

Date 10/11/2017
To Dominic Crinion
From Nathan Cairney (Tactical Group)
Copy to Steve Ryan (Tactical Group), Karen Harragon (DPE), Heather Nelson (DPE), Richard Johnson (Aspect Environmental), Michael Barrow (Qube), Westley Owers (Arcadis), Claire Vahtra (Arcadis)
Subject MPE Concept Plan Modification 2 – Consolidated assessment clarification responses

This memo and its attachments provides consolidates all information provided to the Department of Planning and Environment (DPE), since the submission of the MPE Concept Plan Modification 2 Response to Submissions (RtS) Report.

Table 1 provides a summary of all documentation issued to DPE, the date of issue and which Attachment it is provided in.

It is acknowledged that in some cases, responses relating to the above, included requests for additional information relating to other projects within the Moorebank Precinct. Unless otherwise included for the purpose of a cumulative assessment, this information is not relevant to the MPE Concept Plan Modification 2, and should not be considered as part of this assessment nor is it considered relevant to the approval instrument.

Table 1 Summary of documentation issued to DPE

Information	Date issued to DPE	Attachment
<i>Response to submissions and outstanding information – Moorebank Precinct East Concept Plan Modification 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 Detailed response letter</i>	11 September 2017	Attachment A
<i>Moorebank Precinct East (MPE) and Moorebank Precinct West (MPW) response to submissions and outstanding information – updated issues list letter</i>	18 September 2017	Attachment B
<i>Response to Transport for NSW Submissions on Moorebank Precinct West (MPW) Stage 2 (SSD 7099), MPW Concept Plan Mod 1 (SSD 5066_MOD 1), Moorebank Precinct East (MPE) Stage 2 (SSD 16_7628) and MPE Concept Plan Mod 2 (MP 10_0193 MOD 2) letter</i>	29 September 2017	Attachment C
<i>Recommended Conditions of Approval from Government Agencies -Moorebank Precinct West (MPW) Stage 2 (SSD 7709), MPW Concept Modification 1 (SSD 5066 MOD 1), Moorebank Precinct East Stage 2 (SSD 7628) and MPE Concept Plan Modification 2 (MP 10_0193 MOD 2) letter</i>	23 October 2017	Attachment D

Information	Date issued to DPE	Attachment
<i>MPE Concept Plan Modification (MP 10_0193 MOD 2) – Supplementary environmental assessment (including Biodiversity information) memo</i>	9 November 2017	Attachment E
<i>Response to 'EPA Review of the Response to Submissions Moorebank Intermodal Precinct East – Concept Plan Modification –MOD 2' Letter, letter</i>	3 November 2017	Attachment F
<i>Response to Liverpool City Council 'Moorebank Precinct East – Concept Plan Modification 2 – Response to Submissions Review' Letter letter</i>	4 November 2017	Attachment G
MPE CP Mod 2 – updated application form	6 November 2017	Attachment H

Attachment A

Table B-1 Response to DP&E requests for additional information

Key issue	Additional information required	Response	Reference
Application forms	Updated application forms with current applicant details	An updated application form for the Proposal, acknowledging who the applicant and landowner are and the land to which the application applies has been provided as Attachment C of this letter.	Attachment C of this letter
Consolidated list of mitigation measures	Including measures in the response to DPE issues	<p>A consolidated list of mitigation measures was provided in Section 8 of the MPE Stage 2 RtS. The mitigation measures provided in Section 8 were revised during the preparation of the MPE Stage 2 RtS, and included updates to respond to issues raised by the community, government agencies and stakeholders, inclusive of the NSW DP&E. Since the submission of the MPE Stage 2 RtS, a review of the mitigation measures included in the MPE Stage 2 RtS, as well as other relevant management plans and supporting documentation has been undertaken. As a result of this DP&E request, further inclusions have been made to the mitigation measures provided in Section 8 of the MPE Stage 2 RtS.</p> <p>The Final Compilation of Mitigation Measures (FCMM), including these revisions, has been provided as Attachment D of this letter.</p>	<p>Section 8 of the MPE Stage 2 RtS.</p> <p>Attachment D of this letter</p>
Detailed list of elements for approval (construction)	Construction elements including batching plant, crushing plant etc.	A Consolidated Project Description was provided as Appendix I of the MPE Stage 2 RtS. Table 4-11 of Appendix I, included a list of indicative construction plant and equipment for construction of the Proposal, including a concrete batching plant, crushing plant and a variety of other construction equipment. Table 4-11 also denoted which Construction Works Period the indicative plant and equipment are likely to be utilised.	Table 4-11 of the Consolidated Project Description, provided at Appendix I of the MPE Stage 2 RtS.
Detailed plans	<p><i>Site Plan</i></p> <p>Site plan should be provided as a series of plans at 1:1000 at A1 (including key plan). Showing existing site contours and finished contours or building platform levels to AHD. Existing and finished contours to extend approximately 20 outside construction footprint</p>	Site plans at the requested scale have been provided at Attachment E of this letter.	Attachment E of this letter.

Key issue	Additional information required	Response	Reference
	<p><i>Edge effect plan</i></p> <p>Plans for development of Moorebank Avenue, and works adjacent to the Boot Land, should be provided as a series of plans at 1:500 at A1 (including key plan).</p>	<p>Edge effect plans, showing the works along Moorebank Avenue, and those adjacent to the Boot Land as part of the MPE Stage 2 Proposal have been provided as Attachment E of this letter.</p>	<p>Attachment E of this letter.</p>
	<p><i>Sections</i></p> <ul style="list-style-type: none"> Sections showing proposed levels and tie in to existing vehicle access to adjoining properties not the subject of the application Sections through the MPE Stage 1 and MPE Stage 2 and MPW Stage 2 basin along Moorebank Avenue showing tie in of proposed finished levels. 	<p>Sections showing proposed levels and tie-ins to existing vehicle accesses as well as section through the MPE Stage 1 and MPE Stage 2 and MPW Stage 2 basin along Moorebank Avenue have been provided as Attachment E.</p>	<p>Attachment E of this letter.</p>
Traffic and transport	Requested modelling still outstanding	<p>Traffic modelling relevant to the environmental assessment of the MPE Stage 2 Proposal (EIS) has been provided to Roads and Maritime in March 2017. Additional operational traffic modelling was also discussed in the RtS, with modelling provided to Roads and Maritime in early September 2017. No traffic modelling relevant to the assessment of the MPE Stage 2 Proposal is currently outstanding.</p> <p>It is acknowledged that discussions between the Proponent, Transport for NSW and NSW Roads and Maritime Services, relating to whole-of-precinct traffic modelling are ongoing. However, although related to the whole-of-precinct modelling, the traffic and transport assessment of the MPE Stage 2 Proposal, as presented in Section 7 and Appendix K of the MPE Stage 2 EIS and Section 7 and Appendix C of the MPE Stage 2 RtS are relevant to the impacts of Stage 2 of the MPE Project and is not dependent on the abovementioned whole-of-precinct modelling.</p>	<p>Section 7 and Appendix K of the MPE Stage 2 EIS.</p> <p>Section 7 and Appendix C of the MPE Stage 2 RtS.</p>

Table B-2 Response to additional agency comments

Key issue	Additional information required	Response	Reference
Environment Protection Authority (EPA)			
Regulatory authority	Note that Liverpool City Council is the Appropriate Regulatory Authority for this Project under the <i>Protection of the Environment Operations Act 1997</i> . The EPA has agreed to assist council by providing comments and recommendations in relation to the key environmental issues of noise and vibration, and air quality.	Noted	N/A
Assessment of construction	<p>The EPA notes that the assessment of construction activities reflects that contained within the MPE Concept Plan Modification 2.</p> <p>As per EPA's advice on the Concept Plan Modification 2 (SSD 16_7628), it is not clear whether maximum daily operational intensity of the construction activities has been considered for the purposes of assessing against 24 hour impact assessment criteria. For example the assessment advises that emissions from hauling are based on an assumed capacity of each truck of 50 tonnes corresponding to approximately 26,400 trucks per annum. Based on this information and the proposed quantity of fill (1,320,000 tonnes) to be imported the averaging period for estimating emissions is likely to be based on annual average activity rates.</p> <p>Where peak daily activity rates have not been used to estimate emissions, modelled impacts may have been under predicted.</p>	<p>It is acknowledged that this issues was raised in response to the MPE Concept Plan Modification 2 Application. Section 4.1 of the MPE Concept Plan Mod RtS provided a response to this issue, as provided below:</p> <p>The EPA are correct to assume that the modelling results presented in the Air Quality Impact Assessment for the MPE Concept Plan modification are based on annual average activity rates (1,320,000 tonnes averaged evenly across each day of the year).</p> <p>To address EPA's concern that the modelling did not consider a peak daily scenario, revised analysis is presented based on a peak daily importation rate of 22,000 tonnes¹, for all material handling activities. This importation rate corresponds to the maximum daily fill importation rate for the whole precinct (i.e. across both MPW and MPE proposals) and conservatively assumes that on any given day there is a possibility, although unlikely, that 22,000 tonnes could be directed to MPE only.</p> <p>Other construction phase emission sources, such as dozers, have also been adjusted for the peak daily scenario, for example by removing the 70% utilisation assumption and assuming continuous operation for all construction hours. The revised analysis shows:</p>	N/A

¹ A mitigation measure (No. 1G, in Section 8 of the RtS) has been included to restrict the importation of fill to 22,000 m³/per day for both the MPE Stage 2 Proposal and the MPW Stage 2 Proposal.

Key issue	Additional information required	Response	Reference
	<p>The EPA recommends that the proponent provide additional information to demonstrate that maximum daily operation intensity of construction activities have been considered for assessing against 24 hour impact assessment criteria.</p>	<ul style="list-style-type: none"> The maximum incremental 24-hour PM₁₀ increases from 4.2 µg/m³ for the average daily activity rate to 8.0 µg/m³ for the peak daily activity rate. The maximum incremental 24-hour PM_{2.5} increases from 1.3 µg/m³ for the average daily activity rate to 1.9 µg/m³ for the peak daily activity rate. The maximum cumulative 24-hour PM₁₀ increases from 48.9 µg/m³ for the average daily activity rate to 50.9 µg/m³ for the peak daily activity rate. As a result, there is one additional exceedance of the impact assessment criteria at 5 locations, but this occurs on a day when the background is already elevated (48 µg/m³). It should be noted that the approach to the assessment assumes that the worst case daily activity scenario occurs every day of the year and it is unlikely that this scenario would correspond with an elevated background day and give rise to an additional exceedance. In fact, the proposed real-time boundary monitoring for each phase of construction is designed to eliminate the risk of this occurring. The maximum cumulative 24-hour PM_{2.5} increases from 23.6 µg/m³ for the average daily activity rate to 24.0 µg/m³ for the peak daily activity rate (i.e. no additional exceedances of the impact assessment criteria). <p>The revised assessment demonstrates that with consideration of the peak daily scenario, modelled impacts would not result in additional exceedances of the 24 hour impact assessment criteria with the exception of maximum cumulative 24-hour PM₁₀. However, it is unlikely that this scenario would occur and the proposed real-time boundary monitoring for each phase of construction has been designed to eliminate the risk of this occurring.</p>	
Assessment of operation	<p>The assessment of the operational phase of the proposal has considered emissions from warehouse traffic, mobile plant (forklifts), and warehouse heating/cooling assessed as natural gas boilers. In relation to emissions from vehicle movements the assessment is based on information and data contained in the traffic assessment. Review of the transport assessment and associated traffic modelling is beyond the scope of the EPA's review of the AQIA.</p> <p>In relation to the assessment of emissions from natural gas boilers for heating/cooling purposes</p>	<p>Generic assumptions are used by necessity. The specific details (size and emission performance) of boilers to be used for the heating and/ or cooling of warehouses are not known at this stage and will be determined as part of detailed design development (post determination of the MPE Stage 2 Proposal). The energy requirements of any warehouse facility, including for heating and cooling will be determined by the warehousing tenant(s) prior to operation of the Proposal. Therefore, no further details on the size of boilers to be installed can be provided and/ or benchmarked against best practice at this stage.</p> <p>Specific requirements for operational environmental management will be outlined in the Operational Environmental Management Plan (OEMP) to be prepared prior to the operation of the Proposal. The OEMP will allow the Proponent to require tenants</p>	Table 5-6 of the MPE Stage 2 AQIA, at Appendix M of the MPE Stage 2 EIS.

Key issue	Additional information required	Response	Reference
	<p>the assessment is based on generic assumptions rather than specific details on the size of any boilers that form part of the Stage 2 project. Specifically, emissions from natural gas boilers are based on an energy use intensity (150 MJ/m²/year), a warehouse footprint of 300,000 m² and emission factors. The proponent should be requested to provide further detail on the size and emission performance of boilers proposed for Stage 2.</p> <p>Table 5-6 of the AQIA presents a summary of estimated emissions for operation of Stage 2 and is presented in tonnes/annum. However previous tabulated emission estimates (Table 5-3, Table 5-5) are presented in kg/annum. This is potentially a typographic error, however the proponent should be request to check and confirm the emission estimates and revise the AQIA where the inconsistency is likely to effect the outcomes of the assessment.</p> <p>The EPA recommends the Proponent:</p> <ul style="list-style-type: none"> • Provide additional information on the size of any natural gas boilers proposed; • Benchmark the emission performance of any boilers against best practice; and • Confirm the emission estimation for the operational assessment noting the differences in reported units of measurement for emission rates in Table 5-6 and Tables 5-3 & 5-5. 	<p>to install energy efficient heating/cooling options and/ or consider best practice emissions performance for warehouse facilities.</p> <p>It is noted that the assumptions used in the air quality impact assessment are conservative and therefore the actual operational emissions would be expected to be lower, not higher than those included in Section 9 of the MPE Stage 2 EIS (Arcadis, 2016). Even with these conservative assumptions, the predicted air quality risk from the operation of the Proposal is low.</p> <p>Finally, it is noted that the emissions summary presented in Table 5-6 is incorrectly captioned as “tonnes/annum”. We can confirm that the emission values are reported in kg/annum and no update or change to the modelling assessment is required.</p>	

SSD2 Application

Introduction & Notes

This application form is required to apply for the consent of the Minister to carry out State Significant Development under Part 4 of the *Environmental Planning & Assessment Act 1979*.

You should not lodge this form unless you have previously submitted a request for Director General's Requirements and been provided with Director General's Requirements.

This form must contain all relevant information required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*, otherwise it may be rejected.

If your application is rejected, you will be advised within 14 days of lodgement. If the application and EIS are accepted, you will be contacted regarding the exhibition arrangements. You may also be asked to submit further information on the application or EIS prior to exhibition.

Persons lodging applications are required to declare reportable political donations (including donations of \$1,000 or more) made in the previous two years. For more details, go to www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/Donations-and-Gift-Disclosure.

Applicant Details

Title:	Mr
First name:	Michael
Surname:	Yiend
Day Phone:	+61 2 9080 1900
Fax:	+61 2 9080 1999
Mobile:	
Email:	michael.yiend@qube.com.au
Company:	SIMTA, as Qube Holdings Limited
ABN:	141 497 230 53
Physical Address:	Level 27, 45 Clarence Street, Sydney, NSW 2000
Postal Address:	Level 27, 45 Clarence Street, Sydney, NSW 2000

Site details

Site Title:	Moorebank Precinct West
Site Location:	Moorebank Avenue, Moorebank 2170
Site Government Area:	Liverpool LGA
Lot/DP:	1/1048263, 2/1197707, 3/1197707, 3002/1125930, 5/1197707

Is new land involved?	No
Changes:	

Staged Development

Staged DA:	Yes
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Project Details

State & Regional Development SEPP - Schedule 1 - State Significant Development

- Clause 12: Warehouses or distribution centres

State & Regional Development SEPP - Schedule 2 - State Significant Development

- N/A

Ministerial Call In

- The development was not called in by the Minister for Planning & Environment

Online information provided by the applicant

Title	Moorebank Precinct East – Concept Plan Modification (MOD 2)
State Significance	Clause 12: Warehouses or distribution centres
Description	<p>MPE CP Mod 2 seeks to modify the Concept Plan (MP10_0193) for the MPE Site to include the following:</p> <ul style="list-style-type: none"> • the Moorebank Avenue Upgrade • revised location of MPE Stage 2 site access • use of internal road 2 for heavy vehicle movements • importation of general fill to facilitate construction and bulk earthworks • revised location of, and land uses within the freight village • revised staging of the MPE Project • subdivision of the MPE site
Capital Investment Value	N/A
Construction "jobs"	N/A
Operational "jobs"	N/A
Landowner's Consent Provided?	No

Critical habitat and threatened species

Critical Habitat	No
Development threatens habitats	The development will result in clearing of a small are of a threatened ecological community and is adjacent to threatened species populations and threatened ecological communities.
Biodiversity compliant	A Biodiversity Assessment Report (BAR) has been prepared in accordance with the NSW Framework for Biodiversity Assessment

Approvals

Would the development otherwise, but for section 89J of the EP&A Act, require any of the following (select all that apply)?

- the concurrence under Part 3 of the Coastal Protection Act 1979 of the Minister administering that Part of that Act
- a permit under section 201, 205 or 219 of the Fisheries Management Act 1994
- an approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977
- an Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974
- an authorisation referred to in section 12 of the Native Vegetation Act 2003 (or under any Act repealed by that Act) to clear native vegetation or State protected land
- a bush fire safety authority under section 100B of the Rural Fires Act 1997
- a water use approval under section 89, a water management work approval under section 90 or an activity approval under section 91 of the Water Management Act 2000

Do you require any of the following approvals in order to carry out the development (select all that apply)?

- an aquaculture permit under section 144 of the Fisheries Management Act 1994
- an approval under section 15 of the Mine Subsidence Compensation Act 1961
- a mining lease under the Mining Act 1992
- a petroleum production lease under the Petroleum (Onshore) Act 1991
- an environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 (for any of the purposes referred to in section 43 of that Act)
- a consent under section 138 of the Roads Act 1993
- a licence under the Pipelines Act 1967
- an aquifer interference approval under section 91 of the Water Management Act 2000

Online information provided by the applicant

- No

Consultation and concurrence

Would the development, but for Section 79B (2A) of the EP&A Act have required a concurrence under Section 79B of the Act, including a concurrence under the Threatened Species Conservation Act 1995?

Online information provided by the applicant

- No

Supporting Documents

Submitted files:

- MPE CP Mod 2 as per
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8149

Political Donation

Persons lodging applications are required to declare reportable political donations (including donations of \$1,000 or more) made in the previous two years. For more details, go to www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/Donations-and-Gift-Disclosure.

Do you need to make a political donations disclosure statement?

Online information provided by the applicant

- No

Submitter details

Name	Steve Ryan
Capacity	Managing Director – Tactical Group
Submitted	08/09/2017 – originally submitted 29/11/2016

Attachment B

Attachment A: Response to DP&E detailed issues table

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
MPW	Dependencies Assessment Timeframe Ability to Determine	Procedural requirements met	<ul style="list-style-type: none"> Ongoing discussion about procedural requirements regarding 24/7 warehouse/ heavy vehicle access. 	Procedural requirements critical to determination.	<p>SIMTA and DP&E have been undertaking ongoing discussions with DP&E in regards to the 24/7 operation of warehouses included in the MPW Stage 2 Proposal. SIMTA's position with regards to the need for re-exhibition of the MPW Stage 2 RtS in relation to the hours of warehouse operations was formally provided to DP&E in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter prepared by SIMTA and dated 31/08/2017.</p> <p>The following information was included in the abovementioned letter:</p> <p><i>This proposed amendment to include 24 hour, seven days a week warehouse operations within the RtS has been developed to further clarify and respond to consultation undertaken during the preparation of and public exhibition of MPW Stage 2 EIS, with relevant Commonwealth and NSW Government Agencies including NSW Ports.</i></p> <p><i>Table 6-5 of the MPW Stage 2 Environmental Impact Statement (MPW Stage 2 EIS) (prepared by Arcadis, dated October 2016) summarised the consultation comments from NSW Ports during the preparation of the EIS. On the topic of logistics operations, NSW Ports Table 6-5 noted that:</i></p> <p><i>'Ports expressed desire for the whole of the logistics chain to operate 24/7, specifically including 24/7 intermodal terminal and warehousing operation as part of the Proposal'.</i></p> <p><i>The Proposal, as included as part of the MPW Stage 2 EIS, included 24/7 intermodal terminal operations; however, did not specifically identify 24/7 operation of warehousing within the Proposal Description (Section 4 of the EIS). Although this was not mentioned in the Proposal Description of the EIS, the Operational Traffic and Transport Impact Assessment (OTTIA) (included in Section 7 and Appendix M of the EIS) provided an assessment of 24/7 warehousing operations. An assessment from other environmental aspects including noise and air were omitted from the MPW Stage 2 EIS however have been clearly identified in the RtS and would result in a negligible environmental impact on the MPW Stage 2 Proposal. It is expected that given the negligible environmental impact associated with this amendment/clarification to SSD7709, this amendment does not necessitate that the MPW Stage 2 RtS is re-exhibited.</i></p> <p>It is SIMTAs understanding that the procedural requirements in relation to this matter are currently with DP&E for consideration.</p>
All	Dependencies Ability to Determine	Land owner's consent for concept modifications	<ul style="list-style-type: none"> Applicant to provide land owner's consent. 	<p>Critical to meeting procedural requirements.</p> <p>Delays in obtaining land owners' consent substantially delayed past approvals.</p>	<p>A response to this information was provided in the following documents, issued to DP&E:</p> <ul style="list-style-type: none"> <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 31/08/2017 <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 31/08/2017 <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017 <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017 <i>Moorebank Precinct East (MPE) and Moorebank Precinct West (MPW) Land owners consent</i> letter, dated 15/09/2017. <p>SIMTA would continue to update DP&E on the progress of obtaining landowners consent, however consent from all respective landowners is anticipated to be provided in the near future.</p>

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
MPW	Dependencies Ability to Determine	Secretary certifies that applicant has made satisfactory arrangements for the provision of relevant State public infrastructure	<ul style="list-style-type: none"> Traffic model provided to RMS/Transport for NSW. Agreement between applicant and RMS legal. Acceptance of form of agreement by the Department's development contributions and legal teams. 	<p>Separate to the Department's assessment process, required by RMS/TfNSW.</p> <p>Statutory requirement to comply with LEP.</p> <p>Determination cannot be made without certification.</p>	<p>The following information relating to the provision of traffic modelling was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017:</p> <ul style="list-style-type: none"> Traffic models relating to the MPW Stage 2 Proposal have been provided, including additional modelling undertaken as part of the Response to Submissions Report. No traffic modelling relevant to the assessment of the MPW Stage 2 Proposal is currently outstanding. <p><i>It is acknowledged that discussions between the Proponent, Transport for NSW and NSW Roads and Maritime Services, relating to whole-of-precinct traffic modelling are ongoing. However, although related to the whole-of-precinct modelling, the traffic and transport assessment of the MPW Stage 2 Proposal, as presented in Section 7 and Appendix M of the MPW Stage 2 EIS and Section 7 and Appendix B of the MPW Stage 2 RtS are relevant to the impacts of Stage 2 of the MPW Project and is not dependent on the abovementioned whole-of-precinct modelling. Regular meetings are being held with Roads and Maritime/TfNSW. The next meeting is to be held on 18 September 2017 to further discuss the Precinct modelling, however, we note that this is separate to the planning approval process for MPW Stage 2. These meeting are expected to result in a form of agreement between Qube and RMS that the applicant has made satisfactory arrangements for the provision of relevant State public infrastructure.</i></p>
All	Dependencies Traffic and Transport Ability to Determine	<p>Acceptable traffic and transport outcomes</p> <p>Transport agency agreement</p>	<ul style="list-style-type: none"> Traffic model provided to RMS/Transport for NSW. 	Commission will closely consider transport advice.	<p>The information below was provided in the following documents, issued to DP&E:</p> <ul style="list-style-type: none"> <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017 <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017 <p><i>Traffic models relating to the MPW Stage 2 and MPE Stage 2 Proposals have been provided, including additional modelling undertaken as part of the Response to Submissions Reports. No traffic modelling relevant to the assessment of the MPW Stage 2 and MPE Stage 2 Proposals is currently outstanding.</i></p> <p><i>It is acknowledged that discussions between the Proponent, Transport for NSW and NSW Roads and Maritime Services, relating to whole-of-precinct traffic modelling are ongoing. However, although related to the whole-of-precinct modelling, the traffic and transport assessment of the MPE Stage 2 Proposal, as presented in Section 7 and Appendix K of the MPE Stage 2 EIS and Section 7 and Appendix C of the MPE Stage 2 RtS and the traffic and transport assessment of the MPW Stage 2 Proposal, as presented in Section 7 and Appendix M of the MPW Stage 2 EIS and Section 7 and Appendix B of the MPW Stage 2 RtS are relevant to the impacts of Stage 2 of the MPW Project and Stage 2 of the MPE Project and is not dependent on the abovementioned whole-of-precinct modelling.</i></p>
All	Dependencies Section 94 contributions	Compliance with MPW Concept condition E13 and MPE Schedule 3.	<ul style="list-style-type: none"> Update on negotiations with Liverpool City Council on VPAs/ payments/ works in kind. Evidence of agreement with Council on Section 94 contributions. 	Detail required for Department to finalise assessment and recommended conditions.	<p>MPW:</p> <p>The information below was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017:</p> <p><i>SIMTA has recently consulted with Liverpool City Council (LCC) regarding landowner's consent for the MPW Stage 2 Proposal. It is intended that these discussions would also include developer contributions with a meeting to be undertaken with LCC in the near future.</i></p> <p>MPE:</p> <p>The information below was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017:</p> <p><i>SIMTA has recently consulted with Liverpool City Council (LCC) regarding landowner's consent for the MPE Stage 2 Proposal. It is intended that these discussions would also include developer contributions with a meeting to be undertaken with LCC in the near future.</i></p> <p>A meeting is being held with LCC on 25 September 2017.</p>

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
MPW	Requirements of concept approval Traffic and Transport Cumulative impacts	Assessment of acceptability of all cumulative impacts in supplementary RtS.	<ul style="list-style-type: none"> Traffic assessment/ information as per requested by RMS. Inclusion of cumulative air quality and traffic impact assessments for approved and current applications (MPE Stage 1 + MPE Stage 2 + MPW Stage 2). 	<p>Traffic information required by RMS to provide submission on EISs and RtSs.</p> <p>Critical for evaluation by the Department, Department's technical specialists, and the Commission.</p> <p>If not provided, risk that Commission requires additional information during its determination phase.</p>	<p>The following information was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter</i>, dated 11/09/2017.</p> <p>With regards to traffic assessment/ information:</p> <p><i>Traffic models relating to the MPW Stage 2 and MPE Stage 2 Proposals have been provided, including additional modelling undertaken as part of the Response to Submissions Reports. No traffic modelling relevant to the assessment of the MPW Stage 2 and MPE Stage 2 Proposals is currently outstanding.</i></p> <p><i>The MPE Stage 2 Proposal included an operational traffic and transport assessment that included a cumulative assessment of the MPE Stage 1 Project, MPE Stage 2 Proposal and MPW Stage 2 Proposal.</i></p> <p><i>Additional information relating to cumulative impacts of the MPW Stage 2 Proposal have been provided as Attachment E of the response to the MPW Stage 2 DPE letter.</i></p> <p><i>It is acknowledged that discussions between the Proponent, Transport for NSW and NSW Roads and Maritime Services, relating to whole-of-precinct traffic modelling are ongoing. However, although related to the whole-of-precinct modelling, the traffic and transport assessment of the MPE Stage 2 Proposal, as presented in Section 7 and Appendix K of the MPE Stage 2 EIS and Section 7 and Appendix C of the MPE Stage 2 RtS and the traffic and transport assessment of the MPW Stage 2 Proposal, as presented in Section 7 and Appendix M of the MPW Stage 2 EIS and Section 7 and Appendix B of the MPW Stage 2 RtS are relevant to the impacts of Stage 2 of the MPW Project and Stage 2 of the MPE Project and is not dependent on the abovementioned whole-of-precinct modelling.</i></p> <p>With regards to the cumulative impact assessment of air quality and traffic impacts (MPW Stage 2 + MPE Stage 1 + MPE Stage 2):</p> <p><i>Section 19 of the MPW Stage 2 EIS included an assessment of the cumulative impacts of the MPW Stage 2 Proposal with concurrent construction and operation of other developments. The cumulative scenarios as detailed below were considered the most realistic, based on the best available information available at the time of writing:</i></p> <ul style="list-style-type: none"> <i>Cumulative construction (2018): concurrent construction of the Proposal with MPW Early Works, and the construction of the MPE Stage 1 Project.</i> <i>Cumulative operation: Operation of the Proposal at 500,000 TEU throughput, combined with the operation of the MPE Stage 1 Project at 250,000 TEU throughput.</i> <p><i>At each stage of development of the MPW Project under the MPW Concept Approval, the cumulative construction and operational scenario would be reconsidered and an assessment of the cumulative impacts at each development stage be undertaken. This cumulative scenario was considered to be representative of the cumulative environment at the time of undertaking the environmental assessment of the MPW Stage 2 Proposal.</i></p> <p><i>It was also considered realistic based on the anticipated planning approval timeframe for the MPW Stage 2 Proposal, i.e. EIS exhibited in late October/late November 2016 with MPE Stage 2 EIS exhibited in mid-December 2016/ late February 2017.</i></p> <p><i>Since the preparation of the MPW Stage 2 EIS, an SSD application has been submitted to NSW DP&E for Stage 2 of the MPE Project, under the MPE Concept Approval. As the environmental assessment of the MPW Stage 2 Proposal was being undertaken at the time of undertaking the environmental assessment of the MPE Stage 2 Proposal, the construction and operational cumulative assessment undertaken as part of the MPE Stage 2 EIS considered the concurrent construction and operation of the MPE Stage 2 Proposal with the MPW Stage 2 Proposal. For information, Attachment E of the Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter includes section 19 of the MPE Stage 2 EIS, which considered cumulative construction and operational impacts of the MPE Stage 2 and MPW Stage 2 Proposals. In addition, Attachment E includes a cumulative assessment of the MPW Stage 2 Proposal, drawing upon the information provided in the MPE Stage 2 cumulative assessment, as previously requested by DP&E, including consideration of air quality and traffic impacts.</i></p>

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
MPW	Biodiversity	Assessment of indirect impacts on all adjoining lands. OEH acceptance of updated BAR.	<ul style="list-style-type: none"> Assessment of indirect impacts from proposed MPW Stage 2 works on species (including <i>Hibbertia fumana</i>) in the 'Boot land' including groundwater dependent ecosystems (Anzac Creek corridor). 	<p>Detail required for Department to finalise assessment.</p> <p>Need to refer information to OEH.</p> <p>Risk to project if unaddressed.</p>	<p>The following information was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter</i>, dated 11/09/2017</p> <p><i>With the exception of Persoonia nutans, all threatened flora species in the Boot land have a minimum of 25 metre wide native vegetation buffer between them and the edge of the MPW Stage 2 Construction Area. The closest record of each species to any proposed MPW Stage 2 impacts ranges from 25 metres to 688 metres. Given that:</i></p> <ul style="list-style-type: none"> <i>the recorded threatened plant populations are located a minimum of over 25 metres from any MPW Stage 2 project impacts, with the vast majority of records located over 50 metres from any impacts;</i> <i>the closest impact is an OSD, which is designed to capture sediment flows that may impact on adjoining areas, and will be designed, constructed and managed in accordance with a stormwater management plan; and</i> <i>the existing Moorebank Avenue will not be disturbed, at this location, as part of the MPW Stage 2 Proposal, and would provide an additional barrier between the proposed impacts and the threatened flora populations on the Boot Land, particularly in the area south of Anzac Creek where Moorebank Avenue rises to form the rail overbridge.</i> <p><i>It is considered unlikely that there would be any indirect impacts on the threatened flora populations identified in the Boot land as a result of the Proposal. The risk of introducing or spreading weeds and pathogens into the Boot land as a result of the MPW Stage 2 Proposal is considered low, given the barrier effect of Moorebank Avenue and the proposed implementation of hygiene procedures for the use of vehicles and the importation of materials to the site.</i></p>
All	Requirements of concept approval Construction activities	Summary of temporary facilities (e.g. concreting batching plant, materials crushing) as well as key activities provided in Project Overviews.	<ul style="list-style-type: none"> Inclusion of temporary facilities and key activities in supplementary MPW Stage 2 RtS. Inclusion of temporary facilities in supplementary MPE Stage 2 RtS. 	Clearly identifies all facilities that would otherwise be Designated Development, i.e. "concrete works" and "crushing, grinding and separating works".	<p>The Consolidated Proposal Descriptions previously submitted within the MPE Stage 2 RtS (Appendix I) and MPW Stage 2 RtS (Appendix O) updated to respond to the comments raised by DP&E in their meeting with SIMTA representatives on 12 September 2017. These have been submitted in Attachment B of this letter.</p> <p>Designated development is not considered relevant to State Significant Developments (SSD), seeking approval under Part 4, Division 4.1 of the EP&A Act (refer to Section 77A(2) of the EP&A Act). Notwithstanding this, any facilities to be included for the construction of the MPW Stage 2 and MPE Stage 2 Proposals, which would otherwise be defined as designated development (under Schedule 3 of the <i>Environmental Planning and Assessment Regulations 2000</i> (EP&A Regs)) have been identified in the updated Consolidated Proposal Descriptions (Attachment B).</p> <p>Detailed descriptions of the proposal descriptions have also been discussed in the following documents, issued to DP&E:</p> <ul style="list-style-type: none"> <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter</i>, dated 11/09/2017 <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628) letter</i>, dated 11/09/2017 <p>MPW:</p> <p><i>Appendix O of the MPW Stage 2 RtS comprised a consolidated proposal description, as requested by NSW DP&E in its submission on the MPW Stage 2 EIS, provided in April 2017. Table 4-9 in Section 4.3.5 of the consolidated proposal description provides a summary of the indicative plant and equipment likely to be utilised during each construction works periods of the MPW Stage 2 Proposal. Amongst other things, a concrete batching plant and crushing plant have been listed as indicative plant and equipment.</i></p> <p>MPE:</p> <p><i>A Consolidated Project Description was provided as Appendix I of the MPE Stage 2 RtS. Table 4-11 of Appendix I, included a list of indicative construction plant and equipment for construction of the Proposal, including a concrete batching plant, crushing plant and a variety of other construction equipment. Table 4-11 also denoted which Construction Works Period the indicative plant and equipment are likely to be utilised.</i></p>

Project <i>All/ MPE/ MPW</i>	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
All	Requirements of concept approval Mitigation Measures	Consolidated list of mitigation measures in supplementary RtSs, particularly in relation to imported fill stockpile management (as discussed at meeting on 29/8/2017).	<ul style="list-style-type: none"> Inclusion of commitments/ mitigation measures identified in response to the Department's issues and any additional measures identified in response to additional information required. 	Reduces need for extensive conditions if risks are adequately addressed through mitigation measures/ commitments.	<p>The information below was provided in the following documents, issued to DP&E:</p> <ul style="list-style-type: none"> <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter, dated 11/09/2017</i> <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628) letter, dated 11/09/2017.</i> <p>MPW:</p> <p>It is understood that DP&E were to provide an additional request for information and detail updates required for the mitigation measures for MPW Stage 2. Based on discussions with DP&E in the meeting undertaken with SIMTA representatives on 5 September 2017, and in lieu of receiving this information from DP&E, further detail has been included in the mitigation measures for the MPW Stage 2 Proposal. Attachment F of the SIMTA letter response includes updated mitigation measures, from those provided in the MPW Stage 2 RtS (Section 8). The additional information provided has been drawn from the management plans which were submitted with the EIS and the RtS for the MPW Stage 2 Proposal. All of this information has previously been submitted to DP&E however as requested the mitigation measures have been updated to provide more detail.</p> <p>MPE:</p> <p>A consolidated list of mitigation measures was provided in Section 8 of the MPE Stage 2 RtS. The mitigation measures provided in Section 8 were revised during the preparation of the MPE Stage 2 RtS, and included updates to respond to issues raised by the community, government agencies and stakeholders, inclusive of the NSW DP&E. Since the submission of the MPE Stage 2 RtS, a review of the mitigation measures included in the MPE Stage 2 RtS, as well as other relevant management plans and supporting documentation has been undertaken. As a result of this DP&E request, further inclusions have been made to the mitigation measures provided in Section 8 of the MPE Stage 2 RtS.</p> <p>The Final Compilation of Mitigation Measures (FCMM), including these revisions, has been provided as Attachment D of the previous SIMTA letter response.</p>
All	Requirements of concept approval Infrastructure for staged warehouse construction. (discussed at Regular Meeting on 5/9/2017)	Individual warehouses can operate regardless of the sequence in which they are constructed.	<ul style="list-style-type: none"> Details of all infrastructure committed to, to support individual warehouse operation, e.g. internal roads, car parking, landscaping (e.g. shade trees), drainage etc. 	Reduces need for extensive conditions if commitments are made in supplementary RtS.	<p>The information requested has previously been provided for the MPW Stage 2 Proposal and MPE Stage 2 Proposal SSD Applications. The most up-to-date versions of this information has been previously provided at the following locations:</p> <p>MPW:</p> <ul style="list-style-type: none"> Internal roads: MPW Stage 2 RtS Appendix H – DWG C-MIC2-SSD-002-AA003760-06 Car parking: MPW Stage 2 RtS Revised Architectural drawings at Appendix B – Warehousing masterplan (115123_A_SSD_2000). Landscaping: MPW Stage 2 RtS Revised Landscape Design Statement at Appendix B Drainage: MPW Stage 2 RtS Appendix H (catchment plan at DWG C-MIC2-SSD-406-AA003760-06, stormwater drainage basin and typical raingarden details at DWG C-MIC2-SSD-416-AA003760-06) Utilities: A utilities summary report was provided at Appendix H of the EIS. Final Compilation of Mitigation Measures, at Appendix F of the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709) letter, dated 11/09/2017</i> <p>MPE:</p> <ul style="list-style-type: none"> Internal roads: MPE Stage 2 RtS Appendix E –SSS2-ARC-CV-DWG-002 Car parking: MPE Stage 2 RtS Revised Architectural drawings at Appendix B Proposed Stage 2 Site Plan (DWG 115123_A_SSD_006) Landscaping: MPE Stage 2 RtS Revised Landscape Design Statement at Appendix B Drainage: MPE Stage 2 RtS Appendix E – SSS2-ARC-CV-DWG-0411 to SSS2-ARC-CV-DWG-0432 Utilities: A utilities and servicing strategy was provided at Appendix F of the MPE Stage 2 EIS

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
					<ul style="list-style-type: none"> Final Compilation of Mitigation Measures, provided at Appendix D of the <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017.
MPW	Design detail Contamination (PFAS/PFOS)	Confirmation that site is not included in Department of Defence PFAS/PFOS investigation program.	<ul style="list-style-type: none"> Evidence of consultation with Department of Defence on status of MPW site. 	Confirmation required for Department to finalise assessment.	<p>The following information was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017:</p> <p><i>The MPW site is not a priority site on the Department of Defence PFAS investigation and management program.</i></p> <p>The site is no longer a Department of Defence site. Prior to vacating the site, the Department of Defence provided a Section A Site Audit Statement that certifies that the site is suitable for commercial and industrial use.</p>
All	Design detail Drawings and Sections Details of stormwater system and materials	<p>Demonstrate acceptable design in hydrology, landscaping and urban design, and water sensitive design.</p> <p>Provision of plans and sections at suitable scales and sufficient information for the Department's and technical specialists' assessment of:</p> <ul style="list-style-type: none"> edge effects due to site filling, proposed drainage structures, retaining walls (e.g. changes to overland flow paths, slope stability, vegetation and visual impacts) effectiveness/ functionality of proposed stormwater drainage system (particularly in relation to water quality) 	<ul style="list-style-type: none"> MPE Stage 2 and MPW Stage 2 application plans and application boundaries at 1:5000 at A1 (similar to masterplan dated 31/01/2017 provided to the Department). Site plans at 1:1000 at A1 (including key plan), showing existing site contours and finished contours or building platform levels to AHD. Existing and finished contours to extend at least 20m outside construction footprint. Plans for development of Moorebank Avenue, and works in riparian zones/ Boot land as a series of plans at 1:500 at A1 (including key plan). Cross-sections and details showing: <ul style="list-style-type: none"> existing ground levels (AHD) proposed fill level (AHD) proposed retaining wall heights proposed OSD basin wall heights adjacent to conservation area proposed retaining wall/ OSD wall materials/ treatment conservation zone boundary/ 1% AEP Georges River flood extent annotated fill batter slopes (e.g. 1 in 4) and treatments proposed levels and tie in to existing vehicle access to 	<p>GAO and the Department's stormwater specialist both expressed strong concerns that information provided does not represent good water sensitive urban design or good landscape design or address their integration.</p> <p>MPW RtS did not respond to GAO good design guides, i.e.</p> <ul style="list-style-type: none"> staff open space shade managing heat load across site (human health) relationship with riparian corridor off-site views from public areas green corridors within site/connections to riparian zone and Boot Land. <p>Currently insufficient information to finalise assessment.</p> <p>Unable to assess scale and extent of edge effects.</p> <p>Detail required to demonstrate if or how (e.g. construction of retaining walls) existing ground levels around the perimeter of MPW would be maintained, particularly adjacent to the conservation zone/ Boot land as the Government Architect's Office (GAO)</p>	<p>The following list details information previously provided to DP&E in response to their request for further information:</p> <p>MPW:</p> <p>Additional information to response to the issues raised by the Government Architect's office on the MPW Stage 2 Proposal was provided in the <i>Moorebank Precinct West (MPW) Stage 2 (SSD 7709) Response to Submissions – issues raised by Government Architect NSW</i> letter, issued to the Principal Landscape Architect, Barbara Schaffer on 3 July 2017.</p> <p>The information below was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct West Concept MOD 1 (SSD 5066_MOD1)/ Moorebank Precinct West Stage 2 (SSD 7709)</i> letter, dated 11/09/2017:</p> <ul style="list-style-type: none"> Site plans provided at 1:1000 at A1 at Attachment G. Edge effect plans provided for relevant areas (works along Moorebank Avenue and in the riparian zone, as requested) at 1:500 at A1 at Attachment G. Cross sections showing details was only requested for MPW Stage 2. Existing ground levels and proposed fill levels were provided in the revised drainage design drawings as Earthworks Sections Sheet 1 (DWG C-MIC2-SSD-116-AA003760-07) and Earthworks Sections Sheet 2 (DWG C-MIC2-SSD-117-AA003760-07), in the Revised Stormwater and Drainage Design Drawings in Appendix H of the MPW Stage 2 RtS. The conservation zone boundary is shown as the 'Proposal Operational Boundary' on DWG LDA-007 and LDA-008 in the revised Landscape Design Statement and Plans. These plans were also provided again for information at Attachment G The remaining information requested relating to cross-sections, including the heights of retaining walls and OSD basin walls, fill batter sloped and the retaining wall/ OSD wall materials/ treatment would be determined as part of future detailed design development. Proposed levels and tie in to existing vehicle access to adjoining properties not the subject of the application was not requested as part of MPW letter. This information was however provided as Attachment E of the <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017 Sections through MPE Stage 1 and MPE Stage 2 and MPW Stage 2 basin along Moorebank Avenue showing tie in of proposed finished levels was not requested as part of MPW letter This information was however provided as Attachment E of the <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017 <p>MPE:</p> <p>The information below was provided in the <i>Response to submissions and outstanding information – Moorebank Precinct East Concept MOD 2 (MP 10_0193 MOD 2)/ Moorebank Precinct East Stage 2 (SSD 7628)</i> letter, dated 11/09/2017:</p> <ul style="list-style-type: none"> Site plans provided at 1:1000 at A1 at Appendix E.

Project All/ MPE/ MPW	Key Issue	Desired outcome	Information required	Why information is critical	Arcadis comment
		<ul style="list-style-type: none"> relationship between final landform and stormwater system relationship between final landform and rail corridor relationship between final Moorebank Avenue level and vehicle access to adjacent sites. <p>Application plan for use in the Department's assessment reports to clearly indicate which works are being constructed under which applications.</p>	<ul style="list-style-type: none"> adjoining properties not the subject of the application <ul style="list-style-type: none"> Sections through MPE Stage 1 and MPE Stage 2 and MPW Stage 2 basin along Moorebank Avenue showing tie in of proposed finished levels. Longitudinal sections of the main piped drainage systems showing existing surface levels, finished surface levels, pipe gradient, pipe diameter, invert levels, outlet invert levels into OSD basins, OSD basin outlet invert levels (all to scale and in AHD). Longitudinal sections and cross-sections (3) of the culvert through MPW (to scale and in AHD). Details of materials to be used in construction of the system Plan configuration and typical cross-sections for all OSD systems including surrounding existing and final surface levels (including proposed drainage swales at southern end of MPW site), drainage inlets and outlets (to scale and in AHD). Details of materials to be used in construction of the system. Plan configuration of bioretention systems within OSD basins including drainage inlets and outlets (to scale and in AHD). Confirm how potential scouring and excessive sedimentation would be addressed. In particular, how would long-term performance of the bioretention systems be maintained in basins receiving high flows and associated debris/coarse sediment loads that potential would block the biofilter. Longitudinal sections and cross sections (2) of each of the outlets from OSD basins to the Georges River (to scale and in AHD). Provide details of materials to be used in construction of the system 	<p>noted that existing levels need to be maintained within the drip line of tree trunks to ensure their survival, with maximum upslope fill levels to be determined by an arborist.</p> <p>Detail required to demonstrate need for fill for drainage purposes as an input to the Department's assessment report section on project need and justification</p> <p>There are no details on the materials and depth of the culvert through MPW.</p> <p>There is discrepancy between landscape plans and civil plans as to the base of the OSD basins.</p> <p>There is no information on where the bioretention systems would be located in these basins, which will take up less than 20% of the basin.</p> <p>There is a need to confirm what materials will be used in systems.</p> <p>Stormwater details needed as basis for discussions between the Department's stormwater specialist and the applicant's specialist.</p> <p>Outcomes from above to inform the Department's discussions with Council's stormwater engineers.</p> <p>Department will require better design outcome through extensive conditions.</p>	<ul style="list-style-type: none"> Edge effect plans provided for relevant areas (works along Moorebank Avenue and in the riparian zone, as requested) at 1:500 at A1 at Attachment E. proposed levels and tie in to existing vehicle access to adjoining properties not the subject of the application were provided at Attachment E Sections through MPE Stage 1 and MPE Stage 2 and MPW Stage 2 basin along Moorebank Avenue showing tie in of proposed finished levels were provided at Attachment E. Existing ground levels and proposed fill levels were provided in the revised drainage design drawings as Site Sections Sheet 1 (SSS2-ARC-CV-DWG-0121) and Site Sections Sheet 2 (SSS2-ARC-CV-DWG-0122), in the Revised Stormwater and Drainage Design Drawings in Appendix E of the MPE Stage 2 RtS. The conservation zone boundary is not relevant to the MPE Stage 2 Proposal. <p>General</p> <p>In response to the information required from DP&E in this table, some additional responses and drawings have been prepared and attached to this letter.</p> <ul style="list-style-type: none"> MPE Stage 2 and MPW Stage 2 application plans and application boundaries at 1:5000 at A1 (similar to masterplan dated 31/01/2017 provided to the Department) - this information was not requested previously by DP&E in their requests for additional information; however. This information has been previously provided in the revised architectural drawings: <ul style="list-style-type: none"> For the MPW Stage 2 Proposal, this information was included as <i>Stage 2 Site plan – Drawing No. 115123_A_SSD_012</i> at Appendix B of the MPW Stage 2 RtS For the MPE Stage 2 Proposal, this information was included as <i>Stage 2 Site plan – Drawing No. 115123_A_SSD_0006</i> at Appendix B of the MPE Stage 2 RtS. <p>Plan configuration of the bioretention systems within OSD basins including drainage inlets and outlets (to scale and in AHD) are attached to this letter.</p> <p>The potential for scouring has been addressed via the use of rock protection/energy dissipators at every pipe outlet into the OSD basins throughout the site. It is also noted that predicted velocities through the basins are generally low and not expected to cause erosion. Excessive sedimentation has been addressed via the use of Gross pollutant traps (GPTs) (CDS units), with expected reduction of suspended solids in the order of 70% prior to entering the bio retention / detention basin.</p> <p>In addition to the above, both sedimentation and scouring would be managed in accordance with an operational maintenance schedule (which would be integrated into the Operational Environmental Management Plan for the Proposal). Routine inspections would be specified to check for accumulated litter, excessive accumulation of sediment, structural damage, weed infestation and erosion.</p> <p>It is assumed that the comment provided relates to coarse sediment loads during construction as it is not anticipated that excessive coarse sediment to be encountered from the operation of the proposal. It is envisaged that sediment ponds may be established in OSD areas during construction, however these would be converted into bio retention ponds prior to operation. This ensures that stormwater management measures are tailored to the potential water quality impacts posed by both construction and operation. Bio retention systems are not anticipated to be operational prior to approximately 90% of upstream development has been completed and should therefore not be affected by construction sediment loads.</p>

Attachment C

Attachment B - response to the issues raised by TfNSW in “Notice of Exhibition – Moorebank Precinct East (MPE): Concept Plan Modification MP 10_0193 Mod 2”

Aspect	Issue	Response	Reference
Letter			
Conditional support	TfNSW can advise a position of support for the proposal progressing to the Planning Assessment Commission. This is on the basis that conditions in the Concept Plan approval relating to traffic and transport issues remain unaltered. The raising of Moorebank Avenue as a result of the importation of fill will require more substantial detail regarding the diversion road, which can be dealt with as part of future development applications.	Noted.	N/A
Annexure A – Suggested Conditions			
New or modified traffic signals within the project footprint	<p>Any future development applications for new or modified traffic control signals for the MPE Project will require consent from Roads and Maritime Services in accordance with Section 87 of the <i>Roads Act, 1993</i>.</p> <p>The proponent will be required to enter into a Works Authorisation Deed with Roads and Maritime Services for new or modified traffic control signals.</p>	<p>It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.</p> <p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	N/A

Aspect	Issue	Response	Reference
Moorebank Avenue upgrade works – approval	<p>The design of the proposed upgrade and widening works along Moorebank Avenue, including the raising of Moorebank Avenue, will require approval by Roads and Maritime Services, TfNSW, and other relevant agencies.</p> <p>The proponent will be required to enter into a Works Authorisation Deed with Roads and Maritime Services for proposed road works on Moorebank Avenue.</p>	<p>It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.</p> <p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	N/A
Moorebank Avenue upgrade works – staging plans	<p>The Applicant is to ensure that the existing use of Moorebank Avenue as a public road is to a standard commensurate to its current use prior to the development. A staging plan and Construction and Traffic Management Plan shall be submitted for review and approval to Roads and Maritime Services and TfNSW prior to construction works commencing, to ensure adequate capacity including a requirement to maintain at least two lanes open to traffic along Moorebank Avenue at all times.</p>	<p>It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.</p> <p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods. A similar condition of approval is proposed by TfNSW for the MPE Stage 2 Approval and therefore the inclusion of this condition at a Concept Plan level would create overlap and impact on the potential for these conditions to be implemented/regulated.</p> <p>Further, a Staging Plan has not been prepared for the MPE Stage 1 construction activities which have commenced construction. The inclusion of this condition may unreasonably impact on these works.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	N/A

Attachment D

ATTACHMENT D - RECOMMENDED CONDITIONS OF APPROVAL

Moorebank Precinct East (MPE) Concept Plan Modification 2 (MP 10_0193 MOD 2)

Agency	New condition or amendment to proposed condition	Environmental Aspect	Issue Raised	Justification	Proposed amendment to condition ¹
Recommended conditions from agencies, post-response to submissions preparation					
TfNSW	New condition	Traffic	<p>Any future development applications for new or modified traffic control signals for the MPE Project will require consent from Roads and Maritime Services in accordance with Section 87 of the <i>Roads Act, 1993</i>.</p> <p>The proponent will be required to enter into a Works Authorisation Deed with Roads and Maritime Services for new or modified traffic control signals.</p>	<p>It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.</p> <p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of</p>	Condition not to be included in final conditions of approval

¹ Proposed additions to recommended condition of approval are denoted as bold and underlined text
Proposed deletions to recommended condition of approval are denoted as bold underlined and struck through text

Agency	New condition or amendment to proposed condition	Environmental Aspect	Issue Raised	Justification	Proposed amendment to condition ¹
				approval within the MPE Concept Approval (MP 10_0193) instrument.	
TfNSW	New condition	Traffic	<p>The design of the proposed upgrade and widening works along Moorebank Avenue, including the raising of Moorebank Avenue, will require approval by Roads and Maritime Services, TfNSW, and other relevant agencies.</p> <p>The proponent will be required to enter into a Works Authorisation Deed with Roads and Maritime Services for proposed road works on Moorebank Avenue.</p>	<p>It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.</p> <p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	Condition not to be included in final conditions of approval
TfNSW	New condition	Traffic	The Applicant is to ensure that the existing use of Moorebank Avenue as a public road is to a standard commensurate to its current use prior to the development. A staging plan and Construction and Traffic Management Plan shall be submitted for review and approval to Roads and Maritime Services and TfNSW prior to construction works	It is unclear as to what part of the MPE Concept Plan Approval this condition is to be included (i.e. which section is to be amended). The condition relates to construction of future stages of the MPE Project, which is generally not, or intended to be, included within the MPE Concept Plan Approval instrument.	Condition not to be included in final conditions of approval

Agency	New condition or amendment to proposed condition	Environmental Aspect	Issue Raised	Justification	Proposed amendment to condition ¹
			commencing, to ensure adequate capacity including a requirement to maintain at least two lanes open to traffic along Moorebank Avenue at all times.	<p>In particular, the MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods. A similar condition of approval is proposed by TfNSW for the MPE Stage 2 Approval and therefore the inclusion of this condition at a Concept Plan level would create overlap and impact on the potential for these conditions to be implemented/regulated.</p> <p>Further, a Staging Plan has not been prepared for the MPE Stage 1 construction activities which have commenced construction. The inclusion of this condition may unreasonably impact on these works.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	
Recommended conditions from agencies, received during exhibition of the MPE CP Mod 2 application, and responded to in the MPE CP Mod 2 RtS					
NSW Health	New condition	Noise	There is potential for sleep disturbance from rail pass-by events. As detailed in the Revised Project Report for Noise and Vibration maximum levels at Casula and Glenfield would exceed the sleep	The Rail link is to be constructed under the MPE Stage 1 Project (SSD 14-6766). The comment relating to the assessment	Condition not to be included in final conditions of approval

Agency	New condition or amendment to proposed condition	Environmental Aspect	Issue Raised	Justification	Proposed amendment to condition ¹
			disturbance objective for industrial premises. We note there is no separate allowance for wheel squeal. The report correctly indicates that sleep disturbance will depend on the frequency of events and the time of day/night. Appropriate mitigation measures should be considered. Advice should be sought from the Environment Protection Authority about appropriate mitigation but may include, track lubrication, effective maintenance regimes for locomotives and carriages, electrification, and low noise barriers. Consideration should be given to requiring noise monitoring and a Noise Management Plan as a condition of consent.	of rail noise impacts does not apply to the Modification Proposal.	

Attachment E

Date 9/11/2017
To Nathan Cairney (Tactical Group)
From Westley Owers (Arcadis)
Copy to Michael Barrow (Qube), Michael Yiend (Qube), Steve Ryan (Tactical Group), Andrew Wiltshire (Tactical Group), Richard Johnson (Aspect), Jane Rodd (Arcadis), Claire Vahtra (Arcadis)
Subject MPE Concept Plan Modification (MP 10_0193 MOD 2) – Supplementary environmental assessment (including Biodiversity information)

1. Introduction

This technical memorandum has been prepared to provide additional information to the Department of Planning and Environment (DP&E) for the purposes of the assessment of the Moorebank Precinct East (MPE) Concept Plan Modification (MP 10_0193 MOD 2) (MPE Concept Modification¹) for which approval is sought under 75W (now repealed) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This technical memorandum serves as supplementary information to both the MPE Concept Plan Modification Report (Arcadis, 2016) and the Concept Plan Response to Submissions (RtS) (Arcadis, 2017) in relation to the clearing of vegetation within the Moorebank Avenue site (part of the MPW site). The Moorebank Avenue site includes the land on which the Moorebank Avenue upgrade is proposed. This technical memorandum provides supplementary impact assessment for potential impacts associated with the clearance of this vegetation (at the Concept Plan level) and also reviews and considers the need for any amendments to the Conditions of Approval (CoA) and/or Statement of Commitments (SoCs) for the MPE Concept Plan Approval (MPE 10_0193). The clearing of the vegetation on the Moorebank Avenue site is to be included as an activity associated with the Moorebank Avenue upgrades component of the MPE Concept Modification Proposal (described in the MPE Concept Plan Modification Report and RtS).

The assessment of impacts associated with the clearing of vegetation within the Moorebank Avenue site was not previously provided within the MPE Concept Plan Modification Report or RtS as it was anticipated that this vegetation clearance would be assessed as part of the application for the MPW Stage 2 Proposal (SSD 7709 - subject to approval). This area of the Moorebank Avenue site was not included in the MPE Concept Plan Modification Report and RtS assessments to avoid duplication of, and to avoid confusion between, the current MPE Stage 2 and MPW Stage 2 Proposals.

However, as a result of the anticipated timing in determining these proposals, it is now proposed to assess the clearance of vegetation on the Moorebank Avenue site (for the purposes of the Moorebank Avenue upgrade), within the MPE Concept Plan Modification. Following this modification of the MPE Concept Plan, approval to undertake the physical clearing would be sought, in future Development Applications (such as the MPE Stage 2 Proposal (SSD 7628)).

¹ Throughout this document the reference to the MPE Concept Plan Modification Proposal refers to SSD MOD 2 and not SSD MOD 1 which has previously been granted approval from the PAC.

Further, this technical memorandum has also been prepared to respond to the request from DP&E to Tactical Group (via email²) to update the MPE Concept Plan Modification environmental assessment in light of updated information contained in the MPE Stage 2 Biodiversity Assessment Report (MPE Stage 2 BAR³). This technical memorandum utilises information provided within the MPE Stage 2 BAR.

2. Modification Proposal overview

This section provides an overview of the Modification Proposal as previously discussed in the MPE Concept Plan Modification Report and RtS. Section 3 of the MPE Concept Plan Modification Report provides a description of the Moorebank Avenue upgrade, sought as part of the Modification Proposal⁴.

The following modifications to the MPE Project are proposed within the Modification Proposal⁵:

- Extension of the land to which the MPE Concept Plan Approval applies to include works on Moorebank Avenue and drainage works to the south and east of the MPE site
- Moorebank Avenue upgrade from the northern to the southern extent of the MPE site, including alterations to the existing lane configuration, increasing the vertical alignment, some widening and ancillary services and infrastructure such as stormwater drainage on the western side of Moorebank Avenue
- Provision of an interim MPE site access to warehousing
- Reconfiguration of the internal road network within the MPE Stage 2 site and use of all internal roads by both light and heavy vehicles, rather than separating heavy and light vehicles within the MPE site
- Importation of clean general fill (approximately 600,000m³) material for bulk earthworks to adjust the building formation to support the functionality of the site stormwater and drainage system
- Change to the location of, and land uses within the freight village and provision of warehousing along the Moorebank Avenue frontage (previously identified as IMT)
- Changes to the staging of development including construction of all warehouses as part of the MPE Stage 2 Proposal
- Subdivision of the MPE site.

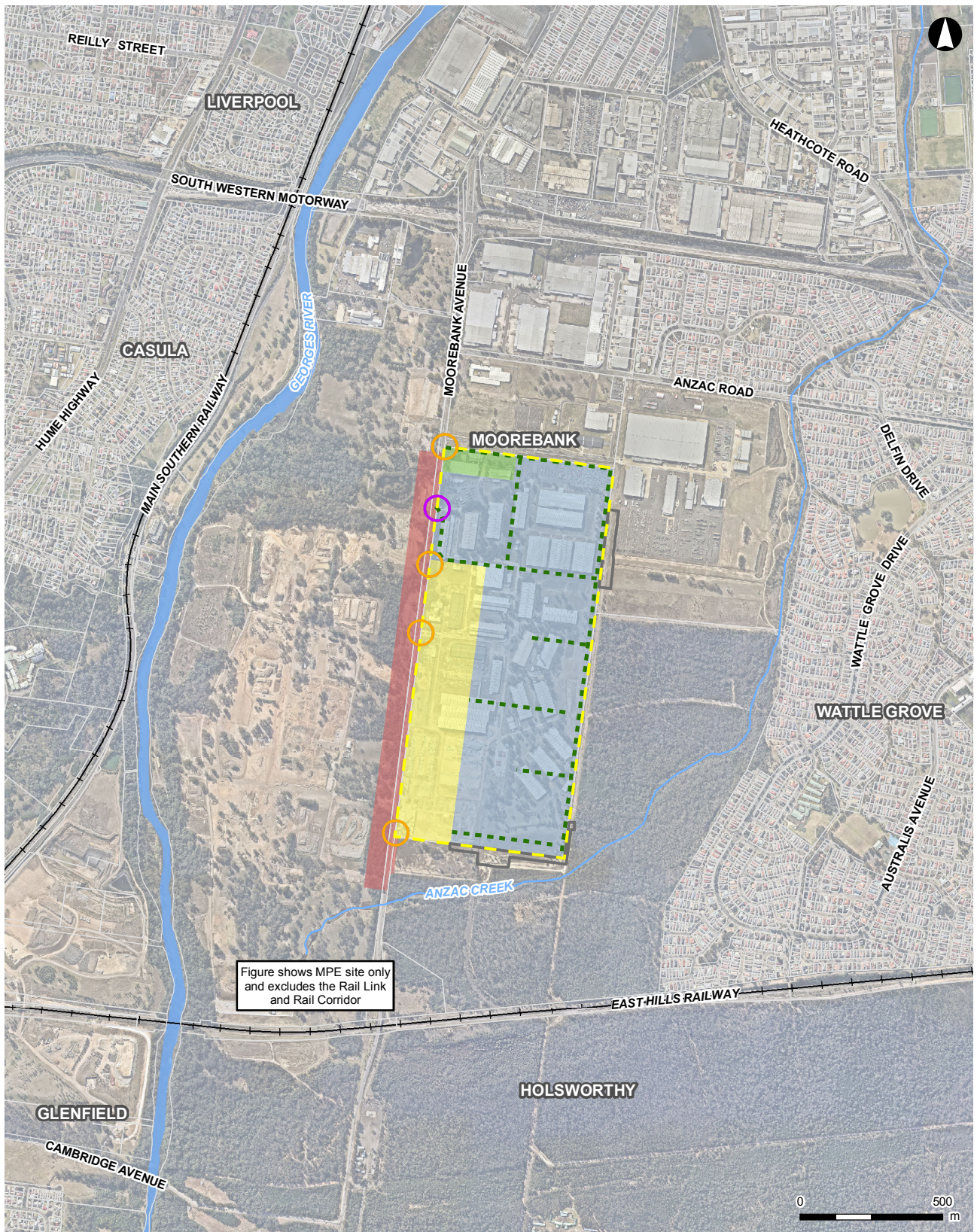
An overview of the Modification Proposal as provided in the MPE Concept Plan Modification RtS is provided in Figure 1.

² Email sent from DP&E (Karen Harragon) to Tactical Group (Steve Ryan) on 7 November 2017.

³ Submitted to DP&E on 7 November 2017.

⁴ The Modification Proposal includes all components proposed within the SSD 5066 MOD 2 Application.

⁵ As identified within the MPE Concept Plan Modification Report and RtS documentation.



LEGEND

- | | | |
|----------------------------------|---------------------------|------------------------------------|
| MPE site | Freight Village | External stormwater infrastructure |
| Site access | Warehousing area | Watercourse |
| Interim site access | Moorebank Avenue upgrades | Existing railway |
| Cadastre (LPI, 2017) | IMT Facility | |
| Indicative internal access route | | |

ARCADIS AUSTRALIA PACIFIC PTY LTD
 ABN 76 104 485 289
 Level 16, 580 George St | Sydney NSW 2000
 P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001
 Coordinate System: GDA 1994 MGA Zone 56
 Aerial imagery supplied by nearmap (August, 2017)



Figure 1: Modification Proposal overview

3. Environmental Assessment

3.1 Previous assessment

Section 5 of the MPE Concept Plan Modification Report provides a detailed environmental assessment of the Modification Proposal (all components) for the following potential impacts:

- Key issues
 - Traffic and transport (Section 5.1)
 - Noise and vibration (Section 5.2)
 - Biodiversity (Section 5.3)
 - Hazards and risks (Section 5.4)
 - Contamination (Section 5.5)
 - Stormwater and flooding (Section 5.6)
 - Air Quality (Section 5.7)
 - Heritage (Section 5.8)
 - Visual and urban design (Section 5.9)
 - Utility servicing (Section 5.10)
- Other issues
 - Health, economic, climate change, ecologically sustainable development and waste management (Section 5.11).

The environmental assessment for the Modification Report (and RtS) considered all environmental impacts for all components of the Modification Proposal (refer to list of components in Section 2, above), including the Moorebank Avenue upgrades. However, to avoid duplication in impact assessment, and as the vegetation clearance was anticipated to be assessed and approved as part of the MPW Stage 2 Proposal (SSD-7709), section 5.2 (Biodiversity) of the MPE Concept Plan Modification Report did not assess the impacts of vegetation clearance in the Moorebank Avenue site for the purposes of the Moorebank Avenue upgrade. All other impacts of other activities associated with the Moorebank Avenue upgrade were assessed in the Modification Report (and RtS).

3.2 Further assessment

The inclusion of clearing of vegetation within the Moorebank Avenue site has the potential to result in a number of impacts with the key potential impact relating to biodiversity. A summary of the potential environmental impacts for issues is provided in Table 1.

Table 1 Supplementary environmental assessment for vegetation clearance on the MPW site (Moorebank Avenue site)

Environmental aspect	Comments	Further ⁶ amendment to CoA/SoCs required?
Traffic and transport	The removal of vegetation from the Moorebank Avenue site (part MPW site) would not result in additional truck movements above that identified in the MPE Concept Plan Approval.	No
Noise and vibration, air quality, health	Noise and vibration, air quality and health emissions from works in the Moorebank Avenue site have been considered in the MPE Concept Plan Modification 2. The removal of vegetation from the Moorebank Avenue site (part MPW site) is not considered to result in additional noise and vibrations, air quality and health emissions above that identified in the Modification Proposal. Any impacts would be managed through the existing CoAs and SoCs in the MPE Concept Plan Approval.	No
Biodiversity	Biodiversity impacts have been considered for works undertaken in the Moorebank Avenue site (in particular the removal of street trees on Moorebank Avenue), with the exception of the vegetation clearance on the Moorebank Avenue site. The removal of vegetation from the Moorebank Avenue site is considered to result in additional impacts for the Modification Proposal. Refer to assessment provided below.	No.
Stormwater and flooding	Stormwater and flooding impacts have been considered for works undertaken in the Moorebank Avenue site. The removal of vegetation from the Moorebank Avenue site (part MPW site) is not considered to result in additional stormwater or flooding impacts above that identified in the Modification Proposal. Any impacts would be managed through the existing CoAs and SoCs in the MPE Concept Plan Approval.	No
Visual and urban design	Visual and urban design impacts have been considered for works undertaken in the Moorebank Avenue site. The removal of vegetation from the Moorebank Avenue site (part MPW site) would result in a change to the visual environment, when viewed from Moorebank Avenue. Any impacts would be managed through the existing CoAs and SoCs in the MPE Concept Plan Approval.	No
Waste management/ ESD	Waste and ESD impacts have been considered for works undertaken in the Moorebank Avenue site. The removal of vegetation from the Moorebank Avenue site (part MPW site) is not considered to result in additional waste management or ESD impacts above that identified in the Modification Proposal. Any impacts would be managed through the existing CoAs and SoCs in the MPE Concept Plan Approval.	No

⁶ This section refers to any additional amendments to the CoA or SoCs in addition to this proposed within Section 6 of the MPE Concept Plan RtS.

Environmental aspect	Comments	Further ⁶ amendment to CoA/SoCs required?
Hazards and risks, contamination, heritage, utility servicing, economic, climate change	No change.	N/A

3.2.1 Biodiversity

This impact assessment utilises information, as relevant, from the MPE Stage 2 BAR (Arcadis, 2017). This assessment provides the level of detail commensurate with that required at the Concept Plan level.

Existing environment

Vegetation - Plant community types / threatened ecological communities

The Moorebank Avenue site includes three native vegetation communities (Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland, Parramatta Red Gum Woodland, and Forest Red Gum – Rough-barked Apple Grassy Woodland) and one modified vegetation type, Planted and disturbed vegetation. A summary of the exiting Plant Community Types (PCTs) on the Moorebank Avenue site including their status under the *Biodiversity Conservation Act 2016* (BC Act) and *Environment Protection and Biodiversity Protection Act 1999* (EPBC Act) is provided in Table 2 and Figure 2.

Table 2 Plant community types (PCTs) identified on the Moorebank Avenue site

Vegetation Class (Keith 2004)	PCT ID	Plant Community Type	BC Act Status	EPBC Act Status	Estimated clearance of PCT since European settlement
Sydney Sand Flats Dry Sclerophyll Forests	ME003	Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin	Vulnerable	Endangered	50%
Sydney Sand Flats Dry Sclerophyll Forests	ME005	Parramatta Red Gum woodland on moist alluvium of the Cumberland Plain, Sydney Basin	Endangered	Not listed	45%
Coastal Floodplain Wetlands	ME018	Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin	Endangered	Not listed	95%

Groundwater dependent ecosystems

Some of the fragmented patches of vegetation along the eastern boundary of the Moorebank Avenue site were identified as having a moderate potential for groundwater interaction (Arcadis 2016). A search of the Australian Government's Atlas of Groundwater Dependent Ecosystems was undertaken on 7 April 2016. No data on subterranean groundwater-dependent ecosystems (GDEs) is available for the locality. Notwithstanding this, several GDEs with potential reliance on subsurface groundwater were identified in the locality including in the Moorebank Avenue site (Bureau of Meteorology 2016). Results are mapped in Figure 3.

Fauna habitat

Fauna habitats (terrestrial) within the Moorebank Avenue site are identified as follows:

- Structurally intact woodland –
 - Scattered throughout the Moorebank Avenue site providing a range of fauna habitat values.
 - Patches of dense understorey and diverse groundcover in this habitat type provide potential foraging and nesting habitat for a variety of terrestrial reptiles, bird and mammals.
 - Moderate to dense cover of immature, semi-mature and mature trees provide foraging habitat for nectar-feeding and seed-eating animals and is likely to contain hollows suitable for birds such as small to large parrots, owls, tree roosting microchiropteran bat and small to large arboreal mammals. Foraging opportunities exist in the canopy for predatory species including Powerful Owl and Spotted-tailed Quoll.
 - Overall, this fauna habitat type is in moderate to good condition providing potential habitat for species of animal that require diverse native understorey vegetation, canopy connectivity and tree hollows.
- Highly disturbed areas with scattered trees –
 - Occurs in areas that have been subject to substantial human disturbance including hardstand areas on the MPW site and the Moorebank Avenue road reserve.
 - Habitat type does not correspond to any native vegetation community. Native vegetation in this habitat type is restricted to occasional trees, shrubs and groundcover plants within otherwise exotic vegetation
 - Habitat is only likely to provide habitat for native and introduced fauna species that are adapted to open environments and tolerant of human disturbance. Many such native species (e.g. Willie Wagtail and Noisy Miners) have increased in abundance in response to human disturbance.
 - Overall, this habitat type is in poor condition and generally of very limited value to threatened fauna species.

The native vegetation in the Moorebank Avenue site is fragmented, but maintains connectivity with riparian vegetation adjoining the Georges River that extends to the north and south of the MPW site.

The Moorebank Avenue site does not contain aquatic fauna habitats, however Anzac Creek is located to the south.

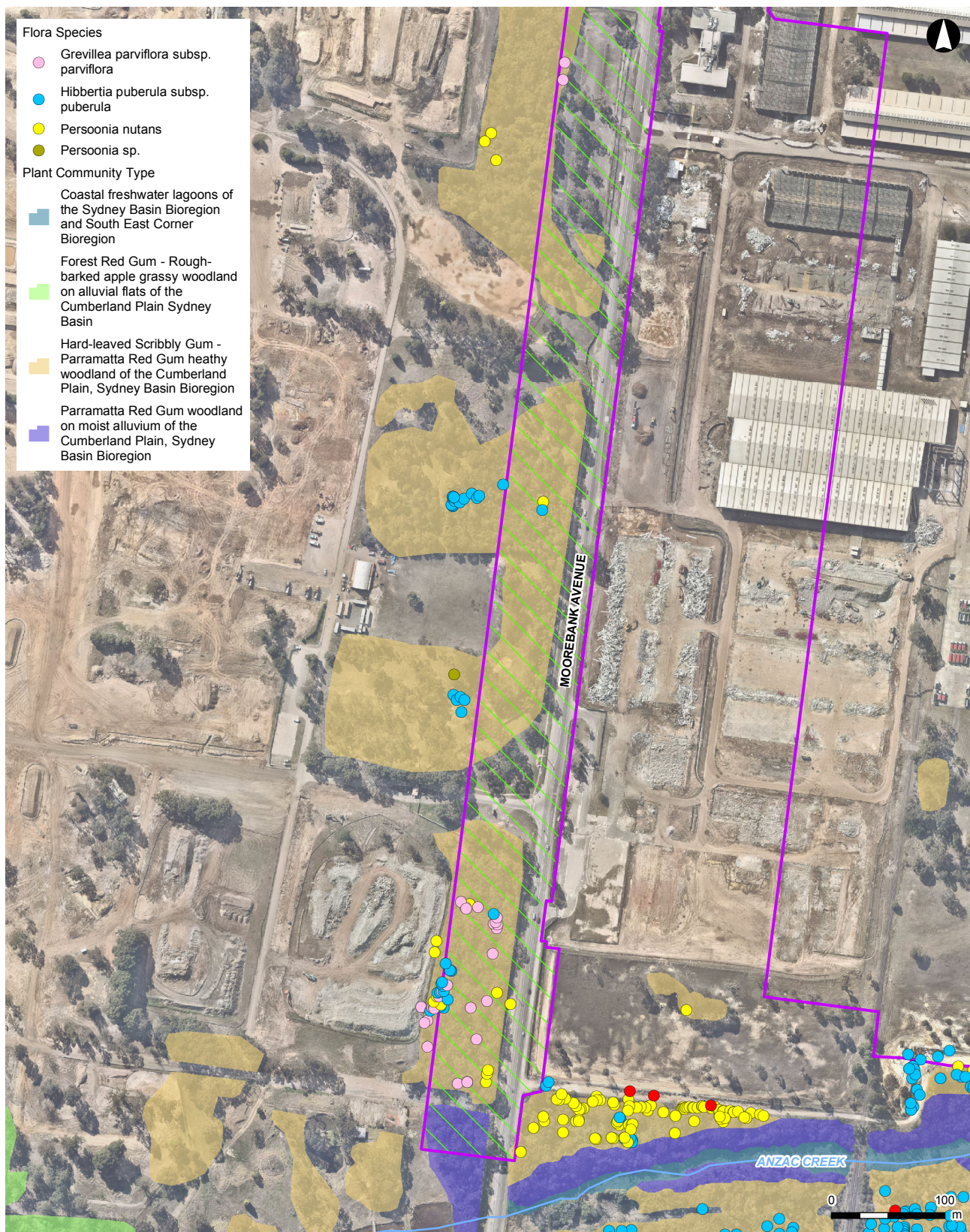
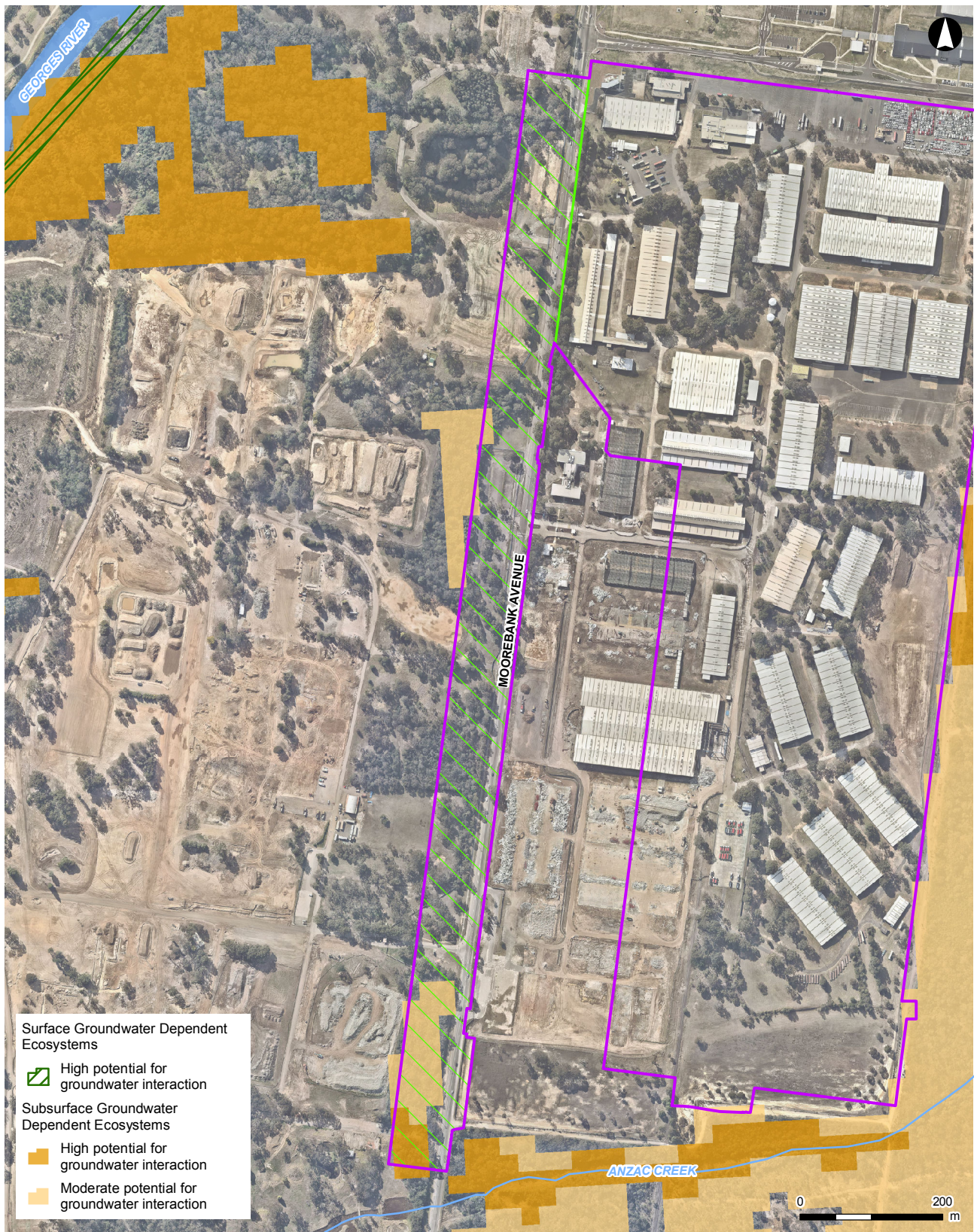


Figure 2: Threatened flora species recorded within and adjacent to the Moorebank Avenue site



Threatened species

Three threatened flora species were recorded within the Moorebank Avenue site: *Hibbertia puberula* subsp. *puberula*, *Persoonia nutans* and *Grevillea parviflora* subsp. *parviflora* (Table 3). Three other threatened flora species were recorded during surveys the nearby Boot land between 2011 and 2017 (Table 3). The locations of threatened species recorded are shown in Figure 2 (above).

Table 3 Threatened flora species recorded within and around the Moorebank Avenue site

Scientific name	Common name	EPBC Act status	BC Act status	Distance between closest record and Moorebank Avenue site	No. within Moorebank Avenue site
<i>Acacia bynoeana</i>	Bynoe's Wattle	Vulnerable	Endangered	300 metres	N/A
<i>Acacia pubescens</i>	Downy Wattle	Vulnerable	Vulnerable	610 metres	N/A
<i>Grevillea parviflora</i> subsp. <i>parviflora</i>	Small-flowered Grevillea	Vulnerable	Vulnerable	occurs within Moorebank Avenue site	79 stems
<i>Hibbertia fumana</i>	-	Not listed	Critically Endangered (provisional listing)	77 metres	N/A
<i>Hibbertia puberula</i> subsp. <i>puberula</i>	-	Not listed	Endangered	occurs within Moorebank Avenue site	22 plants
<i>Persoonia nutans</i>	Nodding Geebung	Endangered	Endangered	occurs within Moorebank Avenue site	8 plants

A total of 23 threatened fauna species were derived from the PCTs identified on the Moorebank Avenue site as predicted ecosystem credit species. None of the predicted threatened fauna ecosystem credit species were recorded on the Moorebank Avenue site. Assessment of the potential presence of each species in the Moorebank Avenue site found that two species (Eastern Freetail-bat and Little Lorikeet) have a high likelihood of occurrence and 10 species have a moderate likelihood of occurrence.

No koalas or incidental observations of koala presence (i.e. scats or scratches) were identified during field surveys undertaken (between 2011 and 2016) in the MPW Stage 2 study area, which includes the Moorebank Avenue site. It was determined that the probability of koalas occurring within the Moorebank Avenue site is "unlikely", based on the lack of Core or Potential habitat for koala and barriers to koala movement. Only one koala feed species listed under Schedule 2 of SEPP 44, *Eucalyptus tereticornis* (Forest Red Gum) occurs in the Moorebank Avenue site. Koala feed trees for the Central Coast KMA that occur in the Moorebank Avenue site include two primary feed tree species, *Eucalyptus parramattensis* and *Eucalyptus tereticornis*. One secondary food tree species, *Eucalyptus baueriana*, also occurs in low densities. Accordingly, no further surveys for koalas within the Moorebank Avenue site were required, and no further assessment was required.

A number of species were identified in the credit calculator as predicted fauna species credit species. The likelihood of these predicted fauna species credit species is shown in Table 4.

Table 4 Fauna species credit species and their presence status on the Moorebank Avenue site

Predicted species credit species	Associated PCTs ⁷ found on Moorebank Avenue site	Habitat presence on Amended Proposal site?	Presence status	Can species withstand further loss?
Cumberland Plain Land Snail <i>Meridolum corneovirens</i> E-BC Act	ME002 ME003	Marginal habitat may be present in ME002 and ME003, however there was minimal leaf litter observed within the small area to be impacted	Unlikely.	Yes
Eastern Pygmy-possum <i>Cercartetus nanus</i> V-BC Act	ME003	Potential habitat on site in ME003 is unlikely to be occupied by this species due to fragmentation.	Unlikely.	Yes
Green and Golden Bell Frog <i>Litoria aurea</i> E-BC Act V-EPBC Act	ME002 ME003	Marginal habitat present in basins and drainage lines. Infestation of <i>Gambusia holbrooki</i> (a predator of tadpoles) reduces the likelihood of occurrence.	Unlikely. Habitat is marginal and species not recorded during targeted surveys.	Yes
Koala <i>Phascolarctos cinereus</i> V-BC Act V-EPBC Act	ME002 ME003	Potential habitat on site in ME003 is unlikely to be occupied by this species due to fragmentation. ME002 does not include potential feed trees.	Unlikely.	Yes
Regent Honeyeater <i>Anthochaera phrygia</i> CE-BC Act E-EPBC Act	ME002 ME003	Potential habitat on site in ME003 is unlikely to be occupied by this species due to fragmentation. May forage sporadically on the site in winter but unlikely to breed locally.	Unlikely. The species was not found during targeted surveys. Species records within 10km are 20 years old or more.	Yes
Squirrel Glider <i>Petaurus norfolcensis</i> V-BC Act	ME002 ME003	No. Species requires abundant hollows. Hollows are a limited resource in the Amended Proposal site.	Unlikely. The species was not found during targeted surveys.	Yes

⁷ Refer to PCTs listed above in Table 2.

Impact assessment (unavoidable impacts)

The MPE Concept Plan Modification Report (Executive Summary) provided the following conclusion for the potential impacts of the Modification Proposal on biodiversity impacts:

Clearing of a very small, isolated and fragmented area of native vegetation, comprising 0.1 hectares of Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin would be required. This vegetation was not mapped as part of the MPE Concept Plan EA, but would require removal with or without the Modification Proposal. All other areas to be impacted are planted and disturbed vegetation. Any impacts to native vegetation would be offset and has been considered in the current Biodiversity Offset Strategy to be prepared for the Moorebank Precinct (under the MPE Stage 1 Conditions of Approval).

The below impact assessment provides additional information with a specific focus on the vegetation clearing on the Moorebank Avenue site component of the Modification Proposal. This impact assessment has also been considered from a cumulative impact perspective in the context of the greater MPE Concept Plan Approval and the MPW Concept Approval Project for PCTs and threatened species as identified below.

Vegetation - Plant community types / threatened ecological communities

The threatened ecological communities to be directly impacted and the total areas of impact are listed in Table 5.

Table 5 Areas of direct impact to threatened ecological communities (estimates, subject to clarification within future Development Applications)

Plant Community Type	Equivalent TEC	Conservation status	Moorebank Avenue site
Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin	Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion	Vulnerable (BC Act) Endangered (EPBC Act)	3.73 ha
Parramatta Red Gum woodland on moist alluvium of the Cumberland Plain, Sydney Basin Bioregion	Castlereagh Swamp Woodland	Endangered (BC Act)	0.22 ha
Forest Red Gum - Rough-barked apple grassy woodland on alluvial flats of the Cumberland Plain Sydney Basin	River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-east Corner bioregions	Endangered (BC Act)	0.59 ha
Total area of native vegetation clearance			4.54 ha

As shown in Table 5, the total area of native vegetation to be cleared from the Moorebank Avenue site is 4.54 ha, however this would be clarified as part of future stages of approval. Ecosystem credits are required to offset the impacts to these threatened ecological communities. Relevant biodiversity offsets would be addressed as part of future stages of approval as required by Schedule 3, Condition 2 (Further Assessment Requirements), sub condition 2.1, 'Biodiversity' of the MPE Concept Plan Approval.

Groundwater dependent ecosystems

Impacts to groundwater dependent ecosystems, such as drawdown of groundwater from the root zone, may occur as a result of earthworks and geotechnical construction activities. This may have the potential to affect adjacent areas of retained vegetation and habitat that may utilise the shallow groundwater aquifers present. Any impacts from the clearing of vegetation within the Moorebank Avenue site are expected to be minor given the limited scope of excavation. The detailed design process of future Development Applications stages of development would further consider potential groundwater impacts and effects on groundwater-dependent ecosystems.

Fauna habitats

The clearing of vegetation on the Moorebank Avenue site would result in the removal of fauna habitat from the Moorebank Avenue site including structurally intact woodland, highly disturbed areas with scattered trees and landscaped vegetation providing habitat for fauna. The clearing of vegetation within the Moorebank Avenue site would involve the removal of two hollow-bearing trees identified by PB (2014a).

Further, the clearing of vegetation within the Moorebank Avenue site would impact a narrow linear patch of trees that provides some connectivity for urban fauna in the road reserve, and allows for movement of some native fauna species across the greater MPW site and broader landscape (although much of the surrounding vegetation is fragmented, with the immediately surrounding vegetation to be removed as part of the MPW Project (MPE Stage 2 Proposal)).

Threatened species

The clearing of vegetation within the Moorebank Avenue site would have direct impacts on three threatened plant species: *Hibbertia puberula* subsp. *puberula*, *Persoonia nutans* and *Grevillea parviflora* subsp. *parviflora*. The number of each species to be cleared is presented in Table 6. The number of plants/stems to be cleared within the Moorebank Avenue site has been compared with the total number of plants/stems in the Moorebank Avenue site plus the Wattle Grove Offset Area, as specified in the BAR prepared for the application for the Biobanking agreement (WSP Parsons Brinckerhoff, 2017).

Table 6 Impacts to threatened flora species in the Moorebank Avenue site (estimates, subject to clarification within future Development Applications)

Threatened Flora Species	Population in Moorebank Avenue site + Wattle Grove Offset Area	Estimated total to be cleared ⁸ Moorebank Avenue site	Percentage of known/ estimated population on the Moorebank Avenue site + Wattle Grove Offset Area to be cleared
<i>Acacia bynoeana</i> Endangered (EPBC Act) Vulnerable (BC Act)	33 plants	0	0%
<i>Acacia pubescens</i> Vulnerable (EPBC Act) Vulnerable (BC Act)	Estimated stem count of 100	0	0%
<i>Grevillea parviflora</i> subsp. <i>parviflora</i>	Estimated stem count of 13,679	79	0.58%

⁸ Subject to clarification as part of future stages of development under the MPE Concept Plan Approval.

Threatened Flora Species	Population in Moorebank Avenue site + Wattle Grove Offset Area	Estimated total to be cleared ⁶ Moorebank Avenue site	Percentage of known/ estimated population on the Moorebank Avenue site + Wattle Grove Offset Area to be cleared
Vulnerable (EPBC Act)			
Vulnerable (BC Act)			
<i>Hibbertia fumana</i> Not listed (EPBC Act) Critically Endangered (BC Act)	370 individuals*	0	0%
<i>Hibbertia puberula</i> subsp. <i>puberula</i> Not listed (EPBC Act) Endangered (BC Act)	565 plants	22 plants	4%
<i>Persoonia nutans</i> Endangered (EPBC Act) Endangered (BC Act)	189 plants	8 plants	4%

*Additional investigations in September 2017 resulted in a population estimate of 14,270 individuals of this species (see Arcadis 2017).

An assessment of the impact of the clearing of vegetation within the Moorebank Avenue site on threatened fauna species is provided above.

Cumulative impacts

Cumulative impacts of the Modification Proposal were addressed, as necessary, within the MPE Concept Plan Modification RtS. The clearing of vegetation within the Moorebank Avenue site has been assessed as part of the MPW Project (MPE Stage 2 Proposal), and therefore the cumulative impacts previously presented within the MPW Stage 2 Proposal / MPE Stage 2 Proposal documentation do not change. An update to the cumulative impacts has been re-presented in this supplementary information to identify and clarify the extent of impacts in the context of the MPE and MPW Projects (refer to Table 7).

Table 7 Cumulative impacts to native vegetation from the MPE Project as modified (MPE Stage 2 Proposal / MPE Stage 1 Project) and MPW Project (MPW Stage 2 Proposal) (estimates, subject to clarification within future Development Applications)

Plant Community Type	Equivalent TEC	MPE Project area of impact			MPW Project area of impact	Total area of impact
		MPE Stage 2 Proposal		MPE Stage 1 Project	MPW Stage 2 Proposal	
		MPE Stage 2 site ⁹	Moorebank Avenue site ¹⁰			
Broad-leaved Ironbark - Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin Bioregion	Cooks River – Castlereagh Ironbark Forest in the Sydney Basin Bioregion Endangered (BC Act) Critically Endangered (EPBC Act)	0.05 ha	0 ha	0 ha	0 ha	0.05 ha
Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin	Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion Vulnerable (BC Act) Endangered (EPBC Act)	0.1 ha	3.73 ha	0.74 ha	13.54 ha	14.38 ha
Parramatta Red Gum woodland on moist alluvium of the Cumberland Plain, Sydney Basin	Castlereagh Swamp Woodland Endangered (BC Act)	0 ha	0.22 ha	0.05 ha	0.68 ha	0.73 ha
Forest Red Gum – Rough- barked Apple grassy woodland on alluvial flats of the Cumberland	River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-	0 ha	0.59 ha	0.41 ha	28.47 ha	28.88 ha

⁹ The area within the MPE site which would be disturbed by the MPE Stage 2 Amended Proposal (including the operational area and construction area). The MPE Stage 2 site includes the former DSND site and the land owned by SIMTA which is subject to the MPE Concept Plan Approval.

¹⁰ The MPW Stage 2 Proposal also includes the clearing of vegetation within the Moorebank Avenue site. As such, the Moorebank Avenue site impacts are not included in the 'total area of impact'.

Plant Community Type	Equivalent TEC	MPE Project area of impact		MPW Project area of impact		Total area of impact
		MPE Stage 2 Proposal		MPE Stage 1 Project	MPW Stage 2 Proposal	
		MPE Stage 2 site ⁹	Moorebank Avenue site ¹⁰			
Plain, Sydney Basin	east Corner bioregions Endangered (BC Act)					
Coastal freshwater lagoons of the Sydney Basin Bioregion and South East Corner Bioregion	Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-east Corner bioregions Endangered (BC Act)	0 ha	0 ha	0.03 ha	0 ha	0.03 ha
Total are of native vegetation clearance (cumulative)		0.15 ha	4.54 ha	1.23 ha	42.69 ha	44.07 ha

A summary of the impacts to threatened flora species from the clearing of vegetation within the Moorebank Avenue site in the context of the MPE Project as modified (MPE Stage 2 Proposal / MPE Stage 1 Project) and MPW Project (MPW Stage 2 Proposal) is provided in Table 8.

Table 8 Cumulative impacts to threatened flora species from the MPE Project as amended (MPE Stage 2 Proposal / MPE Stage 1 Project) and MPW Project (MPW Stage 2 Proposal)

Threatened flora species	Conservation status	MPE Project impact			MPW Project are of impact	Cumulative impacts
		MPE Stage 2 Proposal		MPE Stage 1 Project	MPW Stage 2 Proposal ¹¹	
		MPE Stage 2 site ¹²	Moorebank Avenue site			
<i>Persoonia nutans</i>	Endangered (EPBC Act, BC Act)	4 plants	8 plants	11 plants	16 plants	31 plants
<i>Grevillea parviflora</i> subsp. <i>parviflora</i>	Vulnerable (EPBC Act, BC Act)	0 stems	79 stems	20 stems	333 stems	353 stems
<i>Hibbertia fumana</i>	Critically endangered (BC Act)	0 plants	0 plants	Up to 3 plants	0 plants	Up to 3 plants
<i>Hibbertia puberula</i> subsp. <i>puberula</i>	Endangered (BC Act)	88 plants	22 plants	45 plants	83 plants	216 plants

Mitigation measures

Biodiversity impacts cannot be avoided for many aspects of the clearing of vegetation within the Moorebank Avenue site. As such, mitigation measures should be implemented to mitigate these impacts during the development of future Development Applications. As discussed above, the physical clearance of vegetation proposed is subject to further assessment as part of future Development Applications (in particular the MPE Stage 2 Proposal) and therefore only mitigation measures that are appropriate to the Concept Plan level have been included in the Concept Plan Modification Proposal.

A consideration of the mitigation measures within the MPE Concept Plan Approval relating to biodiversity is provided below. Biodiversity issues associated with the clearing of vegetation within the Moorebank Avenue site would be managed in accordance with the Concept Plan Approval CoA and associated SoCs. These are considered adequate to address the potential impacts of clearing of vegetation within the Moorebank Avenue site. No further mitigation measures are therefore considered necessary.

¹¹ That the MPW Stage 2 Proposal includes the area within the Moorebank Avenue site. As such, the Moorebank Avenue site impacts are not included in the total.

¹² The area within the MPE site which would be disturbed by the MPE Stage 2 Amended Proposal (including the operational area and construction area). The MPE Stage 2 site includes the former DSNDC site and the land owned by SIMTA which is subject to the MPE Concept Plan Approval.

Conditions of Approval

The MPE Concept Plan Approval included a number of additional biodiversity requirements for assessment of future Development Applications, as described in Table 9. The clearing of vegetation within the Moorebank Avenue site would require subsequent approval in future stages of development and therefore these CoAs are considered suitable.

Table 9 MPE Concept Plan Conditions of Approval – Biodiversity

Aspect	Condition
Schedule 3 – 2. Future Assessment Requirements	
2.1 Biodiversity	<p>Any future Development Application shall include a Flora and Fauna assessment. The assessment shall:</p> <ul style="list-style-type: none"> a) assess impacts on the biodiversity values of the site and adjoining areas, including Endangered Ecological Communities and threatened flora and fauna species and their habitat, impacts on wildlife and habitat corridors, riparian land, and habitat fragmentation and details of mitigation measures, having regard to the range of fauna species and opportunities for connectivity (terrestrial, arboreal and aquatic) across the rail link between the site and the EHPL; b) include a Vegetation Management Plan that has been prepared in consultation with the NSW Office of Water; c) document how impacts to the <i>Persoonia nutans</i> and the <i>Grevillea parviflora</i> subsp. <i>Parviflora</i> flora species have been minimised through the detailed design process; d) include the details of available offset measures to compensate the biodiversity impacts of the proposal where offset measures are proposed to address residual impacts, in particular the following should be considered: <ul style="list-style-type: none"> i. As stipulated in principle 2 of 'NSW offset principles for major projects (state significant development and infrastructure)', for terrestrial biodiversity, established assessment tools, such as the BioBanking Assessment Methodology (BBAM), are considered best practice; ii. the Biodiversity Offset Strategy will be undertaken in accordance with the 'NSW offset principles for major projects (state significant development and state significant infrastructure)'; and iii. Offsets shall be identified, and demonstrate that they can be secured.

Statement of Commitments

Based on the recommendations of the Flora and Fauna Assessment (Hyder Consulting, 2013c) prepared for the MPE Concept Plan Approval, SIMTA committed to a number of actions relating to biodiversity impacts. The SoC relevant to the clearing of vegetation within the Moorebank Avenue site is provided in Table 10.

Table 10 Concept Plan Statement of Commitments (biodiversity)

Reference	Condition of Approval / Statement of Commitment	Timing
Biodiversity	<p><u>Offset impacts</u></p> <p>The Proponent will update the Preliminary Biodiversity Offset Strategy (Hyder Consulting 2013) in accordance with the NSW offset principles for major projects (state significant development and state significant infrastructure) and continue to consult with the Department of the Environment (DOTE) through the project approval processes.</p> <p>The offset package will be secured before any clearing of endangered ecological communities or threatened species is carried out.</p>	<p>Address within 12 months of the approval of the planning application for the first stage of works (including the rail link) and</p>

Reference	Condition of Approval / Statement of Commitment	Timing
		secure offsets prior to vegetation clearing

As discussed in the MPE Stage 2 BAR, the offset requirements related to values in the Moorebank Avenue site may be included within either the BOS or a BOP for the MPE Project or the MPW Project, subject to the timing of determination of the MPE Stage 2 Proposal and the MPW Stage 2 Proposal.

This SoC is considered suitable to mitigate the proposed impact at a Concept Plan level and therefore no further mitigation measures are considered necessary.

4. Conclusion

This technical memorandum has been prepared to provide additional information to the Department of Planning and Environment (DP&E) for the purposes of the assessment of the inclusion of vegetation clearing for the Moorebank Avenue upgrades, proposed as part of the Moorebank Precinct East (MPE) Concept Plan Modification (MP 10_0193 MOD 2) for which approval is sought under 75W (now repealed) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). In addition, this technical memorandum has also been prepared to respond to the request from DP&E to update the MPE Concept Plan Modification environmental assessment documentation in light of updated information contained in the MPE Stage 2 Biodiversity Assessment Report (MPE Stage 2 BAR¹³).

An environmental assessment of the potential impacts associated with the inclusion of the clearing of vegetation for the Moorebank Avenue upgrades has been provided. This assessment identified that no further impacts are anticipated for the environmental issues with the exception of biodiversity.

Biodiversity impacts associated with the clearing of vegetation within the Moorebank Avenue site would be managed in accordance with the MPE Concept Plan Approval CoA and associated SoCs. These are considered adequate to address the potential impacts of the clearing of vegetation within the Moorebank Avenue site. No further mitigation measures are therefore considered necessary.

Cumulative biodiversity impacts would be addressed through either the BOS or a BOP for the MPE Project or the MPW Project, and a future biobanking agreement (which would include the MPE Stage 2 Proposal and the MPW Stage 2 Proposal).

¹³ Submitted to DP&E on 7 November 2017.

Attachment F

ATTACHMENT 2 – RESPONSE TO EPA COMMENTS (26/10/2017)– MPE CONCEPT PLAN MOD 2

Aspect	Issue	Response	Reference
Air Quality – Assessment	The assessment of peak daily construction dust has been revised and is considered adequate.	Noted	N/A
Air Quality – Recommendations	The existing conditions of Concept Approval requiring revised AQIA based on detailed design be retained.	Noted. It is understood that this reference relates to the MPE Concept Plan Approval (MP 10_0193), Schedule 3, Condition 2.1 (Air Quality) which requests an air quality impact assessment to be prepared for all future stages of the MPE Project. SIMTA has no objections to this existing condition being remaining within the MPE Concept Plan Approval.	N/A
Air Quality – Recommendations	Revised assessments for subsequent project approvals must include a commitment to implement management measures to prevent exceedances of applicable Air Quality Assessment criteria.	It should be noted that background PM _{2.5} concentrations already exceed the NEPM AAQ reporting standard, meaning that predictions are also above the standard at all receptors. The exceedance of this criteria is outside of the control of the MPE Concept Plan, and as such, cannot be mitigated as part of subsequent project approvals under the MPE Concept Plan. In the context of the above, the following amendments (with additions bold and underlined and deletions bold, underlined and struck through) should be made to the EPAs recommendation: Revised assessments for subsequent project approvals must include a commitment to implement management measures to <u>minimise the extent and duration of</u> exceedances of applicable Air Quality Assessment criteria, <u>above those experienced as a result of existing ambient air quality.</u>	N/A
Noise and Vibration – Assessment	<u>Out of standard hours construction works not justified</u> The proponent has modified the Statement of Commitments for MPE Concept Plan Mod 2 to align with the MPW Concept Approval condition D7. The EPA notes that the condition states that one of the conditions where out of standard hours works can occur is “works as approved through the out-of hours work protocol outlined in the Construction Environmental Management Plan (CEMP)”. The EPA notes that the proponent’s response to EPA’s submission states that LAeq,15minute construction noise levels for out of	As stated by the EPA, Section 3.3 of the MPE Concept Plan Modification Report (Arcadis, 2016) proposes an amendment to the MPE Stage Concept Plan Approval – Statement of Commitments (SoCs) to facilitate future stages of development and align with aspects of Condition D7 within the MPW Concept Approval. The modification proposed to the MPE Concept Approval improves the clarity of the previous condition of approval, which permitted outside of hours works, subject to certain criteria.	Sections 3.3. and 5.2 of the MPE Concept Modification Plan Report

Aspect	Issue	Response	Reference
	<p>standard hours works comply with noise management levels at all residential noise catchments except Wattle Grove, where a 1dB exceedance is predicted.</p> <p>The proponent also attempts to justify a 1dB exceedance as 'minor' and any out of standard hours works will be managed by the Construction Noise Vibration Management Plan (CNVMP). However, the EPA considers that an exceedance of background + 5dB means stop work for any approved out of standard hours works.</p> <p>The EPA is not clear on the potential out of standard hours construction noise impacts from both the MPE and MPW sites and does not consider that the proponent has provided a clear justification for out of standard hours construction works, as noted in the EPA's submission on the exhibited EIS and as stated in the Interim Construction Noise Guideline (ICNG).</p> <p>For the various concerns outlined above, the EPA's opinion is that construction works must be limited to standard hours as per the ICNG.</p>	<p>The construction noise assessments, provided in Section 5.2 of the MPE Concept Plan Modification Report, has been prepared on a conservative basis whereby all plant items during certain Works periods of construction are assumed to be operating simultaneously. The 1dB exceedance at Wattle Grove is considered imperceptible, and does not warrant mitigation given the conservative nature of the assessment assuming that all plant would be operating simultaneously.</p> <p>As mentioned by the EPA, in conjunction with the worst-case, conservative construction noise assessment, as the works will be conducted in accordance with a Construction Noise and Vibration Management Plan, it is unlikely that the predicted exceedance would occur. In particular, the SoCs provided within the MPE Concept Plan Approval require the preparation of a Construction Noise and Vibration Management Plan, prior to construction, for each future stage of the MPE Project.</p> <p>Out of hours (OOH) construction activities are proposed primarily to reduce traffic congestion impacts associated with material delivery. These hours have been developed based on a balanced consideration of reducing the overall length of the construction program and the need to minimise noise and traffic related impacts to nearby sensitive receivers.</p> <p>Further, conditions of approval for the MPE Stage 1 Project allow for construction works to occur outside standard hours, subject to $L_{Aeq,15min}$ noise levels associated with the works being below, and in a worst case no more than 5 dBA above the rating background level. There appears to be no justification as to why such a condition should not also be applied to the MPE Stage 2 Proposal also.</p> <p>In summary, the potential minor noise exceedance could be mitigated through the preparation a Construction Noise and Vibration Management Plan for future stages of development (MPE Stage 2) that includes mitigation measures commensurate to the scale and nature of the work included within the future stage. In particular, the MPE Concept Plan Approval currently allows for outside of hours works and that this has been approved for other stages of the MPE Stage 1</p>	

Aspect	Issue	Response	Reference
		<p>Project. On this basis, the amendment to SoC for out of hours works is considered suitable.</p> <p>Of further consideration is that future stages of approval (such as the MPE Stage 2 Proposal) would undertake detailed cumulative impact assessments to ensure that noise limits would be managed in the incidence of the concurrent construction of the MPE and MPW Projects.</p>	
Noise and Vibration – Assessment	The proponent does not appear to include cumulative construction noise from any out of standard hours works from both the MPE and MPW sites, therefore it is not clear if there may be a cumulative impact out of hours.	<p>As discussed, future stages of approval (such as the MPE Stage 2 Proposal) would undertake detailed cumulative impact assessments to ensure that noise limits would be managed in the incidence of the concurrent construction of the MPE and MPW Projects.</p> <p>A cumulative construction noise assessment for works undertaken outside of standard construction hours was undertaken to support the Responses to Submissions report (RtS) for the Moorebank Precinct East (MPE) Stage 2 Proposal following issue raised by the NSW Department of Planning and Environment (DP&E) during the public display of the MPE Stage 2 Environmental Impact Statement (EIS).</p> <p>This assessment identified that:</p> <ul style="list-style-type: none"> • Cumulative construction noise levels during OOH Period 1 are unlikely to exceed the established NML at nearby residential receivers • Cumulative construction noise levels are predicted to exceed the established NML during OOH period 2 at the most potentially affected receivers in Casula. This exceedance is considered negligible, and due to the conservative assumptions that remain in the modelling, particularly relating to the rate of fill importation into the Moorebank Precinct, this exceedance is considered unlikely to occur. It is also noted that, during OOH period 2, the predicted construction noise level at the most potentially affected residential receiver in Casula is equal to the OOH Period 2 NML established for that receiver catchment in the MPW Stage 2 EIS. 	MPW Stage 2 Response to Submissions - Cumulative Out of Hours Construction Noise letter (Wilkinson Murray, 2017)

Aspect	Issue	Response	Reference
		<ul style="list-style-type: none"> Cumulative construction noise levels in residential receiver catchments are typically dominated by construction activities associated with the closest project. More specifically, cumulative construction noise levels in Wattle Grove are dominated by construction of the MPE Stage 2 Proposal, while cumulative construction noise levels in Casula, Glenfield and Wattle Grove North are dominated by construction of the MPW Stage 2 Proposal. Therefore, if each proposal focuses on managing construction noise levels in the receiver catchment in which that proposal is the dominant source of construction noise, then cumulative construction noise impacts are likely to be well managed. 	
Noise and Vibration – Assessment	<p><u>Operational Noise Assessment not clear</u></p> <p>The EPA considers that the proponent's response regarding the scaled modelling is not clear and does not adequately justify scaling down the modelled noise levels by 6dB. The proponent states 'it was not considered necessary to remodel the MPE Concept Plan Proposal at 250,000 TEU/year'. The proponent appears to justify the scaling by indicating that the scaled down noise levels 'were then compared to predicted LAeq,15minute noise levels for the combined operation of MPE Stage 1 Proposal and the MPE Stage 2 Proposal' and they were said to comply with the criteria.</p> <p>The response also states that 'a more recent model' was used than that used in the MPE Concept Approval. However, it isn't clear to the EPA whether the more recent model included the MPW site as well. The EPA considers that any assessments undertaken for the MPE and MPW sites should include a cumulative assessment of both Concept Approvals in every instance, as noted in Table 2-1 (page 26) of the MPE Stage 2 RTS report.</p> <p>The EPA is not clear what the proponent means by the following statement:</p> <p><i>'if the scaled noise levels for the MPE Concept Plan were to be increased by 5dBA, this would serve to increase (and likely overstate) the difference (i.e. reductions) between the noise levels for the MPE Concept Plan Proposal and the MPE Modification Proposal'.</i></p>	<p>As discussed in Section 4.1 of the MPE Concept Plan Modification RtS, the reduction of the predicted operational noise levels for the MPE Concept Plan down by 6 dB, to reflect the change between the modelled throughput of 1,000,000 TEU/per annum (MPE Concept Plan EA) and the approved throughput of 250,000 TEU/per annum (MPE Stage 1 Approval), provides a reasonable estimate of the likely operational noise levels at nearby receivers. In particular Wilkinson Murray notes they disagree with the EPA's claim that reducing the annual throughput of the site by a factor of four would result in typical worst-case operational noise levels reducing by only 1 dB – a change in noise levels that would be imperceptible.</p> <p>If the EPA's claim – that reducing the throughput of the MPE Concept Plan to 250,000 TEU would result in a 1dB reduction in operational noise levels at receivers – was accurate, then the predicted LAeq, 15min operational noise levels under the approved Concept Plan, during calm/adverse meteorological conditions would be:</p> <ul style="list-style-type: none"> 33/38 dBA in Wattle Grove 34/38 dBA in Wattle Grove North 37/42 dBA in Casula 24/30 dBA in Glenfield. 	<p>Section 6.2 and Appendix C of the MPE Concept Plan Modification Report</p> <p>Section 4.1 of the MPE Concept Plan Modification RtS</p> <p>Table 2-1 of the MPE Stage 2 RtS</p>

Aspect	Issue	Response	Reference
		<p>And, as a result of the Modification Proposal, LAeq, 15min operational noise levels under calm/adverse meteorological conditions would be reduced by:</p> <ul style="list-style-type: none"> • 5/6 dBA in Wattle Grove; • 14/15 dBA in Wattle Grove North; • 5/7 dBA in Casula; and, • 6/5 dBA in Glenfield. <p>Wilkinson Murray does not believe that such reductions in noise levels are likely to result from the Modification Proposal. As advised in the RtS, the overly conservative estimate of operational noise levels from the Concept Plan operating at 250,000 TEU inadvertently results in the effects of the Modification Proposal being overstated.</p> <p>Further, no aspects of the MPW Project were considered in the operational noise assessment for the Modification Proposal. The intent of the assessment was to determine the effects of the Modification on the MPE Concept Plan. Notwithstanding this cumulative noise impacts were considered in the MPE Concept Plan EA and also other subsequent approvals (MPE Stage 1 and MPE Stage 2).</p> <p>Table 2-1 in the MPE Stage 2 RtS report relates to consultation with external stakeholders, and the particulars on page 26 referred to by the EPA relate to consultation between the proponent and TfNSW and RMS, and are relevant to traffic modelling. This information is not considered relevant to noise, nor is it considered relevant to the Concept Modification.</p>	
Noise and Vibration – Assessment	<p><u>Statement of Commitments (SoC) 16 not clear</u></p> <p>For SoC No 16, the EPA considers that it is not clear if the noise barrier along the western boundary of the SIMTA site is referring to a wall along the western boundary of the MPE site or the MPW site. There is a wall proposed along the western side of the internal vehicle road on the MPW site, but the plans for the MPE site do not appear to include a wall along the western boundary of the MPE site.</p>	<p>SoC 16 relates to the consideration of a noise barrier along the western boundary of the MPE site. It was originally envisaged as part of the MPE Concept Approval that there would be the potential for noise impacts of the intermodal terminal operations which may warrant a noise wall to be located on the western boundary (i.e. along Moorebank Avenue). As a result of more recent noise modelling undertaken for the MPE Stage 1 Project (SSD 14-6766) and the MPE Stage 2 Proposal (SSD 7628) that a noise wall is not required along the western (or any other)</p>	N/A

Aspect	Issue	Response	Reference
		<p>boundary of the MPE site. Notwithstanding this, the design of the MPE Stage 1 Project and MPE Stage 2 Proposal are such that they would not require the installation of a noise wall on the western boundary of the MPE site, should it be required as part of a future stage of development.</p> <p>Separately, a noise wall, approximately 5 metres high, has been proposed to be established along the western operational boundary of the MPW Stage 2 site as part of the MPW Stage 2 Proposal (SSD-7709). It should be noted that this noise wall has been proposed as a result of the noise modelling for the MPW Stage 2 Proposal to address noise emissions generated as a result of the MPW Stage 2 Proposal, and as such is not related to the MPE Project (Concept Modification) or MPE Stage 2 Proposal.</p>	
Noise and Vibration – Assessment	<p><u>Statement of Commitments (SoC) 16 not clear</u></p> <p>For SoC No 20, it is not clear to the EPA what is meant by works may be undertaken outside standard hours ‘subject to future development applications (including noise assessments)’.</p>	<p>Future development applications may consider undertaking works outside of standard construction hours. No physical works are proposed within the MPE Concept Plan Approval (i.e. subject to further approvals) and therefore future development applications, such as the MPE Stage 2 may undertake outside of standard hours works, subject to future approvals.</p> <p>As required by the MPE Concept Plan Approval, the granting of outside of standard hours construction works would be in consideration of a noise impact assessment (required by Schedule 3, Condition 2.1 (Noise and Vibration)).</p>	N/A
Noise and Vibration – Recommendations	<p>1. Construction works be limited to standard hours as per the ICNG.</p>	<p>Refer to <u>Noise and Vibration – Assessment - Out of standard hours construction works not justified</u> for a response to this issue.</p> <p><u>SIMTA does not agree to this proposed recommendation.</u></p>	N/A
Noise and Vibration – Recommendations	<p>2. The assessments undertaken for the MPE and MPW sites include a cumulative assessment of both Concept Approvals in every instance.</p>	<p>The cumulative impacts of each development application under the MPE and MPW Concept Approvals has included consideration and assessment of a cumulative construction and operational assessment of the relevant stages, representative of the information available at the time of preparation.</p> <p>As the MPE and MPW projects continue to develop, future development applications will continue to undertake cumulative</p>	N/A

Aspect	Issue	Response	Reference
		assessments which consider the relevant components of the MPE and MPW Projects which may be simultaneously constructed and/ or operated.	
Noise and Vibration – Recommendations	3. The proponent should clarify whether the noise barrier along the western boundary of the SIMTA site is referring to a wall along the western boundary of the MPE site or the MPW site.	Refer to <u>Noise and Vibration – Assessment - Statement of Commitments (SoC) 16 not clear</u> for a response to this issue.	N/A
Noise and Vibration – Recommendations	4. The proponent should clarify what is meant by works may be undertaken outside standard hours ‘subject to future development applications (including noise assessments)’.	Refer to <u>Noise and Vibration – Assessment - Statement of Commitments (SoC) 20 not clear</u> for a response to this issue.	N/A

Attachment G

ATTACHMENT A – RESPONSE TO ISSUES RAISED BY LIVERPOOL CITY COUNCIL - MOOREBANK PRECINCT EAST CONCEPT PLAN MODIFICATION 2

Aspect	Issue	Response	Reference
Legislation (RtS ID LCC-1)	<p>Some ambiguity remains about the efficacy of the environmental impacts associated with Traffic to satisfactorily meet the test set within <i>Barrick Australia Ltd v Williams [2009] NSWCA 275</i>. Specifically, test 2 requires that the proposed modification must have 'limited environmental consequences beyond those which had been the subject of assessment.</p> <p>The lack of back of queue data within the RtS document places significant doubt as to the extent of traffic impact that will result for the proposed modifications, especially associated with traffic movements along the M5.</p> <p>Approval of this modification should not proceed until '<i>limited environmental consequence</i>' can be demonstrated regarding traffic.</p>	<p>Roads and Maritime have been consulted on a number of occasions since the last quarter of 2015 regarding the planning applications associated with the MPE and MPW Projects. Consultation has included establishing and agreeing on a suitable approach to the operational traffic modelling to be undertaken for the Proposal, particularly in the context of the separate overall precinct modelling.</p> <p>As confirmed through the abovementioned consultation, the traffic impact assessment was determined to investigate the agreed key intersections only in the study area.</p> <p>As per Section 4.2.2 of the <i>Guide to Traffic Generating Development</i> (RTA, 2002); <i>"The best indicator of the level of service at an intersection is the average delay experienced by vehicles at that intersection. For traffic signals, the average delay over all movements should be taken."</i></p> <p>As such only the intersection Level of Service from the AIMSUN and SIDRA model has been reported.</p> <p>Back of queue data is normally referred as 95th percentile queue length which is not considered as a good performance indicator for intersection analysis or comparison. Queue length is sensitive to lengths of turning lanes and traffic signals which were preliminary concept at this stage. Queue length is normally measured from each intersection approach and is difficult to use for the purpose of indicating the overall intersection performance.</p> <p>Queue length is also subjective for its definition (i.e. vehicle speed, gaps, etc) and has lack of assessment criteria to determine appropriate queue length. In addition, 95th percentile queue length is not standard output data in dynamic microsimulation / mesosimulation, Therefore, no queue data has been provided or is recommended to be used for the assessment.</p>	Section 4.2.2 of the <i>Guide to Traffic Generating Development</i> (RTA, 2002)
Traffic (RtS ID LCC-2, LCC-3)	Clarification is sought as to whether the proposed interim access point would be converted to a permanent access point if agreement is not reached for shared access with DJLU.	Based on consultation undertaken to-date, it is anticipated that an agreement between SIMTA and the Department of Defence would be reached at the relevant stage of approval.	N/A

Aspect	Issue	Response	Reference
Traffic (RtS ID LCC-4, LCC-5, LCC-8, LCC-9)	<p>Back of queue data is an important measure of the effect of queued traffic on upstream and downstream infrastructure and the safety of other motorists. As noted by Acardis in the RtS document “<i>upstream/downstream queuing impacts at intersections were examined in the AIMSUN and SIDRA model and considered in determining the appropriate mitigation measures</i>”.</p> <p>Back of queue data is once again requested to fully assess the traffic impacts of the proposed development and to assess the adequacy of the proposed mitigation measures.</p>	Refer to Legislation (RtS ID LCC-1) for a detailed response to this issue.	
Traffic (RtS ID LCC-10)	<p>Whilst the difference between results in the OTTIA and CTIA can be explained via the difference in the modelling software employed, it is not clear why the 2019 forecast LoS in the OTTIA (Table 4-2) are better than that for the existing 2015 LoS results (Table 3-3), considering that the 2019 results include increased peak hour traffic volumes. Further clarification of this apparent anomaly is requested.</p>	<p>In the OTTIA (Appendix K of the EIS), the AIMSUN modelling software package and the SIDRA modelling software were used for the intersection Level of Service (LoS) analysis, as follows:</p> <ul style="list-style-type: none"> • 2015 Existing – AIMSUN and SIDRA • 2019 without / with Proposal – AIMSUN only • 2029 without / with Proposal – AIMSUN only <p>The intersection LoS results provided for 2015 in the report were based on AIMSUN supplemented by SIDRA. Different modelling softwares were used between 2015 and the future years. This is to be consistent with the reporting for 2015 conditions in the CTIA (Appendix K of the EIS).</p> <p>Because of this, where there were improvements in the LoS of intersections in 2019 compared to 2015, the differences were considered small i.e. from B to A or C to B. However, where there were marked improvements in the LoS in 2019, this is attributed to improvements due to the traffic reassignment in the AIMSUN model.</p> <p>It should be noted that the 2015 intersection LOS results were provided for the reference only and were not used as the baseline for the assessment of the Proposal. The intersection LoS results of 2019 and 2029 Without Proposal were used as the baseline to compare against the With Proposal results.</p>	Appendix K of the EIS

Aspect	Issue	Response	Reference
Traffic (RtS ID LCC-11)	<p>It is agreed that <i>"an area wide network improvement strategy is needed to provide the desired functionality of the network of motorways, arterials, collector and local roads in the study area is achieved and provide safe and efficient traffic dispersal"</i>, and it is requested that this requirement be incorporated with the project approvals, prior to the commencement of construction to allow for any required modifications to the design of the MPE and MPW facilities as a result of this improvement strategy.</p> <p>It is also requested that such a strategy be based upon an independent review of the required infrastructure upgrades within the study area to facilitate the MPE and MPW developments.</p>	<p>The future traffic growth and modelling data used to undertake the operational traffic impact assessment was sourced from the Roads and Maritime wider Liverpool Moorebank Arterial Road Investigations (LMARI) model built in AIMSUN modelling software version 8.0.9 (R35843). The LMARI model which was provided by Roads and Maritime considers the network functionality and identifies other 'road network improvements' that are to be undertaken by Roads and Maritime.</p> <p>Section 7.4.2 of the MPE Stage 2 EIS noted that with the implementation of assumed network upgrades, intersection performance at all key intersections near the Proposal modelled as part of this assessment in 2029 during the PM peak would operate at an acceptable LoS, with the exception of the M5 Motorway / Heathcote Road intersection, which would continue to operate at a LoS F, although the average delay would be reduced. Although this intersection would operate at a LoS F, its performance is no worse than the performance expected in 2029 without the operation of the Proposal in the AM Peak, and is, therefore, considered acceptable in the context of impacts as a result of the MPE Stage 2 Proposal. No nearby intersections would require upgrading to cater for traffic as a result of the MPE Stage 2 Proposal.</p> <p>It is acknowledged that discussions between the Proponent, Transport for NSW and NSW Roads and Maritime Services, relating to whole-of-precinct traffic modelling and an agreed mitigation framework relating to broader road network impacts are ongoing. Notwithstanding this, these are separate to the MPE Stage 2 approval process and therefore not relevant to assessment of the MPE Stage 2 Proposal (SSD 7628).</p> <p>The MPE Concept Plan Approval instrument does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p>	Section 7.4.2 of the MPE Stage 2 EIS

Aspect	Issue	Response	Reference
Noise (RtS ID LCC-13)	Noting the modelled exceedance of the allowable $LA_{eq,15min}$ construction noise levels for the most affected receivers in Wattle Grove, it is requested that the Construction Noise and Vibration Management Plan (CNVMP) include a requirement to monitor noise at these sensitive receivers throughout construction to ensure the efficacy of proposed control and mitigation measures.	<p>The MPE Concept Plan Approval instrument does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p> <p>This item has been raised in the 'Moorebank Precinct East – Stage 2 – Response to Submissions Review' letter, prepared by Cardno (dated 18 October 2017), and issued to DP&E, and has been appropriately responded to in the context of the MPE Stage 2 Application.</p>	N/A
Noise (RtS ID LCC-14)	Further to comment above, noting that the results modelled for Casula and Wattle Grove North are approaching the allowable $LA_{eq,15min}$ limits, consideration should be given to including requirements for the monitoring of noise at these sensitive receivers throughout the construction period to ensure the efficacy of proposed control and mitigation measures, particularly if exceedances are observed at the most effected receivers at Wattle Grove.	<p>The MPE Concept Plan Approval instrument does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p> <p>This item has been raised in the 'Moorebank Precinct East – Stage 2 – Response to Submissions Review' letter, prepared by Cardno (dated 18 October 2017), and issued to DP&E, and has been appropriately responded to in the context of the MPE Stage 2 Application.</p>	N/A

Aspect	Issue	Response	Reference
Noise (RtS ID LCC-18)	<p>Due to the large number of diesel powered heavy vehicles (locomotives, container forklifts and b-double prime movers) that will operate on the site, and the nature of shunting and short distance stop/start movements associated with the operations of the proposed facilities, due consideration and assessment should be given to the potential for tonal, low frequency and intermittent noise sources.</p> <p>Clarification is sought regarding the formal process undertaken to assess the potential noise sources of the proposed development against the requirements of the NSW Industrial Noise Policy (NSW INP) (EPA 2000), that supports the proponents statement that <i>"no modifying factors are considered necessary to assess low frequency noise, or any other annoying characteristic, in the operational noise levels from the site"</i>.</p>	<p>It should be noted that with the use of the locomotive shifter on the MPE site as part of the IMEX terminal, there would be minimal shunting on the MPE site.</p> <p>In addition, the internal road network within the MPE site has been designed so that vehicles can travel through the site in a manner which would minimise the need for stop/start movements. The road network within the MPE site includes separation of transfer roads from the internal and service roads on the Proposal, which would minimise the number of locations throughout the MPE site where there would be opposing movements and give-way/ stop sign locations, thereby further reducing stop/start movements, while also maintaining efficiency and providing for a safe internal road network.</p> <p>Modifying factors, as defined in the NSW Industrial Noise Policy, have been considered and deemed unlikely to be applicable at any nearby sensitive receivers.</p> <p>Considering the distances to nearby residential receivers, operational noise levels at residential receivers are considered unlikely to exhibit characteristics that would warrant the application of modifying factors under the INP.</p> <p>Notwithstanding, it is anticipated that the consent for Development Applications under the MPE Concept Approval would include requirements for compliance monitoring of operational noise levels, and that the consideration and application of relevant modifying factors would be a basic requirement of such compliance monitoring.</p>	NSW Industrial Noise Policy
Soils (RtS ID LCC-31)	<p>It is considered that at a minimum the report should reference the location of the list of historical contamination investigations. Currently the Concept Plan Modification report provides little context regarding the extent of assessment.</p>	<p>The environmental assessment of contamination included in Section 5.5 of the MPE Concept Plan Modification 2 application is considered to be suitable to the extent required at the Concept Plan Approval Stage. The assessment undertaken for the Concept Plan Approval identified only areas of potential contamination concern within the location of the Rail corridor, i.e. outside of the MPE site. A summary of the information provided in the Concept Plan Approval EA is provided below:</p> <p>The Concept Plan Approval EA included the preparation of a Preliminary Environmental Site Assessment (ESA) (Golder, 2011). Five areas within or near the MPE Project site were identified as part of the Preliminary ESA as having the potential to contain subsurface contamination, however each of these areas are predominately outside of the MPE site. These five areas include:</p> <ul style="list-style-type: none"> Area 1 – located immediately south of the MPE site. Historic information suggests that partially remediated areas of unauthorised dumping may have occurred. 	<p>Concept Plan Approval EA included the preparation of a Preliminary Environmental Site Assessment (ESA) (Golder, 2011)</p> <p>Section 5.5 of the MPE Concept Plan Modification 2 application</p>

Aspect	Issue	Response	Reference
		<ul style="list-style-type: none"> Area 2 – comprising the bushland area south of the MPE site. Historic information indicates that potential unexploded ordinance (UXO) associated with a former grenade range may be present. This area also showed evidence of previous illegal dumping. Area 3 – Lot 1 DP825352 owned by Sydney Trains has been subject to extensive filling with the area levelled approximately two to 2.5 metres higher than surrounding areas. Area 4 – comprising the south-west portion of the golf course was historically used as part of a mock Viet Cong village. Although the village has been demolished, there is potential tunnel materials buried in the area. Area 5 – comprising the Glenfield Quarry and Waste Disposal Facility is located south-west of the MPE Site. Extractive and waste disposal activities currently take place at this location in accordance with an EPL. This land is also subject to an ongoing maintenance order. <p>Attachment B provides the location of the above historical investigations (areas as discussed above). Note that this information has since been updated by the MPE Stage 1 (SSD 14-6766) contamination investigations.</p> <p>More detailed contamination information is provided as part of the staged applications as they include physical works. No further information is therefore considered necessary for the Concept Plan Approval.</p>	Attachment B
Soils (RtS ID LCC-34)	<p>It is noted that imported fill will satisfy the physical and chemical requirements of VENM, ENM and other material as per the NSW EPA's resource recovery orders and exemptions.</p> <p>The Concept Plan Modification report should provide further detail as to the method of governance of fill importation including quality assurance and quality control measures e.g. a fill management protocol.</p>	<p>The MPE Concept Plan Approval instrument, does not include conditions for the construction of any other stages of the Concept Plan Approval (i.e. Stage 2 and Stage 3) as these are subject to separate approval, and separate conditions specifically tailored to the construction methods.</p> <p>As a result of the above, it is considered unsuitable and inconsistent with the approval instrument to amend the conditions to include specific construction requirements for future stages of development.</p> <p>SIMTA therefore does not agree with the inclusion of this amended condition of approval within the MPE Concept Approval (MP 10_0193) instrument.</p> <p>This item has been raised in the <i>'Moorebank Precinct East – Stage 2 – Response to Submissions Review'</i> letter, prepared by Cardno (dated 18 October 2017), and issued to DP&E, and has been appropriately responded to in the context of the MPE Stage 2 Application. It should be noted that a stockpile management protocol was prepared and included as Appendix G of the MPE Stage 2 RtS.</p> <p>This level of detail is not considered appropriate for the Concept Plan Approval.</p>	

Aspect	Issue	Response	Reference
Soils (RtS ID LCC-35)	The approach proposed by the RtS document is considered acceptable.	Noted	N/A
Soils (RtS ID LCC-37)	<p>It is noted that imported fill will satisfy the physical and chemical requirements of VENM, ENM and other material as per the NSW EPA's resource recovery orders and exemptions.</p> <p>The Concept Plan Modification report should provide further detail as to the method of governance of fill importation including quality assurance and quality control measures e.g. a fill management protocol.</p>	The issue raised by LCC is a direct replication to Soils (RtS ID LCC-34). Please refer to above for response.	Soils (RtS ID LCC-34)
Conclusion/ Summary	This review, coupled with all the documentation submitted to both the MPE and MPW projects, place further doubt on the adequacy of the environmental impact assessments that have been conducted to this point. A new application for the MPE should be raised in conjunction with the completion of a precinct wide masterplan for both IMT facilities within Moorebank.	<p>SIMTA has entered into an agreement with MIC to build and operate the MPW Project (under SSD 5066). The MPW and MPE Projects will retain their separate approvals and remain viable as standalone projects.</p> <p>Notwithstanding this, a 'whole of precinct' approach to the Moorebank Precinct development is taken with respect to site operations, with both sites being developed in consideration of one another, including container storage locations and freight village requirements across the precinct. This is evident in the cumulative assessment provided for key issues including traffic, noise and vibration, air quality, human health, hazard and risk, biodiversity and visual amenity (refer to Section 19 of the EIS), that have considered the potential impacts of the Proposal as a standalone as well as being undertaken in conjunction with the adjacent MPW development. Further, potential impacts on the broader Moorebank area is also considered in these assessments. Mitigation measures have been provided in Section 22 of the EIS, and Section 8 of this RtS.</p> <p>Further integration of the MPE and MPW Projects will be considered as part of detailed design development, where practicable and feasible. On the basis of the above, the impact assessment provide for the MPE Concept Plan amendment is considered suitable and therefore no additional 'precinct wide' master-planning is considered necessary.</p>	Section 19 and Section 22 of the EIS

ATTACHMENT B: HISTORICAL CONTAMINATION AREAS OF INTEREST

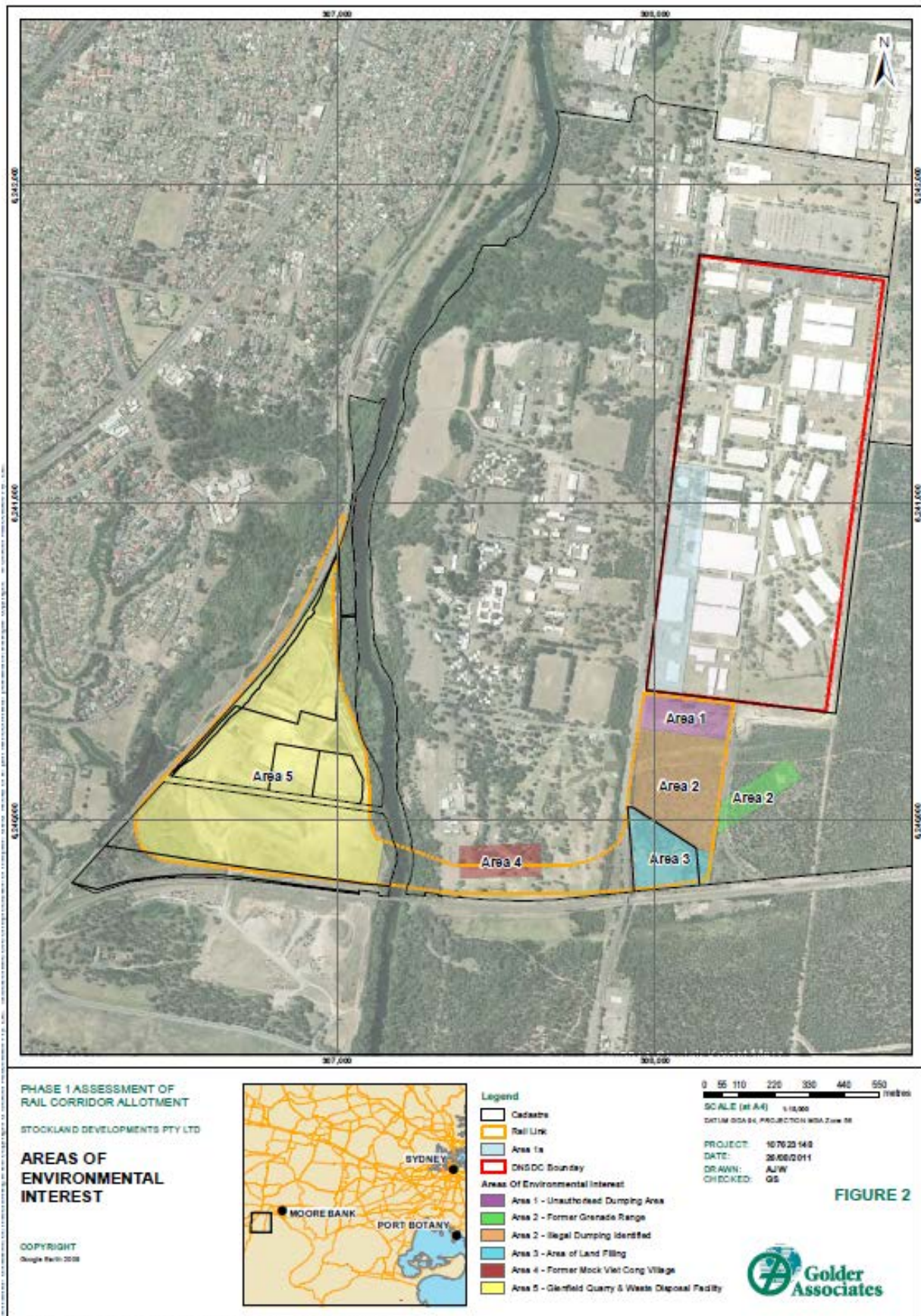


Figure B-1 Historical contamination areas of environmental interest (Golders, 2013)

Attachment H

SSD2 Application

Introduction & Notes

This application form is required to apply for the consent of the Minister to carry out State Significant Development under Part 4 of the *Environmental Planning & Assessment Act 1979*.

You should not lodge this form unless you have previously submitted a request for Director General's Requirements and been provided with Director General's Requirements.

This form must contain all relevant information required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*, otherwise it may be rejected.

If your application is rejected, you will be advised within 14 days of lodgement. If the application and EIS are accepted, you will be contacted regarding the exhibition arrangements. You may also be asked to submit further information on the application or EIS prior to exhibition.

Persons lodging applications are required to declare reportable political donations (including donations of \$1,000 or more) made in the previous two years. For more details, go to www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/Donations-and-Gift-Disclosure.

Applicant Details

Title:	Mr
First name:	Michael
Surname:	Yiend
Day Phone:	+61 2 9080 1900
Fax:	+61 2 9080 1999
Mobile:	
Email:	michael.yiend@qube.com.au
Company:	SIMTA, as Qube Holdings Limited
ABN:	141 497 230 53
Physical Address:	Level 27, 45 Clarence Street, Sydney, NSW 2000
Postal Address:	Level 27, 45 Clarence Street, Sydney, NSW 2000

Site details

Site Title:	Moorebank Precinct East
Site Location:	Moorebank Avenue, Moorebank 2170
Site Government Area:	Liverpool LGA

Lot/DP:	<p>Land identified in the MPE Concept Plan Approval (MP 10_0193) is to be impacted by the MPE Modification Proposal (Mod 2). Additional lots impacted are shown bold, underlined and italics.</p> <p>Intermodal site: Land generally described as being located on the eastern side of Moorebank Avenue, between Anzac Road and the East Hills Passenger Line, Moorebank (Lot 1 in DP 1048263 and <u>a portion of Lot 4 DP1197707 for connection to stormwater infrastructure</u>); and</p> <p><u>Moorebank Avenue: Land described as Moorebank Avenue generally between the Anzac Road/Moorebank intersection to approximately 200 metres south of the intermodal site (Lot 1 DP 1197707 and Lot 2 DP 1197707)</u></p> <p>No change to the area previously identified in the MPE Concept Approval (MP 10_0193) as the 'Rail Corridor'.</p>
Is new land involved?	Yes
Changes:	<p>Additional lots (included within the modification) are identified above and include:</p> <ul style="list-style-type: none"> • <u>Lot 4 DP1197707</u>); and • <u>Moorebank Avenue: Land described as Moorebank Avenue generally between the Anzac Road/Moorebank intersection to approximately 200 metres south of the intermodal site (Lot 1 DP 1197707 and Lot 2 DP 1197707)</u>

Staged Development

Staged DA:	Yes
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Project Details

State & Regional Development SEPP - Schedule 1 - State Significant Development

- Clause 19: Rail and related transport facilities / Clause 12: Warehouses or distribution centres

State & Regional Development SEPP - Schedule 2 - State Significant Development

- N/A

Ministerial Call In

- The development was not called in by the Minister for Planning & Environment

Online information provided by the applicant

Title	Moorebank Precinct East – Concept Plan Modification (MP 10_0193 MOD 2)
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State Significance	Clause 19: Rail and related transport facilities / Clause 12: Warehouses or distribution centres
Description	<p>MPE CP Mod 2 seeks to modify the Concept Plan (MP10_0193) for the MPE Site to include the following:</p> <ul style="list-style-type: none"> • Extension of the land to which the MPE Concept Approval applies to recognise works on Moorebank Avenue and drainage works to the south and east of the MPE site • Moorebank Avenue upgrade from the northern to the southern extent of the MPE site, including alterations to the existing lane configuration, increasing the vertical alignment, some widening and ancillary services and infrastructure such as stormwater drainage on the western side of Moorebank Avenue • Provision of an interim MPE site access to warehousing • Reconfiguration of the internal road network within the MPE Stage 2 site and use of all internal roads by both light and heavy vehicles, rather than separating heavy and light vehicles within the MPE site • Importation of clean general fill (approximately 600,000m³) material for bulk earthworks to adjust the building formation to support the functionality of the site stormwater and drainage system • Change to the location of, and land uses within the freight village and provision of warehousing along the Moorebank Avenue frontage (previously identified as IMT) • Changes to the staging of development including construction of all warehouses as part of the MPE Stage 2 Proposal • Subdivision of the MPE site.
Capital Investment Value	N/A
Construction "jobs"	N/A
Operational "jobs"	N/A
Landowner's Consent Provided?	Yes, refer attached.

Critical habitat and threatened species

Critical Habitat	No
Development threatens habitats	The development will result in clearing of threatened species and ecological communities and their habitat.
Biodiversity compliant	<p>A Flora and Fauna Impact Assessment (Hyder Consulting, 2013) was previously prepared for the MPE Concept Plan Approval.</p> <p>Further biodiversity impact assessment has been undertaken in Section 5.3 of the MPE Modification Report (Arcadis, 2016), and supplementary content prepared subsequent to the Response to Submissions Report (Arcadis, 2017).</p>

Approvals

Would the development otherwise, but for section 89J of the EP&A Act, require any of the following (select all that apply)?

Bolded legislation recognises where legislation applies for the MPE Concept Plan Approval (as modified by Mod 2 (and Mod 1)).

- the concurrence under Part 3 of the Coastal Protection Act 1979 of the Minister administering that Part of that Act
- **a permit under section 201, 205 or 219 of the Fisheries Management Act 1994**
- **an approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977**
- **an Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974**
- **an authorisation referred to in section 12 of the Native Vegetation Act 2003 (or under any Act repealed by that Act) to clear native vegetation or State protected land**
- a bush fire safety authority under section 100B of the Rural Fires Act 1997
- **a water use approval under section 89, a water management work approval under section 90 or an activity approval under section 91 of the Water Management Act 2000**

Do you require any of the following approvals in order to carry out the development (select all that apply)?

- an aquaculture permit under section 144 of the Fisheries Management Act 1994
- an approval under section 15 of the Mine Subsidence Compensation Act 1961
- a mining lease under the Mining Act 1992
- a petroleum production lease under the Petroleum (Onshore) Act 1991
- **an environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 (for any of the purposes referred to in section 43 of that Act)**
- **a consent under section 138 of the Roads Act 1993**
- a licence under the Pipelines Act 1967
- **an aquifer interference approval under section 91 of the Water Management Act 2000**

Online information provided by the applicant

- Refer to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8149
-

Consultation and concurrence

Would the development, but for Section 79B (2A) of the EP&A Act have required a concurrence under Section 79B of the Act, including a concurrence under the Threatened Species Conservation Act 1995?

Online information provided by the applicant

- No

Supporting Documents

Submitted files:

- MPE Concept Plan Mod 2 Modification Report (Arcadis, 2016)
- MPE Concept Plan Mod 2 RtS (Arcadis, 2017)
- Refer to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8149

Political Donation

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Do you need to make a political donations disclosure statement?

Online information provided by the applicant

- No

Submitter details

Name	Steve Ryan
Capacity	Managing Director – Tactical Group
Submitted	06/11/2017 – originally submitted 29/11/2016
