Phytophthora implementa, and Exotic Rust Fungi of the order Pucciniales	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan.

Ref	Description	How Addressed
	•implementation of management measures to protect the riparian zone to ensure fish passage and protect fish habitat in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI (Fisheries NSW), 2013),and minimisation of vegetation removal within the riparian zone where possible	
FF11	A native vegetation seed collection and salvage program would be developed prior to the commencement of construction and implemented during construction. The seed collection and salvage program would target native species prioritising the Cumberland Plain Woodland species to be utilised in landscaping for the project where possible. Opportunities for use of collected and salvaged seed outside of the project would also be investigated	The requirements of this Condition are addressed in the Flora and Fauna Management Sub-plan. SSTOM Works only include propagation of collected material.
GHG1	Carry out an iterative process of greenhouse gas assessments and design refinement prior to construction to identify opportunities to minimise greenhouse gas emissions. Performance would be measured in terms of a percentage reduction in greenhouse gas emissions, and assessed against a business as usual project benchmark verified by Infrastructure Sustainability Council of Australia or equivalent independent industry body.	The requirements of this REMM will be addressed in the Sustainability Plan (refer to Condition 100).
GW1	Further assessment would be undertaken during design development, and prior to construction commencing, to ensure that damage to buildings and structures at risk of ground movement impacts around St Marys, Claremont Meadows, Orchard Hills and Bringelly are avoided or managed. Where building damage risk is rated as slight, moderate or high (as per Rankin 1988), a structural assessment of the affected buildings/structures would be carried out and specific measures implemented to address the risk of damage	Design reports
GW2	Further assessment of road and rail infrastructure and utility assets (including the Warragamba to Prospect Water Supply Pipelines) considered to be at risk from ground movement would be undertaken during design development. Consultation would be undertaken with the infrastructure and asset owners in each case to determine appropriate ground movement criteria for the assessment and, if required, to agree management measures to manage potential impacts	Design reports
GW3	Further assessment of potential ground movement impacts on the Goods Shed building at St Marys Station, including a building condition survey, would be carried out during design development and prior to the commencement of construction. The assessment would be carried out in consultation with a suitably qualified heritage architect and would identify acceptable ground movement criteria and, if required, feasible measures to reduce or mitigate the effects of ground movement on this structure	Design reports
GW5	Detailed hydrogeological and geotechnical models for the project would be developed and progressively updated during design and construction These models would: •be informed by the results of groundwater monitoring undertaken before and during construction •identify predicted changes to groundwater levels, including at nearby water supply works and at groundwater dependent ecosystems or other sensitive groundwater receptors	The hydrogeological and geotechnical models will be progressively updated if required for the SSTOM Works.
GW6	A Groundwater Management Plan would be prepared and implemented. The plan must include the following trigger-action response measures in relation to groundwater levels in areas identified as subject to potential drawdown (at groundwater dependent ecosystems or other sensitive receivers) but outside the construction footprint and Western Sydney International Stage 1 Construction Impact Zone: a. target criteria, set with reference to relevant standards and site specific parameters; b. trigger values and corresponding corrective actions to prevent recurring or long-term exceedance of the target criteria described in (a); c. corrective actions to compensate for any recurring or long-term exceedance of the target criteria described in (a)	Due the low risk of groundwater impacts from the SSTOM Works, a Groundwater Management Plan has not been prepared. A Groundwater Management Procedure has been prepared and is included in in Appendix G of the SWMP.

Ref	Description	How Addressed
	Response measures may include: •targeted ground improvement and grouting to limit groundwater inflows into station excavations, tunnels and cross-passage to reduce groundwater drawdown •design of undrained temporary retention systems to minimise groundwater inflow into station excavations and reduce groundwater drawdown •supplementing groundwater supply at affected groundwater dependent ecosystems or watercourses •make good provisions for groundwater supply wells impacted by changes in groundwater level or quality	
HR1	All hazardous substances that may be required for construction would be stored and managed in accordance with the Storage and Handling of Dangerous Goods Code of Practice (WorkCover NSW, 2005), the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, Industry and Environment, 2011) the Work Health and Safety Act 2011 (Commonwealth and NSW) and the requirements of the Environmentally Hazardous Chemicals Act 1985 (NSW)	The requirements of this REMM are addressed in the Soil and Water Management Sub-plan
HR2	A Bushfire Management Plan would be prepared and implemented to manage current bushfire risk and identify response actions during construction of the project. The Plan would be prepared in consultation with the NSW Rural Fire Service and Western Sydney Airport. For project areas within Western Sydney International the Plan would be prepared having regard to the existing Western Sydney Airport Site at Badgerys Creek Bushfire Risk Management Plan	As part of the Emergency Response Plan, a Bushfire Management Plan will be prepared and implemented in accordance with the requirements of this REMM.
HR3	A hazardous materials analysis would be carried out prior to stripping and demolition of structures and buildings which are suspected of containing hazardous materials (particularly asbestos) Hazardous materials and special waste (such as asbestos) would be removed and disposed of in accordance with the relevant legislation, codes of practice and Australian Standards (including the Work Health and Safety and Regulation 2011 (NSW))	Demolition Management Plan
HR4	Where the project crosses or is adjacent to the Warragamba to Prospect Water Supply Pipelines, construction planning, and approaches to minimising risks of damage or rupture to of the Pipelines, would be developed in consultation with WaterNSW, and in accordance with the Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines (Water NSW, 2020)	The requirements of this REMM are addressed in the Noise and Vibration Management Sub-plan.
HYD1	Construction planning would consider flood related mitigation, including: •staging construction works to reduce the duration of works within the floodplain daily and continuous monitoring of weather forecasts and storm events, rainfall levels and water levels in key watercourses to identify potential flooding events and related flood emergency response •consultation with NSW State Emergency Services and relevant local councils to ensure consistent approaches to the management of flood events (off airport only) •provide flood-proofing to excavations at risk of flooding during construction, where reasonable and feasible, such as raised entry into shafts and/or pump-out facilities to minimise ingress of floodwaters into shafts and the dive structure •review of site layout and staging of construction works to avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan ongoing consultation and planning will be undertaken in relation to flood management.
HYD2	Minimise works in the main creek channels (at Blaxland Creek, unnamed watercourse south of Patons Lane and Cosgroves Creek) where possible and avoid works in the channel during rainfall events	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan

Ref	Description	How Addressed
HYD3	Surface water flows during construction would be managed to ensure that there is no increase in flows into or through the Warragamba to Prospect Water Supply Pipelines corridor	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan and Appendix – Site Establishment Layout Plans
LU1	Areas of land leased for the purposes of construction would be reinstated at the end of the lease to at least equivalent standard in consultation with the landowner	The Soil and Water Management Sub-plan contains details of the post-construction monitoring required to ensure that construction areas have no residual contamination, waste or erosion risk. Details of reinstatement requirements will be subject to individual leases.
LU2	Where required property adjustments have the potential to impact farm infrastructure (such as fencing or dams) or local access to properties, consultation with affected property owners would be carried out prior to these works occurring, in order to determine reasonable, feasible and acceptable solutions	The requirements of this REMM are addressed in the Communication Strategy.
LU3	Where a property would be potentially fragmented by the construction corridor, access to properties would be maintained, in consultation with the landowner(s)	The requirements of this REMM are addressed in the Communication Strategy.
LV1	Opportunities for the retention and protection of existing street trees and trees within the construction sites would be identified during detailed construction planning	The requirements of this REMM are addressed in the Flora and Fauna Management Sub-plan and the Visual Amenity Management Sub-plan
LV2	Existing trees to be retained would be protected prior to the commencement of construction in the vicinity of these trees in accordance with AS4970-2009 Protection of Trees on Development Sites	The requirements of this REMM are addressed in the Flora and Fauna Management Sub-plan
LV3	All structures (including potential acoustic sheds, site offices, workshop sheds and site hoarding) would be finished in a colour which aims to minimise their visual impact where appropriate. This finish is to be applied to all visible fixtures and fittings (such as exposed downpipes)	The requirements of this REMM are addressed in the Flora and Fauna Management Sub-plan and the Visual Amenity Management Sub-plan
NAH1	Potential moveable heritage items would be identified and assessed and a significant fabric salvage schedule would be prepared by an appropriately qualified and experienced heritage specialist for St Marys Railway Station, Bringelly RAAF Base, McGarvie-Smith Farm, and McMasters Farm. Significant fabric would only be salvaged if it can be salvaged in such a way that it can be reused and is likely to be able to be reused	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
NAH2	Heritage advice would be sought to develop solutions to manage potential ground movement impacts to the St Marys Goods Shed	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
NAH3	Archival recording of heritage items which would be impacted or that would have their setting altered, would be carried out in accordance with the NSW Heritage Office's Photographic Recording of Heritage Items Using Film or Digital Capture (2006). The following items would be archivally recorded: •St Marys Railway Station •Luddenham Road Alignment •McMaster Farm •McGarvie-Smith Farm •Kelvin (the State Heritage listed curtilage) •Bringelly RAAF Base	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
NAH4	Not used	
NAH5	Archaeological investigations would be undertaken in accordance with recommendations in the non-Aboriginal Archaeological Research Design	No archaeological investigations have been identified for the SSTOM Works scope.
NAH6	The following heritage items would be monitored for potential vibration impacts during construction: •St Marys Railway Station Group •Queen Street Post-War Commercial Building	Condition is not applicable to SSTOM Works scope however provision has been made for monitoring of potential vibration

Ref	Description	How Addressed
	•St Marys Munitions Workers Housing •McGarvie Smith Farm •McMaster Farm	impacts through the approved Noise and Vibration Management Plan
NAH7	If required, the St Marys Station jib crane would be temporarily relocated prior to construction that may impact on this item, safely stored and appropriately maintained and conserved before reinstatement. If relocation is required, a detailed methodology for the removal and reinstatement of the jib crane would be prepared in consultation with an appropriately qualified heritage advisor	Condition is not applicable to SSTOM Works scope however provision has been made for the management of the St Marys Station jib crane within the approved Non-Aboriginal Heritage Management Plan.
NAH8	A dilapidation survey of the Warragamba to Prospect Water Supply Pipelines would be undertaken prior to construction commencing in the vicinity of this item	Not applicable to SSTOM Works scope. Sydney Metro will provide the dilapidation survey outcomes to Parklife Metro D&C if required.
NAH9	If suspected human remains or unexpected items of potential heritage significance are discovered within the on-airport area, all activity would cease and the unexpected/chance finds requirements specified in the Western Sydney Airport European and Other Heritage Construction Environmental Management Plan would be followed	An unexpected heritage finds procedure is included in the Non-Aboriginal Heritage Management Sub-plan and will be implemented during construction.
OGHG1	Carry out an iterative process of greenhouse gas assessments and design refinement during detailed design to identify opportunities to minimise greenhouse gas emissions Performance would be measured in terms of a percentage reduction in greenhouse gas emissions, and assessed against a business as usual project benchmark verified by Infrastructure Sustainability Council of Australia or equivalent independent industry body.	This REMM is related to operation and not applicable to construction.
OGW1	Ongoing groundwater inflows from drained project elements (or incidental flows) would be treated and tested before discharge to comply with any relevant Environment Protection Licence or agreed discharge criteria	Groundwater Management Procedure has been prepared and is included in Appendix G of the SWMP.
OHR1	All hazardous substances that may be required for operation would be stored and managed in accordance with the Storage and Handling of Dangerous Goods Code of Practice (WorkCover NSW, 2005), the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, Industry and Environment, 2011), the Work Health and Safety Act 2011 (Commonwealth and NSW) and the requirements of the Environmentally Hazardous Chemicals Act 1985 (NSW)	This REMM is related to operation and not applicable to construction.
OHR2	A Bushfire Management Plan would be prepared and implemented to manage current bushfire risk and identify response actions during operation of the project. The Plan would be prepared in consultation with the NSW Rural Fire Service and Western Sydney Airport. For project areas within Western Sydney International, the Plan would be prepared having regard to the existing Western Sydney Airport Site at Badgerys Creek Bushfire Risk Management Plan	This REMM is related to operation and not applicable to construction.
OHR3	Where the project crosses or is adjacent to the Warragamba to Prospect Water Supply Pipelines, the design of the project would aim to minimise risks of damage or rupture of the Pipelines in consultation with WaterNSW, and in accordance with the Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines (Water NSW, 2020)	Design reports
OHR4	The project would be designed to avoid pilot distraction and minimise the risk of headlight glare from metro trains where on surface rail alignment. This would include providing glare screens in those locations where the project creates an unacceptable risk of pilot distraction	Design reports
OHYD1	The flood model for the project would be updated with regard to flood modelling undertaken for the South Creek Sector Review (anticipated to be released in 20201) and would include updated calibration and validation. The updated flood modelling would be used to inform design development	Design reports and flood modelling reports

Ref	Description	How Addressed
	including but not limited to, addressing potential residual flood impacts identified at the following locations: •the viaduct and earthworks in the vicinity of Blaxland Creek so as to minimise the extent of the project within the floodplain •the earthworks arrangement at the stabling and maintenance facility in the area affected by the Probable Maximum Flood The flood model for the project would be updated in consultation with relevant stakeholders	
OHYD2	Develop localised stormwater management plans at St Marys Station and Aerotropolis Core Station to ensure these stations are protected from localised flooding	This REMM is related to operation and not applicable to construction.
OHYD3	Flood compatible design would need to be demonstrated for the permanent spoil placement areas to ensure compliance with applicable land use criteria	Design reports
OHYD4	The design of the viaduct crossing over the Warragamba to Prospect Water Supply Pipelines would not result in an increase of overland flows into or through the pipelines corridor for each storm event up to and including the 1% AEP event	Design reports
OLU1	Where a property would be potentially fragmented by the rail corridor, access to properties would be provided. The location of access to be provided would be agreed in consultation with the landowner(s)	The requirements of this REMM are addressed in the Communication Strategy.
OLU2	Sydney Metro would continue to consult with key stakeholders during design development of the station interchanges and precincts	The requirements of this REMM are addressed in the Communication Strategy.
OLV1	The landscape design for the project would include consideration of appropriate species lists to minimise opportunities to attract wildlife at levels likely to present a hazard to aviation operations. The landscape design would have regard to relevant requirements and species lists under the Western Sydney Airport Wildlife Management Plan and other relevant guidelines, including the National Airports Safeguarding Framework Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports (Australian Government, 2014) and Recommended Practices No. 1 – Standards for Aerodrome Bird/Wildlife Control (International Bird strike Committee 2006)	Design reports PUDCLP
OLV2	Lighting at stations would be designed and operated in accordance with AS4282-2019 Control of the obtrusive effects of outdoor lighting and the National Airports Safeguarding Framework Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports (Australian Government, 2014) (where relevant)	The requirements of this Condition are addressed in the Visual Amenity Management Sub-Plan
OLV3	Opportunities to provide vegetation screening of the stabling and maintenance facility (from sensitive receivers such as Luddenham Road and the surrounding rural areas within the viewshed) would be investigated during design development. This would include investigating options for establishing screening vegetation as early in the construction phase as possible	The requirements of this Condition are addressed in the Visual Amenity Management Sub-Plan
OLV4	Landscape screening would be provided along the corridor including restoring vegetation along the creeks to contain local views, in accordance with the Sydney Metro – Western Sydney Airport Design Guidelines, to minimise adverse visual impacts where feasible	The requirements of this Condition are addressed in the Visual Amenity Management Sub-Plan
OLV5	Corridor services, including the combined services route would be designed to reduce visual clutter and minimise visual impact ensuring these structures have a low profile and do not obstruct views across the corridor	Design reports PUDCLP
OLV6	Proposed engineering batters and water management measures would be designed to integrate with the existing landforms and natural features	Design reports PUDCLP

Ref	Description	How Addressed
OLV7	The landscape design for the project would: •incorporate salvaged native trees (including tree hollows and root balls), to enhance fauna habitat in suitable locations, including riparian corridors, where practicable •use native species from the relevant native vegetation communities within the local area for tree planting programs	Design reports PUDCLP
ONAH1	Design development for the project would endeavour to minimise adverse impacts to heritage buildings, elements, fabric, and heritage significant settings and view lines that contribute to the overall heritage significance of heritage items	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONAH2	The architectural design for the project would take account local heritage context and be sympathetic to local heritage character. This would include using sympathetic building materials, colours and finishes. Design should aim to minimise visual impacts by ensuring that significant elements are not obstructed or overshadowed. Design should adhere to the Sydney Metro – Western Sydney Airport Design Guidelines.	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONAH3	Consultation with the Heritage Council and relevant stakeholders would occur for the design of works that have the potential to impact State significant items including St Marys Railway Station	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONAH4	A heritage interpretation strategy would be prepared for the project identifying key stories and interpretive opportunities related to non-Aboriginal heritage. The strategy would address historic and contemporary heritage and community values and would identify innovative and engaging opportunities for interpretation	Sydney Metro is responsible for the preparation of the heritage interpretation strategy.
ONAH5	A conservation management plan would be prepared for St Marys Railway Station, in accordance with NSW Heritage Council guidelines. The plan would address any changes to the station, including updated assessment of significance of elements and recommendations on curtilage changes. It would also provide site specific exemptions and management policies	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONAH6	Heritage inventory registers for heritage items modified by the project would be updated to document their change in condition following the completion of construction works for the project	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONAH7	An appropriately qualified and suitably experienced heritage architect would be engaged to provide input into design development at St Marys Station	The requirements of this Condition are addressed in the Non-Aboriginal Heritage Management Sub-plan.
ONV1	An Operational Noise and Vibration Review would be prepared during design development to confirm the mitigation measures required to manage: • airborne and ground-borne noise impacts from rail operations • airborne noise impacts from the stabling and maintenance facility • airborne noise impacts from fixed industrial sources, including stations and services facilities The Operational Noise and Vibration Review would consider existing and potential future land use to	The requirements of this Condition are managed in accordance with the Noise and Vibration Management Sub-plan.

Ref	Description	How Addressed
	establish Project Noise Trigger Levels. The EPA would be consulted during preparation of the Operational Noise and Vibration Review	
OSUS1	A Sustainability Plan would be developed and implemented during operation of the project. The Sustainability Plan would identify the sustainability, climate change and greenhouse gas objectives, initiatives and targets which would be implemented during further design development and operation of the project. The Sustainability Plan would be developed to be consistent with the Western Sydney Airport Sustainability Plan for on-airport works	Design reports Sustainability Management Plan
OSUS2	Climate change risk treatments would be confirmed and incorporated during further design development	Design Report/s Sustainability Management Plan
OT1	Interchange access plans would be prepared, in consultation with the Traffic and Transport Liaison Group and relevant authorities including Western Parkland City Authority, to ensure adequate pedestrian and cycle facilities and other transport interchange infrastructure is provided at each station precinct.	Design Management Plan PUDCLP
OT2	The project would be designed such that access to properties and existing infrastructure neighbouring the proposed stations would be maintained	Design reports
OT3	Consultation and coordination would be undertaken with Transport for NSW through the Traffic and Transport Liaison Group to align planned road and intersection upgrades with the year of opening, to enable safe and efficient interchanges between transport modes	Design reports
OT4	An operational car parking strategy for St Marys would be prepared in consultation with Penrith City Council and Transport for NSW prior to commencement of operation. The strategy would include consideration of measures that could be implemented to address any parking impacts as a result of the project	Design reports
OWQ1	Design batter slope gradients and surface treatments to minimise erosion risk	Design reports
OWQ2	Drainage and water treatment design to be undertaken in accordance with Water Sensitive Urban Design requirements specified in local council, Transport for NSW and on-airport standards	Design reports
OWQ3	Suitably designed scour and erosion controls should be included at drainage and sedimentation basin outlet discharge points	Design reports
OWQ4	Detailed design of viaducts across waterways would aim to minimise infrastructure within the bed and banks of existing waterways and minimise changes to flood behaviour across the floodplain	Design reports
OWQ5	Where feasible, on-site detention of stormwater would be introduced where stormwater runoff rates are increased. Where there is insufficient space for the provision of on-site detention, the upgrade of downstream infrastructure would be implemented where feasible and reasonable	Design reports
OWQ6	At all locations where stormwater is discharged, water quality measures such as gross pollutant traps, bio-retention swales and Water Sensitive Urban Design features would be investigated and implemented where feasible and reasonable	Design reports
OWQ7	Water treatment plants would be designed to ensure that wastewater is treated to a level that is compliant with the ANZECC/ARMCANZ (2000), ANZG (2018) and draft ANZG (2020) default guidelines for 95 per cent species protection and 99 per cent species protection level for toxicants that bioaccumulate unless other discharge criteria are agreed with relevant authorities	The requirements of this Condition are addressed in the Soil and Water Management Sub-Plan Design reports
OWR1	Generation of waste would be minimised and reused where possible in line with the waste hierarchy and the sustainability objectives outlined in a Sustainability Plan. In addition:	The requirements of this Condition are addressed in the Waste Management Sub-plan

Ref	Description	How Addressed
	•bins would be provided for general waste and recyclables and collection would be undertaken by an authorised contractor for off-site recycling or disposal at a licenced waste facility •waste from maintenance activities, including containers holding grease and lubricants, would be stored in designated areas for collection by an authorised contractor for off-site disposal •waste oil and oil filters would be stored in recycling bins and collected by an authorised contractor, and recycled off-site, where feasible •wastewater, sewage and grey water would be disposed to stormwater, sewer, recycled wastewater system or transported to an appropriately licenced liquid waste treatment facility (if water quality does not meet requirements for discharge to the stormwater/sewer system)	
SC1	The Soil and Water Management Plan would incorporate the following measures: •for low risk areas of environmental concern, worker health and safety measures, waste management and tracking for contamination would be outlined for medium and high risk areas of environmental concern, detailed site investigations and review of further available information would be undertaken prior to the start of construction	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC2	Based on outcomes of SC1: •if a medium or high risk area of environmental concern is reassessed as low risk, the site would be managed in accordance with the Soil and Water Management Plan. This would typically occur where there is minor, isolated contamination that can be readily remediated through standard construction practices such as excavation and off-site disposal •for areas of environmental concern that remain or change to medium risk, visual inspections and monitoring would be performed during earthworks. If suspected contamination is encountered, the materials would be subject to sampling and analysis to assess management requirements in accordance with statutory guidelines made or endorsed by the NSW Environment Protection Authority •for areas of environmental concern that remain or change to high risk, a Sampling, Analysis and Quality Plan would be prepared for Detailed Site Investigations or data gap investigations. The results from the site investigations would be assessed against criteria contained within the National Environment Protection (Assessment of Site Contamination) Measure (2013) and other applicable NSW statutory guidelines to assess whether remediation is required. Remediation works would be performed in accordance with the hierarchy of preferred strategies in the Guidelines for the NSW Site Auditor Scheme (NSW Environment Protection Authority, 2017) and other guidelines made or endorsed by the NSW Environment Protection Authority Where practical, remediation works would be integrated with excavation and development works performed during construction	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC3	Where information gathered from investigations for medium and high risk areas of environmental concern (as per mitigation measure SC1) is insufficient to determine the risk of contamination, a detailed site investigation would be carried out in accordance with the National Environment Protection Measure (2013) and other guidelines made or endorsed by the NSW Environment Protection Authority Where data from the additional data review (mitigation measure SC1) or the detailed site investigation (mitigation measure SC2) confirms that contamination would require remediation, a Remediation Action Plan would be developed for the area of the construction footprint If a Remediation Action Plan is required, it would be developed in accordance with NSW Environment Protection Authority statutory guidelines and a Site Auditor would be engaged. Remediation methodologies would be undertaken in accordance with Australian Standards and other relevant	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan

Ref	Description	How Addressed
	government guidelines and codes of practice Remediation would be performed as an integrated component of construction an	
SC4	If a duty to report to the NSW Environment Protection Authority under Section 60 of the Contaminated Lands Management Act 1997 is triggered, or where a medium to high risk of contamination is identified, an accredited Site Auditor would review and approve the Remediation Action Plan (including issue of interim audit advice), and would develop a Site Audit Statement and Site Audit Report upon completion of remediation	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC5	An unexpected finds procedure would be developed and implemented as part of the project Soil and Water Management Plan, outlining a set of potential contamination issues which could be encountered, and detailing the management actions to be implemented. The unexpected finds procedure would include a process for chemical and asbestos contamination and would generally include: •cessation of works within the affected area until inspection of the suspected contamination by a qualified contaminated lands consultant •collection of soil samples for chemical or asbestos analysis, where required, based on observations •assessment of results against applicable land use or waste classification criteria in accordance with statutory guidelines made or endorsed by the NSW Environment Protection Authority •management of the contamination in accordance with statutory guidelines made or endorsed by the NSW Environment Protection Authority •the unexpected finds procedure for on-airport construction would be consistent with the Western Sydney Airport unexpected finds procedure detailed in the Western Sydney Airport Soil and Water Construction Environmental Management Plan	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC6	Post construction, an inspection of construction, stockpiling and laydown sites and soil validation of redundant sedimentation/water quality basins would be undertaken to assess if further investigation and remediation is required. Investigation and remediation (if required) would be undertaken in accordance with the Soil and Water Management Plan (off-airport) and a project specific Remediation Action Plan that would be prepared in a manner consistent with the Western Sydney Airport Remediation Action Plan (on-airport). All inspections, investigations and remediation would be undertaken by a qualified contaminated lands consultant with reports prepared or reviewed by a Certified Contaminated Land Consultant	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC7	Prior to ground disturbance in areas of potential acid sulfate soil occurrence, testing would be carried out to determine the actual presence of acid sulfate soils. If acid sulfate soils are encountered, they would be managed in accordance with the Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998)	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC8	Prior to ground disturbance in high probability salinity areas testing would be carried out to determine the presence of saline soils. If salinity is encountered, excavated soils would not be reused or would be managed in accordance with Book 4 Dryland Salinity: Productive Use of Saline Land and Water (NSW DECC 2008). Erosion controls would be implemented in accordance with the Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004)	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC9	Targeted groundwater investigations would be undertaken prior to construction to identify high salinity areas at risk from rising groundwater. Where high saline areas (>1000 µS/cm) are identified, measures such as planting, regenerating and maintaining native vegetation and good ground cover in recharge, transmission and discharge zones would be implemented where possible	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan

Ref	Description	How Addressed
SC10	Where the construction footprint is not used as part of the operational footprint (residual land), an assessment of the suitability of the site for the proposed land use would be undertaken in accordance with statutory guidelines made or endorsed by the NSW Environment Protection Authority	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
SC11	For works within Western Sydney International: •a review of further available information from Western Sydney Airport would be undertaken prior to the commencement of construction, which may include review of investigations, the Western Sydney Airport Remediation Action Plan and validation reports •any remediation works (for contamination encountered by Sydney Metro that has not been remediated by Western Sydney Airport) would be undertaken in accordance with the Sydney Metro Remediation Action Plan, developed in a manner consistent with the Western Sydney Airport Remediation Action Plan	Not applicable to off-airport SSTOM Works
SE1	Consultation with the local community and project stakeholders would be undertaken to: •identify and deliver opportunities for facilitating local creative and cultural activities in appropriate project locations •identify and deliver initiatives and opportunities to provide a positive contribution to the potentially affected community and affected locations such as temporary public art and targeted community events and programs	The requirements of this REMM are addressed in the Communication Strategy.
SE2	Not used	The requirements of this REMM are addressed in the Communication Strategy.
SE3	Where partial property acquisition has been identified, undertake property liaison and consultation activities to minimise disruption to property owners and activities on impacted sites	The requirements of this REMM are addressed in the Communication Strategy.
SUS1	A Sustainability Plan would be developed and implemented during construction of the project. The Sustainability Plan would identify the sustainability, climate change and greenhouse gas objectives, initiatives and targets which would be implemented during further design development and construction of the project. The Sustainability Plan would be developed to be consistent with the Western Sydney Airport Sustainability Plan for on-airport works The Sustainability Plan would also inform the preparation of Sustainability Management Plans for each off-airport construction work package	The requirements of this REMM will be addressed in the Sustainability Plan (refer to Condition 100).
SUS2	Protect sensitive construction equipment from the effects of extreme weather, such as direct exposure to the sun on extreme heat days and flooding	The requirements of this Condition are addressed in the Emergency Response Plan
SUS3	Address climate change impacts in emergency management procedures for the construction of the project, such as consideration of impacts of flash flooding on evacuation procedures	Flooding and associated evacuation procedures will be included in the Emergency Response Plan.
T1	Construction Traffic Management Plans would be prepared in accordance with the Construction Traffic Management Framework	The requirements of this REMM are addressed in the Overarching Construction Traffic Management Plan and Site-specific CTMPs.
T2	The Construction Traffic Management Plan for St Marys would be developed in consultation with the Traffic and Transport Liaison Group to ensure existing transport interchange infrastructure continues to operate effectively within the St Marys station precinct.	The requirements of this Condition are addressed in the Overarching Construction Traffic Management Plan.
T3	Coordination with Western Sydney Airport and Transport for NSW would be undertaken through the Traffic and Transport Liaison Group to manage potential cumulative construction traffic impacts with M12 Motorway and Elizabeth Drive	The requirements of this Condition are addressed in the Overarching Construction Traffic Management Plan.

Ref	Description	How Addressed
T4	Road Safety Audits would be carried out to address vehicular access and egress, and pedestrian, cyclist and public transport safety. Road Safety Audits would be carried out as per the guidelines outlined in Section 10 of the Construction Traffic Management Framework	The requirements of this REMM are addressed in the Overarching Construction Traffic Management Plan and Site-specific CTMPs.
T5	Maintain access for pedestrians and cyclists around construction sites as per the guidelines outlined in the Construction Traffic Management Framework. Appropriate signage and line marking would be provided to guide pedestrians and cyclists past construction sites and on the surrounding network to allow access to be maintained	The requirements of this REMM are addressed in the Overarching Construction Traffic Management Plan and Site-specific CTMPs.
T6	Access for construction vehicles to be planned as per the guidelines outlined in the Construction Traffic Management Framework. Construction site traffic would be managed to minimise movements during peak periods. Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety	The requirements of this REMM are addressed in the Overarching Construction Traffic Management Plan and Site-specific CTMPs.
T7	Temporary relocation of bus stops and the bus layovers at to the Station Street car park in St Marys would be implemented prior to the commencement of construction works that impacts on the existing bus facilities. The temporary relocation of bus stops and the bus layover at St Marys would be carried out in consultation with the Transport for NSW, Penrith City Council and bus operators. Wayfinding and customer information would guide customers to temporary bus stop locations	The requirements of this Condition are addressed in the Overarching Construction Traffic Management Plan.
T8	Transport for NSW would be consulted to discuss opportunities for their delivery of intersection upgrades at Mamre Road/M4 Western Motorway on and off ramps prior to the peak year of construction	The requirements of this Condition are addressed in the Overarching Construction Traffic Management Plan.
T9	A construction worker car parking strategy for St Marys would be prepared in consultation with Penrith City Council and Transport for NSW prior to the commencement of construction. The strategy would seek to: • minimise overall demand for construction worker car parking through initiatives such as use of other project construction worksites in combination with shuttle buses, car-pooling and encouraging the use of public transport • minimise potential use of on-street car parking by construction workers The construction worker car parking strategy would be implemented throughout construction	The requirements of this Condition are addressed in the Overarching Construction Traffic Management Plan.
WQ1	A surface water quality monitoring program would be implemented to monitor water quality during construction. The program would be developed in consultation with (as relevant) Western Sydney Airport, NSW Environment Protection Authority, relevant sections of Department of Planning, Industry and Environment and relevant local councils. The program would consider monitoring being undertaken as part of other infrastructure projects such as the M12 Motorway and Western Sydney International On-airport, the water quality monitoring program would ensure that works meet the requirements under Schedule 2 of the Airports (Environment Protection) Regulations 1997 The program would monitor all construction discharge locations	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
WQ2	Water treatment plants would be designed to ensure that wastewater is treated to a level that is compliant with the ANZECC/ARMCANZ (2000), ANZG (2018) and draft ANZG (2020) default guidelines for 95 per cent species protection and 99 per cent species protection level for toxicants that bioaccumulate unless other discharge criteria are agreed with relevant authorities	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan
WQ3	The design and construction of the project would take into account the former NSW Office of Water's Guidelines for controlled activities on waterfront land	The requirements of this Condition are addressed in the Soil and Water Management Sub-plan

Ref	Description	How Addressed
WR1	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging	The requirements of this Condition are addressed in the Waste Management Sub- plan
WR2	Waste streams would be segregated to avoid cross-contamination of materials and maximise reuse and recycling opportunities	The requirements of this Condition are addressed in the Waste Management Sub- plan
WR3	A material tracking system would be implemented for material transferred between construction sites	The requirements of this Condition are addressed in the Waste Management Sub- plan

Appendix B.3 CEMF Requirements

Ref	Description	How Addressed
3.1a	Principal Contractors are required to have a corporate Environmental Management System certified under AS/NZS ISO 14001:2016.	The WeBuild Corporate Environmental Management System (EMS) is ISO14001:2016 certified as part of their Business Management System
3.1b	Principal Contractors are required to develop a project based Environment and Sustainability Management System (E&SMS). The E&SMS will:	The ESMS is described in this CEMP and includes a suite of procedures including forms, registers and work instructions that will form the basis of the tools used on the SSTOM Works
3.1bi	Be consistent with the Principal Contractors corporate Environmental Management System and AS/NZS ISO 14001:2016;	The SSTOM Works EMS is fully integrated with Sydney Metro's Environment and Sustainability Management System (ESMS), as demonstrated in this CEMP
3.1bii	Be supported by a process for identifying and responding to changing legislative or other requirements;	This CEMP outlines the process for managing legislative change. No changes currently required
3.1biii	Include processes for assessing design or construction methodology changes for consistency against the planning approvals;	A process for managing changes to the approved project is outlined in this CEMP
3.1biv	Include processes for tracking and reporting performance against sustainability and compliance targets;	Performance targets are outlined for the SSTOM works in this CEMP. Specific objectives and targets are also included in each Sub-plan
3.1bv	Include a procedure for the identification and management of project specific environmental risks and appropriate control measures; and	This CEMP outlines the process for managing project risk. An initial environmental risk assessment workshop was held on 13 February 2023 to inform this CEMP and Staging Report review process.
3.1bvi	Be consistent with the Sydney Metro – Western Sydney Airport Sustainability Plan and the Sydney Metro Environment and Sustainability Statement of Commitment.	Requirements are addressed in the Sustainability Plan - Delivery Phase
3.1c	All sub-contractors engaged by the Principal Contractor will be required to work under the Principal Contractor's Environment and Sustainability Management System	Noted
3.1d	The relationship between the Sydney Metro Environment and Sustainability Management System and the Principal Contractor's Environment and Sustainability Management System is shown in Figure 1.	Noted, and reflected in this CEMP
3.4b	Sydney Metro will submit the on-airport CEMPs to the Commonwealth for approval. The approved SMWSA on-airport CEMPs will be implemented for all on-airport rail construction works and inform the Principal Contractor's environmental documentation where working on the airport site.	CEMP has been prepared to ensure consistency with the on-airport construction CEMP
3.4c	Principal Contractors are required to prepare and implement a Construction Environmental Management Plan (CEMP) relevant to the scale and nature of their off-airport scope of works. The CEMP shall comprise of a main CEMP document, issue specific sub plans, activity specific procedures and site based control maps. The CEMP shall illustrate the relationship between other plans required by the contract, in particular those that relate to design management. The CEMP will address the specific requirements of scope of works and address the off-airport environmental requirements	Noted, and reflected in this CEMP
3.4d	Depending on the scope and scale of the works, Sydney Metro may decide to streamline the CEMP and sub-plan requirements for off-airport works. For example, depending on the risk associated with particular environmental issues it may be appropriate to remove the need for a sub plan, or replace with a procedure as part of the CEMP. The CEMP and sub-plan requirements from this CEMF for each construction stage / contract will be detailed in the Staging Report / Construction (Rail) Plan for the project.	Parklife Metro D&C has submitted a draft revised Staging Report, which has been updated to reflect the risk assessment carried out for the SSTOM works.

3.4e	Environmental documentation prepared for works within the on-airport site will be in accordance with the approved SMWSA on-airport CEMPs.	Noted, for implementation as required
3.4f	The Principal Contractor CEMP will cover the requirements of the relevant planning approval documentation, the conditions of all other permits and licences, the Principal Contractor's corporate EMS, the environmental provisions of the contract documentation and this Construction Environmental Management Framework	Noted, and reflected in this CEMP
3.4g	As a minimum the Principal Contractor CEMP will: i. Include a contract specific environmental policy; ii. Include a description of activities to be undertaken during construction; iii. For each plan under the CEMP include a matrix of the relevant SSI Conditions of Approval referencing where each requirement is addressed; iv. For each plan under the CEMP, set objectives and targets, and identify measurable key performance indicators in relation to these; v. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with the overall project organisation structure; vi. Assign the responsibility for the implementation of the CEMP to the Environment Manager, who will have appropriate experience. The Principal Contractor's Project Director will be accountable for the implementation of the CEMP; vii. Identify communication requirements, including liaison with stakeholders and the community; viii. Include induction and training requirements and a summary of the Training Needs Analysis required in Section 3.11(b); ix. Management strategies for environmental compliance and review of the performance of environmental controls; x. Procedures for environmental inspections and monitoring, auditing and review, and reporting on environmental performance including environmental compliance tracking; xi. Include an annual schedule for auditing the CEMP and Sub-Plans that is updated at least monthly; xii. Include procedures for emergency and incident management, non-compliance management, and corrective and preventative action; and xiii. Include procedures for the control of environmental records.	This CEMP has been developed in line with this clause of the CEMF.
3.4h	The Principal Contractor CEMP and associated sub-plans will be reviewed by Sydney Metro prior to any construction works commencing. For off-airport works approved under the CSSI, the independent environmental representative (see Section 3.13) will also review the CEMP.	Noted, and reflected in this CEMP
3.4i	Where a corresponding systems document exists within the Sydney Metro Integrated Management System, the Principal Contractor's procedures will be required to be consistent with any requirements in those documents.	Noted, and reflected in this CEMP. Sydney Metro procedures have been used in some instances where appropriate
3.5a	Subject to Section 3.4(b) the Principal Contractors will prepare issue-specific environmental sub plans to the CEMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific sub plans will include as a minimum: i. Spoil management; ii. Groundwater management; iii. Traffic and transport management;	Where the sub-plans have been determined to be applicable to the SSTOM Works and in accordance with the Staging Report, they have been prepared in accordance with the CEMF.

	iv. Noise and vibration management; v. Heritage management; vi. Flora and fauna management; vii. Visual amenity management; viii. Soil and water management; ix. Air quality management; and x. Waste management. Some of these sub plans may also be informed by other environmental management documents included in the planning approval, for example the Construction Traffic Management Framework or Construction Noise and Vibration Standard	
3.6a	The Principal Contractor will prepare and implement activity specific environmental procedures. These procedures should supplement environmental management sub plans, but may substitute for sub plans in agreement with Sydney Metro if a reasonable risk based justification can be made and the sub plan is not a requirement of any approval.	Procedures have been developed and included in the suite of Sub-plans
3.6b	The procedures will include: i. A breakdown of the work tasks relevant to the specific activity and indicate responsibility for each task; ii. Potential impacts associated with each task; iii. A risk rating for each of the identified potential impacts; iv. Mitigation measures relevant to each of the work tasks; and v. Responsibility to ensure the implementation of the mitigation measures.	Procedures have been developed and included in the suite of Sub-plans
3.6c	The Principal Contractor will prepare and implement site based, progressive Environmental Control Maps (ECMs) which as a minimum: i. Depicting the current representation of the site; ii. Indicate which environmental procedures, environmental approvals, or licences are applicable; iii. Illustrate the site, showing significant structures, work areas and boundaries; iv. Illustrate the environmental control measures and environmentally sensitive receivers; v. Is endorsed by the Principal Contractors Environmental Manager or delegate; vi. Include all the training and competency requirements for relevant workers; and. vii. Be communicated to relevant workers, including sign off the appropriate procedures prior to commencing works on the specific site and / or activity.	Noted for implementation of ECMs
3.7a	Where the requirement for an additional environmental assessment is identified, this will be undertaken prior to undertaking any construction activities. The environmental assessment will include: i. A description of the existing surrounding environment; ii. Details of the ancillary works and construction activities required to be carried out including the hours of works; iii. An assessment of the environmental impacts of the works, including, but not necessarily limited to, traffic, noise and vibration, air quality, soil and water, ecology and heritage; iv. Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and v. Identification of the timing for completion of the construction works, and how the sites would be reinstated (including any necessary rehabilitation).	This is included in Section 1.9 of this CEMP.
3.8a	A cumulative construction impacts management plan would be developed. The plan would detail co-ordination and consultation requirements with the following stakeholders (as relevant) would occur where required to manage the interface of projects under construction at the same time: i. Western Sydney Airport ii. Transport for NSW	PARKLIFE METRO D&C will implement the Cumulative Construction Impacts Management Plan

	iii. Department of Planning, Industry and Environment iv. Western Parkland City Authority (and their contractors) v. Emergency service providers vi. Utility providers Co-ordination and consultation requirements with these stakeholders would be detailed in the plan to include: i. provision of regular updates to the detailed construction program, construction sites and haul routes ii. identification of key interfaces with other construction projects iii. Development of mitigation strategies to manage cumulative impacts associated with these interfaces.	
3.9a	Prior to the commencement of construction the Principal Contractors are to offer Pre-construction Building Condition Surveys, in writing, to the owners of buildings where there is a potential for construction activities to cause any damage (regardless of severity). If accepted, the Principal Contractor will produce a comprehensive written and photographic condition report produced by an appropriate professional prior to relevant works commencing.	A commitment to this requirement is included in the NVMP.
3.9b	Prior to the commencement of construction the Principal Contractor will prepare a Road Dilapidation Report for all local public roads proposed to be used by heavy vehicles. Dilapidation reports are to include other road infrastructure such as signs, curbs, applicable driveways and pedestrian paths.	This requirement will be satisfied prior to use of local roads by HVs. Heavy vehicle routes are identified in the site specific CTMP
3.10a	Principal Contractors will identify hold points, beyond which approval is required to proceed with a certain activity. Example activities include vegetation removal and water discharge. Hold points will be documented in relevant CEMPs.	Hold points have been identified in this CEMP and suite of Sub-plans
3.10b	Table 1.4 shows preliminary hold points	Noted. This CEMP provides a list of applicable hold points, which includes those listed in Table 1.4 of the CEMF
3.11a	Principal Contractors are responsible for determining the training needs of their personnel. As a minimum this will include site induction, regular toolbox talks and topic specific environmental training as follows: i. The site induction will be provided to all site personnel and will include, as a minimum: – Training purpose, objectives and key issues; – Contractor's environmental and sustainability policy(s) and key performance indicators; – Due diligence, duty of care and responsibilities; – Relevant conditions of any environmental licence and/or the relevant conditions of approval; – Site specific issues and controls including those described in the environmental procedures; – Reporting procedure(s) for environmental hazards and incidents; and – Communication protocols for interactions with community and stakeholders. ii. Toolbox talks will be held on a regular basis in order to provide a project or site wide update, including any key or recurring environmental issues; and iii. Topic specific environmental training should be based upon, but is not limited to, issue specific subplans required under Section 3.5 (a).	Training, inductions and toolbox talks have been identified in this CEMP. Project inductions have commenced
3.11b	Principal Contractors will conduct a Training Needs Analysis which: i. Identifies that all staff are to receive an environmental training; ii. Identifies the competency requirements of staff that hold environmental roles and responsibilities documented within the Construction Environmental Management Plan and sub-plans; iii. Identifies appropriate training courses/events and the frequency of training to achieve and/or maintain these competency requirements; and iv. Implements and documents as part of the CEMP a training schedule that plans attendance at environmental	Training needs have been identified in this CEMP

	training events, provides mechanisms to notify staff of their training requirements, and identifies staff who do not attend scheduled training events or who have overdue training requirements	
3.12a	Principal Contractors undertaking off-airport work in accordance with an EPL must develop and implement a Pollution Incident Response Management Plan, in accordance with the requirements of the POEO Act. Contractor's emergency and incident response procedures will also be consistent with any relevant Sydney Metro procedures and, for on-airport works, consistent with the environmental incident and emergency management requirements identified in the Western Sydney Airport Site Environmental Management Framework, and will include: i. Categories for environmental emergencies and incidents; ii. Notification protocols for each category of environmental emergency or incident, including notification to Sydney Metro, WSA (where required for on-airport works) and notification to owners / occupiers in the vicinity of the incident. This is to include relevant contact details; iii. Identification of personnel who have the authority to take immediate action to shut down any activity, or to affect any environmental control measure (including as directed by an authorised officer of any regulator or government department); iv. A process for undertaking appropriate levels of investigation for all incidents and the identification, implementation and assessment of corrective and preventative actions; and v. Notification protocols of incidents to relevant regulators and stakeholders including (but not limited to) the EPA, DPIE, the AEO, WSA and DITRDC for incidents that are made by the Contractor or Sydney Metro.	PARKLIFE METRO D&C is in the process of seeking an EPL for SSTOM work. A PIRMP will be prepared in conjunction with this licence application
3.12b	The Contractor will make all personnel aware of the plan and their responsibilities.	The Project Induction will discuss environmental responsibilities. Refer to CEMP – Section 3.5 and 3.6.
3.13a	Sydney Metro will engage Independent Environmental Representatives (ERs) as required under the SSI approval for off-airport works to undertake the following, along with any additional roles as required: i. Review, provide comment on and endorse (where required) any relevant environmental documentation to verify it is prepared in accordance with relevant environmental legislation, planning approval conditions, Environment Protection Licences, relevant standards and this CEMF; ii. Monitor and report on the implementation and performance of the above mentioned documentation and other relevant documentation; iii. Provide independent guidance and advice to Sydney Metro and the Contractors in relation to environmental compliance issues and the interpretation of planning approval conditions; iv. Be the principal point of advice for the DPIE in relation to all questions and complaints concerning the environmental performance of the project; v. Ensure that environmental auditing is undertaken in accordance with all relevant project requirements; and vi. Recommend reasonable steps, including 'stop works', to be taken to avoid or minimise adverse environmental impacts.	Parklife Metro D&C will work with the ER for the Project to fulfil environmental obligations as required
3.15a	In relation to Roles and Responsibilities the Principal Contractor CEMP will: i. Describe the relationship between the Principal Contractor, Sydney Metro, key regulatory stakeholders, the independent environmental representative and the independent certifier; ii. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with the overall project organisation structure; iii. Provide details of each specialist environment, sustainability or planning consultant who is employed by the Principal Contractor including the scope of their work; and iv. Provide an overview of the role and responsibilities of the Independent Environmental Representative, the Independent Certifier and other regulatory stakeholders.	Noted, and reflected in this CEMP

3.15b	All sub-contractors engaged by the Principal Contractor will be required to operate within the EMS documentation of that Principal Contractor.	This requirement forms part of contracts with sub-contractors.
3.16a	Issue specific environmental monitoring will be undertaken as required or as additionally required by any approval, permit or licence conditions.	Monitoring requirements have been identified in this CEMP, Sub-plans and specific monitoring programs
3.16b	The results of any monitoring undertaken as a requirement of a license or permit that is required to be published will be published on the Principal Contractor's, or a project specific, website within 14 days of obtaining the results.	Monitoring results will be published as required
3.16c	Environmental inspections will include: i. Surveillance of environmental mitigation measures by the Site Foreman; and ii. Periodic inspections by the Principal Contractor's Environmental Manager (or delegate) to verify the adequacy of all environmental mitigation measures. This will be documented in a formal inspection record.	Inspection requirements are included in this CEMP
3.16d	Regular site inspections by Sydney Metro, the ER for off-airport works and the AEO for on-airport works will be undertaken at a frequency to be agreed with the Principal Contractor, based on the risk of activity but as a minimum monthly.	Inspection requirements are included in this CEMP
3.16e	Principal Contractors must undertake internal environmental audits. The scope will include: i. Compliance with any approval, permit or licence conditions; ii. Compliance with the E&SMS, CEMP, SMP, sub-plans and procedures; iii. Community consultation and complaint response; iv. Environmental training records; and v. Environmental monitoring and inspection results.	Audit requirements are included in this CEMP
3.16f	Sydney Metro will also undertake periodic audits of the Principal Contractor's E&SMS and compliance with the environmental aspects of contract documentation, including this CEMF. These audits would cover both on- and off-airport works.	Audit requirements are included in this CEMP
3.16g	Off-airport works approved under the SSI approval will be subjected to audits undertaken by the independent environmental auditor. Independent environmental audits will focus on compliance with the planning approval and the conditions of approval. The independent auditor is approved by DPIE and an audit schedule will be developed in consultation with the Principal Contractor and Sydney Metro.	The role of the ER is noted and described in this CEMP
3.16h	On-airport works approved under the Airport Plan, as varied, will be subject to environmental audits and compliance audits, noting unscheduled audits may also be undertaken. The environmental audits would audit the environmental systems and on-site performance of the on-airport works of SMWSA and be undertaken on a 6 monthly basis.	Noted for implementation
3.17a	Principal Contractors will document and detail any non-compliances arising out of the above monitoring, inspections and audits. Sydney Metro will be made aware of all non-compliances in a timely manner.	Management of non-compliances is included in this CEMP
3.17b	Principal Contractors will develop and implement corrective actions to rectify the non-compliances and preventative actions in order to prevent a re-occurrence of the non-compliance. Contractors will also maintain a register of non-compliances, corrective actions and preventative actions	Management of non-compliances is included in this CEMP
3.17c	Sydney Metro may raise non-compliances against environmental requirements. The Environmental Representative and Airport Environmental Officer also have the authority to raise a non-compliance for their respective areas of work.	Management of non-compliances is included in this CEMP
3.18a	a. Principal Contractors will maintain appropriate records of the following: i. Site inspections, audits, monitoring, reviews or remedial actions; ii. Documentation as required by performance conditions, approvals, licences and legislation; iii. Modifications to site environmental documentation (e.g. CEMP, sub-plans and procedures); and iv. Other records as required by this Construction Environmental Management Framework.	Record keeping requirements are included in this CEMP
3.18b	b. Records must be accessible onsite for the duration of works.	

3.18c	c. Records will be retained by the Principal Contractor for a period of no less than 7 years. Records will be made available in a timely manner to Sydney Metro (or their representative) upon request.	
3.18d	d. Compliance reports detailing the outcome of any environmental surveillance activity including internal and external audits (refer to Section 3.14) will be produced by the Principal Contractors Environmental Manager or delegate. These reports will be submitted to Sydney Metro at an agreed frequency.	Compliance reporting requirement are included in this CEMP
3.19a	Principal Contractors will ensure the continual review and improvement of the management systems. This will generally occur in response to: i. Issues raised during environmental surveillance and monitoring; ii. Expanded scope of works; iii. Environmental incidents; and iv. Environmental non-conformances.	Review and improvement requirements are included in this CEMP
3.19b	A formal review of the management systems by the Principal Contractor's Senior Management Team will also occur on an annual basis, as a minimum. This review shall generate actions for the continual improvement of the systems and supporting management plans	Audit and review requirements are included in this CEMP
4.4a	Principal Contractors will ensure as a minimum: i. Temporary construction works consider urban design and visual impacts, including: s Artwork, graphics and images to enhance the visual appearance of temporary works in high visibility locations; s Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress; s Community information, including contact numbers for enquiries / complaints; s Signage and information to mitigate impacts on local businesses which may be obscured by the construction site; s Sydney Metro advertising / public awareness campaigns; and s Logos / branding, including Sydney Metro, NSW and Commonwealth Government, and Contractor branding. ii. The design of all temporary works will require Sydney Metro approval in relation to urban design and visual impacts and Sydney Metro will stipulate the design of hording artwork, including: s Sydney Metro advertising / public awareness campaigns; and s Logos / branding, including Sydney Metro, NSW and Commonwealth Government, and Contractor branding.	Design Reports
4.4b	Construction hoardings, scaffolding and acoustic sheds will be regularly inspected and kept clean and free of dust build up. Graffiti on construction hoardings, scaffolding or acoustic sheds will be removed or painted over promptly.	CEMF requirement included in the VAMP
4.4c	The principles of Crime Prevention through Environmental Design (CPTED) will be applied to all works, including temporary works that have a public interface.	Design Reports
5.1a	Standard working hours are between 7am – 6pm on weekdays and 8am – 1pm on Saturdays.	Work Hours are included in the NVMP and in Section 1.8 of this CEMP
5.1b	Works which can be undertaken outside of standard construction hours without any further approval include: i. Those which have been described and assessed in the environmental assessments. For example, tunnelling and underground excavations and supporting activities or works within Western Sydney International ii. Works which are determined to comply with the relevant Noise Management Level at sensitive receivers; iii. The delivery of materials outside of approved hours as required by the Police or other authorities (including Transport for NSW) for safety reasons; iv. Where it is required to avoid the loss of lives, property and / or to prevent environmental harm in an emergency; and v. Where written agreement is reached with all affected receivers	Work Hours are included in the NVMP and in Section 1.8 of this CEMP

5.1c	Where off-airport works are being undertaken under an Environmental Protection Licence, Principal Contractors may apply for EPA approval to undertake works outside of normal working hours.	EPL is currently being sought for the SSTOM works. OOHW process is included in the NVMP
5.2a	The management of traffic impacts due to construction is addressed in the Construction Traffic Management Framework (CTMF) which sets out system requirements for management plans and other associated documentation. This document applies to Principal Contractors and forms part of the contract documentation.	CEMF requirements have been included in the overarching and site specific CTMPs
5.2b	The Construction Traffic Management Framework (CTMF) sets out the approach to managing traffic impacts during the construction of the Sydney Metro projects. The CTMF also outlines contractor requirements, with reference to third party agreements. Principal Contractors are required to produce these documents in accordance with the CTMF.	CEMF requirements have been included in the overarching and site specific CTMPs
5.3a	Principal Contractors will consider the following in the layout of construction sites: i. The location of noise intensive works and 24 hour activities in relation to noise sensitive receivers; ii. The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day; iii. The use of site buildings to shield noisy activities from receivers; iv. The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours; and v. Aim to minimise the requirement for reversing, especially of heavy vehicles	CEMF requirements have been included in the NVMP
5.4a	Where measures for reinstatement are not stipulated in the contracts, mitigation measures for reinstatement of construction and ancillary lands will be produced in consultation with Sydney Metro, the landowner and stakeholders.	The Flora and Fauna Management Plan includes details to ensure this CEMF requirement is considered.
5.4b	Mitigation measures required for reinstatement will be incorporated into the CEMP and will include as a minimum: i. Principal Contractors will clear and clean all working areas and accesses at project completion; ii. At the completion of construction all plant, temporary buildings or vehicles not required for the subsequent stage of construction will be removed from the site; iii. All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better; and iv. Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of construction.	Pre-construction building condition surveys and dilapidation surveys will be undertaken in all areas potentially impacted by the SSTOM Works. Completion handover requirements will ensure this CEMF requirement is satisfied.
7.1a	The following groundwater management objectives will apply to construction: i. Reduce the potential for drawdown of surrounding groundwater resources; ii. Prevent the pollution of groundwater through appropriate controls; and iii. Reduce the potential impacts of groundwater dependent ecosystems. iv. For on-airport works, the Sydney Metro Western Sydney Airport Soil and Water CEMP will detail all the groundwater management objectives and will be consistent with the WSA Soil and Water CEMP, including all appendices to the CEMP.	The objectives are listed in Section 2 of the Groundwater Management Procedure, in Appendix G of the SWMP.
7.2a	For off-airport works, the following content may be provided within other sub plans such as the Soil and Water Management Plan and Flora and Fauna Management Plan. Groundwater management of on-airport works will be implemented through the groundwater management plan approved as part of the SMWSA Soil and Water CEMP. In particular the groundwater quality criteria will be in accordance to the WSA Soil and Groundwater CEMP Appendix G.	Relevant to on airport works. Off-airport groundwater quality criteria will be determined through consultation with the EPA and documented in the EPL.
7.2b	Principal Contractors will develop and implement a Groundwater Management Plan for off-airport works. The Groundwater Management Plan will include as a minimum: i. The groundwater mitigation measures as detailed in the planning approval documentation; ii. The requirements of any applicable licence conditions; iii. Details of proposed extraction, use and disposal of groundwater, and measures to mitigate potential impacts	In accordance with the risk associated with the SSTOM Works, a Groundwater Management Procedure is included in Appendix G of the SWMP.

	to groundwater sources, incorporating monitoring, impact trigger definition and response actions for all groundwater sources potentially impacted by SMWSA; iv. Evidence of consultation with the relevant government agencies, such as DPIE for off-airport works or land; v. The responsibilities of key project personnel with respect to the implementation of the plan; vi. Procedures for the treatment, testing and discharge of groundwater from the site; vii. Compliance record generation and management; and viii. Details of groundwater monitoring if required.	
7.3a	The on-airport Soil and Water CEMP (with the groundwater management plan) and the off-airport Groundwater Management Plan will include the following groundwater mitigation measures as well as relevant Conditions: i. Implementing all feasible and reasonable measures to limit groundwater inflows to stations and crossovers; and ii. Undertaking groundwater monitoring during construction (levels and quality) in areas identified as 'likely' and 'potential' groundwater dependent ecosystems.	The listed mitigation measures are included in the Groundwater Management Procedure, included in in Appendix G of the SWMP.
8.1a	The following noise and vibration management objectives will apply to construction: i. Minimise unreasonable noise and vibration impacts on residents and businesses; ii. Avoid structural damage to buildings or heritage items as a result of construction vibration; iii. Undertake active community consultation; iv. Maintain positive, cooperative relationships with schools, childcare centres, local residents and building owners; and v. For on-airport works, the Sydney Metro Western Sydney Airport Noise and Vibration CEMP will detail all the noise and vibration management objectives and will be consistent with the WSA Noise and Vibration CEMP, including all appendices to the CEMP.	CEMF requirements have been included in the NVMP
8.2a	On-airport management of noise and vibration will be achieved through the implementation of the SMWSA Noise and Vibration CEMP and Principal Contractors will develop and implement a Construction Noise and Vibration Management Plan for all off-airport works consistent with the Interim Construction Noise Guidelines (Department of Environment and Climate Change, 2009). Both plans will include as a minimum: i. Identification of work areas, site compounds and access points; ii. Identification of sensitive receivers and relevant construction noise and vibration goals; iii. Be consistent with, and include the requirements of the noise and vibration mitigation measures as detailed in the planning approval documentation and the Sydney Metro Construction Noise and Vibration Standard (CNVS), including the provision of respite; iv. Details of construction activities and an indicative schedule for construction works, including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios) that have the potential to generate noise or vibration impacts on surrounding sensitive receivers, in particular residential areas; v. Identification of feasible and reasonable procedures and mitigation measures to ensure relevant vibrations and blasting criteria are achieved, including a suitable blast program; vi. The requirements of any applicable licence or approval (for example EPL); vii. Additional requirements in relation to activities undertaken 24 hours of the day, 7 days per week; viii. Pre-construction compliance requirements and hold points; ix. The responsibilities of key project personnel with respect to the implementation of the plan; x. Noise monitoring requirements; xi. Compliance record generation and management; and xii. An Out of Hours Works Protocol applicable to all construction methods and sites.	CEMF requirements have been included in the NVMP On-airport requirements are noted for implementation

8.2b	Detailed Construction Noise and Vibration Impact Statements will be prepared for noise-intensive construction sites and or activities to ensure the adequacy of the noise and vibration mitigation measures. Specifically, Construction Noise and Vibration Impact Statements will be prepared for works proposed to be undertaken outside of standard construction hours and to support applications to undertake out of hours works (this includes variations of EPLs and applications to relevant agencies).	CEMF requirements have been included in the NVMP
8.2c	Noise and vibration monitoring would be undertaken for construction as specified in the CNVS.	CNVS requirements have been included in the NVMP
8.2d	The following compliance records would be kept by Principal Contractors: i. Records of noise and vibration monitoring results against appropriate NMLs and vibration criteria; and ii. Records of community enquiries and complaints, and the Contractor's response.	CEMF requirements have been included in the NVMP
8.3a	All feasible and reasonable mitigation measures would be implemented in accordance with the CNVS. The on-airport Noise and Vibration CEMP and the off-airport Noise and Vibration Management Plan will include the following noise and vibration mitigation measures as well as relevant Conditions: i. Construction hours will be in accordance with the working hours specified in Section 5.1; ii. Hoarding and enclosures will be implemented where required to minimise airborne noise impacts; and iii. The layout of construction sites will aim to minimise airborne noise impacts to surrounding receivers iv. Provision of respite periods	CEMF and CNVS requirements have been included in the NVMP
9.1a	The following heritage management objectives will apply to construction: i. Embed significant heritage values through any architectural design, education or physical interpretation; ii. Minimise impacts on items or places of heritage value; iii. Avoid accidental impacts on heritage items; iv. Maximise worker's awareness of indigenous and non-indigenous heritage; and v. For on-airport works, the Sydney Metro Western Sydney Airport Aboriginal Cultural Heritage CEMP and the European and Other Heritage CEMP will detail all the heritage management objectives and will be consistent with the WSA Aboriginal Cultural Heritage CEMP and European and Other Heritage CEMP, including all appendices to these CEMP documents.	CEMF requirements have been included in the NAHMP
9.2a	On-airport management of Aboriginal cultural heritage and European heritage will be achieved through the implementation of the SMWSA Aboriginal Cultural Heritage and the European and Other Heritage CEMP. Principal Contractors will develop and implement a Heritage Management Plan for all off-airport works. Plans will include as a minimum: i. Evidence of consultation with Registered Aboriginal Parties and the NSW Heritage Council; ii. Identify initiatives that will be implemented for the enhancement of heritage values and minimisation of heritage impacts, including procedures and processes that will be used to implement and document heritage management initiatives; iii. The heritage mitigation measures as detailed in the planning approval documentation; iv. The responsibilities of key project personnel with respect to the implementation of the plan; v. Procedures for interpretation of heritage values uncovered through salvage or excavation during detailed design; vi. Procedures for undertaking salvage or excavation of heritage relics or sites (where relevant), consistent with and any recordings of heritage relics prior to works commencing that would affect them; vii. Details for the short and / or long term management of artefacts or movable heritage; viii. Details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity); ix. Procedures for unexpected heritage finds, including procedures for dealing with human remains; x. Heritage monitoring requirements; and xi. Compliance record generation and management.	CEMF requirements have been included in the NAHMP On-airport requirements are noted for implementation. Consultation with RAPs remains with Sydney Metro

9.2b	The Contractor's regular inspections will include checking of Aboriginal and non-Aboriginal heritage mitigation measures.	Weekly inspections will be carried out in accordance with this CEMP.
9.2c	Compliance records will be retained by the Contractor. These will include: i. Inspections undertaken in relation to heritage management measures; ii. Archival recordings undertaken of any heritage item; iii. Unexpected finds and stop work orders; and iv. Records of any impacts avoided or minimised through design or construction methods.	Records will be kept in accordance with this requirement.
9.3a	The on-airport Aboriginal Cultural Heritage and European and Other Heritage CEMPs and the off-airport Heritage Management Plan will include the following mitigation measures as well as relevant Conditions: i. Induction courses for site workers will include training in the identification of Aboriginal artefacts and management of Aboriginal heritage values. ii. Any heritage item not affected by the works will be retained and protected throughout construction; iii. During construction undertake professional archaeological investigation, excavation, and reporting of any historical Indigenous heritage sites of state significance which will be affected. Reporting may be completed as construction progresses; iv. Undertake archival recordings of all non-Indigenous heritage items affected by the works prior to commencement of works; and v. Implement unexpected heritage find procedures for Indigenous and non-Indigenous heritage items.	CEMF requirements have been included in the NAHMP On-airport requirements are noted for implementation
10.1a	The following flora and fauna management objectives will apply to construction: i. Minimise impacts on flora and fauna; ii. Design waterway modifications and crossings to incorporate best practice principles; iii. Retain and enhance existing flora and fauna habitat wherever possible; iv. Appropriately manage the spread of weeds and plant pathogens; and v. For on-airport works, the Sydney Metro Western Sydney Airport Biodiversity CEMP will detail all fauna and flora management objectives and will be consistent with the WSA Biodiversity CEMP, including all appendices to the Biodiversity CEMP.	CEMF requirements have been included in the FFMP
10.2a	a. On-airport management of flora and fauna will be achieved through the implementation of the SMWSA Biodiversity CEMP and Principal Contractors will develop and implement a Flora and Fauna Management Plan for all off-airport works. Both plans will include as a minimum: i. The biodiversity mitigation measures as detailed in the planning approval documentation; ii. The responsibilities of key project personnel with respect to the implementation of the plan; iii. Procedures for the clearing of vegetation and the relocation of flora and fauna; iv. Details on the locations, monitoring program and use of nest boxes by fauna; v. Procedures for the demarcation and protection of retained vegetation, including all vegetation outside and adjacent to the construction footprint, and the protection of retained vegetation within the environmental conservation zone on the airport site; vi. Plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; vii. Vegetation management plan(s) for sites where native vegetation is proposed to be retained; viii. Identification of measures to reduce disturbance to sensitive fauna; ix. Rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas (including duration of the implementation of such measures); x. Weed and disease management measures focusing on early identification of invasive weeds and diseases. Protocols to address the effective management of these risks;	CEMF requirements have been included in the FFMP On-airport requirements are noted for implementation

	xi. A procedure for dealing with unexpected threatened species identified during construction, including cessation of work and notification to the relevant government department for both on- and off-airport works. The procedure shall define how appropriate mitigation measures (including relevant relocation measures) and updating of ecological monitoring or off-set requirements; xii. Details on the methodology for vegetation mapping and survey; xiii. Ecological monitoring requirements; and xiv. Compliance record generation and management.	
10.2b	Principal Contractors would undertake the following ecological monitoring as a minimum: i. A pre-clearing inspection will be undertaken prior to any native vegetation clearing by a suitable qualified ecologist and the Contractor's Environmental Manager (or delegate). The pre-clearing inspection will include, as a minimum: - Identification of hollow bearing trees or other habitat features; - Identification of any threatened flora and fauna; - A check on the physical demarcation of the limit of clearing; - An approved erosion and sediment control plan for the worksite; and - The completion of any other pre-clearing requirements required by any project approvals, permits or licences. ii. The completion of the pre-clearing inspection will form a HOLD POINT requiring sign-off from the Contractor's Environmental Manager (or delegate) and a qualified ecologist; and iii. A post clearance report, including any relevant Geographical Information System files, will be produced that validates the type and area of vegetation cleared including confirmation of the number of hollows impacted and the corresponding nest box requirements to offset these impacts.	CEMF requirements have been included in the FFMP
10.2c	The Principal Contractor's regular inspections will include a check on the ecological mitigation measures and project boundary fencing.	CEMF requirements have been included in the FFMP
10.2d	The following compliance records would be kept by the Principal Contractor: i. Records of pre-clearing inspections undertaken; ii. Records of the release of the pre-clearing hold point; and iii. Records of ecological inspections undertaken.	CEMF requirements have been included in the FFMP
10.3a	The on-airport Biodiversity CEMP and the off-airport Flora and Fauna Management Plan will include the following flora and fauna mitigation measures as well as any relevant Conditions: i. Areas to be retained and adjacent habitat areas will be fenced off prior to works to prevent damage or accidental over clearing; ii. Clearing will follow a two-stage process as follows: • Non-habitat trees will be cleared first after sign-off of the pre-clearing inspection; and • Habitat trees will be cleared no sooner than 48 hours after non-habitat trees have been cleared. A suitably qualified ecologist will be present on site during the clearing of habitat trees. Felled habitat trees will be left on the ground for 24 hours or inspected by the ecologist prior to further processing. iii. Weed management is to be undertaken in areas affected by construction prior to any clearing works. Off-airport weed management will be undertaken in accordance with the NSW Noxious Weeds Act 1993. On-airport weed management will also be undertaken in accordance with the NSW Noxious Weeds Act 1993 and the NSW Biosecurity Act 2015, which is consistent with the approach adopted in the Western Sydney Airport Weed and Disease Management Plan (Appendix C of the Western Sydney Airport Biodiversity CEMP).	CEMF requirements have been included in the FFMP On-airport requirements are noted for implementation
11.1a	The following visual and landscape management objectives will apply to the construction of the project: i. Minimise impacts on existing landscape features as far as feasible and reasonable; ii. Ensure the successful implementation of the Landscape Design; iii. Reduce visual impact of construction to surrounding community; and	CEMF requirements have been included in the VAMP

	iv. For on-airport works, the Sydney Metro Western Sydney Airport Visual and Landscape CEMP will detail all the visual amenity and landscaping management objectives and will be consistent with the WSA Visual and Landscape CEMP, including all the appendices to the CEMP.	
11.2a	On-airport management of visual and landscaping will be achieved through the implementation of the SMWSA Visual and Landscape CEMP and Principal Contractors will develop and implement a Visual Amenity Management Plan for all the off-airport temporary works which will include as a minimum: i. The visual mitigation measures as detailed in the planning approval documentation for construction; ii. Input from an experienced Landscape or Urban Designer; iii. The maintenance of outward facing elements of site hoarding or noise barriers, including the removal of graffiti and weeds; iv. Apply the principles of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant safety design requirements and detail mitigation measures to minimise lighting impacts on sensitive receivers for all permanent, temporary and mobile light sources; v. Identify the processes and procedures that will be used for the incorporation of the principles of Crime Prevention Through Environmental Design (CPTED) in the design and construction of any temporary site facilities; and vi. Compliance record generation and management.	CEMF requirements have been included in the VAMP On-airport requirements are noted for implementation
11.2b	Visual and landscape measures will be incorporated into the Principal Contractor's regular inspections including checking the health of retained vegetation around site boundaries, checking the condition of any site hoarding and acoustic sheds, and checking the position and direction of any sight lighting.	CEMF requirements have been included in the VAMP
11.2c	The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures	CEMF requirements have been included in the VAMP
11.3a	The on-airport Visual and Landscape CEMP and the off-airport Visual Management Plan will include the following visual amenity mitigation measures as well as relevant Conditions: i. Wherever feasible and reasonable, vegetation around the perimeter of the construction sites will be maintained; ii. Existing vegetation not affected by the construction works will be retained; iii. Temporary construction works will be designed with consideration of urban design and visual amenity as per Section 4.4; and iv. Temporary site lighting, for security purposes or night works will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting.	CEMF requirements have been included in the VAMP On-airport requirements are noted for implementation
12.1	The following soil and water management objectives will apply to construction: i. Minimise pollution of surface water through appropriate erosion and sediment control; ii. Minimise leaks and spills from construction activities; iii. Maintain existing water quality of surrounding surface watercourses; iv. Source construction water from non-potable sources, where feasible and reasonable; and v. For on-airport works, the Sydney Metro Western Sydney Airport Soil and Water CEMP will detail all the soil and water management objectives and will be consistent with the WSA Soil and Water CEMP, including all appendices to the CEMP."	CEMF requirements have been included in the SWMP
12.2a	On-airport management of soil and water will be achieved through the implementation of the SMWSA Soil and Water CEMP and Principal Contractors will develop and implement a Soil and Water Management Plan for all off-airport works. Both plans will include as a minimum: i. The soil and water mitigation measures as detailed in the planning approval documentation and sustainability requirements; ii. Details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;	CEMF requirements have been included in the SWMP On-airport requirements are noted for implementation

	iii. Surface water and ground water impact assessment criteria consistent with the principles of the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines for off-airport works and the Airports (Environment Protection) Regulations 1997 for on-airport works (with due consideration of the ANZECC guidelines); iv. Management measures to be used to minimise surface and groundwater impacts, including identification of water treatment measures and discharge points, details of how spoil and fill material required by the project will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events; v. A contingency plan, consistent with the NSW Acid Sulphate Soils Manual (EPA 1998), to deal with the unexpected discovery of actual or potential acid sulphate soils both on and off-airport lands. The plan must including procedures for the investigation, handling, treatment and management of such soils and water seepage; vi. Management measures for contaminated material (soils, water and building materials) and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material, including asbestos, during construction; vii. A description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; viii. The requirements of any applicable licence conditions; ix. The responsibilities of key project personnel with respect to the implementation of the plan; x. Procedures for the development and implementation of Progressive Erosion and Sediment Control Plans; xi. Identification of locations where site specific Stormwater and Flooding Management Plans are required; and xii. Compliance record generation and management.	
12.2b	Principal Contractors will develop and implement Progressive Erosion and Sediment Control Plans (ESCPs) for all active worksites in accordance with Managing Urban Stormwater: Soils & Construction Volume 1(Landcom, 2004) (known as the “Blue Book”). The ESCPs will be approved by the Contractor’s Environmental Manager (or delegate) prior to any works commencing (including vegetation clearing) on a particular site. Copies of the approved ESCP will be held by the relevant Contractor personnel including the Engineer and the Site Foreman.	CEMF requirements have been included in the SWMP
12.2c	ESCPs will detail all required erosion and sediment control measures for the particular site at the particular point in time and be progressively updated to reflect the current site conditions. Any amendments to the ESCP will be approved by the Contractor’s Environmental Manager (or delegate).	CEMF requirements have been included in the SWMP
12.2d	Principal Contractors will develop and implement Stormwater and Flooding Management Plans for the relevant construction sites. These plans will identify the appropriate design standard for flood mitigation based on the duration of construction, proposed activities and flood risks. The plan will develop procedures to ensure that threats to human safety and damage to infrastructure are not exacerbated during the construction period.	Design Reports and Construction Management Plans will detail Flood response
12.2e	Principal Contractors will undertake the following soil and water monitoring as a minimum: i. Weekly inspections of the erosion and sediment control measures. Issues identified would be rectified as soon as practicable; ii. Additional inspections will be undertaken following significant rainfall events (greater than 20 mm in 24 hours); and iii. All water will be tested (and treated if required) prior to discharge from the site in order to determine compliance with the appropriate approvals and licencing. No water will be discharged from the site without written approval of the Contractor’s Environmental Manager (or delegate). This is to form a HOLD POINT.	These requirements are included in the SWMP and Surface Water Quality Monitoring Program
12.2f	The following compliance records will be kept by the Principal Contractors: i. Copies of current ESCPs for all active construction sites;	These requirements are included in the SWMP

	ii. Records of soil and water inspections undertaken; iii. Records of testing of any water prior to discharge; and iv. Records of the release of the hold point to discharge water from the construction site to the receiving environment.	
12.2g	The following water resources management objectives will apply to the construction of the project: i. Minimise demand for, and use of potable water; ii. Maximise opportunities for water re-use from captured stormwater, wastewater and groundwater; iii. Examples of measures to minimise potable water consumption include: • Water efficient controls, fixtures and fittings in temporary facilities; • Collecting, treating and reusing water generated in tunnelling operations, concrete batching and casting facility processes; • Using recycled water or treated water from onsite sources in the formulation of concrete; • Harvesting and reusing rainwater from roofs of temporary facilities; • Using water from recycled water networks; • Collecting, treating and reusing groundwater and stormwater; • Using water efficient construction methods and equipment; and • Providing designated sealed areas for equipment wash down.	CEMF requirements have been included in the SWMP and Construction Sustainability Plan
12.3a	The on-airport Soil and Water CEMP and the off-airport Soil and Water Management Plan will include the following surface water and flooding mitigation measures as well as any relevant Conditions: i. Clean water will be diverted around disturbed site areas, stockpiles and contaminated areas; ii. Control measures will be installed downstream of works, stockpiles and other disturbed areas; iii. Exposed surfaces will be minimised, and stabilised / revegetated as soon feasible and reasonable upon completion of construction; iv. Dangerous good and hazardous materials storage will be within bunded areas with a capacity of 110 per cent of the maximum single stored volume; v. Chemicals will be stored and handled in accordance with relevant Australian standards such as: • AS 1940-2004 The storage and handling of flammable and combustible liquids • AS/NZS 4452:1997 The storage and handling of toxic substances • AS/NZS 5026:2012 The storage and handling of Class 4 dangerous goods • AS/NZS 1547:2012 On-site domestic wastewater management vi. Spill kits will be provided at the batch plants, storage areas and main work sites; vii. A protocol will be developed and implemented to respond to and remedy leaks or spills. viii. A remedial action plan and unexpected finds protocol would be established to facilitate the quarantining, isolation and remediation of contamination identified throughout the construction programme. Any asbestos identified on site would be managed in accordance with applicable regulatory requirements.	CEMF requirements have been included in the SWMP On-airport requirements are noted for implementation
13.1a	The following air quality management objectives will apply to construction: i. Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable; ii. Identify and control potential dust and air pollutant sources; and iii. For on-airport works, the Sydney Metro Western Sydney Airport Air Quality CEMP will detail all the air quality management objectives and will be consistent with the WSA Air Quality CEMP including all appendices to the CEMP.	CEMF requirements have been included in the AQMP
13.2a	On-airport management of air quality will be achieved through the implementation of the SMWSA Soil and Water CEMP and Principal Contractors will develop and implement an Air Quality Management Plan for all off-airport works. Both plans will include, as a minimum: i. The air quality mitigation measures as detailed in the planning approval documentation;	CEMF requirements have been included in the AQMP

	ii. The requirements of any approval and applicable licence conditions; iii. Site plans or maps indicating locations of sensitive receivers and key air quality / dust controls; iv. The responsibilities of key project personnel with respect to the implementation of the plan; v. Air quality and dust monitoring requirements; and vi. Compliance record generation and management.	
13.2b	Air quality and dust monitoring will involve the following as a minimum: i. Meteorological conditions will be monitored and appropriate responses will be organised and undertaken periodically by the Principal Contractor; ii. Regular visual monitoring of dust generation from work zones; and iii. Monitoring emissions from plant and construction vehicles to ensure they have appropriate emission controls and are being maintained correctly.	CEMF requirements have been included in the AQ Monitoring Program
13.2c	The following compliance records will be kept by the Principal Contractor: i. Records of any meteorological condition monitoring; ii. Records of any management measures implemented as a result of adverse, windy weather conditions; and iii. Records of air quality and dust inspections undertaken.	CEMF requirements have been included in the AQMP
13.3a	The on-airport Air Quality CEMP and the off-airport Air Quality Management Plan will include the following air quality mitigation measures as well as any relevant Conditions: i. Plant and equipment will be serviced and maintained in good working order to reduce unnecessary emissions from exhaust fumes; ii. Plant and equipment to be switched off engines when not in use; iii. The avoidance the use of diesel or petrol powered generators and instead using mains electricity or battery powered equipment, where practicable; iv. Appropriate vehicle speeds on sealed and unsealed roads; v. Development and implementation of a construction logistics plan to manage the sustainable delivery of goods and materials; vi. Implementing measures to support and encourage sustainable travel for construction workers to and from the construction sites; vii. Water suppression will be used for active earthwork areas, stockpiles, unsurfaced haul roads and loads of soil being transported to reduce wind-blown dust emissions; viii. Wheel-wash facilities or rumble grids will be provided and used near the site exit points, as appropriate; and ix. Dust extraction and filtration systems will be installed for tunnel excavation works and deep excavation with limited surface exposure.	CEMF requirements have been included in the AQMP On-airport requirements are noted for implementation
14.1a	The following waste objectives will apply to construction: i. Minimise waste throughout the project life-cycle; ii. Waste management strategies for off-airport works will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows: • Avoidance of unnecessary resource consumption; • Resource recovery (including reuse, reprocessing, recycling and energy recovery); and • Disposal. iii. Consistent with the Western Sydney Airport Waste and Resource Construction Environmental Management Plan, waste management strategies for on-airport works will also be aligned with the NSW Waste Avoidance and Resource Recovery Strategy under the NSW Waste Avoidance and Resource Recovery Act 2001; and iv. For on-airport works, the Sydney Metro Western Sydney Airport Waste and Resources CEMP will detail all the waste management objectives and will be consistent with the WSA Waste and Resources CEMP including all appendices to the CEMP."	CEMF requirements have been included in the WMP

14.1b	Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.	CEMF requirements have been included in the WMP
14.2a	On-airport management of waste and resources will be achieved through the implementation of the SMWSA Waste and Resources CEMP and Principal Contractors will develop and implement a Waste Management Plan for all off-airport works. Both plans will include as a minimum: i. The waste management mitigation measures as detailed in the planning approval documentation; ii. The responsibilities of key project personnel with respect to the implementation of the plan; iii. Waste management monitoring requirements; iv. A procedure for the assessment, classification, management and disposal of waste in accordance with Waste Classification Guidelines; and v. Compliance record generation and management.	CEMF requirements have been included in the WMP on-airport requirements are noted for implementation
14.2b	Principal Contractors will undertake the following waste monitoring as a minimum: i. Weekly inspections will include checking on the waste storage facilities on site; and ii. All waste removed from the site will be appropriately tracked from 'cradle to grave' using waste tracking dockets.	CEMF requirements have been included in the WMP
14.2c	Principal Contractors will report all necessary waste and purchasing information to Sydney Metro as required for Sydney Metro to fulfil their WRAPP reporting requirements.	CEMF requirements have been included in the WMP
14.2d	Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.	CEMF requirements have been included in the WMP
14.3a	The on-airport Waste and Resources CEMP and the off-airport Waste Management Plan will include the following waste management mitigation measures as well as relevant Conditions: i. A central waste area (or areas) would be established, at which waste (including recyclables) would be stored or stockpiled. Stockpiles and bins would be appropriately labelled, managed and monitored till being removed from site; ii. All waste materials removed from the sites will be directed to an appropriately licensed waste management facility; iii. The use of raw materials (noise hoarding, site fencing, etc...) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and iv. Recyclable wastes, including paper at site offices, will be stored separately from other wastes.	CEMF requirements have been included in the WMP on-airport requirements are noted for implementation

Appendix C Aspects and Impacts Risk Register

Appendix C.1 Aspects and Impacts Risk Register

This Aspects and Impacts Risk Register provides a summary of the environmental risk analysis undertaken by Parklife Metro D&C for the SSTOM Works. This risk assessment was undertaken to assist in identifying the potential environmental and community risks and issues that could arise from undertaking the SSTOM Works. Environmental risks were categorised based on the environmental aspect and associated activities, the probability of the risk eventuating and the likelihood of occurrence.

An initial risk workshop was conducted by Parklife Metro D&C on February 14, 2023. This Aspects and Impacts Risk Register, provided in Table C - 1 will be reviewed and updated regularly as part of periodic review of the CEMP, or when significant new works are due to commence. It is noted that this risk register, whilst included in the CEMP, is a separate document that is edited independently of this CEMP. Therefore, the risk register included in this CEMP will not be updated as the SSTOM Works risk register is progressively reviewed and updated throughout construction.

Appendix C.1.1 Risk Assessment Methodology

The environmental risk analysis was undertaken in accordance with the principles of the Australian and New Zealand standard *AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines*. The environmental risk analysis involved the identification of the consequence and likelihood of impacts to determine the risk of a given action or impact. The definitions of the consequences used are provided in Table C - 2 and the definitions of likelihood are provided in Table C - 3. Table C - 4 shows the risk matrix, combining the consequence and likelihood to establish the risk outcome. Utilising the consequences likelihood definitions below to determine risk has been undertaken in accordance with the Sydney Metro Risk Management Standard (SM-17-00000182) to identify the appropriate management measures required.

TABLE C - 2 ENVIRONMENTAL RISK ANALYSIS CONSEQUENCE DEFINITIONS

	Insignificant	Minor	Moderate	Major	Severe	Catastrophic
	C6	**C5**	**C4**	**C3**	**C2**	**C1**
Environment	No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems.
Regulatory or Legal Breach	Low-level non-compliance with legal and/or regulatory requirement or duty by individuals or Sydney Metro.	Minor non-compliance with legal and/or regulatory requirement or duty. Investigation and/or report to authority	Moderate non-compliance. Subject to comment and monitoring from applicable regulator. Small fine and no disruption to services	Systemic noncompliance /Major breach resulting in enforcement action and/or prohibition notices. Substantial fine and no disruption to services	Substantial breach resulting in prosecution, fines and/or litigation. Licence or accreditation restricted or conditional affecting ability to operate.	Prosecution leading to imprisonment of Sydney Metro / Parklife Metro D&C executive. Loss of operating licence

TABLE C - 3 ENVIRONMENTAL RISK ANALYSIS PROBABILITY DEFINITIONS

	Almost Certain	Very Likely	Likely	Unlikely	Very Unlikely	Almost Unprecedented
	L1	**L2**	**L3**	**L4**	**L5**	**L6**
Probability	Expected to occur frequently during time of activity or project. Greater than a 90% chance of occurring.	Expected to occur occasionally during time of activity or project. A 75–90% chance of occurring	More likely to occur than not occur during time of activity or project A 50-75% chance of occurring	More likely not to occur than occur during time of activity or project. A 25-50% chance of occurring	Not expected to occur during the time of activity or project. A 10-25% chance of occurring	Not expected to ever occur during time of activity or project. Less than 10% chance of occurring
Frequency	10 times or more every year	1-10 times every year	Once each year	Once every 1 to 10 years	Once every 10 to 100 years	Less than once every 100 years

TABLE C - 4 RISK MATRIX

RISK MATRIX		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
Almost Certain	L1				Very High	Very High	Very High
Very Likely (Likely)	L2					Very High	Very High
Likely (possible)	L3						Very High
Unlikely (unlikely)	L4	Low	Low	Moderate	Moderate	High	High
Very Unlikely (rare)	L5	Low	Low	Low	Moderate	Moderate	High
Almost Unprecedented	L6	Low	Low	Low	Low	Moderate	Moderate

TABLE C - 5 ENVIRONMENTAL ASPECTS AND IMPACTS RISK REGISTER

SSTOM Risk Assessment

Construction Activity / Aspect	Construction Activity / Aspect	Impact				Controls			Residual Risk Rating
Traffic and transport	- Haulage of material. - Delivery of materials, plant and equipment. - Travel to and from site. - Construction works requiring changed traffic conditions (ROL's, alternative routes, etc.)	Temporary impacts to roads, parking, pedestrian and cycling access or worsening of traffic performance network due to construction vehicles, road closures or lane closures	C3	L2	High	Implement Construction Traffic Management Framework (CTMF), TAMP, and transport mitigation measures. Alternative, parking arrangements would be provided at St Marys to minimise disruption, and alternative worker parking and shuttle bus would be provided elsewhere on the project, where practicable.	C4	L4	Moderate
		Temporary delays or other temporary impacts on the reliability of public transport services including impacts to the T1 Western Line	C4	L2	High	Provide replacement bus services when track possessions occur. Works scheduled for scheduled track possession dates.	C4	L3	Moderate
		Temporary altered access to private property and public land	C5	L3	Moderate	Safe access to properties and businesses would be maintained during construction, as part of the performance outcomes for the project	C5	L4	Low
		Temporary traffic, pedestrian and cyclist safety issues from the introduction of heavy vehicles and diversions	C5	L3	Moderate	Implement CTMF, Overarching Community Communication Strategy (OCCS) and transport mitigation measures. Road Safety Audits would be carried out to address vehicular access and egress, and pedestrian, cyclist and public transport safety.	C5	L4	Low
Noise and vibration	- Site establishment works. - Ancillary facility construction. - Earthworks and piling. - Station and station precinct construction. - OOHW (incl. station fit out) - Track installation. - Linewide Works	Temporary localised airborne noise impacts to sensitive receivers from construction works during and outside of standard construction hours	C4	L2	High	Implement Construction Noise and Vibration Standard (CNVS), NVMP and noise and vibration mitigation measures, including acoustic enclosures / shielding.	C5	L3	Moderate
		Temporary perceived impacts to human health as a result of airborne noise	C4	L3	Moderate	Implement CNVS, NVMP, noise and vibration mitigation measures and undertaking effective consultation regarding potential impacts to minimise risks	C5	L3	Moderate
		Temporary ground-borne noise impacts from tunnelling and other excavation activities, including blasting if required	C5	L4	Low	Implement CNVS, NVMP and noise and vibration mitigation measures	C5	L5	Low
		Temporary noise from the movement of construction traffic via the road network	C4	L3	Moderate	Implement CNVS, NVMP, and noise and vibration mitigation measures, including reducing the frequency of movements, especially during sensitive periods, where practicable.	C5	L4	Low
		Temporary vibration impacts from construction works exceeding human comfort or structural damage criteria.	C4	L3	Moderate	Where works occur within minimum safe working distances, reasonable and feasible mitigation would be considered in line with the CNVS, NVMP, including investigation of alternative construction methodology and vibration monitoring, where required.	C5	L4	Low
Biodiversity	- Site establishment works. - Ancillary facility construction. - Station and station precinct construction. - OOHW (incl. station fit out).	Impacts (including clearing) on endangered populations, threatened species and threatened ecological communities including riparian and aquatic habitats during construction	C3	L4	Moderate	Implement CEMF, FFMP, and flora and fauna mitigation measures, including minimising clearing, where practicable. Project Ecologist inspection of proposed clearing areas to confirm impacts.	C4	L5	Low
		Impacts on groundwater dependent ecosystems	C5	L4		Impact from SSTOM Works is limited as the majority of ground disturbance and all tunnelling would be completed by other contractors. Existing controls will be maintained, and additional controls will include waterproofing to minimise groundwater ingress and associated drawdown at station sites. The performance outcomes for the project include that groundwater drawdown	C5	L5	Low

SSTOM Risk Assessment

Construction Activity / Aspect	Construction Activity / Aspect	Impact				Controls			
	- ATC construction. - Linewide Works					would be managed at Orchard Hills to avoid or minimise impacts on groundwater dependent ecosystems.			
		Indirect temporary impacts including light and noise impacts.	C5	L2	Moderate	Implement noise and vibration, landscape and visual mitigation measures	C5	L4	Low
Non-Aboriginal heritage	- Site establishment works. - Ancillary facility construction. - Station and station precinct construction. - ATC construction.	Direct impacts to State listed heritage items, including St Marys Station	C5	L3	Moderate	Design and mitigation measures would minimise permanent direct impacts. * The Goods Shed associated with St Marys Railway Station Group would be retained and potential vibration and settlement impacts on this structure during construction would be managed. Exclusion fencing and no-go zones would be put in place around retained heritage items, including at the jib crane. * Works in the vicinity of the Warragamba to Prospect Water Supply Pipelines would be managed in accordance with Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW 2020)	C5	L4	Low
		Direct impact to local and section 170 register listed heritage items (including archaeological items)	C4	L3	Moderate	Design and mitigation measures would minimise permanent direct impacts. Works in the vicinity of the Warragamba to Prospect Water Supply Pipelines would be managed in accordance with Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW 2020)	C5	L4	Low
		Indirect damage to heritage items from construction vibration including from ground-borne noise	C6	L5	Low	Risks would be managed by implementing the FFMP, NAHMP, and noise and vibration mitigation measures, including noise and vibration monitoring on heritage significant items.	C6	L5	Low
		Direct impacts to unknown heritage items (e.g. archaeological items) during construction	C4	L4	Moderate	Works and design will be informed by the ARD. Any unexpected heritage items would be managed in accordance with the Unexpected Heritage Finds Procedure, and the ARD.	C5	L4	Low
		Indirect impacts to heritage items such as visual setting	C4	L3	Moderate	Implement non-Aboriginal heritage and landscape and visual mitigation measures	C5	L3	Moderate
		Settlement impacts to heritage items	C5	L4	Low	Impact from SSTOM Works is limited as the majority of ground disturbance and all tunnelling would be completed by other contractors. Parklife Metro D&C would implement groundwater and geology mitigation measures to ensure adherence with settlement criteria	C5	L5	Low
Aboriginal heritage	- Site establishment works. - Ancillary facility construction. - Station and station precinct construction. - ATC construction.	Direct impacts on known Aboriginal heritage items, as well as areas of archaeological sensitivity along the construction footprint that are likely to contain as yet unidentified Aboriginal heritage items	C4	L5	Low	Implementation of Aboriginal heritage mitigation measures. Alignment cleared by SM, so implementation of the ACHMP will be sufficient for this risk.	C5	L5	Low
		Direct impacts to archaeologically sensitive landscapes including around creek lines which may contain unidentified Aboriginal heritage items	C4	L5	Low	Works would be undertaken with consideration of the information provided in the ACHMP, and through the test excavations previously completed by SM.	C5	L5	Low
		Indirect impacts to Aboriginal heritage items such as visual setting or settlement.	C5	L4	Low	Implementation of the ACHMP, and consideration of findings from the test excavation program completed by SM.	C5	L4	Low

SSTOM Risk Assessment

Construction Activity / Aspect	Construction Activity / Aspect	Impact				Controls			
Flooding, hydrology and water quality	- Site establishment works. - Ancillary facility construction. - Station and station precinct construction. - Water treatment. - ATC construction.	Temporary water quality impacts due to spills, erosion, discharge of contaminated water or groundwater	C4	L3	Moderate	Risks would be effectively managed through the design of construction water treatment plants, along with standard mitigation measures.	C5	L3	
		Temporary flooding impacts to construction activities would include: • inundation and damage to construction sites, machinery, plant and equipment • safety risks associated with high flow velocities and/or deep water, potentially restricting access to construction areas and constituting a hazard to construction workers and personnel.	C3	L2	High	Construction sites are generally located outside of flood prone areas which would minimise potential flooding risks during construction. Construction activities would generally be carried out outside of the 1 in 20 year annual recurrence interval flood event, however there is the potential for inundation for larger events.	C3	L3	High
		Temporary impacts to flooding regime during construction including impacts to adjacent properties	C5	L3	Moderate	Construction sites have been selected to generally be located outside of flood prone areas which would minimise potential flooding risks during construction.	C5	L4	Low
		Temporary impact on the geomorphology of the waterways and overland flow paths from construction activities as well as the removal of farm dams	C4	L3	Moderate	Risks would be effectively managed through the implementation of standard mitigation measures.	C4	L4	Moderate
Groundwater and geology	- Site establishment works. - Ancillary facility construction. - Station and station precinct construction. - Water treatment. - ATC construction.	Temporary impact to groundwater quality from spills or the disturbance of existing contaminated land	C4	L3	Moderate	Impact from SSTOM Works is limited as the majority of ground disturbance and all tunnelling would be completed by other contractors. Existing controls will be maintained, and additional controls will include waterproofing to minimise groundwater ingress and associated drawdown at station sites.	C5	L4	Low
		Temporary ground movement impacts associated with tunnelling and groundwater drawdown	C5	L4	Low	No tunnelling is associated with SSTOM Works. Minor excavations are unlikely to cause increased ground movements associated with drawdown when mitigation measures are implemented accordingly.	C5	L5	Low
Contamination and soils	- Site establishment. - Excavation. - Piling.	Temporary disturbance of pre-existing contaminated land and associated potential impacts to human and ecological receptors	C5	L4	Low	Additional site investigations would be carried out in high risk areas to provide greater detail on the extent of potential contamination and identify measures required to manage potential impacts. SSTOM Works would implement the Unexpected Contaminated Land and Asbestos Finds Procedure.	C5	L5	Low
		Contamination of land due to leaks and spills	C5	L2	Moderate	Risks would be managed through the implementation of standard mitigation measures related to the maintenance and operation of machinery and storage of chemicals.	C5	L4	Low
		Encountering acid sulfate soils and saline soils during excavation.	C5	L3	Moderate	In areas identified as having potential for acid sulfate soils or saline soils, testing would be carried out and mitigation would be implemented accordingly	C5	L4	Low
Sustainability, climate change and greenhouse gas	- Site establishment works. - Ancillary facility construction. - Earthworks and piling.	Emissions of greenhouse gases from construction energy use, including embodied energy in construction materials	C5	L2	Moderate	25 per cent of the greenhouse gas emissions would be offset from emissions associated with consumption of electricity during construction. Utilise recycled content in materials, biodiesels where possible, use modern equipment, maintained in accordance with manufacturers specifications, low carbon content concrete mixes and steel, etc.	C6	L3	Low

SSTOM Risk Assessment

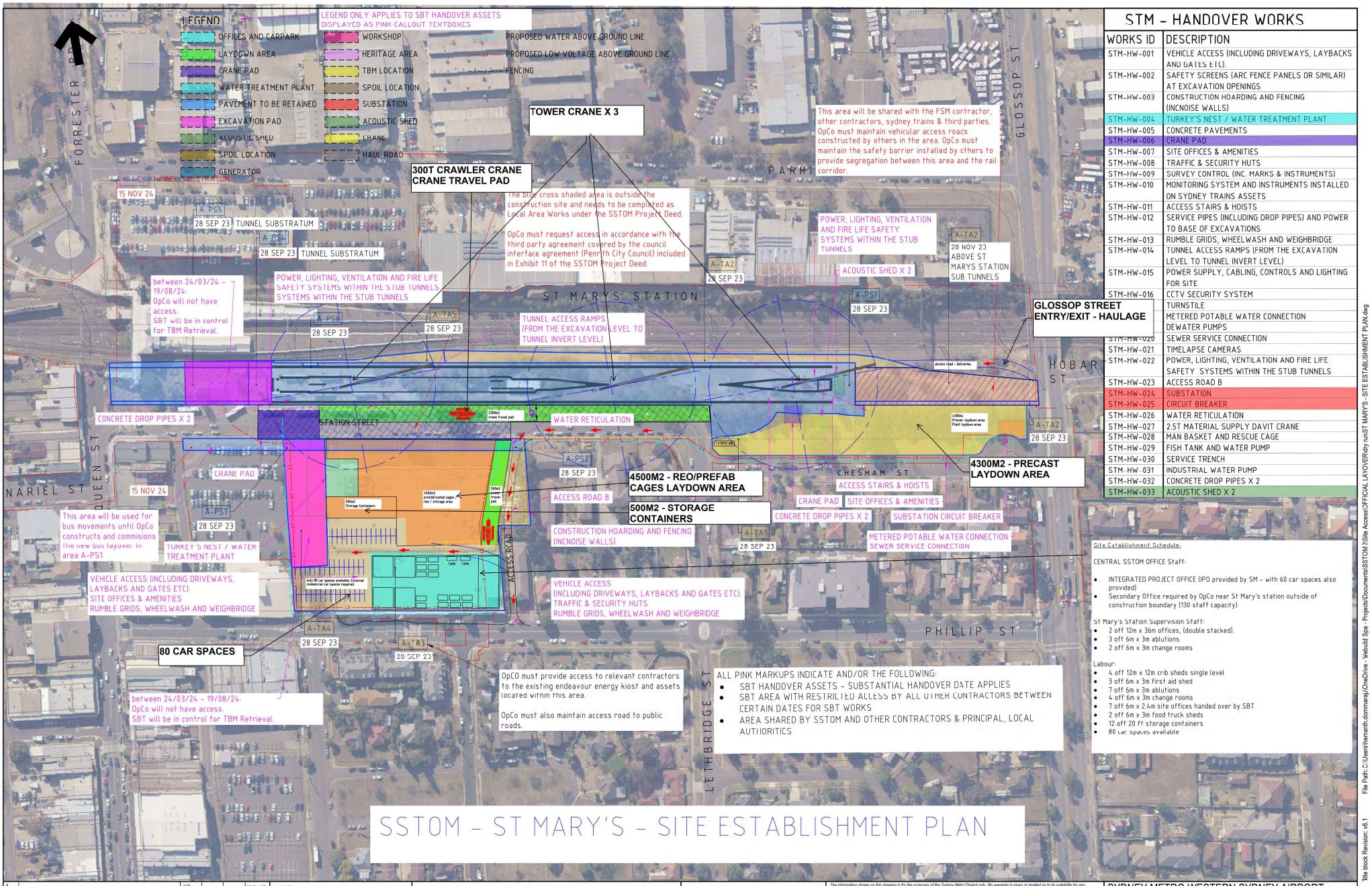
Construction Activity / Aspect	Construction Activity / Aspect	Impact				Controls			
	- Station and station precinct construction. - Track Installation. - Linewide Works	Potential impacts of climate change on the project including increased intensity, duration and frequency of rainfall events.	C4	L3	Moderate	Potential climate change impacts (e.g. extreme/more frequent rainfall, extreme heat) would be considered in emergency management procedures for the construction of the project. Sensitive construction equipment would be protected from the effects of extreme weather and climate.	C5	L4	
Resource management	- Management of materials. - Procurement of materials	Management of waste during construction	C5	L4	Low	A Waste Management Plan would be prepared and implemented for the project in accordance with the CEMF for the project, and in accordance with the waste hierarchy.	C5	L5	Low
Land use and property	- Site establishment. - Identification of additional ancillary facilities. - Roadworks and interface works. - Linewide works. - Station and station precinct construction.	Temporary leasing of properties	C4	L6	Low	Sydney Metro manages property acquisition in accordance with the Land Acquisition (Just Terms Compensation) Act 1991. Any additional temporary leasing of properties identified through construction of the SSTOM Works would be managed in accordance with the OCCS.	C4	L4	Moderate
		Access to utilities, properties and business is impacted by works.	C4	L3	Moderate	Consultation and agreement of potential impacts with affected utility owners, landowners, occupiers and businesses in place prior to impacting access. Management of work and implementation of site-specific CTMPs would avoid any unnecessary impacts to property access.	C5	L5	Low
		Temporary impacts on other infrastructure, and risks of failing to co-ordinate and integrate with Western Sydney International and road projects.	C3	L2	High	Potential impacts to key infrastructure would be mitigated by the design of the project, utility investigations and through consultation with asset owners (including Western Sydney Airport). Planned power and utility interruptions would be scheduled to outside of typical business hours where feasible and reasonable, reducing the likelihood of impacts.	C4	L3	Moderate
Landscape and visual impact	- Site establishment works. - Ancillary facility construction. - Earthworks and piling. - Station and station precinct construction. - Track Installation. - Linewide Works	Temporary adverse visual impacts from the presence of construction activities and construction sites	C4	L1	High	Controls will be implemented in accordance with the VAMP, developed in line with the CEMF. This plan includes measures to minimise impacts such as retaining street trees and finishing all structures (including potential acoustic sheds, site offices and workshop sheds) in a colour which aims to minimise their visual impact.	C5	L2	Moderate
		Temporary impact to landscape character associated with construction activities and construction sites	C4	L1	High	Controls will be implemented in accordance with the VAMP, developed in line with the CEMF. This plan includes measures to minimise impacts such as retaining street trees and finishing all structures (including potential acoustic sheds, site offices and workshop sheds) in a colour which aims to minimise their visual impact.	C5	L2	Moderate
		Temporary light-spill on sensitive receivers during night construction works.	C4	L2	High	Controls will be implemented in accordance with the VAMP, developed in line with the CEMF. This plan includes measures to minimise light spill impacts.	C5	L4	Low
Social and economic	- Site establishment - Landscaping	Temporary amenity impacts on residential receivers and social infrastructure.	C5	L2	Moderate	Implement OCCS, VAMP, and CEMF, along with noise and vibration, landscape and visual mitigation measures	C5	L2	Moderate

SSTOM Risk Assessment

Construction Activity /	Construction Activity / Aspect	Impact	C	L	Inherent Risk Rating	Controls	C	L	Residual Risk Rating
	- Worker parking - ATC Construction - Station and station precinct construction	Potential impacts on community values and lifestyle.	C4	L2	High	Implement OCCS, VAMP, and CEMF, along with noise and vibration, landscape and visual mitigation measures	C5	L2	Moderate
		Potential impacts to agricultural assets such as dams	C4	L4	Moderate	Implement OCCS	C5	L4	Low
		Temporary access restrictions or changes resulting from construction sites and activities	C4	L2	High	Implement CEMF, CTMF, transport mitigation measures	C5	L2	Moderate
		Potential temporary cumulative impacts associated with concurrent project construction and construction of approved development considered as part of current strategic planning for the area	C5	L2	Moderate	Implement CEMF, OCCS, noise and vibration, transport, landscape and visual mitigation measures	C5	L3	Moderate
		Social and economic impacts associated with property acquisition (including of businesses)	C5	L6	Low	This risk is managed by SM, and will be supported by Parklife Metro D&C by implementing the OCCS	C5	L6	Low
		Temporary disruption to servicing, deliveries and access during construction from potential traffic network impacts	C4	L2		Implement CEMF, OCCS, CTMF and transport mitigation measures	C5	L2	Moderate
		Potential temporary impacts on business due to reduced visibility of businesses, changes to pedestrian and vehicle movements or reduction in amenity associated with construction sites	C4	L2	High	Implement CEMF, CTMF and transport mitigation measures	C5	L2	Moderate
Air quality	- Earthworks, - Material handling, - Operation of plant and equipment	Temporary, localised impacts to local air quality due to dust generation from construction activities including during bulk earthworks.	C4	L4	Moderate	Potential risks would be minimised through the implementation of standard mitigation measures.	C5	L4	Low
		Temporary air quality impacts from emissions other than dust that would be generated during construction including emissions from the combustion of diesel fuel by heavy vehicles, mobile construction equipment and stationary equipment such as diesel generators.	C5	L2	Moderate	Potential risks would be minimised through the implementation of standard mitigation measures.	C5	L4	Low
Hazard and risk	- Storage of hazardous material. - Site establishment. - Use of ancillary facilities.	Transport and storage of hazardous substances and dangerous goods.	C4	L5	Low	Potential risks would be managed in accordance with NSW guidelines including the *Storage and Handling of Dangerous Goods Code of Practice* (WorkCover NSW, 2005) and Applying SEPP 33 (Department of Planning, 2011).	C4	L5	Low
		Bushfire risks to the construction of the project, or the potential for the project to provide sources of ignition including sparks from the use of construction equipment.	C4	L5	Low	Bushfire Management Plan to be implemented, as part of emergency response management plan. Hot works permits will be required for all works which have a fire risk.	C5	L4	Low
Cumulative impacts	- Any construction works with the potential for cumulative impacts with surrounding projects.	Cumulative impacts from the construction of multiple projects (including the construction of Western Sydney International and future M12 Motorway), including construction fatigue from other projects.	C3	L2	High	Cumulative impacts are minimised through coordination of construction activities and communication processes with nearby projects, including ongoing consultation with surrounding projects, TTLG, and other forums.	C4	L3	Moderate

Appendix D Initial Environmental Control Maps

NOTE: It is noted that this initial ECM, whilst included in the CEMP, are separate documents that are edited independently of this CEMP. Therefore, the ECMs included in this CEMP will not be updated as the SSTOM Works ECMs are progressively reviewed and updated throughout construction.



SSTOM - ST MARY'S - SITE ESTABLISHMENT PLAN

STM - HANDOVER WORKS

WORKS ID	DESCRIPTION
STM-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
STM-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
STM-HW-003	CONSTRUCTION HOARDING AND FENCING (INCNOISE WALLS)
STM-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
STM-HW-005	CONCRETE PAVEMENTS
STM-HW-006	CRANE PAD
STM-HW-007	SITE OFFICES & AMENITIES
STM-HW-008	TRAFFIC & SECURITY HUTS
STM-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
STM-HW-010	MONITORING SYSTEM AND INSTRUMENTS INSTALLED ON SYDNEY TRAINS ASSETS
STM-HW-011	ACCESS STAIRS & HOISTS
STM-HW-012	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
STM-HW-013	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
STM-HW-014	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
STM-HW-015	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
STM-HW-016	CCTV SECURITY SYSTEM
STM-HW-017	TURNSTILE
STM-HW-018	METERED POTABLE WATER CONNECTION
STM-HW-019	DEWATER PUMPS
STM-HW-020	SEWER SERVICE CONNECTION
STM-HW-021	TIMELAPSE CAMERAS
STM-HW-022	POWER, LIGHTING, VENTILATION AND FIRE LIFE SAFETY SYSTEMS WITHIN THE STUB TUNNELS
STM-HW-023	ACCESS ROAD B
STM-HW-024	SUBSTATION
STM-HW-025	CIRCUIT BREAKER
STM-HW-026	WATER RETICULATION
STM-HW-027	2.5T MATERIAL SUPPLY DAVIT CRANE
STM-HW-028	MAN BASKET AND RESCUE CAGE
STM-HW-029	FISH TANK AND WATER PUMP
STM-HW-030	SERVICE TRENCH
STM-HW-031	INDUSTRIAL WATER PUMP
STM-HW-032	CONCRETE DROP PIPES X 2
STM-HW-033	ACOUSTIC SHED X 2

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			09/04/22

SCALE: 0 10 20 30 40 50m
SCALE 1:1000 AT ORIGINAL SIZE

Original Coordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

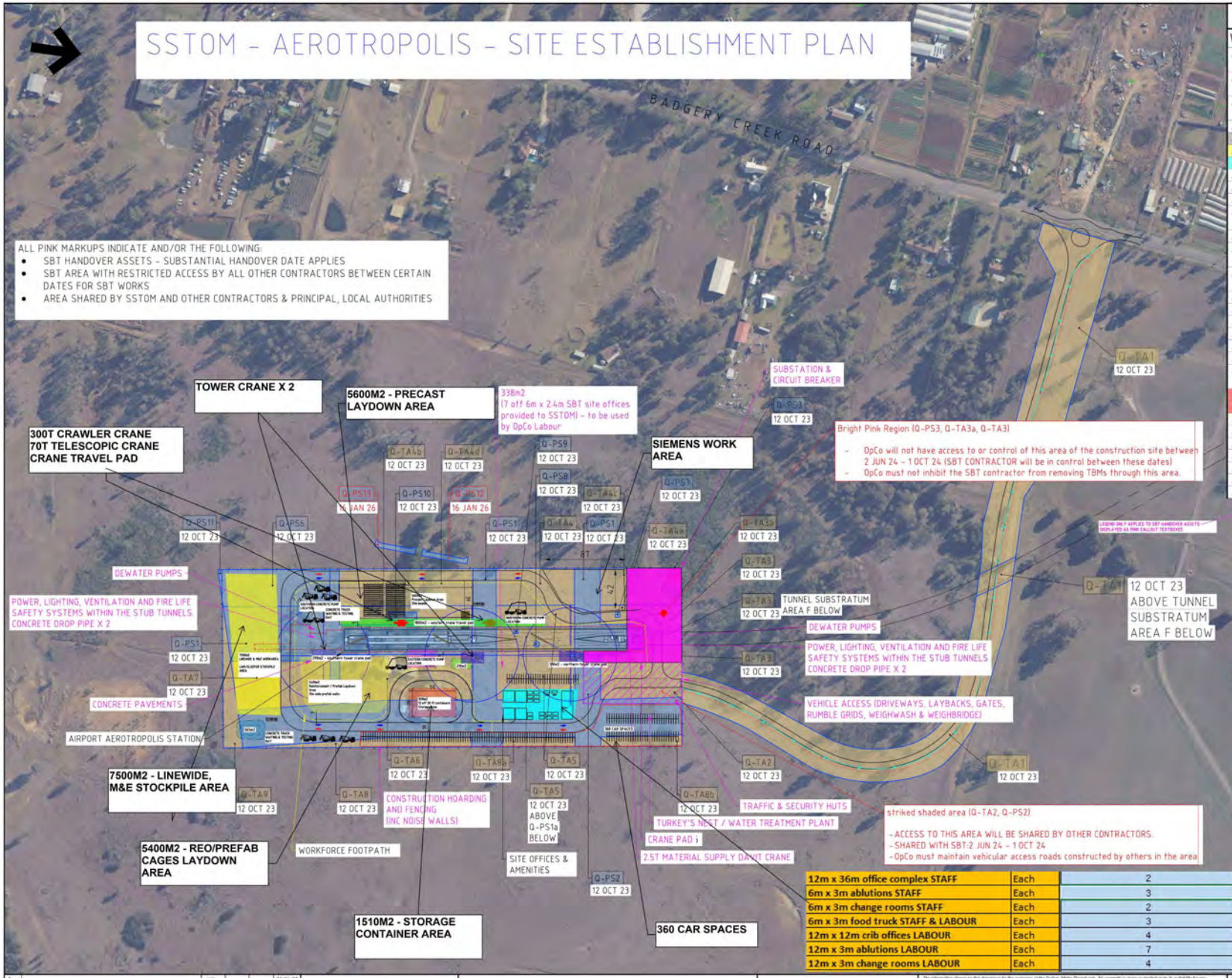
DRAWN	HD	09.04.22
DESIGNED		
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO WESTERN SYDNEY AIRPORT
ST MARYS
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN

FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: ST MARY'S - SITE ESTABLISHMENT PLAN | REV: A | VER:

Plot Date & Time: 30/05/22 - 17:51
100mm AT FULL SIZE
File Path: C:\Users\hemanth.dommeraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVERday run\ST MARY'S - SITE ESTABLISHMENT PLAN.dwg
Title block Revision: v6.1

SSTOM – AEROTROPOLIS – SITE ESTABLISHMENT PLAN



AEC – HANDOVER WORKS

WORKS ID	DESCRIPTION
AEC-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
AEC-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
AEC-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
AEC-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
AEC-HW-005	CONCRETE PAVEMENTS
AEC-HW-006	CRANE PAD
AEC-HW-007	SITE OFFICES & AMENITIES
AEC-HW-008	TRAFFIC & SECURITY HUTS
AEC-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
AEC-HW-010	ACCESS STAIRS & HOISTS
AEC-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
AEC-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
AEC-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
AEC-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
AEC-HW-015	CCTV SECURITY SYSTEM
AEC-HW-016	TURNSTILE
AEC-HW-017	-
AEC-HW-018	DEWATER PUMPS
AEC-HW-019	-
AEC-HW-020	TIMELAPSE CAMERAS
AEC-HW-021	POWER, LIGHTING, VENTILATION AND FIRE LIFE SAFETY SYSTEMS WITHIN THE STUB TUNNELS
AEC-HW-022	SUBSTATION
AEC-HW-023	CIRCUIT BREAKER
AEC-HW-024	WATER RETICULATION
AEC-HW-025	2.5T MATERIAL SUPPLY DAVIT CRANE
AEC-HW-026	MAN BASKET AND RESCUE CAGE
AEC-HW-027	FISH TANK AND WATER PUMP
AEC-HW-028	SERVICE TRENCH
AEC-HW-029	INDUSTRIAL WATER PUMP
AEC-HW-030	CONCRETE DROP PIPE X 2

12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			09/04/22

SCALE: 0 20 40 60 80 100m
SCALE 1:2000 AT ORIGINAL SIZE

Original | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

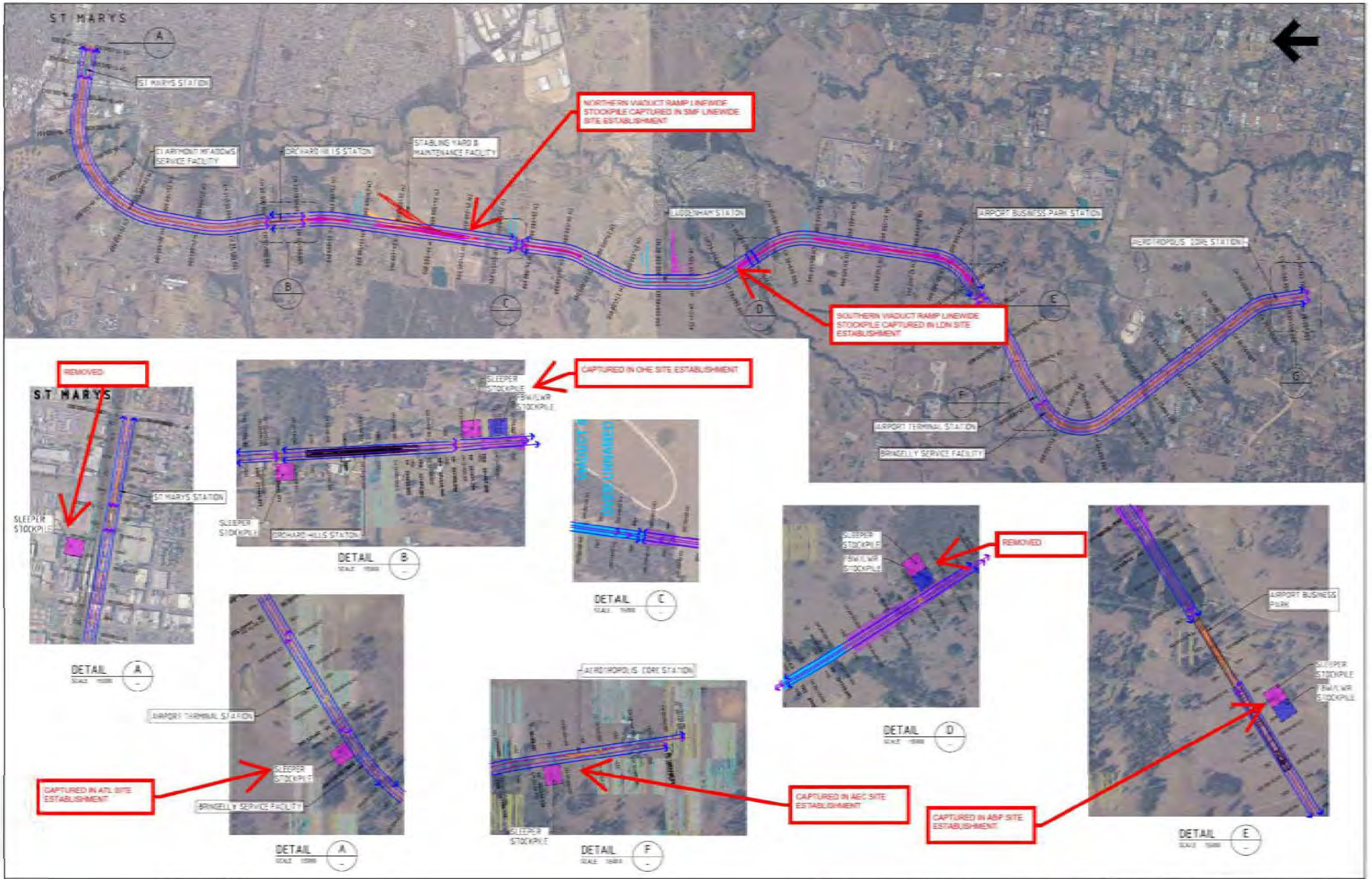
Parklife Metro

DRAWN	HD	09.04.22
DESIGNED		
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO WESTERN SYDNEY AIRPORT
AEROTROPOLIS
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN

FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: AEC - SITE ESTABLISHMENT PLAN | REV A | VER

Plot Date & Time: 31/05/22 - 13:09
100mm AT FULL SIZE
File Path: C:\Users\hemanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVER\Ray run\AEC - SITE ESTABLISHMENT PLAN.dwg
Title block Revision: v5.1



SYDNEY METRO WESTERN SYDNEY AIRPORT

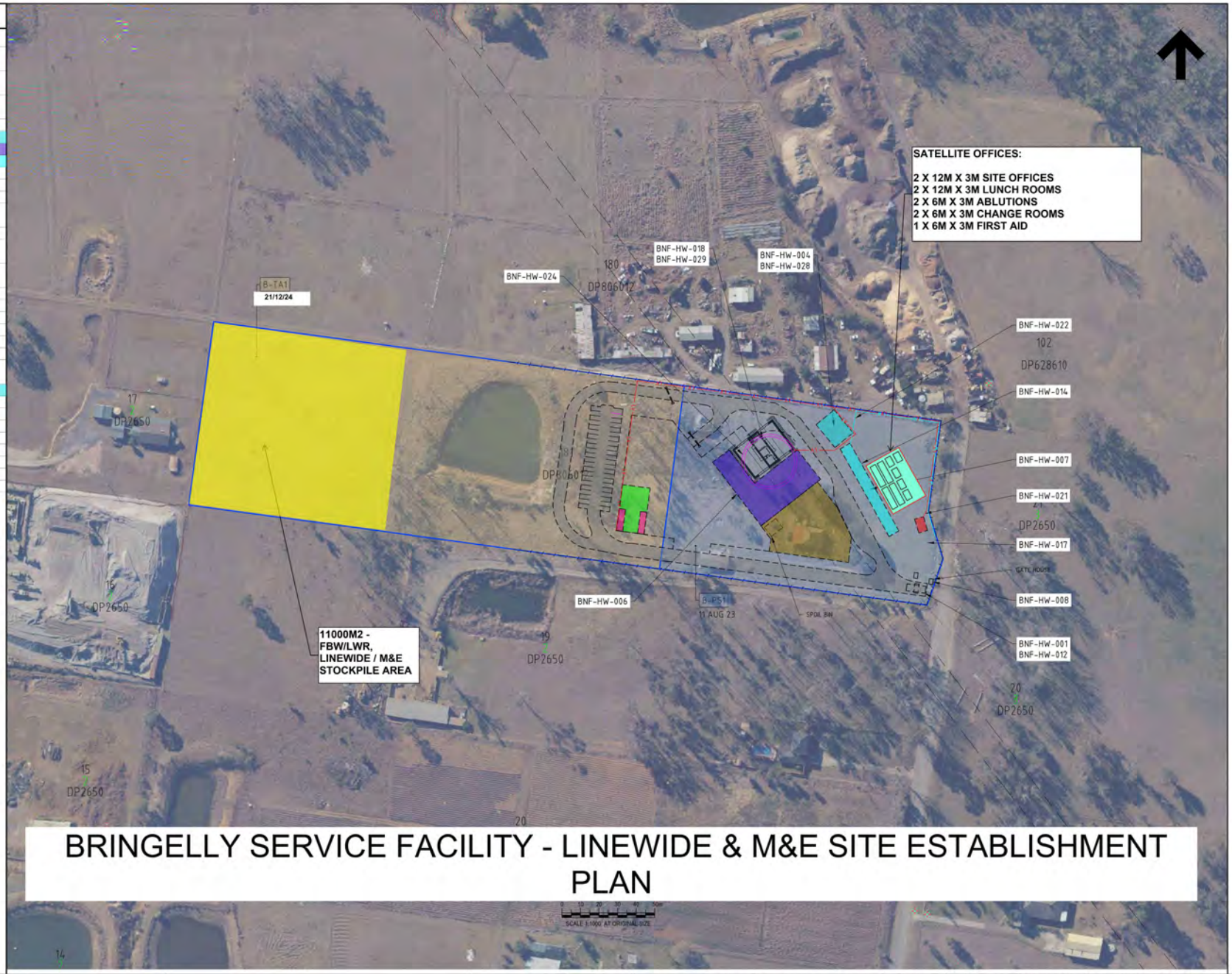
LINEWIDE STOCKPILE AND SITE ESTABLISHMENT DELIVERABLE

BSF – HANDOVER WORKS

WORKS ID	DESCRIPTION
BSF-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
BSF-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
BSF-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
BSF-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
BSF-HW-005	CONCRETE PAVEMENTS
BSF-HW-006	CRANE PAD
BSF-HW-007	SITE OFFICES & AMENITIES
BSF-HW-008	TRAFFIC & SECURITY HUTS
BSF-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
BSF-HW-010	ACCESS STAIRS & HOISTS
BSF-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
BSF-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
BSF-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
BSF-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
BSF-HW-015	CCTV SECURITY SYSTEM
BSF-HW-016	TURNSTILE
BSF-HW-017	-
BSF-HW-018	DEWATER PUMPS
BSF-HW-019	-
BSF-HW-020	TIMELAPSE CAMERAS
BSF-HW-021	LV POWER SUPPLY
BSF-HW-022	WATER RETICULATION
BSF-HW-023	FIRE EXTINGUISHERS
BSF-HW-024	MAN DAVIT HOIST
BSF-HW-025	-
BSF-HW-026	MAN BASKET AND RESCUE CAGE
BSF-HW-027	INDUSTRIAL WATER PUMP
BSF-HW-028	WATER TANKS AND PUMPS
BSF-HW-029	CONCRETE DROP PIPE

LEGEND

- OFFICES AND CARPARK
- LAYDOWN AREA
- CRANE PAD
- WATER TREATMENT PLANT
- PAVEMENT TO BE RETAINED
- EXCAVATION PAD
- ACOUSTIC SHED
- SPOIL LOCATION
- GENERATOR
- WORKSHOP
- HERITAGE AREA
- TBM LOCATION
- SPOIL LOCATION
- SUBSTATION
- ACOUSTIC SHED
- CRANE
- HAUL ROAD
- PROPOSED WATER ABOVE GROUND LINE
- PROPOSED LOW VOLTAGE ABOVE GROUND LINE
- FENCING



BRINGELLY SERVICE FACILITY - LINEWIDE & M&E SITE ESTABLISHMENT PLAN

REV	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			10.04.22

SCALE:

0 20 40 60 80 100m

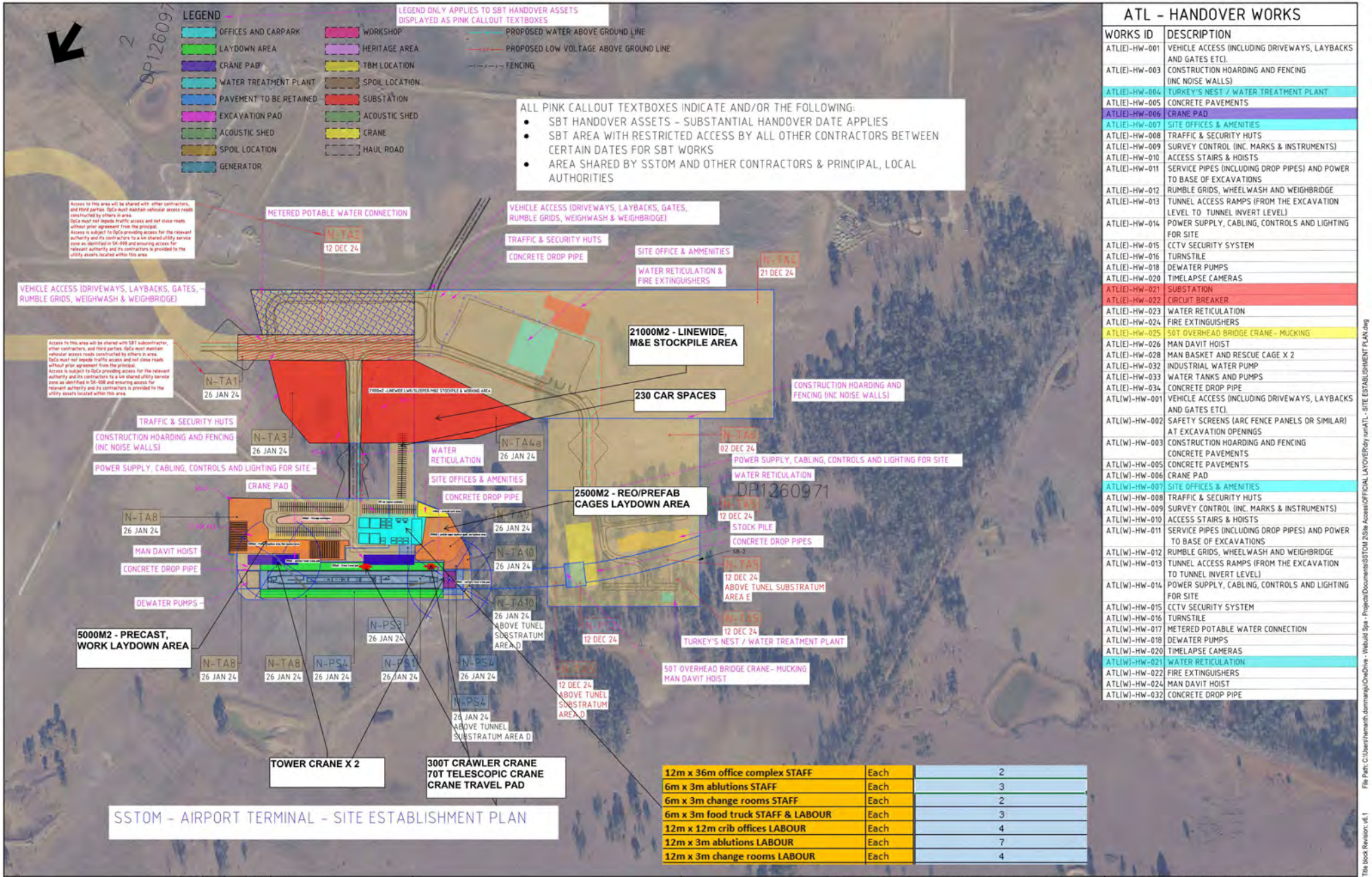
SCALE 1:2000 AT ORIGINAL SIZE

Original Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN	HD	10.04.22
DESIGNED		
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO WESTERN SYDNEY AIRPORT
BRINGELLY SERVICE FACILITY
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN
FILE No: | SHEET 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: BRINGELLY SERVICE FACILITY - SITE ESTABLISHMENT DELIVERABLE | REV A | VER



ATL - HANDOVER WORKS

WORKS ID	DESCRIPTION
ATL(E)-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
ATL(E)-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
ATL(E)-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
ATL(E)-HW-005	CONCRETE PAVEMENTS
ATL(E)-HW-006	CRANE PAD
ATL(E)-HW-007	SITE OFFICES & AMENITIES
ATL(E)-HW-008	TRAFFIC & SECURITY HUTS
ATL(E)-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
ATL(E)-HW-010	ACCESS STAIRS & HOISTS
ATL(E)-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
ATL(E)-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
ATL(E)-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
ATL(E)-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
ATL(E)-HW-015	CCTV SECURITY SYSTEM
ATL(E)-HW-016	TURNSTILE
ATL(E)-HW-018	DEWATER PUMPS
ATL(E)-HW-020	TIMELAPSE CAMERAS
ATL(E)-HW-021	SUBSTATION
ATL(E)-HW-022	CIRCUIT BREAKER
ATL(E)-HW-023	WATER RETICULATION
ATL(E)-HW-024	FIRE EXTINGUISHERS
ATL(E)-HW-025	50T OVERHEAD BRIDGE CRANE - MUCKING
ATL(E)-HW-026	MAN DAVIT HOIST
ATL(E)-HW-028	MAN BASKET AND RESCUE CAGE X 2
ATL(E)-HW-032	INDUSTRIAL WATER PUMP
ATL(E)-HW-033	WATER TANKS AND PUMPS
ATL(E)-HW-034	CONCRETE DROP PIPE
ATL(W)-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
ATL(W)-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
ATL(W)-HW-003	CONSTRUCTION HOARDING AND FENCING CONCRETE PAVEMENTS
ATL(W)-HW-005	CONCRETE PAVEMENTS
ATL(W)-HW-006	CRANE PAD
ATL(W)-HW-007	SITE OFFICES & AMENITIES
ATL(W)-HW-008	TRAFFIC & SECURITY HUTS
ATL(W)-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
ATL(W)-HW-010	ACCESS STAIRS & HOISTS
ATL(W)-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
ATL(W)-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
ATL(W)-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION TO TUNNEL INVERT LEVEL)
ATL(W)-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
ATL(W)-HW-015	CCTV SECURITY SYSTEM
ATL(W)-HW-016	TURNSTILE
ATL(W)-HW-017	METERED POTABLE WATER CONNECTION
ATL(W)-HW-018	DEWATER PUMPS
ATL(W)-HW-020	TIMELAPSE CAMERAS
ATL(W)-HW-021	WATER RETICULATION
ATL(W)-HW-022	FIRE EXTINGUISHERS
ATL(W)-HW-024	MAN DAVIT HOIST
ATL(W)-HW-032	CONCRETE DROP PIPE

12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			10.04.22

SCALE: 0 20 40 60 80 100m
SCALE 1:2000 AT ORIGINAL SIZE

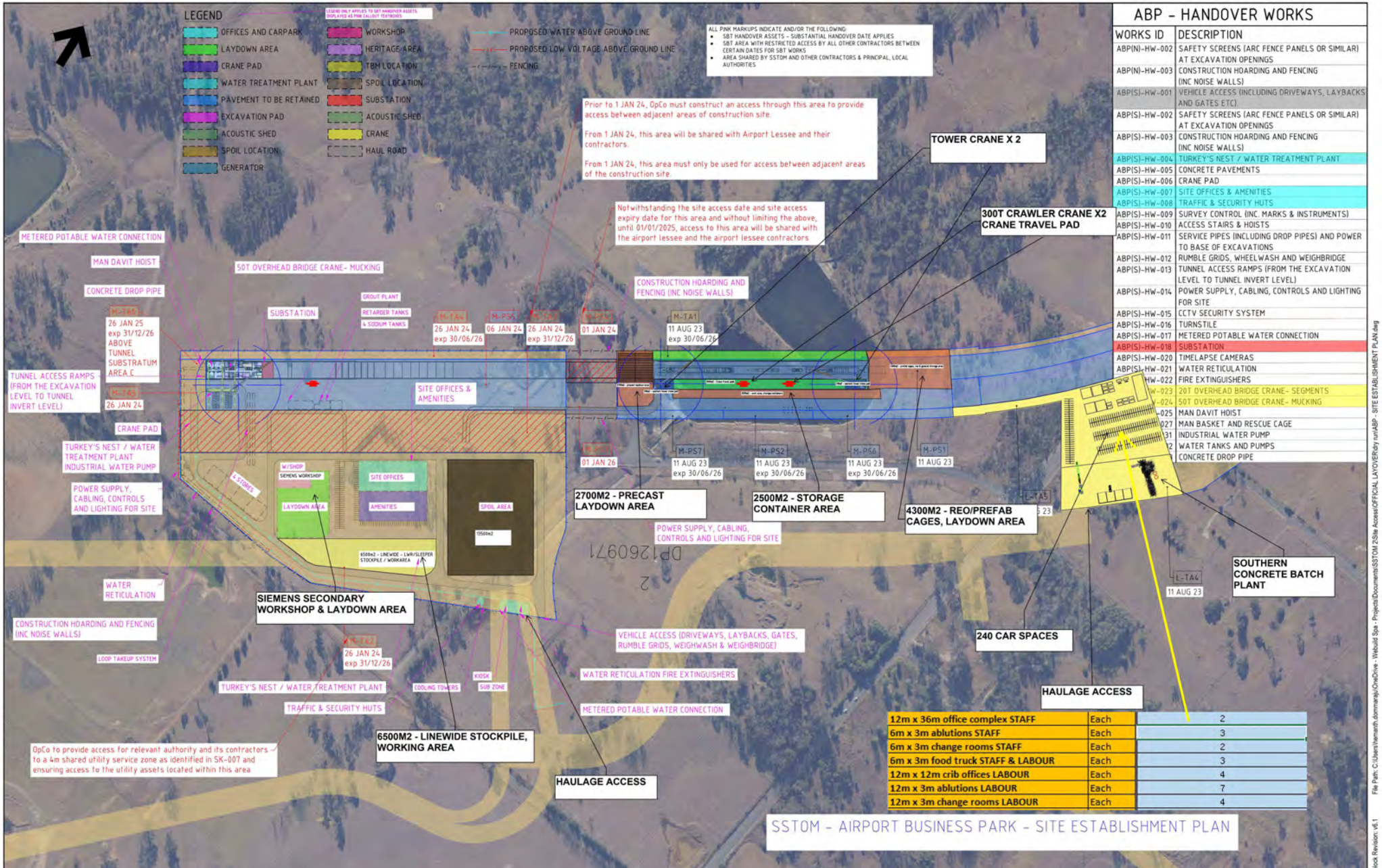
Original Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN HD 10.04.22
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO WESTERN SYDNEY AIRPORT
AIRPORT TERMINAL
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN
FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: ATL - SITE ESTABLISHMENT PLAN | REV A | VER

Plot Date & Time: 31/05/22 - 10:32
100mm AT FULL SIZE
File Path: C:\Users\hemanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVER\Rdry run\ATL - SITE ESTABLISHMENT PLAN.dwg
Title block Revision: v5.1



ABP - HANDOVER WORKS

WORKS ID	DESCRIPTION
ABP(N)-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
ABP(N)-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
ABP(S)-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC)
ABP(S)-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
ABP(S)-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
ABP(S)-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
ABP(S)-HW-005	CONCRETE PAVEMENTS
ABP(S)-HW-006	CRANE PAD
ABP(S)-HW-007	SITE OFFICES & AMENITIES
ABP(S)-HW-008	TRAFFIC & SECURITY HUTS
ABP(S)-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
ABP(S)-HW-010	ACCESS STAIRS & HOISTS
ABP(S)-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
ABP(S)-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
ABP(S)-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
ABP(S)-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
ABP(S)-HW-015	CCTV SECURITY SYSTEM
ABP(S)-HW-016	TURNSTILE
ABP(S)-HW-017	METERED POTABLE WATER CONNECTION
ABP(S)-HW-018	SUBSTATION
ABP(S)-HW-020	TIMELAPSE CAMERAS
ABP(S)-HW-021	WATER RETICULATION
ABP(S)-HW-022	FIRE EXTINGUISHERS
ABP(S)-HW-023	20T OVERHEAD BRIDGE CRANE- SEGMENTS
ABP(S)-HW-024	50T OVERHEAD BRIDGE CRANE- MUCKING
ABP(S)-HW-025	MAN DAVIT HOIST
ABP(S)-HW-027	MAN BASKET AND RESCUE CAGE
ABP(S)-HW-031	INDUSTRIAL WATER PUMP
ABP(S)-HW-032	WATER TANKS AND PUMPS
	CONCRETE DROP PIPE

12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

SSTOM - AIRPORT BUSINESS PARK - SITE ESTABLISHMENT PLAN

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			09/04/22

SCALE: 0 20 40 60 80 100m
SCALE 1:2000 AT ORIGINAL SIZE

Original | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

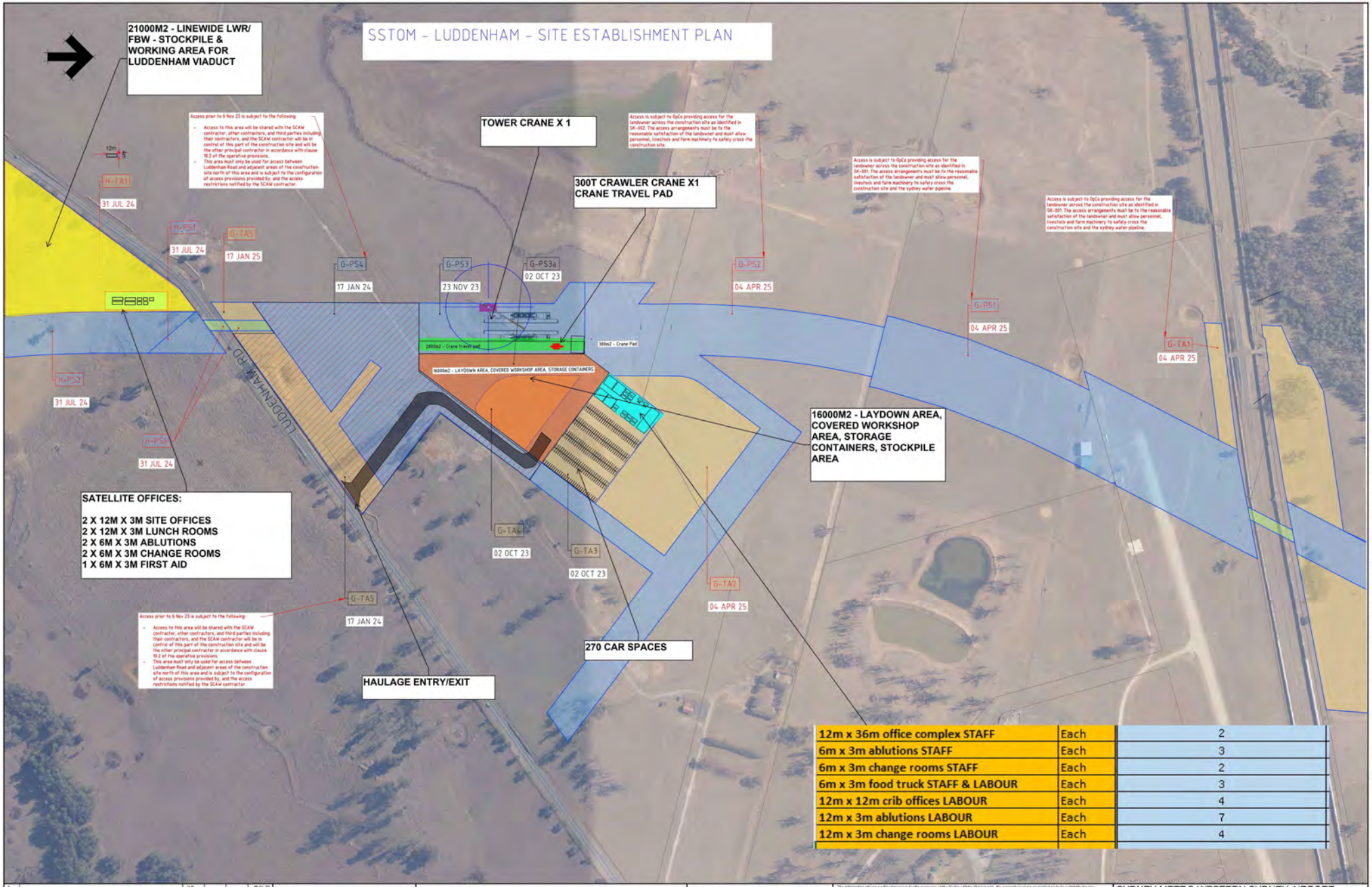
Parklife Metro

DRAWN	HD	09.04.22
DESIGNED		
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO WESTERN SYDNEY AIRPORT
AIRPORT BUSINESS PARK
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN
FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: ABP - SITE ESTABLISHMENT PLAN | REV A | VER

Plot Date & Time: 31/05/22 - 10:37
100mm AT FULL SIZE
File Path: C:\Users\hemanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVER\dry run\ABP - SITE ESTABLISHMENT PLAN.dwg
Title block Revision: v5.1

SSTOM - LUDDENHAM - SITE ESTABLISHMENT PLAN



Access prior to 6 Nov 23 is subject to the following:

- Access to this area will be shared with the SCAW contractor, other contractors, and third parties including their contractors, and the SCAW contractor will be in control of this part of the construction site and will be the other principal contractor in accordance with clause 10.2 of the operative provisions.
- This area must only be used for access between Luddenham Road and adjacent areas of the construction site north of this area and is subject to the configuration of access provisions provided by, and the access restrictions notified by the SCAW contractor.

Access is subject to OpCo providing access for the landowner across the construction site as identified in SK-002. The access arrangements must be to the reasonable satisfaction of the landowner and must allow personnel, livestock and farm machinery to safely cross the construction site.

Access is subject to OpCo providing access for the landowner across the construction site as identified in SK-001. The access arrangements must be to the reasonable satisfaction of the landowner and must allow personnel, livestock and farm machinery to safely cross the construction site and the sydney water pipeline.

Access is subject to OpCo providing access for the landowner across the construction site as identified in SK-001. The access arrangements must be to the reasonable satisfaction of the landowner and must allow personnel, livestock and farm machinery to safely cross the construction site and the sydney water pipeline.

12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		H.D.			10.04.22

SCALE:

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

Original | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN	HD	10.04.22
DESIGNED		
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO WESTERN SYDNEY AIRPORT
LUDDENHAM
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN

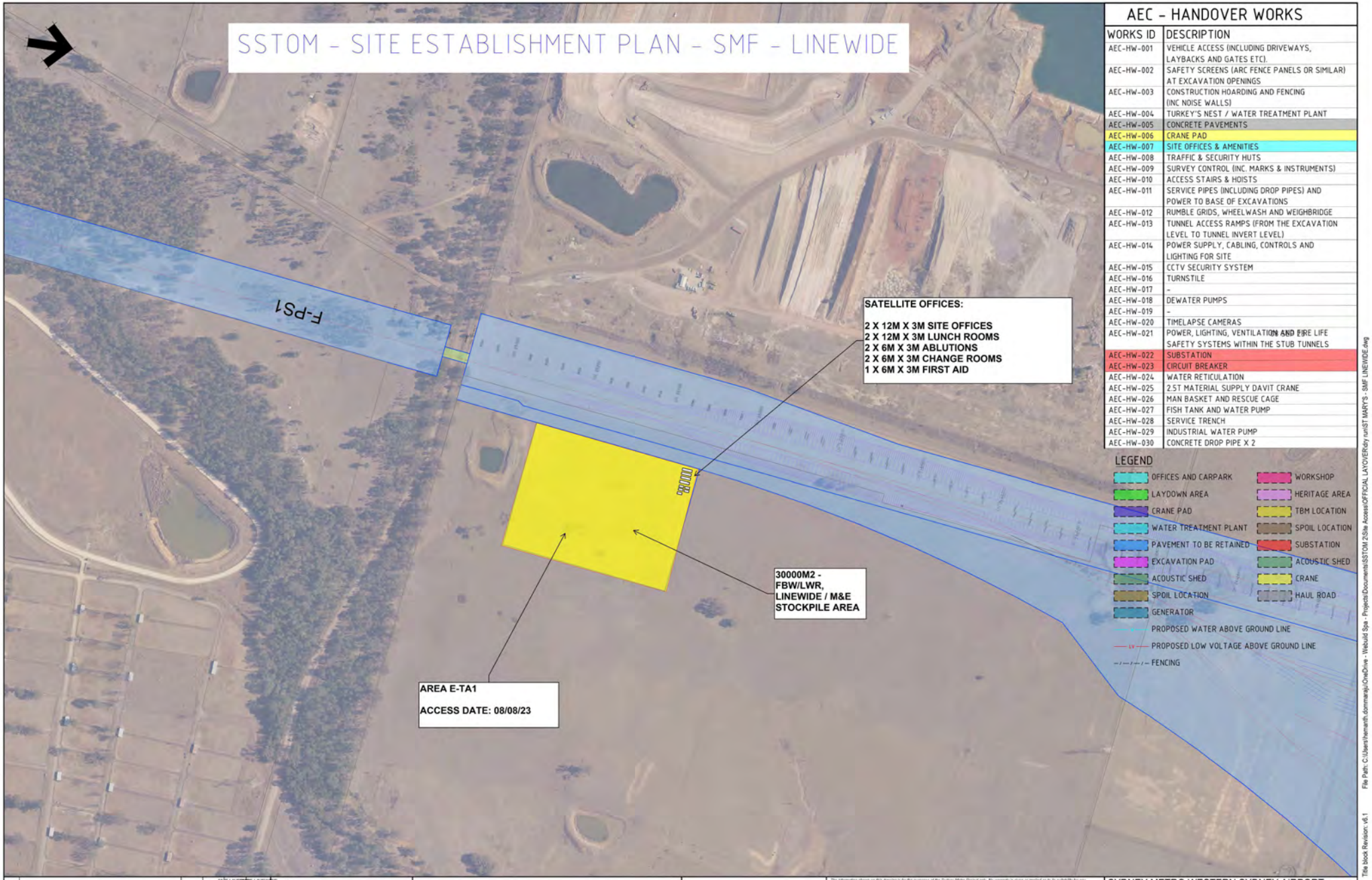
FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: LDN - SITE ESTABLISHMENT PLAN | REV A | VER

100mm AT FULL SIZE Plot Date & Time: 31/05/22 - 09:51

File Path: C:\Users\hemanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVERday run\LDN - SITE ESTABLISHMENT PLAN.dwg

Title block Revision: v5.1

SSTOM - SITE ESTABLISHMENT PLAN - SMF - LINEWIDE



AEC - HANDOVER WORKS

WORKS ID	DESCRIPTION
AEC-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
AEC-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
AEC-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
AEC-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
AEC-HW-005	CONCRETE PAVEMENTS
AEC-HW-006	CRANE PAD
AEC-HW-007	SITE OFFICES & AMENITIES
AEC-HW-008	TRAFFIC & SECURITY HUTS
AEC-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
AEC-HW-010	ACCESS STAIRS & HOISTS
AEC-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
AEC-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
AEC-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
AEC-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
AEC-HW-015	CCTV SECURITY SYSTEM
AEC-HW-016	TURNSTILE
AEC-HW-017	-
AEC-HW-018	DEWATER PUMPS
AEC-HW-019	-
AEC-HW-020	TIMELAPSE CAMERAS
AEC-HW-021	POWER, LIGHTING, VENTILATION AND FIRE LIFE SAFETY SYSTEMS WITHIN THE STUB TUNNELS
AEC-HW-022	SUBSTATION
AEC-HW-023	CIRCUIT BREAKER
AEC-HW-024	WATER RETICULATION
AEC-HW-025	2.5T MATERIAL SUPPLY DAVIT CRANE
AEC-HW-026	MAN BASKET AND RESCUE CAGE
AEC-HW-027	FISH TANK AND WATER PUMP
AEC-HW-028	SERVICE TRENCH
AEC-HW-029	INDUSTRIAL WATER PUMP
AEC-HW-030	CONCRETE DROP PIPE X 2

LEGEND

- OFFICES AND CARPARK
- LAYDOWN AREA
- CRANE PAD
- WATER TREATMENT PLANT
- PAVEMENT TO BE RETAINED
- EXCAVATION PAD
- ACOUSTIC SHED
- SPOIL LOCATION
- GENERATOR
- WORKSHOP
- HERITAGE AREA
- TBM LOCATION
- SPOIL LOCATION
- SUBSTATION
- ACOUSTIC SHED
- CRANE
- HAUL ROAD
- PROPOSED WATER ABOVE GROUND LINE
- LV PROPOSED LOW VOLTAGE ABOVE GROUND LINE
- FENCING

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SMF LINEWIDE

SCALE:

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

Original | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

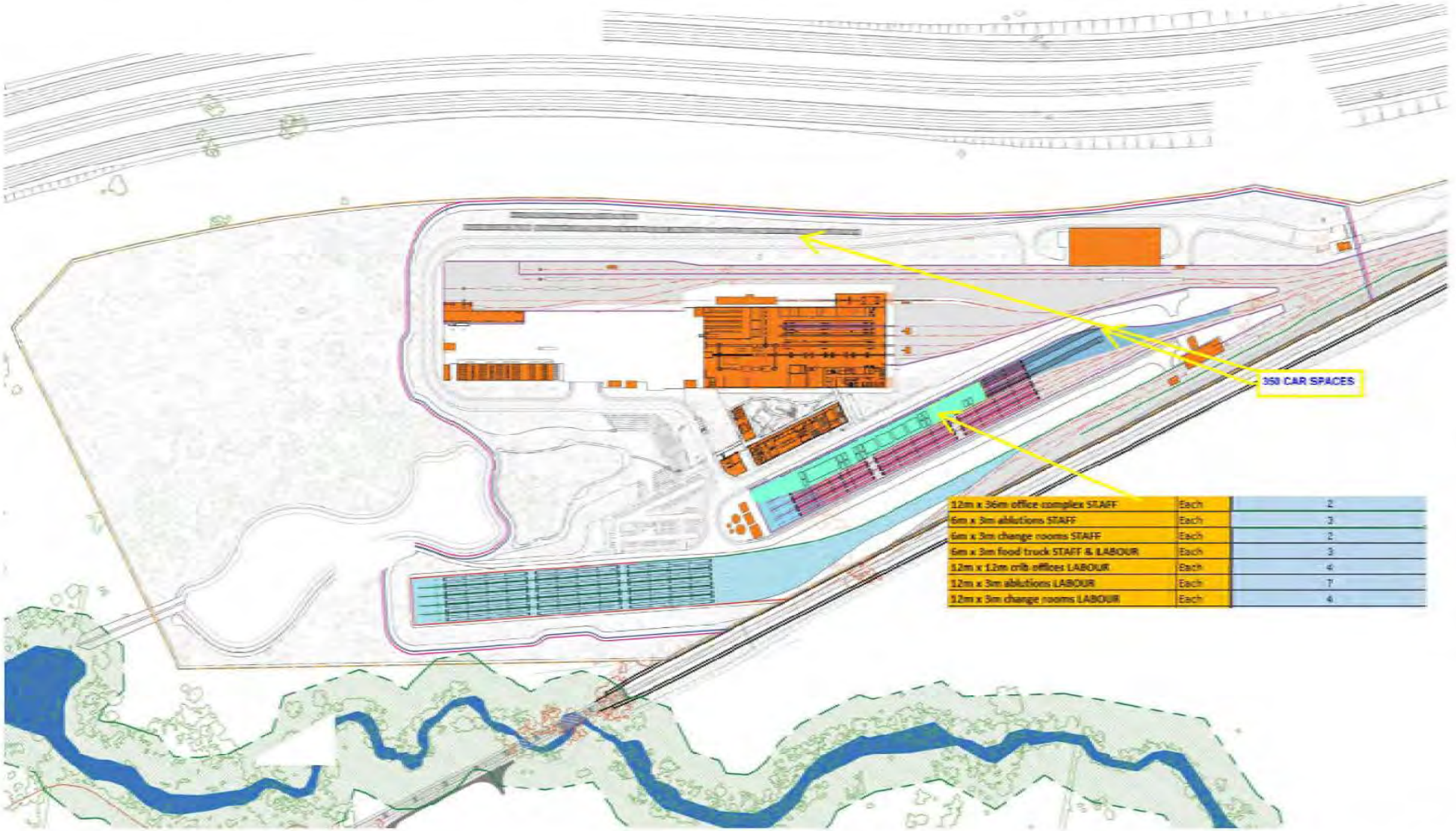
SYDNEY METRO WESTERN SYDNEY AIRPORT
SMF LINEWIDE - SITE ESTABLISHMENT
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN

FILE No:
SHEET: 1 OF 1
STATUS: FOR TENDER
EDMS No:
DRG No: SMF LINEWIDE - SITE ESTABLISHMENT
REV V3b
VER

Plot Date & Time: 11/05/22 - 17:12
100mm AT FULL SIZE
Title block Revision: v5.1
File Path: C:\Users\hemanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVER\dry run\ST MARY'S - SMF LINEWIDE.dwg

LEGEND

SSTOM - STABLING MAINTENANCE FACILITY - SITE ESTABLISHMENT PLAN



12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

REV A - H.D. 14/04/22

SCALE:

REV. | AMENDMENT DESCRIPTION | Design | Checked | Approved | Date

A1 Original | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing

Parklife Metro

DRAWN | DESIGNED | RECOMMENDED | ISSUED UNDER | APPROVED

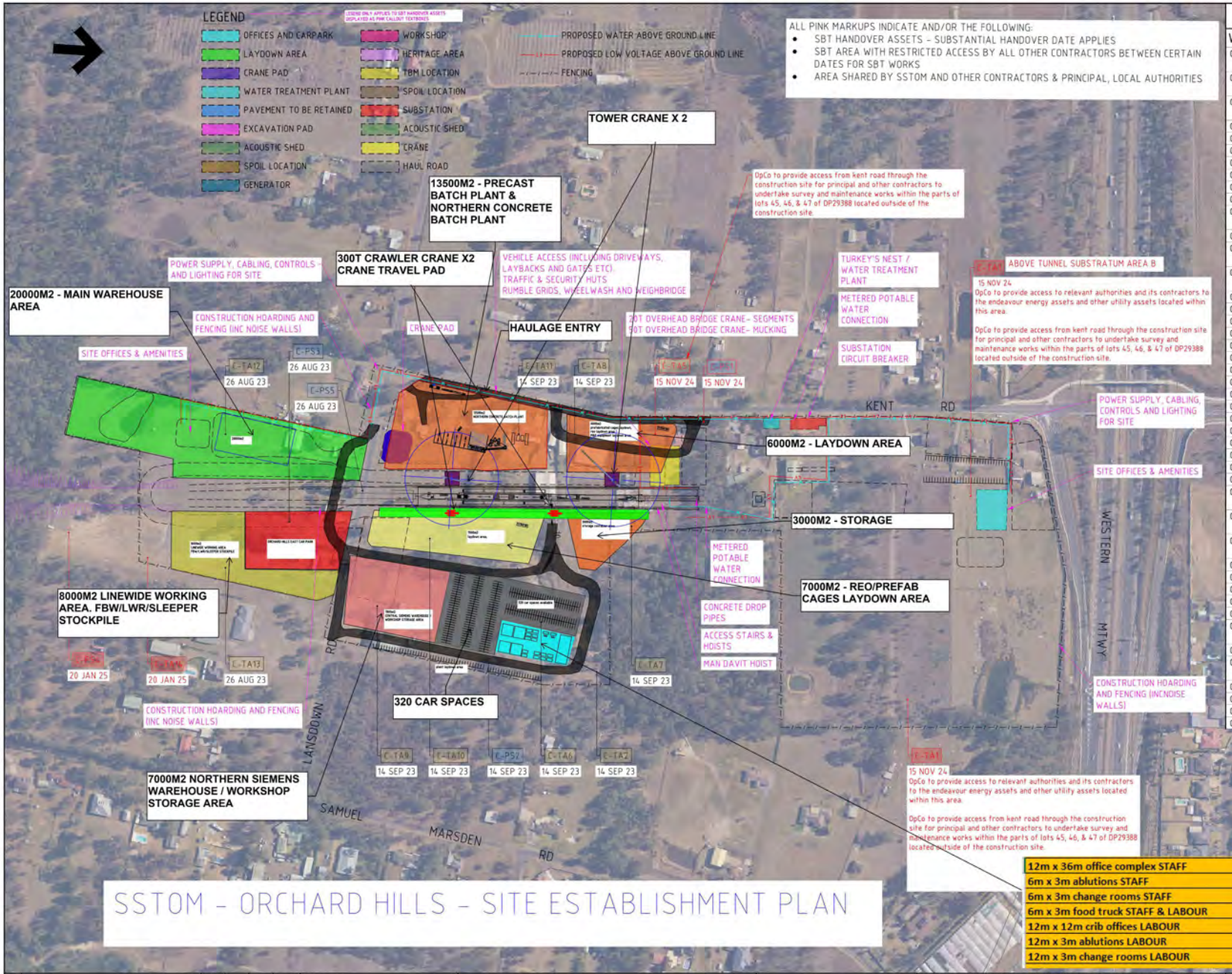
SYDNEY METRO WESTERN SYDNEY AIRPORT

SITE ESTABLISHMENT PLAN
STABLING MAINTENANCE FACILITY

FILE No. 417048 | SHEET 1 OF 1

STATUS: FOR TENDER | TENDER NO.

REV A | ISSUE



SSTOM - ORCHARD HILLS - SITE ESTABLISHMENT PLAN

OHE - HANDOVER WORKS

WORKS ID	DESCRIPTION
OHE(N)-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
OHE(N)-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
OHE(N)-HW-003	CONSTRUCTION HOARDING AND FENCING (INCNOISE WALLS)
OHE(N)-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
OHE(N)-HW-005	CONCRETE PAVEMENTS
OHE(N)-HW-006	CRANE PAD
OHE(N)-HW-007	SITE OFFICES & AMENITIES
OHE(N)-HW-008	TRAFFIC & SECURITY HUTS
OHE(N)-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
OHE(N)-HW-010	ACCESS STAIRS & HOISTS
OHE(N)-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
OHE(N)-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
OHE(N)-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
OHE(N)-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
OHE(N)-HW-015	CCTV SECURITY SYSTEM
OHE(N)-HW-016	TURNSTILE
OHE(N)-HW-017	METERED POTABLE WATER CONNECTION
OHE(N)-HW-018	DEWATER PUMPS
OHE(N)-HW-020	TIMELAPSE CAMERAS
OHE(N)-HW-021	SUBSTATION
OHE(N)-HW-022	CIRCUIT BREAKER
OHE(N)-HW-023	WATER RETICULATION
OHE(N)-HW-024	FIRE EXTINGUISHERS
OHE(N)-HW-025	20T OVERHEAD BRIDGE CRANE- SEGMENTS
OHE(N)-HW-026	50T OVERHEAD BRIDGE CRANE- MUCKING
OHE(N)-HW-027	MAN DAVIT HOIST
OHE(N)-HW-029	MAN BASKET AND RESCUE CAGE
OHE(N)-HW-033	INDUSTRIAL WATER PUMP
OHE(N)-HW-034	WATER TANKS AND PUMPS
OHE(N)-HW-035	CONCRETE DROP PIPES
OHE(S)-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS AND GATES ETC).
OHE(S)-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
OHE(S)-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
OHE(S)-HW-005	CONCRETE PAVEMENTS
OHE(S)-HW-006	CRANE PAD
OHE(S)-HW-007	SITE OFFICES & AMENITIES
OHE(S)-HW-008	TRAFFIC & SECURITY HUTS
OHE(S)-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
OHE(S)-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
OHE(S)-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
OHE(S)-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
OHE(S)-HW-015	CCTV SECURITY SYSTEM
OHE(S)-HW-020	TIMELAPSE CAMERAS
OHE(S)-HW-021	WATER RETICULATION
OHE(S)-HW-022	FIRE EXTINGUISHERS

12m x 36m office complex STAFF	Each	2
6m x 3m ablutions STAFF	Each	3
6m x 3m change rooms STAFF	Each	2
6m x 3m food truck STAFF & LABOUR	Each	3
12m x 12m crib offices LABOUR	Each	4
12m x 3m ablutions LABOUR	Each	7
12m x 3m change rooms LABOUR	Each	4

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		HD			09/04/22

SCALE: 0 20 40 60 80 100m
SCALE 1:2000 AT ORIGINAL SIZE

Original Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN HD 09.04.22
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO WESTERN SYDNEY AIRPORT
ORCHARD HILLS
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN
FILE No: | SHEET: 1 OF 1 | ©
STATUS: FOR TENDER | EDMS No:
DRG No: ORCHARD HILLS - SITE ESTABLISHMENT PLAN | REV A | VER

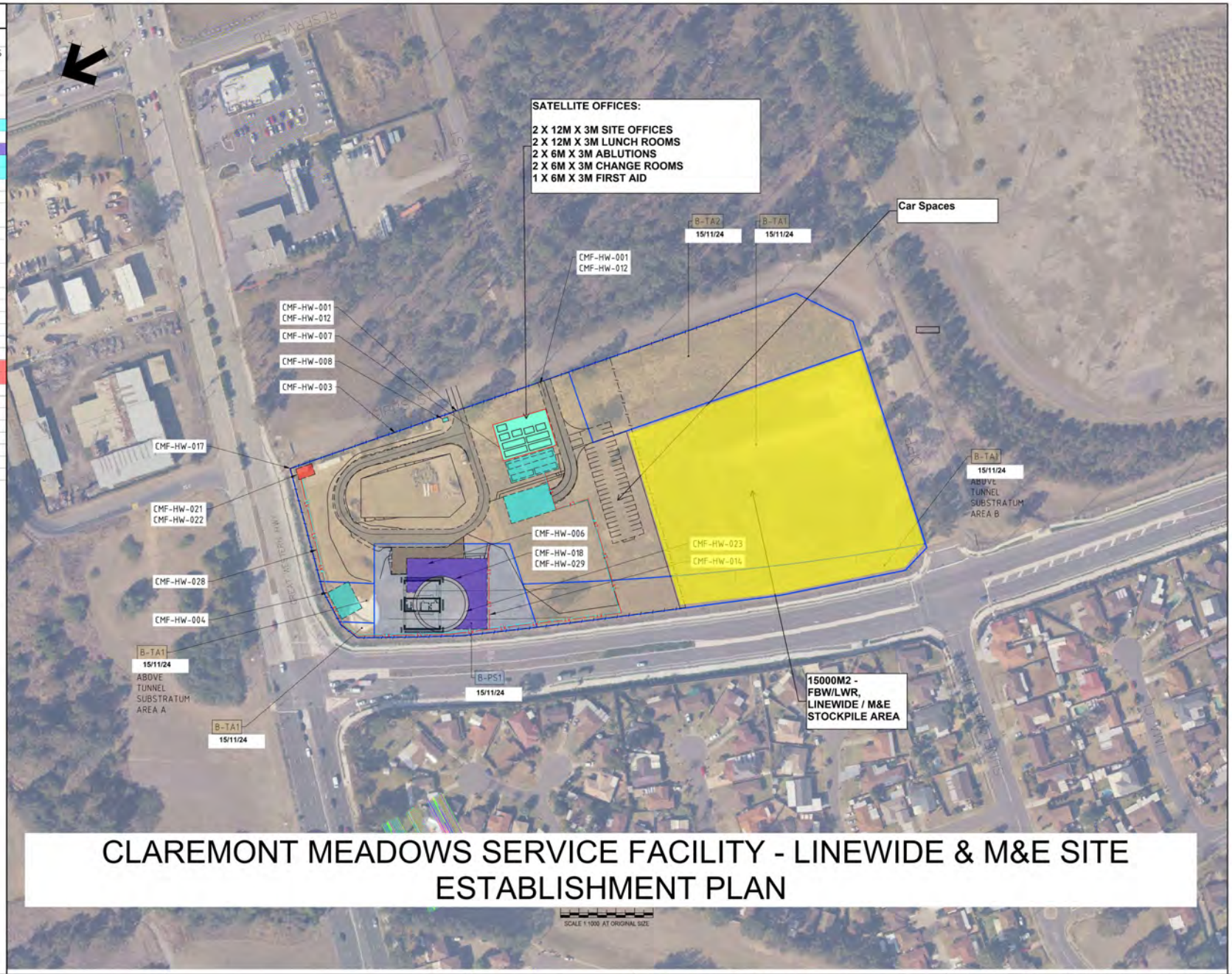
Plot Date & Time: 30/05/22 - 18:12
100mm AT FULL SIZE
File Path: C:\Users\hmanth.dommaraju\OneDrive - Webuild Spa - Projects\Documents\SSTOM 2\Site Access\OFFICIAL LAYOVER\Ryan\ORCHARD HILLS - SITE ESTABLISHMENT PLAN.dwg
Title block Revision: v6.1

CMF – HANDOVER WORKS

WORKS ID	DESCRIPTION
CMF-HW-001	VEHICLE ACCESS (INCLUDING DRIVEWAYS, LAYBACKS LAYBACKS AND GATES ETC).
CMF-HW-002	SAFETY SCREENS (ARC FENCE PANELS OR SIMILAR) AT EXCAVATION OPENINGS
CMF-HW-003	CONSTRUCTION HOARDING AND FENCING (INC NOISE WALLS)
CMF-HW-004	TURKEY'S NEST / WATER TREATMENT PLANT
CMF-HW-005	CONCRETE PAVEMENTS
CMF-HW-006	CRANE PAD
CMF-HW-007	SITE OFFICES & AMENITIES
CMF-HW-008	SITE OFFICES & AMENITIES
CMF-HW-009	SURVEY CONTROL (INC. MARKS & INSTRUMENTS)
CMF-HW-010	ACCESS STAIRS & HOISTS
CMF-HW-011	SERVICE PIPES (INCLUDING DROP PIPES) AND POWER TO BASE OF EXCAVATIONS
CMF-HW-012	RUMBLE GRIDS, WHEELWASH AND WEIGHBRIDGE
CMF-HW-013	TUNNEL ACCESS RAMPS (FROM THE EXCAVATION LEVEL TO TUNNEL INVERT LEVEL)
CMF-HW-014	POWER SUPPLY, CABLING, CONTROLS AND LIGHTING FOR SITE
CMF-HW-015	CCTV SECURITY SYSTEM
CMF-HW-016	TURNSTILE
CMF-HW-017	METERED POTABLE WATER CONNECTION
CMF-HW-018	DEWATER PUMPS
CMF-HW-019	SEWER SERVICE CONNECTION
CMF-HW-020	TIMELAPSE CAMERAS
CMF-HW-021	SUBSTATION
CMF-HW-022	CIRCUIT BREAKER
CMF-HW-023	WATER RETICULATION
CMF-HW-024	FIRE EXTINGUISHERS
CMF-HW-025	MAN DAVIT HOIST
CMF-HW-027	MAN BASKET AND RESCUE CAGE
CMF-HW-028	INDUSTRIAL WATER PUMP
CMF-HW-029	WATER TANKS AND PUMPS
CMF-HW-030	CONCRETE DROP PIPES

LEGEND

- OFFICES AND CARPARK
- LAYDOWN AREA
- CRANE PAD
- WATER TREATMENT PLANT
- PAVEMENT TO BE RETAINED
- EXCAVATION PAD
- ACOUSTIC SHED
- SPOIL LOCATION
- GENERATOR
- WORKSHOP
- HERITAGE AREA
- TBM LOCATION
- SPOIL LOCATION
- SUBSTATION
- ACOUSTIC SHED
- CRANE
- HAUL ROAD
- PROPOSED WATER ABOVE GROUND LINE
- PROPOSED LOW VOLTAGE ABOVE GROUND LINE
- FENCING



CLAREMONT MEADOWS SERVICE FACILITY - LINEWIDE & M&E SITE ESTABLISHMENT PLAN

REV	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
A		H.D.			10.04.22

SCALE: 0 20 40 60 80 100m
SCALE 1:2000 AT ORIGINAL SIZE

Original Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

Parklife Metro

DRAWN HD 10.04.22
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO WESTERN SYDNEY AIRPORT
CLAREMONT MEADOWS SERVICE FACILITY
CONSTUCTION SITE
GENERAL
OVERALL SITE PLAN
FILE No: SHEET 1 OF 1
STATUS: FOR TENDER EDMS No:
DRG No: CLAREMONT MEADOWS SERVICE FACILITY - SITE ESTABLISHMENT DELIVERABLE REV A VER

Appendix E Sydney Metro Environmental Incident and Non-compliance Reporting Procedure

Environmental Incident and Non-compliance Reporting Procedure

SM-17-00000096

Sydney Metro Integrated Management System (IMS)

Applicable to:	Sydney Metro
Document Owner:	Manager, Environment
System Owner:	Executive Director, Safety, Sustainability & Environment
Status:	FINAL
Version:	5.1
Date of issue:	18 February 2019
Review date:	11 February 2020

Table of contents

Figures

Tables

1. Purpose and scope

This procedure documents the process to be used when classifying and reporting Environmental Events.

This procedure applies to Sydney Metro and any contractor Sydney Metro engages to carry out works. Principal Contractors must ensure their processes for managing Environmental Events is consistent with this document. The requirement for consistency is documented in the Construction Environmental Management Framework (Section 3.3(f)) and shall be allocated as a contractual requirement to each delivery partner.

2. Introduction

Sydney Metro is committed to minimising risks to the environment, the rapid identification and rectification of breaches to Environmental Requirements and efficient and effective responses to Environmental Incidents that grows our ability to minimise harm and prevent future re-occurrences.

This procedure defines an approach to classifying Environmental Issues, Incidents and Non-compliances and establishes the immediate, interim and long term actions that are taken in response to Environmental Events.

3. Definitions

All terminology in this Procedure is taken to mean the generally accepted or dictionary definition with the following exceptions:

Term	Definition
Environment	means components of the earth, including: a) land, air and water, and b) any layer of the atmosphere, and c) any organic or inorganic matter and any living organism, and d) human-made or modified structures and areas, and includes interacting natural ecosystems that include components referred to in (a)-(c).
Environmental Event	An occurrence that identifies actual or potential environmental impacts or non-compliances. Events cans include conversations, inspections, incidents, or failures of process.
Environmental Harm	Includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution.
Environmental Incident	An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.
Environmental Issue	An occurrence or set of circumstances where Environmental Harm or Non-compliance could occur if not rectified.
Environmental Non-compliance	A breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans.

Term	Definition
Material Harm to the Environment	harm to the environment is material if: a) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or b) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and c) 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. It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

Terms and jargon specific to this procedure are defined within the Sydney Metro Glossary.

4. Accountabilities

The Executive Director, Safety, Sustainability & Environment is accountable for this Procedure. Accountability includes authorising the document, monitoring its effectiveness and performing a formal document review.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

The Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document if specified in the relevant contracts.

5. Environmental Events

Environmental surveillance data is relied upon to inform Sydney Metro of performance trends, to provide assurance that legislative requirements are being met and indicate where surveillance activities should be directed. In order to rely upon environmental data for this purpose there needs to be a high degree of consistency in the manner by which it is collected and interpreted. Due to the need for consistency, any incident/Non-compliance procedure produced by a delivery partner to Sydney Metro is required to be consistent with the requirements of this document.

The concept of Environmental Events forms a common starting point for understanding what types of occurrences should be managed and reported as Incidents and what should be reported as Non-compliances or Issues. When an Environmental Event occurs a series of questions can be asked to consistently determine what type of event it is. Commonly, Environmental Events lead to three different processes:

1. Reporting of an Environmental Incident;
2. Reporting of an Environmental Non-compliance; or
3. Reporting of an Environmental Issue.

Incidents and Non-compliances are recorded using the Environmental Incident and Non-compliance Report Form (SM ES-FT-403) and Environmental Issues are recorded through environmental inspection reports using the Environmental Inspection Information & Summary Form (SM ES-FT-406). These paper based records are subsequently entered into the Sydney Metro Compliance Register (Section 6.7) which is used to disseminate the data and facilities reporting internally and externally. Note where a Principal Contractor has submitted alternative processes and these have been approved by Sydney Metro they may also be used.

The figure below shows the process by which Environmental Events are classified (Figure 1).

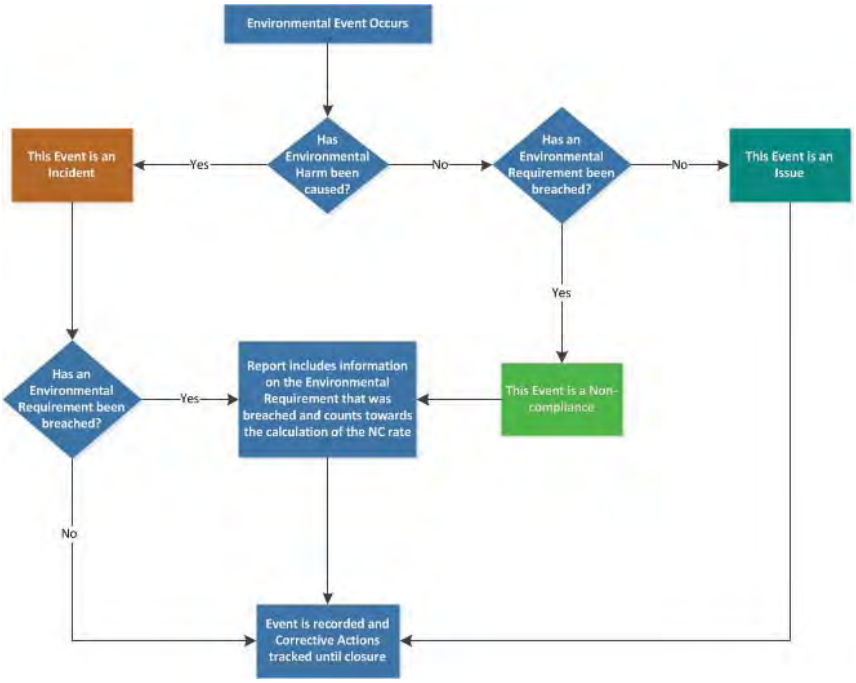


Figure 1: Environmental Event Classification Process

Where Environmental Harm has been caused the event will always be classified as an Environmental Incident regardless of whether one or more Environmental Requirements have been breached. Only when an event occurs without harm being caused to the environment will it be classified as a Non-compliance or Issue. It should be noted that the Incident management process still captures any breaches of Environmental Requirements and these incidents contribute towards the calculation of the NC Rate (Section 7.1).

This flowchart above is intended to be a guide and there may be situations where it is unclear exactly how an Environmental Event should be classified. In these situations a judgement call should be made in consultation with your Manager.

5.1. Worked Example – Classifying Environmental Events

This Section provides a fictitious example of Environmental Events which fall into each of the three different categories. The situations outlined below are provided to explain how event classifications are made. The background for these worked examples is as follows:

Sydney Metro is carrying out works in a newly established site and substantial earthworks are occurring to construct piers for an elevated viaduct. A nearby creek contains a variety of important fish species and the local community are known to use this creek for recreational fishing. The Environmental Impact Statement identified the creek as being at risk of increased sedimentation from dirty water run-off and the Conditions of Approval include a requirement to have a Progressive Erosion and Sediment Control Plan in place. This plan has been produced and indicates that sediment fences must be in place at specific locations to capture dirty water run-off. Regular daily inspections of the sediment controls are carried out by the contractor's Environment Manager and an Independent Environmental Representative has commenced a monthly inspection on this site at 7 am on Thursday morning.

5.1.1. Soil and Water Issue

The Environmental Representative notices a sediment fence has been knocked over in one of the areas indicated as requiring fencing on the ERSED plan. It appears to have occurred recently and there is no record of rainfall in the last few days. During the course of the inspection all other ERSED controls appeared to be in good condition and erected in accordance with the requirements of the Blue Book. In this example no harm has yet been caused and no environmental requirement has been breached so the event is classified as an Environmental Issue which is raised on the inspection report with an action to reinstall the fence.

5.1.2. Soil and Water Non-compliance

Alternatively, the Environmental Representative might have noticed many sediment fences had been knocked down and in some areas an absence of sediment fences where the plan indicates they are required. Despite there being no rain in recent days the Environmental Representative concludes that the requirements of the plan are not being followed and have been breached. The event is raised as non-compliance and actions are set in place to re-enforce the requirements of the ERSED plan for that sites workforce as well as the immediate reinstatement of controls.

5.1.3. Soil and Water Incident

Finally, in a third scenario the Environmental Representative notices many sediment fences are down and some are absent where required by the plan. However, significant rainfall has occurred in recent days and the Environmental Representative determines that it is likely dirty water has escaped through the area into the nearby creek potentially causing harm to the fish population. This event is classified as an Incident by the inspector and immediate notification is undertaken. Similar controls are implemented as described above.

5.2. Notifiable Events

There are a number of Acts and regulations that include a specific requirement to notify a Regulatory Authority. When an Environmental Event triggers one of these notification requirements we then also refer to that event as a Notifiable Event (Table 1).

The Principal Contractor's Environment Manager must determine whether an event is notifiable, and may rely upon advice from Sydney Metro if it is provided.

Table 1: Examples of Notifiable Events

Event type	Legislation		Trigger for Notification
Pollution Incident[1]	POEO Act 1997	Part 5.7	Where Material Harm has occurred contact the EPA Pollution Line as soon as practicable
	POEO (General) Regulation 2009	Section 101	
Land contamination	Contaminated Land Management Act 1997	Section 60(1)	As soon as practicable, after becoming aware of contamination that exceeds the relevant investigation levels in the National Environment Protection Measure, where a person has or will be exposed to the contamination
Discovery of an Aboriginal relic	National Parks & Wildlife Act 1974	Section 89A	Director General of EPA in writing within a reasonable time after becoming aware. Note this is not required for Projects approved under Part 5.2 of the Environmental Planning and Assessment Act (see section 115ZG). Notification and reporting is addressed in the relevant Infrastructure Approval
Discover Aboriginal Remains	Commonwealth Aboriginal & Torres Strait Islanders Heritage Protection Act 1984	Section 20	Commonwealth Minister of the Environment in writing as soon as practicable after becoming aware
Discovery of a relic	Heritage Act 1977	Section 146	Heritage Council in writing within a reasonable time after becoming aware Note -this is not required for Projects approved under Part 5.2 of the Environmental Planning and Assessment Act (see section 115ZG). Notification and reporting is addressed in Infrastructure Approvals

5.3. Event Types

Each Environmental Event is assigned a secondary classification of an Event Type for the purpose of data analysis and general environmental management. They are grouped by areas of environmental management so that targeted auditing, training or awareness initiatives can be initiated in response to emergent trends. Each Event Type is explained in Table 2.

[1] Further information on reporting pollution incidents to EPA is provided in Section 6.6 Environmental Incident/Non-compliance Report

Table 2: Environmental Event Types and their descriptions

Event Type	Applies To:			Description
	Issue	Incident	Non compliance	
Soil and Water	●	●	●	Covers the physical location, chemical composition and ecology of soils and waterways. Any event which changes these compositions is a Soil and Water event. Within this event type all instances of contamination, erosion and sedimentation of waterways is covered.
Flora and Fauna	●	●	●	Covers vegetation and vegetation communities as well as animals and animal habitat. Any event where vegetation is felled or damaged, animals are killed or injured, or habitat is harmed or destroyed is covered.
Waste and Spoil	●	●	●	Covers the management of Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM) including on-site management, and disposal and also the classification and management of Waste materials. **Note:** that the transportation of spoil is covered under Traffic, Transport and Access.
Heritage	●	●	●	Covers the management of known heritage artefacts or sites, and the treatment of unexpected finds, archaeological investigations and other impacts.
Air Quality	●	●	●	Covers the management of emissions of particulate matter, odours, and gasses used as air quality parameters from worksites.
Noise and Vibration	●	●	●	Covers the management of airborne and ground borne noise and vibration and includes hold points on the commencement of any work where Out of Hours Works permits or Construction Noise Impact Statements are required.
Community Stakeholder and Business	●	●	●	Covers the management of Community and Stakeholder requirements and includes complaint response procedure, community management protocols, and the maintenance of information on websites.
Traffic Transport and Access	●	●	●	Covers the management of traffic inside and outside of sites including access points and parking requirements. This event type also covers any requirements in relation to vehicles and vehicle maintenance or the transportation of waste and spoil.
Spills and Leaks	●	●	●	Covers all instances where environmentally sensitive substances are held within a container which has the potential to leak or spill and covers pipes, hoses, fuel tanks, storage tanks and plastic containers. **Note:** Spills and Leaks specifically exclude anything in relation to the transport and deposition of sedimentation.
Management Systems	●	●	●	Covers procedural or administrate processes that are common across all areas. It specifically does not cover procedural or administrate processes which are unique to any of the other event types. For example, not completing a vegetation removal form prior to vegetation clearing is still a Flora and Fauna event. **Note:** A good example of a Management Systems NC would be not reporting an Environmental Incident within required timeframes.

6. Environmental Incident Classification and Management

Sydney Metro has defined an Environmental Incident as:

An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.

Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items, or adverse community impacts.

Planning Approvals and Environment Protection Licences permit some environmental impacts and these are not intended to be captured as Environmental Incidents.

Table 3: Examples of Environmental Incidents

Type	Example Incident
Air Quality	Odour that travels beyond the site boundary
Air Quality	Dust exceeding reasonable levels without active management measures in place
Air Quality	Operation or maintenance of plant in a manner that causes or has likely caused excessive air pollution
Soil and Water	Discharge of water on or off site in a manner that causes or has likely caused water pollution without required approvals.
Noise and Vibration	Noise that travels beyond the site boundary as a result of poorly maintained plant or operation of plant in an inefficient manner
Noise and Vibration	Failure to comply with the approved hours of work
Soil and Water	Where the chemical composition of soil or water has been detrimentally modified by a contaminant leading to potential or actual environmental harm. For example, rainfall causes a flow of water across a site that erodes soil and enters a waterway increasing the total suspended solids of that water body.
Spills and Leaks	Where a substance has leaked from, or spilt from a container that is designed to prevent that substance from escaping into the environment (including bunds, fuels tanks, chemical bottles and other containers). Spills and Leaks specifically exclude anything in relation to the transport and deposition of sedimentation.
Soil and Water	Dispose of waste in a manner that harms or is likely to harm the environment
Flora and Fauna	Harm or “pick” a threatened species, endangered population or endangered ecological community without required approvals
Flora and Fauna	Damage to vegetation, fauna or habitat including watercourses without required approvals
Heritage	Damage, disturbance, destruction or works to heritage items/relics without required approvals
Heritage	Damage, disturbance, or destruction of Aboriginal objects or places without required approvals

6.1. Incident Classification

Environmental Incidents are classified into one of three Classes that are based upon the consequence descriptors for environmental risks in the Sydney Metro Risk Matrix (refer to Sydney Metro Risk Management Standard). Each of these classifications trigger a variety of management actions and/or legislative requirements depending on the severity of the consequence described where Class 3 represents minor consequences and Class 1 represents major consequences.

This matrix is further sub-divided into consequence ratings ranging from C6 (low impact) to C1 (high impact). An incident transitions between a Class 3 to a Class 2 incident once material harm has been caused, and transitions into a Class 1 incident once it is determined that the Environmental Harm caused in large-scale and cannot be remediated (Table 4).

Table 4: Classification System for Environmental Incidents

Class 3			Class 2		Class 1
C6	C5	C4	C3	C2	C1
No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well-contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems

6.1.1. Class 3 Incidents

These Incidents are events which cause Environmental Harm, but do not cause Material Harm to the environment. Normally Class 3 Incidents are not Notifiable Events and therefore a simple notification protocol is adopted whereby Sydney Metro must be notified within 48 hours verbally, and in writing.

In some cases it will be unclear whether Material Harm has been caused in the early stages of Incident Management. If this is the case then the process for Class 2 Incidents is followed (see Section Class 2 Incidents) until it is clear that Material Harm has not been caused.

A formal Incident Investigation report is not required for Class 3 Incidents, however, it is expected that the person responsible for completing the Incident Notification Report makes appropriate enquiries to determine the likely causal factors involved and assigns effective corrective actions.

6.1.2. Class 2 Incidents

These Incidents are events which cause Material Harm to the environment and they always trigger notification of Regulatory Authorities. These Incidents represent events that are far more serious than Class 3 Incidents and therefore strict communication protocols are required to ensure that effective and informed decisions are made (Figure 2).

The Environmental Lead, contract Environment Manager and the Independent Environmental Representative must be notified verbally as soon as possible after the observer becomes aware of a Class 2 Incident.

Class 2 Incidents must be investigated and the investigation must produce an investigation report containing corrective or preventative actions. This investigation report must be provided to Sydney Metro within 7 days of the event unless another timeframe is agreed with the EL.

Despite any arrangements for the submission of investigation reports, an Incident Notification Report must be provided with all available information and submitted to Sydney Metro within 48 hours. It is not expected that initial Incident Notification Reports for Incidents under investigation initially include actions as these will be informed by the findings of the investigation. The report should be updated with actions resulting from the investigation when available.

6.1.3. Class 1 Incidents

Class 1 Environmental Incidents are managed in the same manner as Class 2 Incidents expect where a determination is made by the Chief Executive (or delegate) that a Crisis Management Team should be activated. In this situation the Sydney Metro Crisis Management Implementation Plan is followed.

6.2. Incident Notification

When and Environmental Event occurs which causes Environmental Harm in all cases both verbal and written communication of the incident must be carried out immediately and within 48 hours respectively. For Class 1 and 2 Incidents the notification process shown in Figure 2 must be followed. Written communication of Environmental Incidents is via an Incident Notification Report (Section 6.3).

This process includes specific roles and responsibilities within Sydney Metro and our delivery Partners who are required to take notification actions in response to Incidents.

This notification process has been developed to ensure that crucial information about Incidents is captured early and communicated to specific individuals who can ensure the Environmental Impacts are minimised and efficient and effective responses to the event are implemented.

In particular the Principals Representative and the Environmental Lead for Sydney Metro play a crucial role in the communication of Incidents within Sydney Metro and these roles are explained in more detail below.

6.2.1. Principal's Representative (PR)

Each works package establishes a contractual interface for communication between the contracted party and Sydney Metro. Generally this interface is between the Principal Contractors Project Director and an appointed representative of Sydney Metro called the Principals Representative.

All formal written communications must pass between these two individuals electronically using TeamBinder. The Principals Representative holds certain responsibilities in the Incident management Process outlined in Figure 2.

6.2.2. Environmental Lead (EL)

Where this procedure is applied to a works package an Environmental Lead (EL) will be selected for the relevant works package. The Environmental Lead must possess environmental experience and competency in managing Incidents and be a representative of Sydney Metro for those works. This representative holds specific responsibilities outlined in Figure 2.

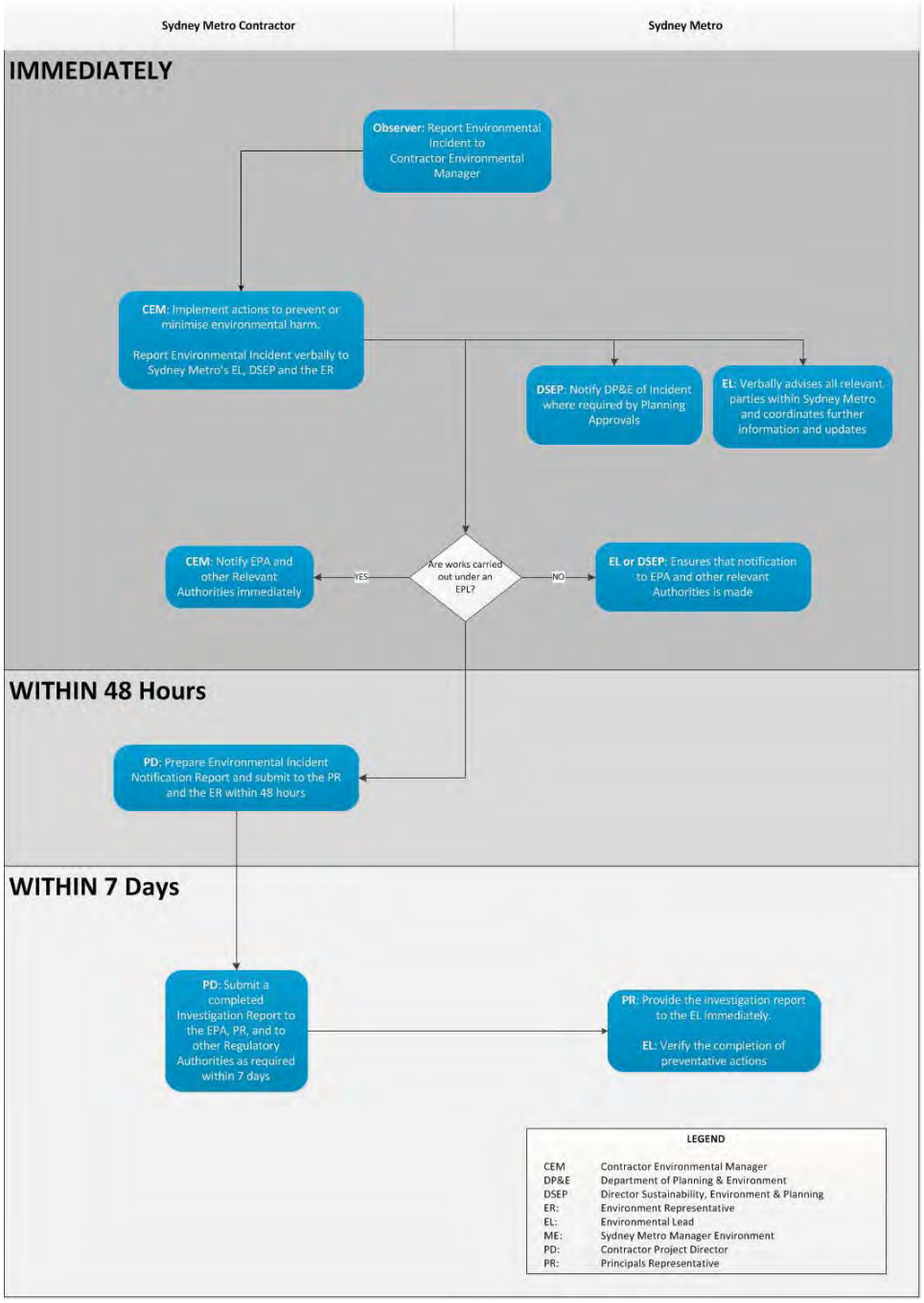


Figure 2: Environment Incident notification process for Class 1 and 2 Incidents

6.3. Incident Notification Reports

For all Incidents an Incident Notification Report must be completed and submitted to Sydney Metro within 48 hours. These reports satisfy the requirement for written communication to Sydney Metro and are completed using the Environmental Incident and Non-compliance Notification Report (SM ES-FT-403) or a similar and consistent form approved by Sydney Metro.

6.4. Incident Investigations

Environmental Incident Investigations must be carried out for all Class 1 and Class 2 Incidents. Investigations may also be requested for any other Environmental Event at the discretion of Sydney Metro. This discretion is likely to be exercised where incidents of a similar nature are occurring repetitively.

When conducting an Environmental Incident investigation, they must:

- Be led by a lead investigator who is suitably independent investigator capable of arriving at objective findings and is experienced in conducting environmental incident investigations;
- Consider the need for legal privilege during the investigation process in consultation with legal counsel;
- Be informed by all available information that is relevant to the investigation;
- Analyse the timeline of events which led up to and followed the occurrence of Environmental Harm including the immediate incident response;
- Be conducted in a manner that is consistent with recognised investigation techniques such as ICAMS;
- Gather and record evidence;
- Seek the input of key stakeholders; and
- Identify Preventative and Corrective actions and document these in the Incident Notification Report.

6.5. Environmental Incidents with Health and Safety Impacts

It is possible that where an Event occurs that causes Environmental Harm, harm is also caused to the health, safety or wellbeing of people. In these situations there will also be a Health and Safety Incident process undertaken which is separate to the process outlined in this document.

While the definition of the Environment covers people under the POEO Act, the management of impacts upon them are carried out using the Health and Safety Incident Management protocols. This is because Health, Safety and Wellbeing requirements are governed by a range of legislation other than the POEO Act and this procedure is not comprehensive in that regard. Sydney Metro has well established processes to manage impacts on people without the need for the Environmental Incident Process to intervene.

Furthermore, where Environmental Events cause harm to both the 'environment' and people it is possible that the root causes for the respective impacts are different. It is also possible that differences in the severity of the impacts trigger inconsistent notification requirements and investigation levels. It is prudent to identify appropriate and effective corrective actions that reduce the risk of impacts to both people and the environment, therefore separate Incident Management Processes are undertaken in these situations.

For more detail on the management of Health and Safety Incidents please refer to the Health & Safety Incident Reporting & Investigation Standard (SM-17-00000040).

6.6. Reporting Pollution Incidents to Relevant Authorities

If an Incident or Non-compliance is a Notifiable Event, then a report must be provided to the relevant Regulatory Authority within the timeframe(s) specified by the relevant legislation. Pollution Incidents which are causing or threatening Material Harm to the environment must be reported to each of the following authorities immediately after project personnel become aware of the Incident, as required by Section 148 of the POEO Act 1997. The contact numbers for these authorities are listed in Table 5.

Table 5: Contact details for Relevant Authorities

Type	Example incident
EPA Environment Line	131 555
Local Authority	Local Council (specific to area)
Ministry of Health	Public Health Unit (refer to http://www.health.nsw.gov.au/Pages/default.aspx to confirm local area contact details)
SafeWork NSW	131 050 or contact@safework.nsw.gov.au
Fire and Rescue NSW	000

Relevant information required to be given to EPA when making a notification is specified in Section 150 of the POEO Act 1997 as follows:

- Time, date, nature, duration and location of the incident;
- Location of the place where pollution is occurring or is likely to occur;
- Nature, the estimated quantity or volume and the concentration of any pollutants involved;
- Circumstances in which the Incident occurred (including the cause of the Incident, if known);
- Action taken or proposed to be taken to deal with the Incident and any resulting pollution or threatened pollution; and
- Other information prescribed by the regulations.

All relevant information known at the time of making the notification must be reported. If the information required by (c), (d) or (e) above is not known at the time of initial notification but becomes known afterwards, it must be reported to each authority immediately after it

becomes known. Verbal notification must be followed by notification in writing within seven days of the date on which the Incident occurred.

Pollution Incidents are not required to be reported if the Incident has already come to the attention of the EPA or the Incident involves only the emission of an odour.

Failure to report a pollution Incident as required by the POEO Act 1997 is an offence.

Where any work or activity is regulated by an Environment Protection License (EPL), notification of a pollution Incident to the EPA should be made by the licensee. Thus, where the contractor holds the EPL for the project, notification to EPA shall be made by the contractor.

For any work or activity that is not regulated by an EPL, notification of pollution Incidents to EPA shall be made by Sydney Metro, unless the contractor is instructed otherwise by Sydney Metro. This includes pollution Incidents that occur as a result of pre-construction activities which may be undertaken prior to an EPL being required for a project. Pre-construction activities are determined by the Planning Approval and may include, for example, geotechnical investigations or surveys.

Where the Environmental Representative determines there to have been a significant off-site impact on people or the biophysical environment, the program Director Sustainability Environment and Planning will notify the Secretary of the Department of Environment and Planning within 48 hours in accordance with Project Infrastructure Approval Conditions. This notification will be followed by a full written report within seven days of the date on which the incident occurred.

6.6.1. Maritime Related Incident Notification and Reporting

Marine Incidents involving vessels and personnel on board vessels must be reported to the Australian Maritime Safety Authority in accordance with the guidance published on their website at:

- Australian Maritime Safety Authority Incident Reporting; and
- Reporting obligations of owners and masters of domestic commercial vessels.

6.7. Environmental Compliance Register

The Environmental Compliance Register is used to manage the information associated with reporting of Environmental Events. This register is maintained by the Manager Environment and may be used by a variety of individuals to input data. For access to the register or information on its use contact the Manager Environment.

This register analyses the data it contains and produces environmental compliance statistics that are used to meet a range of reporting and environmental management requirements.

7. Environmental Non-compliance

An Environmental Non-compliance is a breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans. It is important to note that regardless of whether an event is classified as a Non-compliance or an Incident the process behind managing the event remains the same, with the following exceptions:

- Non-compliances are not notifiable to Regulatory Authorities under the POEO Act;
- Non-compliances are reported to have occurred on the day the breach was raised as opposed to the date when the requirement was breached (this is to preserve historical reporting and analysis – see Section 7.1);
- Non-compliances are not divided into severity classes (Section 5.2);
- Non-compliances do not have the potential to trigger crisis or emergency management processes; and
- There is an informal notification process in the immediate timeframe following a Non-compliance being raised.

When an Environmental Event occurs that causes Environmental Harm and also breaches one or more Environmental Requirements, then an Incident Notification Report will be created which records what requirements were breached.

If a Non-compliance is identified then it must be raised using the Environmental Incident and Non-compliance Report Form within 48 hours by the party responsible for the breach.

7.1. Non-compliance Rate

A key environmental performance statistic used by Sydney Metro is the Non-compliance Rate. This statistic provides a standardised way of comparing the performance of different projects or contractors. The NC Rate is calculated using the following formula:

$$= \left(\frac{NCs + Incidents\ with\ breaches\ raised\ in\ month) + (Open\ NCs + Open\ Incidents\ with\ breaches\ from\ previous\ months)}{Total\ Number\ of\ Ongoing\ Requirements} \right) X\ 100$$

Each month a count of the number of NCs raised, and Incident raised where Environmental Requirements have also been breached is counted. Added to this number is the number of these events which were raised in previous months that still held an Open status in the current reporting period. Non-compliance and incident Events are considered Open if any of the associated Actions are Open. The total is divided by the number of Environmental Requirements which are actively being complied with (Ongoing Requirements) and a multiplying factor of 100 is applied.

8. Corrective and Preventative Actions

Whenever an Environmental Event is raised actions will be assigned to the event irrespective of whether it is an Issue, Incident or Non-compliance. These actions will generally be Corrective Actions which are implemented to eliminate the cause of the Incident, Non-compliance or Issue and can be thought of as reactive measures in response to the Environmental Event.

Preventative Actions may also be assigned to prevent the occurrence of an Incident, Non-compliance or Issue and can be considered pro-active measures which may be recommended following a detailed investigation of the event.

Actions must:

- Limit impacts as far as is reasonably practicable;
- eliminate risk where practicable;
- where is it not practicable to eliminate the risk, follow the hierarchy of controls;
- address root causes and contributing factors; and
- be prioritised based on risk.

The Executive Director, Safety Sustainability & Environment must ensure there are systems in place to:

- monitor corrective action status;
- escalate issues to the executive where progress on a corrective action is inadequate; and
- retain all corrective action responses for recording purposes.

8.1. Action Status

Actions are allocated to a person who will take accountability for ensuring it is carried out within a timely manner and completed by the due date.

Actions are either closed immediately if the Action has already been carried out and verified by Sydney Metro, or are created with an open status. The Action will remain in an open state until such a time as Sydney Metro verifies that the responsible person has completed the Action in a satisfactory manner. Until all actions associated with an Incident, Non-compliance or Issue are closed the original Environmental Event is considered to be open as well. This is relevant when calculating the NC Rate as open Non-compliances and Incidents contribute toward the calculation of this statistic.

Verification is determined by the Environmental Lead by sighting evidence of the Actions implementation.

9. Related Documents and References

Related Documents and References
• Environmental & Sustainability Management Manual • Risk Management Standard • Health & Safety Incident Reporting & Investigation Standard (SM-17-00000040) • Crisis Management Implementation Plan • Environmental Incident and Non-compliance Notification Report • Environmental Inspection Information & Summary • Sydney Metro Glossary

10. Superseded Documents

Superseded Documents
There are no documents superseded as a result of this document.

11. Document History

Version	Date of approval	Notes
1.0	31 March 2015	New document
2.0	7 July 2016	IMS Review
3.0	7 April 2017	IMS Review
4.0	23 November 2018	IMS Review
5.0	11 February 2019	IMS Review
5.1	18 February 2019	Minor correction to formula

Appendix F Indicative Ancillary Facility Site Layouts

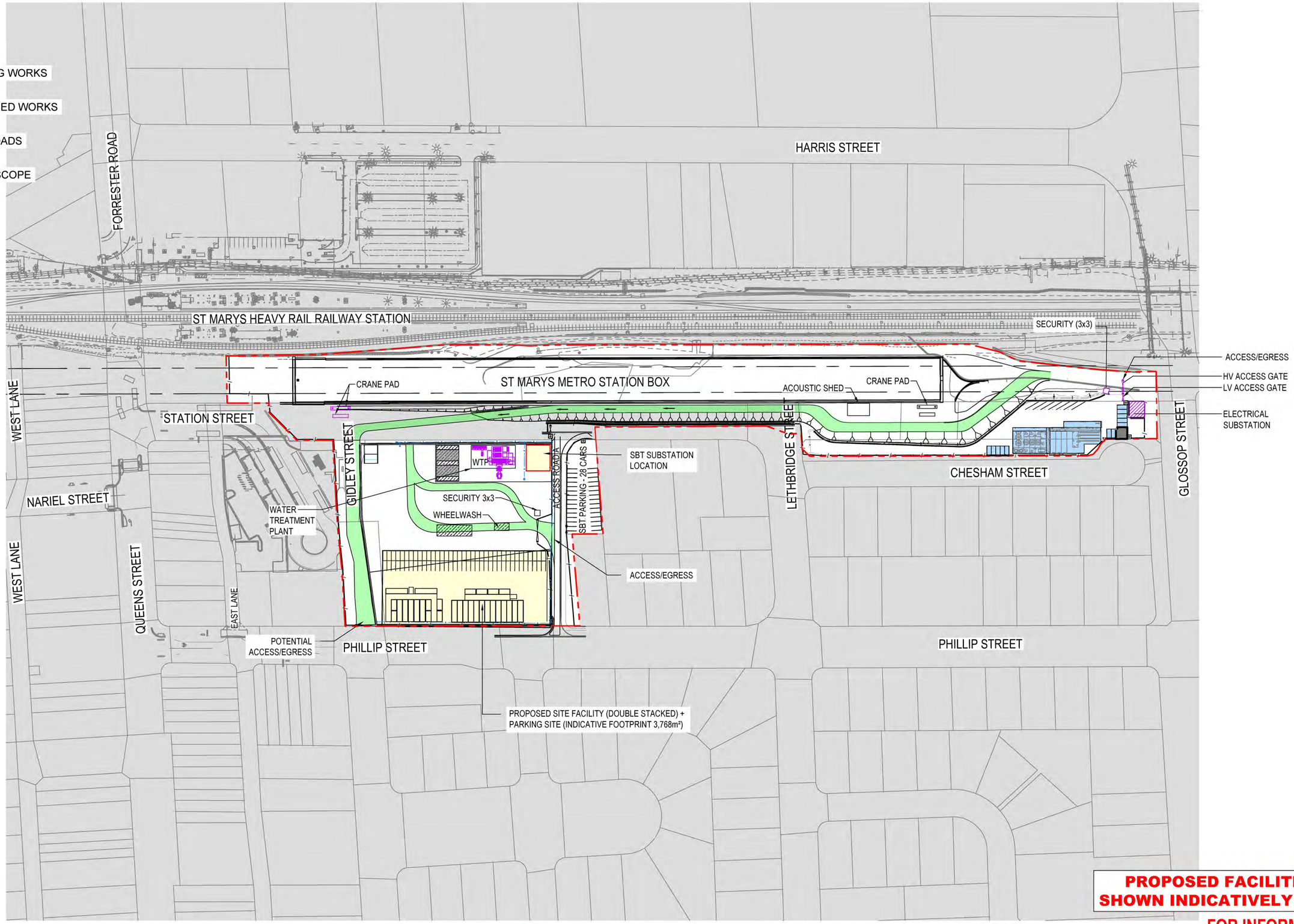
N

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS

NOT IN SCOPE



0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

ST MARYS

SITE ESTABLISHMENT PLAN

STAGE 1: INITIAL HANDOVER 28/09/2023

VERSION: 2

FILE No: | SHEET: OF | ©

STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-STM-MB-M2D-STG1V2 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

PROPOSED WORKS

MAIN ROADS

PROPOSED PARKING SITE (~740m²)

ACCESS/EGRESS

TAKE OVER OF EXISTING FACILITIES

ACCESS/EGRESS

SUBSTATION STRUCTURE CIVIL PACKAGE FOR REFER TO ROBERT BIRD

OFFICE

5.5m

ACCESS/EGRESS

PLANT WATER TREATMENT

WORKSHOP

HARDSTAND

SPOIL BIN

SHAFT

CRANE PAD

HOARDING TRAFFIC BARRIER AND NOISE APPROXIMATE

DOCUMENTATION REFER TO SHAFT PACKAGE FOR

TEMPORARY FENCING

0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

Plot Date & Time:

100mm AT FULL SIZE

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:500

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO | Parklife Metro D&C

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

CLAREMONT MEADOWS

SITE ESTABLISHMENT PLAN

INITIAL HANDOVER 15/11/2024

VERSION:

FILE No: SHEET: OF ©

STATUS: EDMS No:

DRG No: SMWSASSM-PLD-CMF-MB-M2D-0001V1 REV VER

A1	Co-ordinate System:	Height Datum:	This sheet may be prepared using colour and may be incomplete if copied	NOTE: Do not scale from this drawing.

N

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS

FUTURE SCOPE

NOT IN SCOPE

PROPOSED SITE FACILITIES (DOUBLE STACKED) + PARKING SITE (~3,600m²)

ACCESS/EGRESS

EXISTING SITE WAREHOUSE (784.74m²)

EXISTING ACOUSTIC SPOIL SHED TO REMAIN

WTP PRE SETTLEMENT POND

WATER TANKS

2 x WTP

SUB STATION (20x15)

HEAVY VEHICLE SITE ACCESS

ACCESS/ EGRESS

SECURITY (3x3)

SWITCHING STATION

EXISTING DRIVEWAY TO BE RETAINED FOR LIGHT VEHICLE SITE ACCESS

SECURITY (3X3)

AMBULANCE PARKING

OFFICES (27x12)

OFFICES (24x12)

WHEEL WASH

ACCESS/EGRESS

WHEEL WASH

KENT ROAD

72

50

ORCHARD HILLS METRO STATION BOX

WHEEL WASH

SPOIL AREA

ACCESS/EGRESS

ELECTRICAL SUBSTATION

BATCH PLANT OFFICE/PARKING (~256m²)

WATER TREATMENT PLANT (~230m²)

49

69

58

140

ACCESS/EGRESS

LANSDOWNE ROAD

PROPOSED FUTURE SIEMENS UNCOVERED LAY DOWN AREA (~2,000m²)

BATCH PLANT (~9,908m²)

PROPOSED SIEMENS PODS (x4)

PROPOSED SIEMENS WAREHOUSE (~2,850m²)

SAMUEL

0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1500

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

ORCHARD HILLS

SITE ESTABLISHMENT PLAN

STAGE: 1 INITIAL HANDOVER 11/08/2023

VERSION: 2

FILE No: | SHEET: OF | ©

STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-OHE-MB-M2D-STG1V2 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS

FUTURE SCOPE

PROPOSED PARKING AREA (~2,100m²)

WATER TREATMENT PLANT (~230m²)

PROPOSED SIEMENS WAREHOUSE (~1,500m²)

PROPOSED PARKING AREA (~1,000m²)

PROPOSED SITE FACILITY (~3,639m²)

PROPOSED LAYDOWN (~17,000m²)

GATE

ACCESS/EGRESS

PATONS LANE

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1250

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

SITE MAINTENANCE FACILITY

SITE ESTABLISHMENT PLAN

STAGE: 1 INITIAL HANDOVER 08/08/2023

VERSION: 2

FILE No: | SHEET: OF | ©

STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-SMF-MB-M2D-STG1V2 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO - WSA - SSTOM

LUDDENHAM STATION
SITE ESTABLISHMENT PLAN
STAGE: 1 INITIAL HANDOVER 02/10/2023
VERSION: 2

FILE No: | SHEET: OF | ©
STATUS: | EDMS No:
DRG No: SMWSASSM-PLD-LDN-MB-M2D-STG1V2 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

AIRPORT BUSINESS
PARK STATION

BUND BD19

BUND BD20

BADGERY'S CREEK ROAD

PROPOSED FACILITIES
SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:2000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO - WSA - SSTOM
AIRPORT BUSINESS PARK
SITE ESTABLISHMENT PLAN
OVERALL SITE PLAN

FILE No: | SHEET: OF | ©
STATUS: | EDMS No:
DRG No: SMWSASSM-PLD-ABP-MB-M2D-STG1OA | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS

FUTURE SCOPE

NOT IN SCOPE

1x50T & 1x20T OVERHEAD BRIDGE CRANE

BUND BD10

BUND BD20

COOLING PLANT

AIR COMPRESSORS AND RECEIVER

SIG

COMM

OHW

TPS

PROPOSED FUTURE SIEMENS UNCOVERED FENCED LAY DOWN AREA (~5,200M²)

PROPOSED SIEMENS PODS (x4)

EXISTING SITE FACILITY (~3,180m²)

EXISTING PARKING SITE (~5,600m²)

18

44

52

25

60

2 x 15l/s WATER TREATMENT PLANTS WITH BUNDED SLABS (1395m²)

WEDGE PIT (28x14)

ACCESS/EGRESS

ACCESS/EGRESS

0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE 1:1000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

TA O DESIGN COMPA N Y/ CONTRACTOR:

DRA WN

DESIGNED

DRG CHECK

DESIGN CHECK

A PPROVED

SYDNEY METRO - WSA - SSTOM

AIRPORT BUSINESS PARK

SITE ESTABLISHMENT PLAN

STAGE 1: INITIAL HANDOVER 11/08/2023

VERSION: 2

FILE No: | SHEET: OF | ©

S TATUS: | EDMS No:

DRG No: SMWSASSM-PLD-ABP-MB-M2D-S1V201 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

PROPOSED WORKS

MAIN ROADS

FUTURE SCOPE

NOT IN SCOPE

AEW PEDESTRIAN BRIDGE 4 INTERFACE
12/04/23 - 06/12/23 (PROGRAM 20221129)

WATER TREATMENT
PLANT (~230m²)

BUND BD20

PROPOSED SITE FACILITY (DOUBLE STACKED)
+ PARKING SITE (~2,366m²)

BATCH PLANT (~15,800m²)

ACCESS/EGRESS

BADGERYS CREEK ROAD

0 10 20 30 40 50
SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

SYDNEY METRO - WSA - SSTOM
AIRPORT BUSINESS PARK
SITE ESTABLISHMENT PLAN
STAGE 1: INITIAL HANDOVER 11/08/2023

FILE No: | SHEET: OF | ©
STATUS: | EDMS No:
DRG No: SMWSASSM-PLD-ABP-MB-M2D-STG102 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time:

N

SUBSTATION ELECTRICAL

WATER TREATMENT PLANT

ACCESS/EGRESS

EXISTING PARKING AREA (~4,343m²)

EXISTING SITE FACILITY (~3,800m²)

CAR PARK 161 SPACES

CAR PARK 69 SPACES

SITE OFFICES (3798m2)

ACCESS/EGRESS

EXISTING PARKING AREA (~2,351m²)

PROPOSED PARKING AREA (~256m²)

SUBSTATIONS ELECTRICAL

WATER TREATMENT PLANT (~230m²)

PROPOSED SITE FACILITY (DOUBLE STACKED) (~1,432m²)

DOCUMENTATION PACKAGE FOR AIRPORT TERMINAL REFER TO PERMANENT STRUCTURE

SUBSTATIONS ELECTRICAL

TOWERS COOLING

TANK

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS

FUTURE WORKS

NOT IN SCOPE

0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

100mm AT FULL SIZE Plot Date & Time:

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1000

WORK IN PROGRESS

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

CLIENT: NSW GOVERNMENT | sydney METRO | Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

AIRPORT TERMINAL

SITE ESTABLISHMENT PLAN

STAGE 1: INITIAL HANDOVER 26/01/2023

VERSION: 2

FILE No: | SHEET: OF | ©

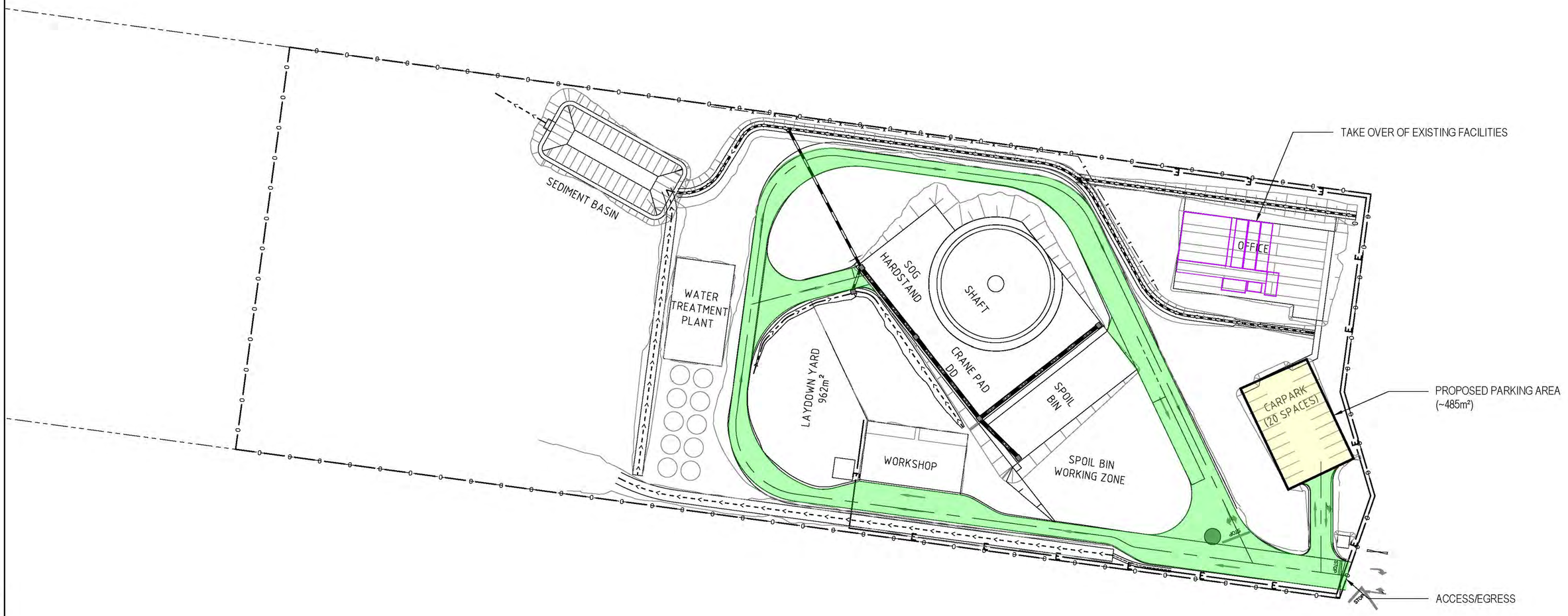
STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-ATL-MB-M2D-STG1V2 | REV | VER

N

PROPOSED WORKS

MAIN ROADS



0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:500

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

BRINGELLY

SITE ESTABLISHMENT PLAN

INITIAL HANDOVER 12/01/2025

FILE No: | SHEET: OF | ©

STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-BNF-MB-M2D-000001 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

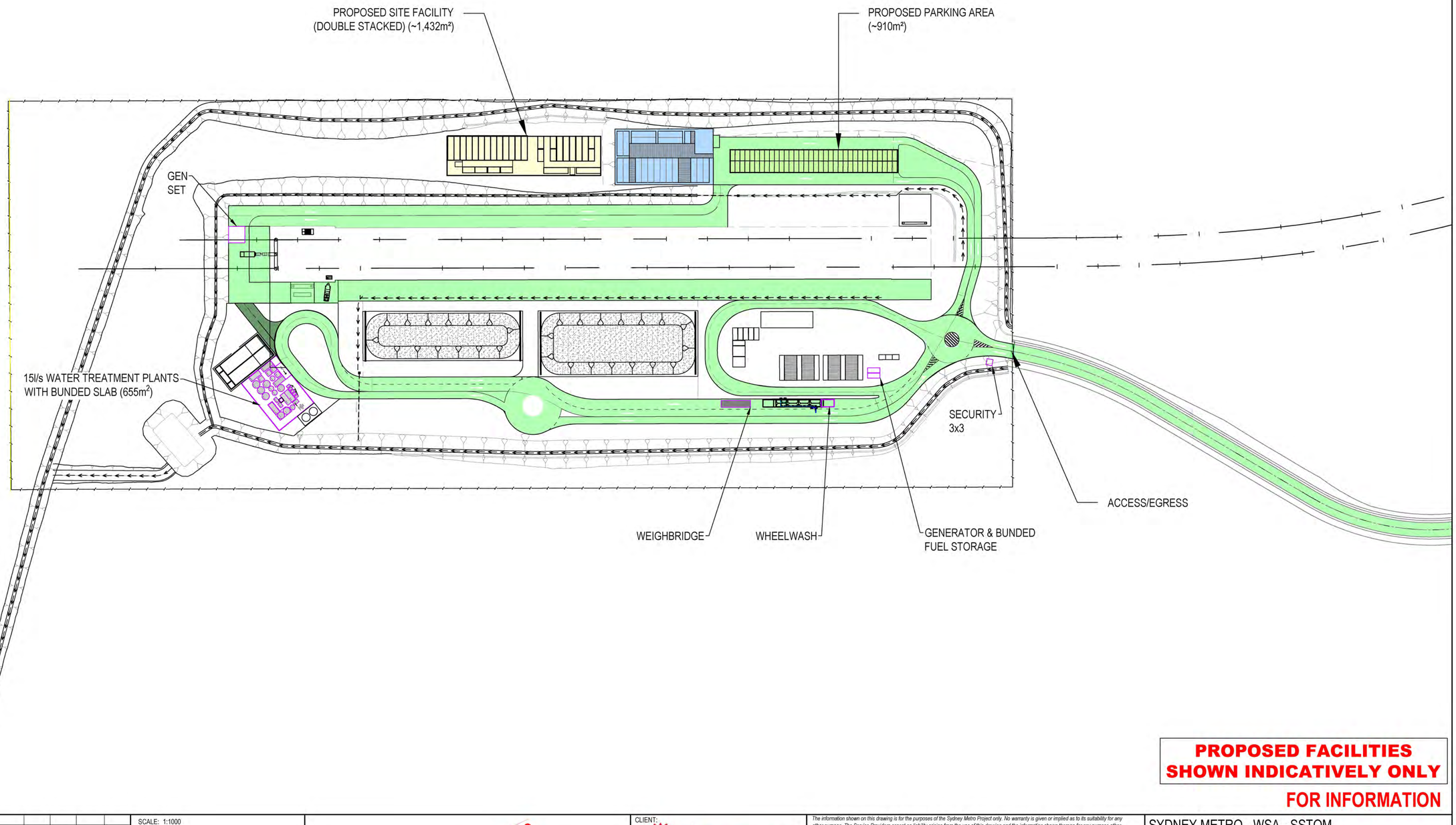
100mm AT FULL SIZE Plot Date & Time:

N

EXISTING WORKS

PROPOSED WORKS

MAIN ROADS



0 10 20 30 40 50

SCALE

PROPOSED FACILITIES SHOWN INDICATIVELY ONLY

FOR INFORMATION

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date

SCALE: 1:1000

WORK IN PROGRESS

CLIENT: NSW GOVERNMENT | sydney METRO

Parklife Metro D&C

TAO DESIGN COMPANY/CONTRACTOR:

DRAWN

DESIGNED

DRG CHECK

DESIGN CHECK

APPROVED

SYDNEY METRO - WSA - SSTOM

AEROTROPOLIS

SITE ESTABLISHMENT PLAN

STAGE 1: INITIAL HANDOVER 12/10/2023

VERSION: 2

FILE No: | SHEET: OF | ©

STATUS: | EDMS No:

DRG No: SMWSASSM-PLD-AEC-MB-M2D-STG1V2 | REV | VER

A1 | Co-ordinate System: | Height Datum: | This sheet may be prepared using colour and may be incomplete if copied | NOTE: Do not scale from this drawing.

100mm AT FULL SIZE Plot Date & Time: