

31 January 2025

Mr Mark Smith  
Program Manager - Capital Works  
Macquarie Point Development Corporation  
41 Evans Street, Hobart, Tasmania, 7000

Dear Mark,

## **Macquarie Point Precinct Plan - Tasmanian Planning Commission Request for Information**

### **1.0 Introduction and Background**

The Macquarie Point Development Corporation (the Corporation) has engaged the services of AECOM Australia Pty Ltd (AECOM) in the role of Project Remediation Consultant to assist with the development, implementation and ongoing oversight of a remediation strategy for the Macquarie Point site in Hobart, Tasmania (the Site). AECOM has acted in this role since 2015.

The Tasmanian Government Department of State Growth announced in September 2022 that the Site is the preferred location for a mixed-use precinct, including a multipurpose stadium. The proposed development of a multipurpose stadium at the Site was classified as a Project of State Significance (PoSS) by the Governor of Tasmania on 16 October 2024, and is subject to an integrated assessment process by the Tasmanian Planning Commission (the Commission) under the *State Policies and Projects Act 1993*.

As part of the assessment process, the Commission has prepared *Guidelines – Macquarie Point Multipurpose Stadium Project of State Significance* (the Guidelines) (TPC, 2024a), which were issued as final on 16 February 2024. The Corporation submitted the *Macquarie Point Multipurpose Stadium – Project of State Significance* (the Submission) (MPDC, 2024) to the Commission on 17 September 2024, which provided a background of the proposed development and responses to the Guidelines, including relevant supporting reports, in order to inform the Commission's integrated assessment of the proposed development. On 19 November 2024, the Commission issued a Request for Information (RFI) (TPC, 2024b) to the Corporation relating to the requirements of the Guidelines.

As part of AECOM's role as Project Remediation Consultant, AECOM has conducted environmental remediation and assessment related to the proposed development of the Site, and provided ongoing advice to the Corporation on the environmental status of the Site and where it may intersect with other development matters. The following AECOM reports related to the environmental condition of the Site were included in the Submission:

- Appendix V – *Site Remediation Strategy Update 2024* (AECOM, 2024a)
- Appendix KK – *Preliminary Results of Acid Sulphate Investigation* (AECOM, 2024b)

At the Corporation's request, AECOM has prepared this letter to support the response to the RFI.

### **2.0 Responses to RFI Comments**

Additional information on matters raised in the RFI are provided on **Table 1** below. The reference IDs were provided by the Corporation and reference the RFI by section, item, and bullet point. For example, "B.7.4" refers to the following part of the RFI:

- Section B – Contents of the Reports in Response to the Guidelines
- Item 7 – Environmental Quality and Hazards
- Information Request 4– *Further analysis of tolerable risks to be considered at a detailed design stage, and detail of mitigating solutions, in relation to hazards is sought.*

As part of consideration of the Submission, the Commission has consulted with agencies identified to have an interest in the project, who have had the opportunity to supply stakeholder submissions which have informed the RFI. The Corporation has provided AECOM with additional information from stakeholder submissions which, based on discussion between the Corporation and the Commission, are considered by the Corporation to be relevant to the matters raised in the RFI.

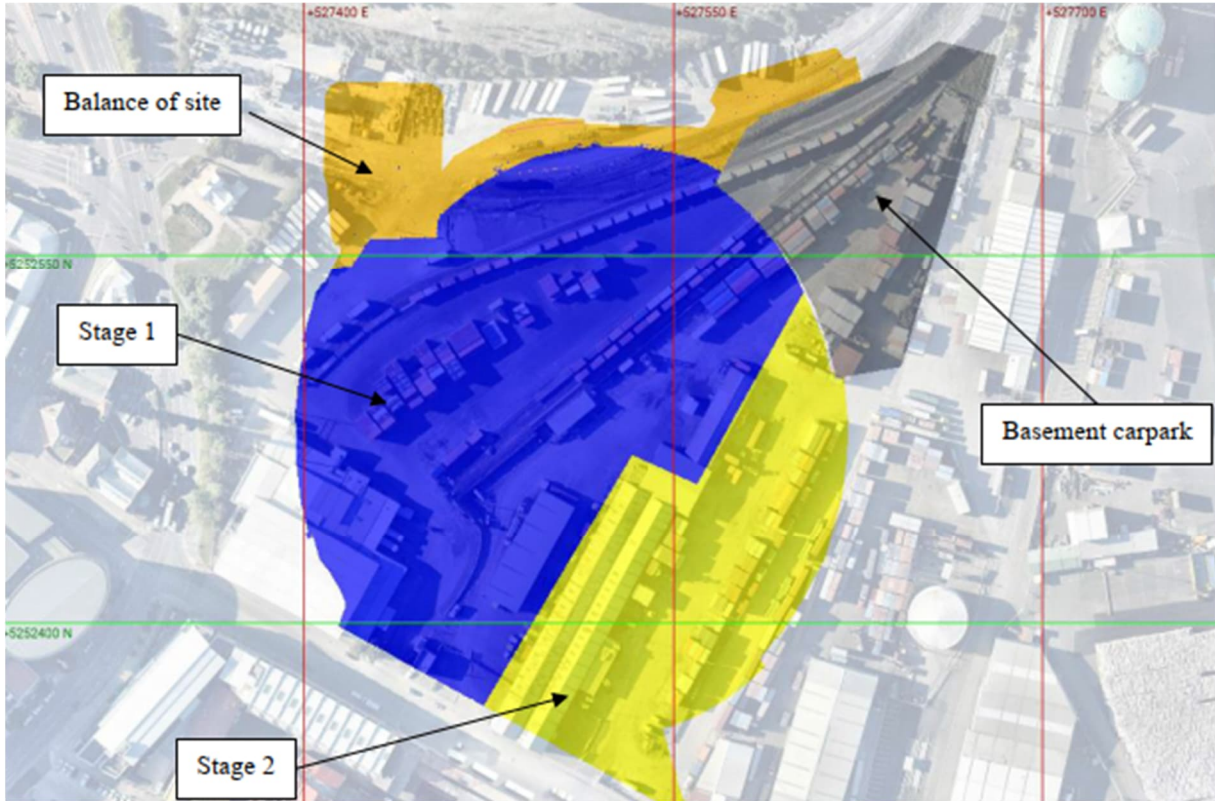
Table 1 RFI Additional Information - AECOM (Environment)

| Reference | Matters Raised                                                                                                                                         | Notes from Stakeholder Submission(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Response        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| B.7.4     | Further analysis of tolerable risks to be considered at a detailed design stage, and detail of mitigating solutions, in relation to hazards is sought. | <p><u>EPA, 2024, Page 6</u></p> <p>Feasible contaminated land-related hazards that may adversely affect site users include:</p> <ul style="list-style-type: none"><li>• vapour accumulation in basement compartments or ground level rooms of structures leading to asphyxiation or increase in cancer risk</li><li>• contaminated groundwater contact by construction workers or operational staff causing potential exposure to metals, cyanide, hydrocarbons or volatile organic compounds, all have which have been identified as contaminants of concern on the site,</li><li>• uncontrolled discharge of contaminated groundwater from the site resulting in adverse environmental or public health outcomes,</li><li>• contaminated soil exposure to construction workers and site users resulting in adverse health outcomes.</li></ul> | <p>The potential environmental risks for stadium design and operation, as noted in the EPA submission, have been identified and mitigation / management measures presented as part of previous investigations summarised in the <i>Site Remediation Strategy</i> (the SRS) (AECOM, 2024a), included as <b>Appendix V</b> of the Submission, and in the <i>Site Environment Management Plan</i> (the SEMP) (AECOM, 2011), included as <b>Appendix LL</b> of the Submission. Although parts of the assessments which informed these measures were conducted prior to announcement of the multipurpose stadium, they are still considered relevant as discussed in the response provided for <b>Reference B.8.1</b> below.</p> <p>Remediation criteria for the identification of soil and groundwater were developed in <i>Derivation of Remediation Criteria, Macquarie Point Development Project</i> (AECOM, 2016), with reference to the relevant Australia human health risk assessment guidance, namely:</p> <ul style="list-style-type: none"><li>• <i>Environmental Health Risk Assessment: Guidelines for Assessing Human Health Risks from Environmental Hazards</i> (enHealth, 2012)</li><li>• The <i>National Environment protection (Assessment of Site Contamination) Measure</i> ASC NEPM, 2013:<ul style="list-style-type: none"><li>- Schedule B4, Guideline on Site-Specific Health Risk Assessment Methodology</li><li>- Schedule B7, Guideline on Derivation of Health-Based Investigation Levels.</li></ul></li></ul> <p>The updated proposed development, including the multipurpose stadium, are similar to the previously assessed generic Commercial / Light Industrial scenarios or Open Space scenarios. As the assumptions and controls required by the remediation criteria are to be maintained (as listed in the SRS), or would require independent Environmental Auditor review and endorsement to modify, the previous assessments are considered suitable for assessment of risks to the updated development plan.</p> <p>More specifically, and with reference to the contaminated land-related hazards listed in the EPA stakeholder submission:</p> <ul style="list-style-type: none"><li>• Vapour accumulation or intrusion under generic residential, commercial, open space and intrusive maintenance work scenarios has been considered for all Site areas previously assessed, and was incorporated into the Site Specific Remediation Criteria (AECOM, 2016), and in the Tier 1 assessment criteria adopted for each Detailed Site Investigation conducted.</li></ul> <p>Potential vapour intrusion risks previously identified were summarised in <b>Section 5.4</b> of the SRS, and previously identified mitigations consisted of:</p> <ul style="list-style-type: none"><li>- Limitations on land use or subsurface development.</li><li>- Incorporation of ventilation requirements or vapour barriers to a level defined by relevant standards.</li></ul> <p>For example, to mitigate potential vapour risk in the previously proposed medium to high density residential development with underground carpark in the central part of the Site, mitigations included requirement for ground floor use to be commercial, and for the underground carpark to be ventilated to Building Code of Australia for exhaust fumes, which was assessed as a suitable level for potential vapour intrusion based on environmental data collected in this area. In other areas of the Site, for example the Precinct North, it was required that building design include mitigation features sufficient to meet Characteristic Situation (CS) 3 – Moderate Risk, as defined by the <i>Assessment and Management of Hazardous Ground Gases, Contaminated Land Guidelines</i> (EPA NSW, 2020).</p> <p>Identified data gaps which may require modification to mitigations are:</p> <ul style="list-style-type: none"><li>- Vapour intrusion related to the location of the former Hobart gasworks in the south-west portion of the Site. However, it is considered unlikely that impacts which would prevent stadium construction are present, or that any mitigation which would be required would be significantly different to other identified requirements, as:<ul style="list-style-type: none"><li>▪ Remediation of gasworks impacts was conducted in 2024 and removed or solidified known potential sources of impact within the former gasworks area, noting that further investigation of potential vapours are planned.</li><li>▪ Previous sub-slab vapour intrusion investigations of buildings in this area have not detected an unacceptable risk of vapour intrusion.</li><li>▪ The proposed future use of the area is largely Open Space, with a small portion of the stadium footprint over the former gasworks area. Vapour intrusion in Open Space would require a level of contamination which has not been detected in soil samples from the area, and if additional mitigations are identified as required, a relatively small area is considered to be potentially affected.</li></ul></li><li>- Previous assessments have not considered construction and installation of basement structures below the water table, which is proposed for the underground carpark in the north-east portion of the Site. However, the preliminary costing for this structure include tanking as mitigation. During detailed design, suitable</li></ul> |

| Reference | Matters Raised                                                                                                                                                                                                                                                                                                                                                                             | Notes from Stakeholder Submission(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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|           |                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>construction and testing standards will be included to provide protection against vapour and groundwater infiltration by tanking.</p> <ul style="list-style-type: none"> <li>Significant data relating to groundwater contamination has been collected, with historic information dating to 1993 available, and the most recent groundwater assessment at the Site was conducted in December 2024. The SEMP currently only recommends impervious gloves (i.e., nitrile gloves) in addition to standard personal protective equipment (PPE) (neck to toe high visibility clothing, steel-capped boots, safety glasses, and hard hats for works near plant material) for activities where personnel may come into contact with groundwater. A preliminary Construction Environment Management Plan (CEMP) (Zancon, 2024), included as <b>Appendix AA</b> of the Submission, provides high level environmental procedures for odour control, air monitoring, and water quality management. A more detailed CEMP would be prepared as part of detailed design/construction planning by the party engaged for construction and contain specific details, either in the CEMP or as specific Safe Work Method Statements (SWMS) or similar documentation as required by Section 4.3 of the SEMP. The proposed design is above the measured groundwater depth for the most part and no contact with groundwater by operational staff is considered likely. Potential design features which may be below groundwater are: <ul style="list-style-type: none"> <li>Footings for stadium support – no ongoing contact with groundwater is anticipated to be required.</li> <li>The underground carpark – tanking of the carpark will prevent potential contact with groundwater seepage.</li> </ul> </li> <li>Previous assessments (AECOM, 2020, 2024) have not identified potentially unacceptable risks related to Site contamination associated with groundwater discharge from the Site. While additional assessment and review is planned, the proposed changes are not considered likely to have substantial effects on groundwater as: <ul style="list-style-type: none"> <li>No contaminant sources have been identified up-hydraulic gradient (west to north-west), and the depth to groundwater is relatively elevated when compared to the level of the nearby River Derwent and Sullivans Cove. A potential change in Site groundwater hydrostatic conditions is considered of low probability to significantly change groundwater flow direction or encourage migration of potential off-Site contaminant sources (i.e., the sewerage plant to the north-east or locations of former bulk fuel storage under TasPorts to the east) onto Site.</li> <li>Limited intrusion into groundwater is anticipated under the planned construction. Footings for stadium development are likely to have limited impact on groundwater flow, and the proposed underground carpark is hydraulically upgradient and between potential receptors (the River Derwent) of groundwater discharge.</li> </ul> </li> <li>Previous remediation works have included extensive contact with contaminated Site soil and have not identified management or PPE requirements beyond those documented in the SEMP, which have been relatively simple and not onerous to implement on Site, and it is anticipated that this would be the case for ongoing construction. The SEMP includes requirements for construction and maintenance of barriers between soil and ongoing Site users. This requirement is currently expected to remain in place for the final development of the Site to prevent contact between Site users and potentially contaminated soil, and any modification of this requirement would require review and acceptance by the independent Environmental Auditor and update of the SEMP.</li> </ul> <p>The mitigations and controls above have been previously implemented on Site and documented in the SEMP and relevant CEMPs. While some works were conducted with consideration of the previous development plan, the updated uses in the Precinct Plan were compared to past investigations in Section 8.1.1 of the SRS and are considered aligned.</p> <p>The SEMP will remain in place and documents the requirements for works, and will be updated and reviewed by the Environmental Auditor for any changes.</p> |
| B.8.1     | Many of the supporting reports refer to an earlier master plan for Macquarie Point that did not include the proposed stadium and which had a substantially different site development configuration. Consequently, many of the supporting reports are either at a preliminary stage where the Guidelines have not been addressed or are not adequate as they refer to a different project. | <p><u>EPA, 2024, Page 4</u></p> <ul style="list-style-type: none"> <li>Supporting technical and management reports did not reflect the current development design. The Precinct Plan design is not aligned with the provided environmental assessments. Many of the proposed management measures are based on radically different earlier design iterations and are not suitable for the Precinct Plan during construction or operation.</li> </ul> <p><u>EPA, 2024, Page 5</u></p> <ul style="list-style-type: none"> <li>In the case of the Site Suitability Statements referenced by the proponent in the Summary Report (Section 7.9), the statements relate to the previous Macquarie Point mixed use commercial/residential Masterplan (Macquarie Point Strategic Framework and Masterplan 2015 – 20301), with clearly defined:</li> </ul> | <p>While environmental reports and Site Suitability Statements issued prior to announcement of the multipurpose stadium in 2022 were conducted with reference to the previous proposed development plans, the data collected and remediation conducted is still considered relevant and suitable for identification of environmental hazards and required mitigations and controls for the development of the multipurpose stadium as:</p> <ul style="list-style-type: none"> <li>Previous investigations and assessments were conducted with reference to relevant Australian guidelines and against generic criteria developed in accordance with relevant Australia human health risk practice guidance, as recorded in each report, and have produced a large body of environmental data on the Site condition. A summary of the regulatory framework and primary legislation and regulation used for previous assessments is provided in <b>Section 3.0</b> of the SRS (AECOM, 2024a) The regulatory framework, and subsequent investigation report requirements, is not altered by the updated proposed development.</li> <li>Previous investigations have considered a broad range of generic future land uses, consisting of: <ul style="list-style-type: none"> <li>Residential (low density or medium to high density)</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Reference | Matters Raised | Notes from Stakeholder Submission(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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|           |                | <ul style="list-style-type: none"> <li>- building footprints,</li> <li>- limits on depths of excavation,</li> <li>- associated assumptions of vapour risk,</li> <li>- separation from groundwater, and</li> <li>- limited disturbance of remediated and residual contaminated soils, with a physical barrier layer between site users and potentially impacted soils on the site.</li> </ul> <p>The EPA considers that the existing site suitability statements do not apply to the Precinct Plan (the stadium plan) despite statements by the proponent that they do.</p> <p><u>EPA, 2024, Page 6</u></p> <ul style="list-style-type: none"> <li>• Reports insufficiently updated to address the Precinct Plan</li> </ul> <p>Many of the supporting appendices provided as proponent's reports relate to the former Masterplan (which did not include a stadium, and had substantially different building, infrastructure and site use configurations), such as the Site Environment Management Plan, the referenced Site Suitability Statements and the Assessment of Off-Site Ecological Impacts, undertaken in 2020 and referenced in the Site Remediation Strategy Update 2024. These documents are not relevant to the current design (Precinct Plan). The Site Remediation Strategy Update 2024 is mostly focused on the remediation works in the context of the former Masterplan, with some small adaptations, modifications and many identified data gaps to try and account for the Precinct Plan. The result is that the Remediation Strategy Update highlights many of the misalignments between the former Masterplan and the Precinct Plan, and many key questions (site suitability, groundwater interaction, contaminated soil management, acid sulfate soils, soil vapour, etc.) that have not been adequately answered considering the change in site development plan. Therefore assessment of the contaminated land aspects of the site, as it relates to the Precinct Plan is incomplete</p> <p><u>EPA, 2024, Page 6</u></p> <ul style="list-style-type: none"> <li>• Significant changes to the Proposal since issue of TPC Guidelines.</li> </ul> <p>It appears from the documentation provided that the three level underground carpark structure was added to the design in approximately July or August 2024. Much of the supporting documentation does not consider the significant impact on feasibility, construction methodology, construction management, residual contaminant mobilisation, waste disposal, dewatering, ongoing contaminated groundwater management, changes to groundwater flow paths, subsidence, hard rock blasting, estuarine saltwater intrusion and other environmentally relevant issues when building a deep excavation below the water table into unknown geology on contaminated land with contaminated groundwater.</p> <ul style="list-style-type: none"> <li>o The EPA considers that the large area, volume and depth of the excavation associated with the</li> </ul> | <ul style="list-style-type: none"> <li>- Commercial</li> <li>- Light Industrial</li> <li>- Open Space</li> <li>- Intrusive Maintenance Workers</li> </ul> <p>As assessed in the SRS, these uses are considered comparable to the proposed development. Specifically, <b>Section 8.1.1</b> of the SRS considered the land uses which have been found suitable for sub-areas of the Site under the previous proposed development, when compared to the anticipated land uses under the updated development plans considered by the PoSS process.</p> <p>None of the land uses anticipated by the Precinct Plan have been prohibited previously, noting that review and endorsement of updated uses by the Environmental Auditor is required.</p> <ul style="list-style-type: none"> <li>• The mitigations, controls and handling requirements, such as barrier layers or vapour mitigations, required by the existing Site Suitability Statements and documented in the SEMP are considered transferrable and indicative of what will be required for stadium development, as discussed in the response to <b>Item B.7.4</b> above, and will be updated as part of the ongoing Environmental Audit process as necessary.</li> <li>• Ongoing assessment is underway or planned to address identified data gaps which did not require assessment under the previous proposed development.</li> <li>• While further work is required with regards to the basement carpark, preliminary review of previous environmental assessments has not identified residual contamination in the proposed area which is considered to represent potentially unacceptable risks to operation of a properly tanked carpark and will be reviewed and updated as design and requirements are developed. High level details on construction approach and management/mitigation of impacts have been provided in the preliminary CEMP in the Submission (Zancon, 2024) and will be fully documented in a CEMP prepared as part of detailed design and planning.</li> <li>• The final Site Suitability Statement for the Site, as outlined in <b>Section 7.5</b> of the SRS, will be developed for proposed development documented within the Precinct Plan (or updates which occur prior to completion of environmental remediation) and will not be issued unless the Environmental Auditor is satisfied that no unacceptable risks to human or ecological receptors remain which are not able to be safely managed or mitigated. This approach has been discussed with and accepted by the Environmental Auditor.</li> </ul> <p>The Environmental Auditor has provided a separate letter documenting his view on management of the changes in the proposed Site development and areas of his interest or identified as requiring additional information.</p> |

| Reference | Matters Raised                                                                                                                                                                                                                                                                                                       | Notes from Stakeholder Submission(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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|           |                                                                                                                                                                                                                                                                                                                      | <p>underground carpark is a significant change to the scope of the project. The EPA draws attention to the guidelines being based on the project understanding in February 2024 and questions whether the guidelines remain appropriate to capture the significant changes that have occurred to the scope of the project since their issue.</p> <ul style="list-style-type: none"><li>• Reports not updated to reflect proposed Precinct Plan design</li></ul> <p>The provided reports do not reflect the proposed design. This makes it challenging to evaluate the presented potential management measures and strategies for suitability to the construction and operation of the project. The reports need to reflect the updated project design, particularly with information relating to the construction and design of underground infrastructure, to enable adequate assessment of the likely environmental risks and impacts in an integrated way. The preliminary nature of the reports and limited design information presented has created inconsistencies in reported results, assessment methods and assumptions adopted within individual reports.</p>                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| B.8.2     | Estimates of material excavation do not appear to be based on the current proposal and an assessment should be undertaken on the time and operational impact of stockpiling and assessing excavated material or the capacity of local landfill depots to receive materials (sections 8.6 and 8.7 of the Guidelines). | <p><u>EPA, 2024, Page 6</u></p> <ul style="list-style-type: none"><li>• Many of the supporting appendices provided do not consider or assess the significant volumes of likely contaminated excavated soil and/or significant contaminated groundwater dewatering requirements associated with the construction of the stadium and multistorey underground carpark (discussed below).</li></ul> <p><u>EPA, 2024, Page 12</u></p> <ul style="list-style-type: none"><li>• The response to the guidelines must consider how the management of potentially contaminated soil and all types of confirmed contaminated soil (level 2, 3 and 4) impacts the constructability, programming and management of the works.</li></ul> <p>The response to the guidelines must identify where contaminated soil materials can be disposed of, and if landfill infrastructure development needs to be bought forwards to facilitate the project, and if there are any financial, logistical or resource availability barriers to such a landfill infrastructure project that must be overcome to enable the Precinct Plan works</p> <p><u>City of Hobart, 2024, Page 2</u></p> <ul style="list-style-type: none"><li>• More detail regarding waste removal from the site including the frequency and volume.</li></ul> | <p>An initial estimate of excavation volume required was developed and presented in <i>Macquarie Point Stadium – Bulk Excavation Volume Estimates</i> (WSP, 2024), which estimated approximately 191,000 m<sup>3</sup> (<i>in situ</i>) of soil to be excavated as part of the development.</p> <p>A methodology for assessment of soil to be excavated and level of contamination determined has been prepared as <i>Stadium Footprint In Situ Soil Characterisation – Sampling, Analysis and Quality Plan (SAQP)</i> (AECOM, 2024c). Field works to collect required soil samples for a portion of the proposed excavation, shown as Stage 1 and Stage 2 on the figure below, which covers the footprint of the proposed multipurpose stadium but excluding the underground carpark at this stage, were conducted in December 2024.</p> |

| Reference | Matters Raised | Notes from Stakeholder Submission(s) | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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|           |                |                                      | <div></div> <p><b>Figure 1 Bulk Excavation Assessment Areas (WSP, 2024)</b></p> <p>While all results have not yet been received and/or fully assessed, and no submission has yet been made to EPA for determination of soil waste category, the following initial inferences have been made:</p> <ul style="list-style-type: none"><li>• Review of existing soil data, and preliminary assessment of results from December 2024 field sampling, for the proposed excavation indicates that soil waste in the estimated area of excavation is considered likely to be categorised as Level 2 under the guidelines in <i>Information Bulletin No 105: Classification and Management of Contaminated Soil for Disposal</i> (EPA, 2018). A small portion of soil in the south-west corner, &lt;5% of the total volume assessed, may require some additional investigation.</li><li>• No groundwater was encountered in the Stage 1 or Stage 2 areas to the depths reached in the 2024 investigation, which were either the proposed excavation depth (2.4 meters Australian Height Datum), or termination on dolerite bedrock if encountered before the design excavation depth, which occurred in some locations along the northern edge of Stage 1. Some groundwater may be present in dolerite and require management during construction, however inflow would be expected to be low, as dolerite at the Site has had a previously measured geometric mean hydraulic conductivity of <math>8.2 \times 10^{-8}</math> m/s, and impacts from Site contamination are not expected as this area is hydraulically upgradient of potentially contaminating Site uses and has minimal impacts detected during previous sampling.</li></ul> <p>Full results of this investigation will be submitted to EPA for review and assessment, and would seek a preliminary classification of soil. This submission would also include details on assessment and records required to be kept on-Site, and procedures for isolating or excluding areas of potentially higher contamination which may be encountered during excavation. Field works for categorisation of the remaining areas will be scheduled at a later date.</p> <p>The SEMP contains guidelines for handling and management of contaminated soil. Large quantities of soil have been excavated from the Site as part of previous remediation projects, and have consisted of predominately Level 2 – Low Level Contaminated Soil, which has typically been accepted with EPA Environmental Approval for disposal at nearby municipal landfills.</p> <p>Level 3 or Level 4 soils have been preferentially remediated on-Site to reduce hazard levels, and there is a well-developed and matured approach for on-Site remediation of hydrocarbon or metal impacted soil which has been successful in reduction of Level 3 or 4 soil to Level 2. Remediation would typically consist of on-Site stockpiling and amendment of soil to reduce or immobilise contaminants, and, based on the available data and consideration of past remediation programs which have removed already identified areas of higher contamination, is considered to be</p> |

| Reference          | Matters Raised                                                                                                                                                                                                                                                                                              | Notes from Stakeholder Submission(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| B.8.3              | Further assessment of risks and potential impacts to the environment from the project's construction and operation interacting with groundwater is sought. The outcome of this assessment should be translated into suitable environmental management strategies. (sections 8.5 and 8.7 of the Guidelines). | <p><u>EPA, 2024, Page 4</u></p> <ul style="list-style-type: none"> <li>The reports did not adequately address all aspects of the project interacting with the environment and the associated potential environmental risks and impacts. A significant data gap relates to the lack of assessment regarding the project's interaction with groundwater. The EPA recommends a Groundwater Impact Assessment be undertaken for the proposal.</li> </ul> <p><u>EPA, 2024, Page 7</u></p> <ul style="list-style-type: none"> <li>The modelling presented does not include an assessment of groundwater levels or flow paths associated with construction (significant dewatering to excavate stadium footprint, footings and underground carpark) or operation (tanking or draining of the underground carpark, change in recharge due to stadium roof) of the project. The modelled results are likely to differ from those presented when considering the construction and operation of the project. Therefore, the environmental hazards have not been assessed and are still unknown.</li> </ul> | <p>Interactions with groundwater are considered as part of the Site Contamination Audit process and will be included in the proposed review of data and update for the final Site Suitability Statement, as discussed in Items B.7.4 and B.8.1 above.</p> <p>As noted in response to item B.8.2, based on review of the estimated area of excavation, and results of soil sampling within the carpark footprint in December 2024, significant intersection with groundwater is not anticipated with the exception of the proposed basement carpark, which is located hydraulically up gradient of known contaminant sources on the Site.</p>                                                                                                                                                                                                                                                                                                                                                                               |
| B.8.4              | Stormwater management reports should assess known risks such as the potential for 'liquid emissions' to enter stormwater, and include proposed strategies to achieve a suitable level of compliance with water quality objectives (section 8.5 of the Guidelines).                                          | <p><u>EPA, 2024, Page 7</u></p> <ul style="list-style-type: none"> <li>Macquarie Point Stadium Stormwater Management Plan (BMT, 2024) stating in Section 2.10 Contamination: The potential for 'liquid emissions' to stormwater at the Site are presently unknown and have not been considered in this report. The site contamination is well known and discussed within other technical reports within the Proponent's submitted reports. There is a feasible un-assessed risk for 'liquid emissions' to enter stormwater given the presence of fill, shallow groundwater and the proposed Precinct Plan design. This un-assessed risk may also (once assessed) require reconsideration of the proposed stormwater management system utilising bio-retention systems which the report (BMT, 2024) states in Section 5.4.3: Other practical considerations for the Macquarie Point site that may influence the design consideration include risk of infiltrated waters becoming contaminated or of the bio-retention system becoming contaminated.</li> </ul>                                   | <p>Impacts to stormwater from residual contamination of soil or groundwater will be limited by the development or by controls in the SEMP, including:</p> <ul style="list-style-type: none"> <li>Construction and maintenance of hardstand barriers over areas of potentially contaminated soil. Maintenance of barriers is intended both to prevent contact with soil by Site users, and prevent impact to stormwater by preventing the contact between soil and stormwater discharging from the Site.</li> <li>The planned elevation of the final Site surface is above groundwater and contact between groundwater and stormwater/stormwater infrastructure is not anticipated.</li> </ul> <p>It is noted that this response only relates to interaction between stormwater and residual contamination of soil and groundwater, and does not consider stormwater impacts from structures or use of the Site following development, which the Corporation is understood to be providing separate response regarding.</p> |
| C.9.2.1 to C.9.2.3 | <p>Estimated volumes and weight of excavated materials, including the carpark construction.</p> <p>Details of how the management of potentially contaminated soil</p>                                                                                                                                       | <p><u>EPA, 2024, Page 6</u></p> <ul style="list-style-type: none"> <li>Many of the supporting appendices provided do not consider or assess the significant volumes of likely contaminated excavated soil and/or significant contaminated groundwater dewatering requirements</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Please see response to Item B.8.2 above, which discussed the current and future assessment and management approach for soils likely to be excavated and managed on-Site as part of development.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Reference          | Matters Raised                                                                                                                                                                                                                                                                                                                                                                                                                        | Notes from Stakeholder Submission(s)                                                                          | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                    | <p>and all types of confirmed contaminated soil (Level 2, 3 and 4) impacts the constructability, programming and management of the project.</p> <p>Information on where materials are proposed to be disposed of, the capacity of proposed landfill destinations to accommodate proposed volumes and any logistical or financial requirements for additional landfill infrastructure.</p>                                             | <p>associated with the construction of the stadium and multistorey underground carpark (discussed below).</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| C.9.3.1 to C.9.3.3 | <p>Information that shows what use and development proposal existing site suitability statements relate to.</p> <p>Information that addresses gaps that are identified within the Site Remediation Strategy, as well as in relation to the full scope of the site as assessed by the Commission.</p> <p>New or updated site suitability statements from an Environmental Auditor that relate to the proposed use and development.</p> | <p>No reference to stakeholder submissions provided</p>                                                       | <p>Please see response to Item B.8.1, which discussed the relevance and reliability of previous assessment for the updated development plan.</p> <p><b>Section 7.5</b> of the SRS contains the proposed pathway for completion of the Environmental Audit, and the Environmental Auditor has prepared a separate letter in response to the RFI providing his views on the proposed pathway and remaining activities, which will provided as part of the Corporation's response.</p> |

Yours faithfully



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