



# Modification of Consent Concept Approval MP10\_0193



SIMTA

SYDNEY INTERMODAL TERMINAL ALLIANCE

Part 4, Division 4.1, State Significant  
Development

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## Modification 3

# Moorebank Precinct East Concept Approval (MP10\_0193)

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## REVISIONS

| Revision | Date       | Description                                          | Prepared by                          | Approved by     |
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## 1.0 Introduction

This modification application has been prepared by Aspect Environmental Pty Limited on behalf of SIMTA (as Qube Holdings Limited) (the Applicant), and seeks approval to modify the Moorebank Precinct East (MPE) Concept Plan Approval (MP 10\_0193) for an intermodal terminal (IMT) facility, warehousing and a freight village at Moorebank, NSW to include an additional 1.5 hectares (ha) of Lot 4 DP197707, in the area colloquially known as the “Butcher’s Knife”.

The Concept Plan Approval for the MPE project was issued on 29 September 2014, in accordance with section 75O (now repealed) of the *Environment Planning and Assessment Act* 1979 (EP&A Act). The MPE Project was a Transitional Part 3A Project, however, transitional arrangements for Part 3A projects ceased as of 28 February 2018. Modification of the Concept Plan is undertaken under Part 4 of the EP&A Act as State significant development (SSD).

Since the Concept Plan Approval design refinement has been required in response to the consent instrument issued in respect of MPE Stage 2 SSD 7628 issued on 31 January 2018. This refinement has been required to address matters which were not contemplated at the time of the Concept Plan Approval and to enable the construction process to proceed in accordance with the consent instrument.

The Proposed Modification is sought concurrently with a modification application for MPE Stage 2 (SSD 7628 MOD 2) to ensure consistency is maintained between the staged development consent and the Concept Plan Approval.

## 2.0 The MPE Site

The MPE site is located approximately 27 km south-west of the Sydney central business district and approximately 26 km west of Port Botany. The MPE site is situated in the Liverpool local government area, in Sydney's South West subregion, approximately 2.5 km from the Liverpool City Centre (see Figure 1).

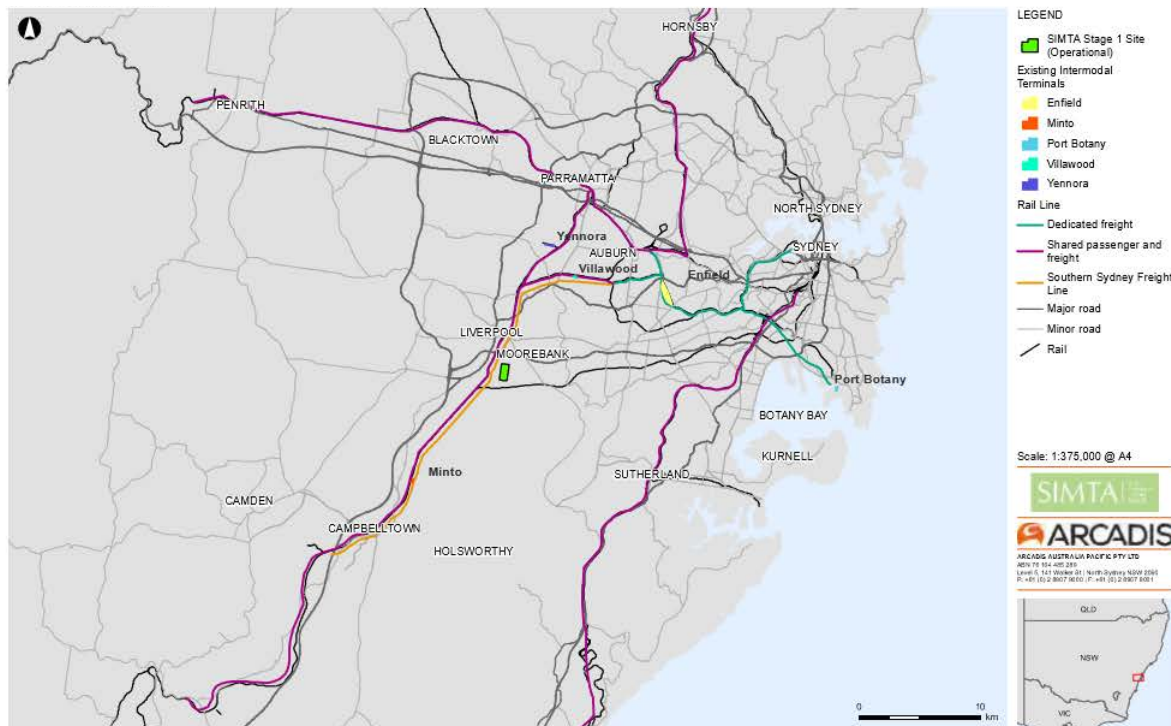


Figure 1 MPE Site location (Source: Arcadis, 2016)

The MPE site comprises around 83 hectares of land on the eastern side of Moorebank Avenue, Moorebank and adjoins the southern boundary the Defence Joint Logistics Unit (DJLU) (refer to Figure 2). The site is rectangular in shape (1,382 metres by 600 metres) and is located mostly within Lot 1 DP 1048263, with a portion of the site located within Lot 4 DP 1197707, known as the Butcher's Knife.

The MPE site is generally flat with direct frontage and access to Moorebank Avenue (Lot 2 DP 1197707), a privately-owned road that is currently accessible to the public.

The MPE Project involves the development of an IMT, warehouse and distribution facilities with ancillary offices, a freight village (ancillary site and operational services), stormwater, landscaping, servicing and associated works, together with a rail link connecting the MPE Project to the Southern Sydney Freight Line (SSFL) within the Rail Corridor (the entire area, being the MPE site and Rail Corridor).

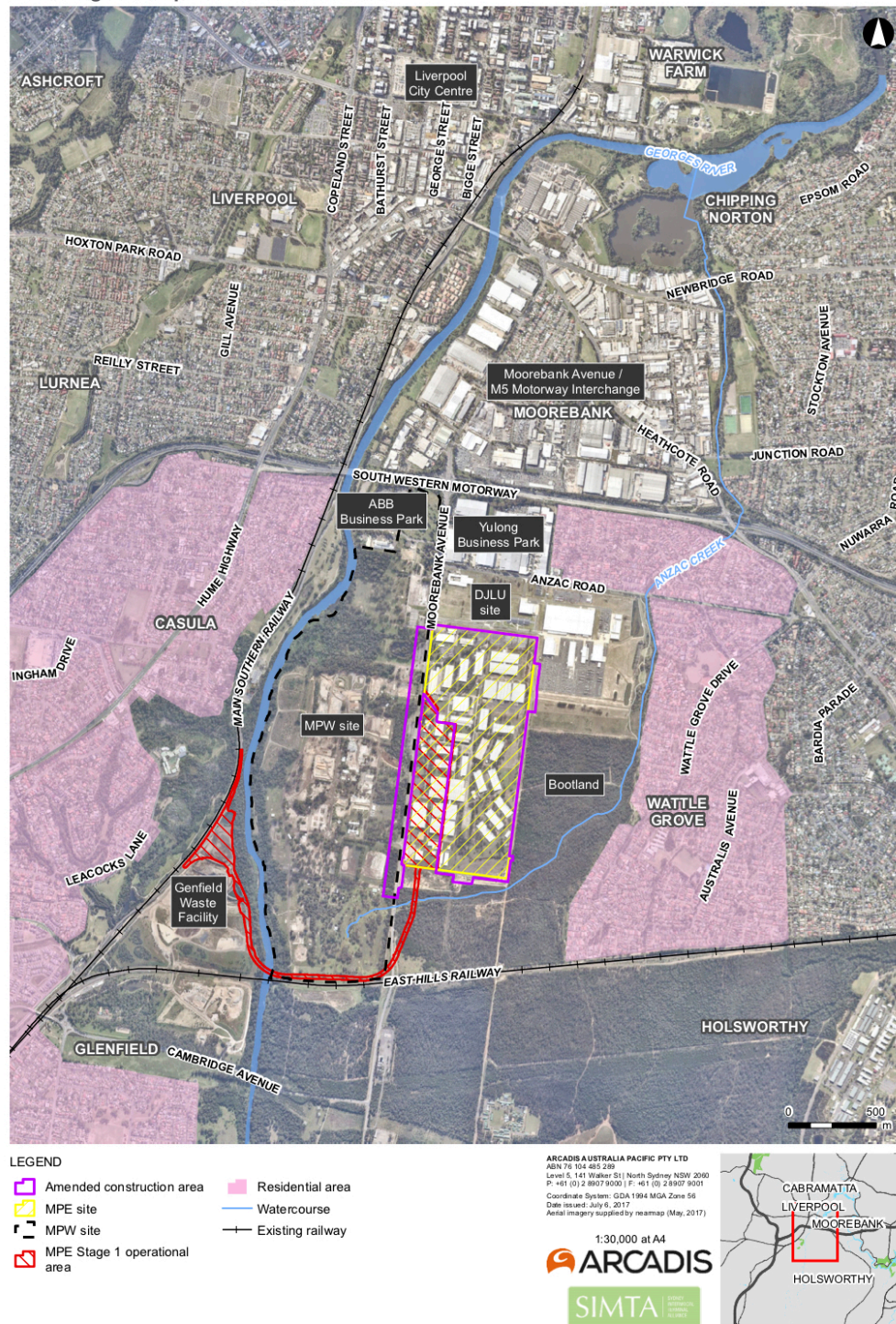
The MPE Project is to be developed in three stages:

- Stage 1 – Construction and operation of the IMT facility and rail link (herein referred to as MPE Stage 1);
- Stage 2 – Construction and operation of warehouse and distribution facilities (herein referred to as MPE Stage 2); and
- Stage 3 – Increase in capacity of the IMT facility as per the MPE Concept Plan Conditions of Approval (herein referred to as the future Stage 3 Proposal) and upgrades to the warehousing and distribution facilities (in accordance with the Concept Plan Conditions of Approval) to accommodate the increase in capacity of the IMT.

Development consent has been issued for stages 1 and 2 of the MPE Project and the Applicant is progressing with the development of the MPE site. To provide the 1V:4H batters for on-site detention basins (OSDs) as required under MPE Stage 2 SSD 7628 condition of consent (CoC) B40(c)(iii) and thereby complete the final stage for the stormwater management plan under MPE Stage 2 SSD 7628 CoC B40, an adjustment to the approved construction and operation boundary is required. The adjustment to the MPE boundary is the subject of this modification application.



# MPE Stage 2 Response to Submissions





### 3.0 The MPE Concept Plan Approval

The MPE Concept Plan Approval (MP 10\_0193) was granted by the Planning Assessment Commission (PAC) as a delegate of the Minister for Planning on 29 September 2014 under the (now repealed) Part 3A of the EP&A Act.

The Concept Plan Approval is for the transport by rail of up to 500,000 twenty-foot equivalent units (containers) between Port Botany and the site. It also proposes a warehousing and road transport distribution facility to allow the delivery of the rail freight to the catchment area in south-west Sydney.

The Concept Plan Approval does not permit the construction or operation of any part of the project until development consent is granted in accordance with Part 4 of the EP&A Act.

The MPE Concept Plan Approval has also been subject to the following modification applications.

- **MPE Concept Plan Modification 1:** submitted concurrently with the MPE Stage 1 Project application (SSD 5066), was approved by the PAC on 12 December 2016. Modification 1 included additional land for the construction of the Rail Link, and the revision of Condition 1.9 of the Concept Plan Approval relating to road infrastructure upgrades and bus routes.
- **MPE Concept Plan Modification 2:** submitted concurrently with the MPE Stage 2 application (SSD 7628, was approved by the PAC on 31 January 2018. Modification 2 included the following:
  - Increase in site area and amendments to the site boundary to include works on Moorebank Avenue and drainage works to the south and east of the site;
  - Upgrade works to Moorebank Avenue;
  - A diversion road and interim site access to the MPE Site during the Moorebank Avenue upgrade;
  - Interim site access for warehousing from Moorebank Avenue;
  - Reconfiguration of internal road layouts and their use by light and heavy vehicles;
  - Importation of approximately 600,000 m<sup>3</sup> of clean fill for bulk earthworks;
  - Expansion of the land-uses within the freight village;
  - Revision of the proposed staging of the project; and
  - Subdivision of the site.

The MPE Development was a Transitional Part 3A Project, however, the modification provisions in section 75W (now repealed) of the EP&A Act no longer apply as of 1 March 2018. Modification of the Concept Approval falls under the provisions of section 4.55 of the EP&A Act.

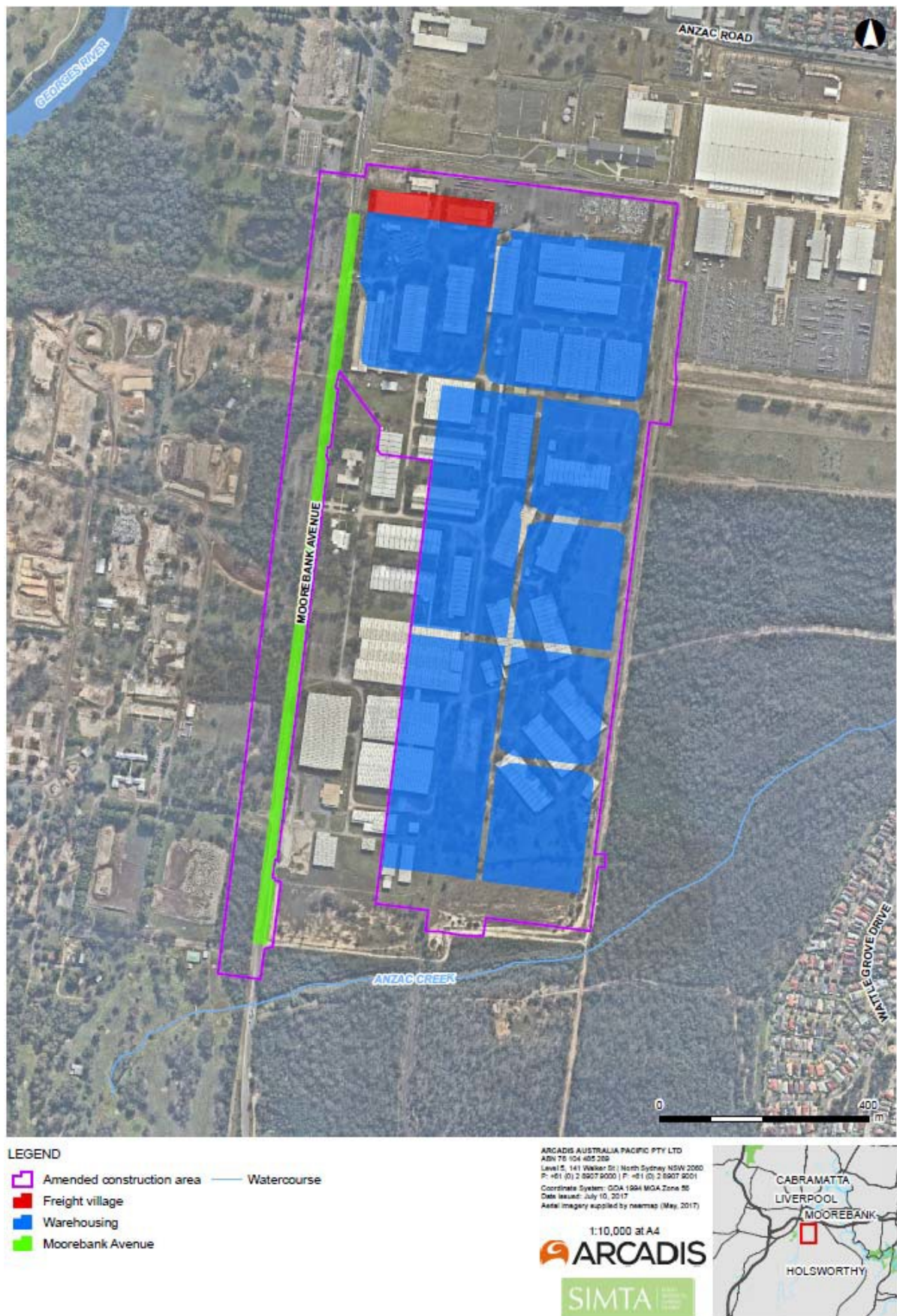


Figure 3 MPE Stage 2 approved boundary (Source: MPE Stage 2 SSD 7628 EIS, Arcadis 2016)

## 4.0 Need for the modification

To accommodate the 1V:4H batters on OSDs, required under MPE Stage 2 SSD 7628 CoC B40(c)(iii), the site stormwater layout requires amendment. To achieve the requirements of the consent condition an additional 1.5 ha of land within the Butcher's Knife is required.

The Applicant is progressing with the development of the MPE site and construction activities related to the MPE Stage 2 project have commenced. The submission of the amended Stormwater Management Plan required by MPE Stage 2 SSD 7628 CoC B40, has been staged in accordance with CoC A14 and A15 and, accordingly, the satisfaction of this CoC is substantially progressed.

The initial stage of the amended SMP, *MPE Stage 2 Warehouse 1 Precinct Stormwater Management Plan* (SMP W1P) (Arcadis Australia, 2018), was approved by DP&E on 2 July 2018. SMP W1P applies to the area known as the Warehouse 1 Precinct (W1P), located in the north-west corner of the MPE site (shown in Figure 5), and is currently being implemented.

The second stage of the SMP, the *MPE Stage 2 Stormwater Management Plan – Balance of Site* (SMP BoS), prepared by Costin Roe, was submitted to DP&E on 23 October 2018. The SMP BoS includes an amended stormwater development layout and design in response to the requirements of CoC B40. The design of the amended stormwater system comprises:

- a reduction in the size and number of OSDs at the site, i.e. replacement of central linear basins with underground tanks and redesign and relocation of OSD 1 to include 1V:4H batters; and
- inclusion of 1V:4H batters for the revised OSD 2 in an expanded location into the land described as the “Butcher's Knife” to the south of the MPE site (Lot 4 DP 1197707)

The SMP BoS has been updated in accordance with DP&E comments and the SMP BoS figures relevant to OSD 2 are provided as Appendix A of this report.

The MPE Concept Plan Approval instrument and the assessment documentation referenced within it indicate that Lot 4 DP 1197707 constitutes part of the land to which the approval applies, and the works considered in this area were drainage-related. The proposed extension of the construction and operation footprint to include an additional 1.5 ha has been held by the DP&E to require modification on the basis of a change to the spatial extent of the development.



## 5.0 Proposed modification

The Proposed Modification seeks to extend the land to which the Concept Plan Approval applies to include an additional 1.5 ha of Lot 4 DP 1197707, in the area colloquially known as the “Butcher’s Knife”. This is to enable the construction and operation of revised stormwater management infrastructure that forms part of the amended Stormwater Management Plan required by Condition B40 of the MPE Stage 2 development consent. The proposed construction and operation boundary is shown below in Figure 4; Figure 5; and Figure 6.

MPE Stage 2 SSD 7628 CoC B40(c)(iii) requires a maximum batter slope of 1V:4H on OSDs. As this additional spatial requirement was not provided for in the MPE Stage 2 SSD 7628 application, an amended design to enable compliance was required. The amended design provides for replacement of the central linear OSDs with underground tanks and an increased footprint for OSD 2 proximate to the location as originally assessed, located within the Butcher’s Knife land immediately to the south of the MPE site.

The increased footprint is necessary to:

- provide the required batter slopes for OSD 2
- maintain adequate storage volume across the site
- provide the necessary area of biofiltration for water quality treatment, being 1% of the catchment draining to the system in accordance with MPE Stage 2 SSD 7628 CoC B40((e)(iv).

To accommodate the inclusion of 1V:4H batter slopes for MPE Stage 2, OSD 2 has increased from a surface area of approximately 1.15 ha and diversion area of 0.53 ha (total 1.68 ha) to a surface area of 2.23 ha.

To accommodate the revised OSD 2 footprint, inclusive of batters, the construction and operation footprint would extend further into the Butcher’s Knife land, increasing the construction and operation footprint in the Butcher’s Knife by 1.50 ha from 1.24 ha to 2.74 ha.

### Land to which this application applies

The proposed modification requires the inclusion of an additional portion of the area at the southern extent of the MPE Site, known as the Butcher’s Knife, in the MPE Stage 2 construction and operation footprint to accommodate the revised OSD 2 footprint. A description of the land to which this modification application applies is provided in Table 1 below.

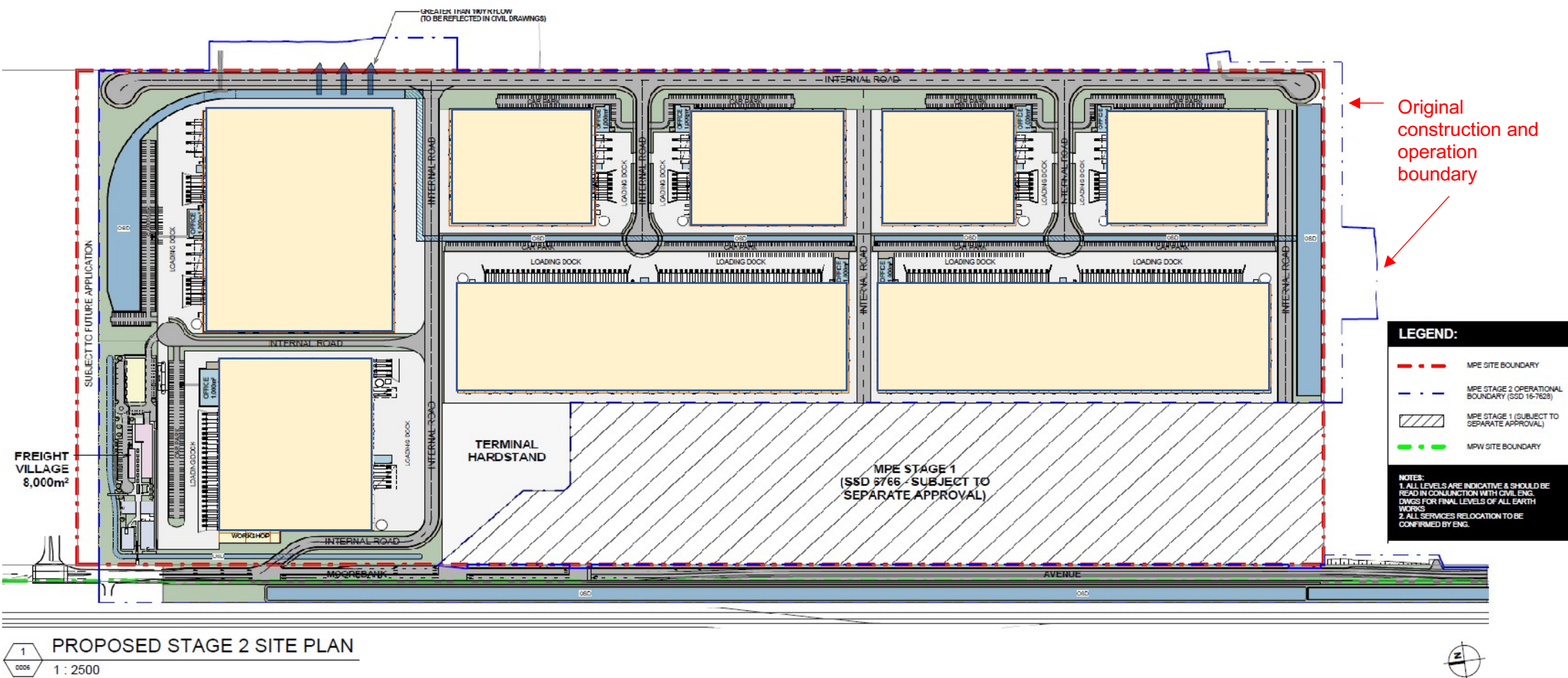
*Table 1 Land affected by the proposal*

| Name                              | Lot description  |
|-----------------------------------|------------------|
| MPE Site                          | Lot 1 DP 1048263 |
| “Boot land” and “Butcher’s Knife” | Lot 4 DP 1197707 |

Lot 1 DP 1048263 is wholly owned by Qube Holdings as The Land Trust. Lot 4 DP 1197707 is owned by the Commonwealth of Australia. Land owner's consent was provided in respect of MPE Stage 2 SSD 7628 application, and subsequent amended proposal, which included works in both of the referenced lots, including stormwater management works within the Butcher's Knife (Lot 4 DP 1197707). These consents continue to have effect for the scope of the proposed modification.

The subject land forms part of the land that is under a 99-year lease arrangement to a land trust, comprising Moorebank Intermodal Company and Qube Holdings, for the purpose of facilitating the development of the wider Moorebank Intermodal Precinct.





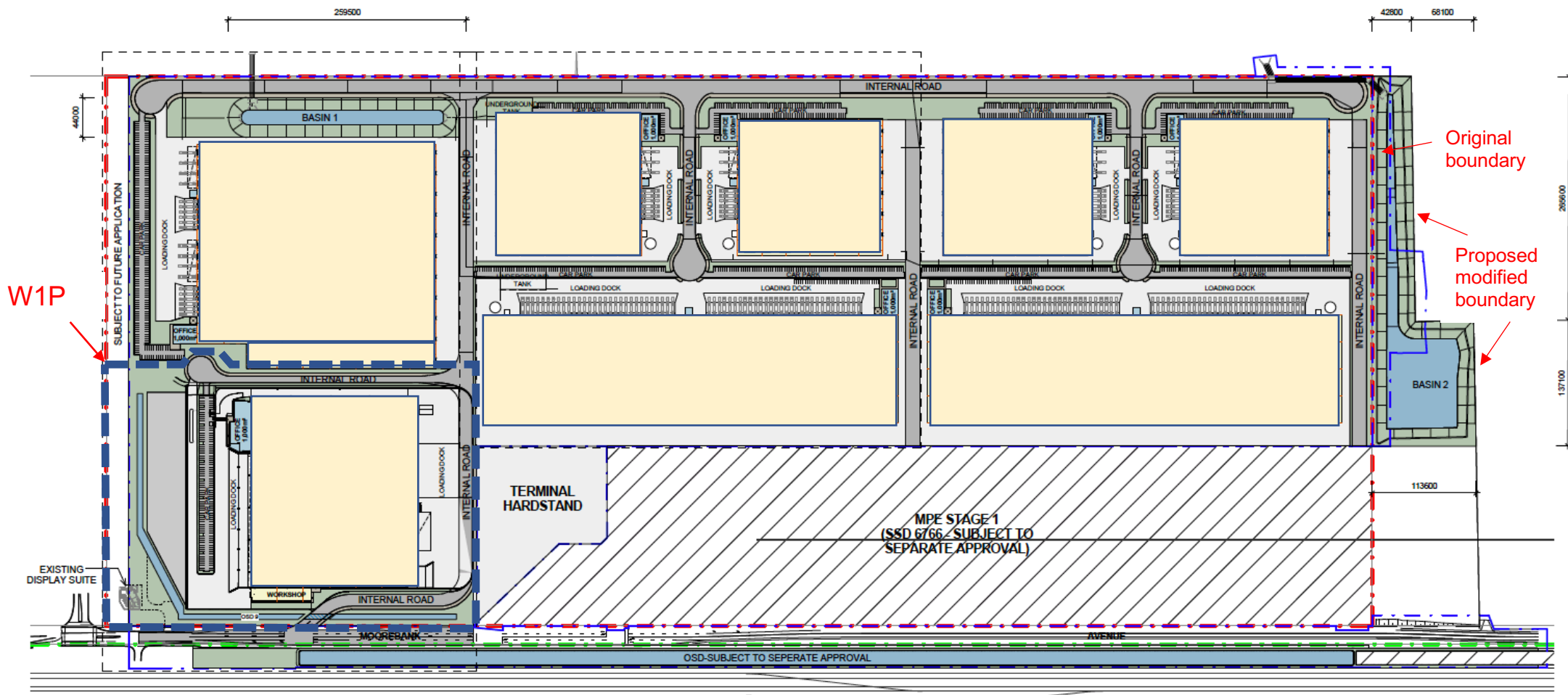


Figure 5 MPE Site Proposed boundary change

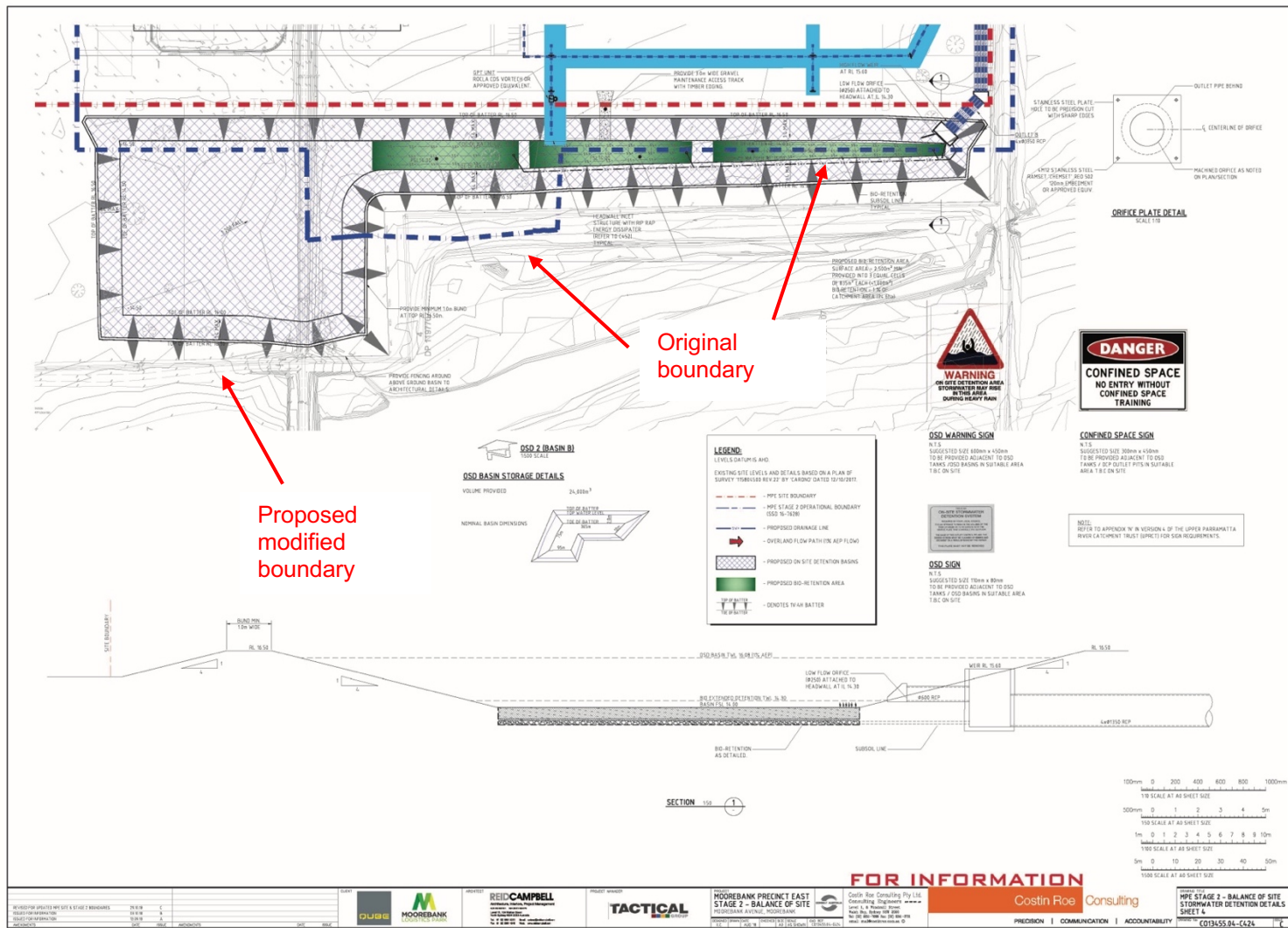


Figure 6 MPE Stage 2 proposed boundary change - indicative OSD 2 layout (Costin Roe, 2018)

## Proposed modification justification

The extension of the boundary is required to accommodate the revised footprint of onsite detention basin 2 (OSD 2) that has been amended in response to CoC B40 and particularly the design criteria imposed by CoC B40(c)(iii) of the development consent for MPE Stage 2 (SSD 7628).

MPE Stage 2 SSD 7628 CoC B40 requires the preparation of an amended Stormwater Management Plan (SMP) and provides prescriptive design criteria that relate to water quality outcomes and Water Sensitive Urban Design objectives. Specifically, CoC B40(c)(iii) requires the inclusion of 1V:4H batter walls for OSDs, which has initiated the need to alter the design and layout of the stormwater management system from what was originally proposed in the MPE Stage 2 EIS (Arcadis, 2016).

The Proposed Modification does not alter the function or performance outcomes of the MPE Project and its stormwater management system, as identified in the EIS and prescribed by the MPE Stage 2 SSD 7628 CoC. The minor change to the Project boundary is proposed to give effect to the design criteria imposed by CoC B40 of Development Consent SSD 7628, for the MPE Stage 2 Project.

## Substantially the same development

Section 4.55 (1A) of the EP&A Act states that a consent authority may approve an application for the modification of development consent if,

*“it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all).”*

While the legislation does not include a strict definition on what constitutes ‘substantially the same development’, the phrase was interpreted by the court in the case of *Moto Projects (No 2) Pty Ltd v North Sydney Council (1999) NSWLEC 280*.

Within this case important principles for consideration in the approval of a modification were established. These included;

- The verb ‘modify’ means to alter without radical transformation
- “Substantially’ in this context means essentially materially or having the same essence
- A development as modified would not necessarily be ‘substantially the same development’ simply because it is for precisely the same use as that for which consent was originally granted
- A modification application involves undertaking both a qualitative and quantitative comparison of the development as originally approved and modified
- Although the comparative task required under section 96 (now Section 4.55) involves a comparison of the whole of the development being compared, the fact does not eclipse or cause it to be eclipsed if a particular feature of the



development particularly if that feature is found to be important, material or essential to the development

- Environmental impacts of the proposed modification are relevant in determining whether or not a development is substantially the same.

The proposed modifications do not change the purpose for which the development is being carried out and maintains all the key components of the development, as described in Schedule 1 of the consent.

The proposed modification involves a minor increase in the disturbance footprint of the MPE Site, an increase of approximately 1.5 ha. As previously stated, the extension of the construction and operation boundaries of the MPE Site are required to give effect to the batter requirements of MPE Stage 2 SSD 7628 CoC B40(c)(iii).

The increased footprint is necessary to:

- provide the required batter slopes within OSD 2
- maintain adequate storage volume across the site
- provide the necessary area of biofiltration for water quality treatment, being 1% of the catchment draining to the system in accordance with B40((e)(iv).

While the additional construction and operation area required to achieve the B40(c)(iii) outcomes for the amended OSD 2 would result in additional impacts to flora species, which are described in Table 2, these impacts are considered minimal as they are able to be included within the existing offset requirements contained in MPE Stage 2 SSD 7628 CoC B104.

The proposed modification to the Concept Approval MP 10\_0193 provides for a development that remains consistent with the applicable legislation, policies and controls relevant to the development.

Accordingly, the Proposed Modification is considered to be substantially the same development as the MPE Project for which consent was originally granted. and is of minimal environmental impact.



## 6.0 Assessment

As outlined in Section 3, the proposed modification seeks the extension of the construction and operation boundaries of the MPE Site in Lot 4 DP 1197707 by approximately 1.5 ha to accommodate a required revision of the stormwater management system as part of Development Consent SSD 7628.

The Proposed Modification is likely to only result in minor impacts beyond those previously assessed and approved as part of the Concept Plan Approval. A summary of any potential impacts of the Proposed Modification to key environmental aspects is provided in Table 2 below.

The assessment considers the Future Assessment Requirements (FEARs) as they relate to environmental values, as included in the Concept Approval, and identifies their address within the MPE Stage 2 SSD 7628 EIS and consent instrument. The assessment of the modification proposal in respect of the FEARs and MPE Stage 2 SSD 7628 consent is presented.

The area subject to the proposed boundary modification is shown indicatively in Figures 7 – 14 below.



Figure 7 MPE Stage 2 proposed boundary change





Figure 8 MPE Stage 2 proposed boundary change (view to south west)



Figure 9 MPE Stage 2 proposed boundary change (view to south west)



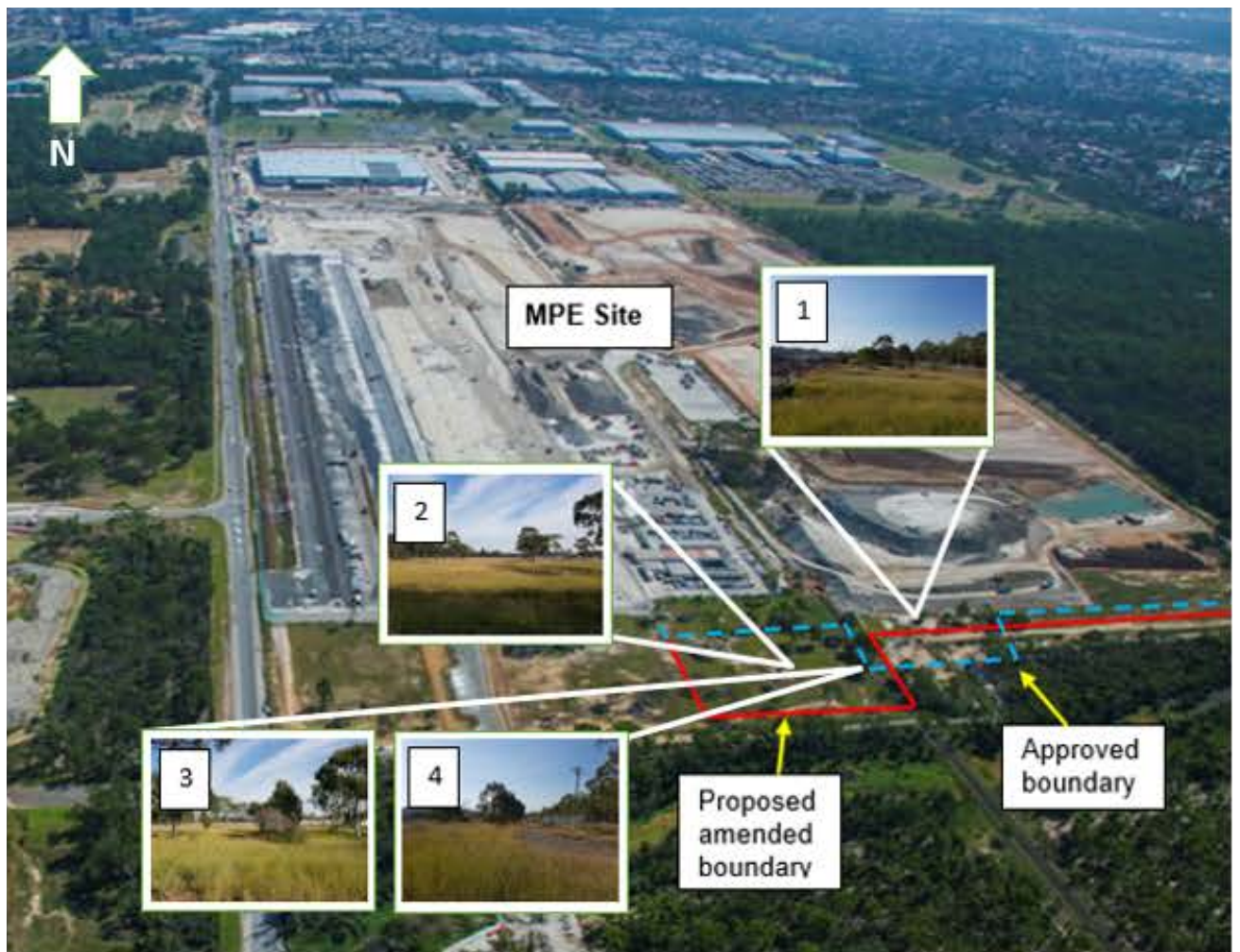


Figure 10 MPE Stage 2 proposed boundary change showing inset figures



Figure 11 Inset Figure 1 view east in Butcher's Knife





*Figure 12 Inset Figure 2 view west across Butcher's Knife*



*Figure 13 Inset Figure 3 view west across Butcher's Knife*



*Figure 14 Inset Figure 4 view east across Butcher's Knife*



Table 2 Assessment of potential impact

| Environmental aspect | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biodiversity         | <p>A Biodiversity Assessment Report (BAR) was prepared by Arcadis (2016) as part of the MPE Stage 2 EIS (Arcadis, 2017) to assess the potential biodiversity impacts arising from the construction and operation of the MPE Stage 2 Project. The preparation of the BAR for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for biodiversity (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p> <p>Notwithstanding, the <i>Moorebank Precinct East Intermodal Facility – Concept Plan Approval Modification (10_0193_MOD2) – Review of Biodiversity Impacts</i> was prepared by Arcadis (2016) as part of the MPE Concept Plan Modification 2 application (Arcadis, 2017) to review the potential impacts to biodiversity associated with the modification of the MPE Concept Plan Approval to reflect the construction and operation of Stage 2 of the MPE development.</p> <p>The MPE Stage 2 BAR (updated) considered clearing of all vegetation within the MPE Stage site, including threatened ecological communities (TECs). The total area of native vegetation to be cleared is 0.15 ha; the areas to be cleared comprise small, fragmented patches of vegetation and the disturbed edges of larger patches. The total area to be cleared consists of two plant community types (PCTs):</p> <ul style="list-style-type: none"> <li>• 0.1 hectares of Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin.</li> <li>• 0.05 hectares of Broad-leaved Ironbark - Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain.</li> </ul> <p>In addition, it was determined that there would be direct impacts on three threatened plant species as part of the MPE Stage 2 Project.</p> | <p>An additional area of impact of approximately 1.5 ha in Lot 4 DP 1197707.</p> <p>A BDAR has been prepared by Arcadis (June 2019) under the <i>Biodiversity Conservation Act</i> 2016 (BC Act) for the MPE Stage 2 Modification 2 application.</p> <p>The biodiversity impacts and offset requirements for the development site for the MPE Stage 2 Modification 2 application were calculated using the Biodiversity Assessment Method Calculator in accordance with the Biodiversity Assessment Method (2017).</p> <p>The vegetation within the development site is predominantly comprised of exotic grassland vegetation, with two small patches of modified native vegetation. This native vegetation has been classified as Plant Community Type (PCT) 883 Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin Bioregion. All vegetation within the development site has been categorised into one of two PCT 883 vegetation zones; '883_Poor' incorporating the degraded woodland vegetation and '883_Cleared' incorporating the exotic grassland. PCT 883_Poor corresponds with the following TECs:</p> <ul style="list-style-type: none"> <li>• Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion, listed as vulnerable under the BC Act; and</li> <li>• Castlereagh Scribbly Gum and Agnes Banks Woodlands ecological community, listed as endangered under the <i>Environment Protection and Biodiversity Conservation Act</i> 1999.</li> </ul> <p>The BDAR considered the construction and operational impacts of the proposed modification. The potential biodiversity impacts of the proposed modification are as follows:</p> <ul style="list-style-type: none"> <li>• Clearing of all vegetation within the development site including representatives of one threatened ecological community. The total area of vegetation to be cleared is 0.60 ha; the areas of native vegetation to be cleared comprise two</li> </ul> |

| Environmental aspect                                                            | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Proposed Modification      |                              |                  |                                             |                       |     |                                                  |                              |                            |                                                                                 |                       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                                                                                 | <ul style="list-style-type: none"> <li>• <i>Hibbertia puberula</i> subsp. <i>puberula</i> (110 plants)</li> <li>• <i>Persoonia nutans</i> (12 plants)</li> <li>• <i>Grevillea parviflora</i> subsp. <i>parviflora</i> (79 stems)</li> </ul> <p>The numbers of individuals impacted as part of the MPE Stage 2 Project were revised in response to changes to biodiversity offsetting methodology implemented by the NSW Office of Environment and Heritage (OEH) following the MPE Stage 2 Project's approval. The change in methodology has affected the quantification of impact and credit allocation for <i>Hibbertia puberula</i> subsp. <i>puberula</i> that was included in the original assessment, and as a result, development consent SSD 7628.</p> <p>The approved impact for MPE Stage 2 SSD 7628 and resultant offset credit requirement is identified as CoC B104 Tables 6 &amp; 7 of the SSD 7628 consent. The MPE SSD 7628 Mod 1 Application seeks to adjust Table 7 to reflect the revised OEH methodology for <i>Hibbertia puberula</i> subsp. <i>Puberula</i>, from individuals to area -based) as per below (reference Table 10 from MPE Stage 2 SSD 7628 Mod 1 Response to Submissions (Aspect, April 2019).</p> <table border="1"> <thead> <tr> <th>Species</th><th>Impacted individuals or area</th><th>Credits required</th></tr> </thead> <tbody> <tr> <td>Nodding Geebung (<i>Persoonia nutans</i>)</td><td>12 <u>individuals</u></td><td>924</td></tr> <tr> <td><i>Hibbertia puberula</i> subsp. <i>puberula</i></td><td><del>1102</del> <u>49 ha</u></td><td><del>4400</del> <u>101</u></td></tr> <tr> <td>Small-flower Grevillea (<i>Grevillea parviflora</i> subsp. <i>parviflora</i>)</td><td>79 <u>individuals</u></td><td>1106</td></tr> </tbody> </table> | Species                    | Impacted individuals or area | Credits required | Nodding Geebung ( <i>Persoonia nutans</i> ) | 12 <u>individuals</u> | 924 | <i>Hibbertia puberula</i> subsp. <i>puberula</i> | <del>1102</del> <u>49 ha</u> | <del>4400</del> <u>101</u> | Small-flower Grevillea ( <i>Grevillea parviflora</i> subsp. <i>parviflora</i> ) | 79 <u>individuals</u> | 1106 | <p>small, fragmented patches of vegetation totalling 0.17 hectares. The total area to be cleared consists of one plant community type (PCT):</p> <ul style="list-style-type: none"> <li>– 0.17 hectares of Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin. This PCT corresponds with the TEC Castlereagh Scribbly Gum Woodland in the Sydney Basin Bioregion, which is listed as vulnerable under the BC Act and Castlereagh Scribbly Gum and Agnes Banks Woodlands ecological community listed as endangered under the EPBC Act.</li> </ul> <ul style="list-style-type: none"> <li>• The proposed modification will have direct impacts on habitat for three threatened plant species (all of which are 'area' assessed species), including: <ul style="list-style-type: none"> <li>– <i>Hibbertia puberula</i> subsp. <i>puberula</i> (0.59 hectares)</li> <li>– <i>Hibbertia fumana</i> (0.14 hectares)</li> <li>– <i>Persoonia nutans</i> (0.33 hectares).</li> </ul> </li> <li>• <i>Hibbertia fumana</i> is a candidate species for Serious and Irreversible Impacts. An assessment of the potential impacts of the proposed modification against the Serious and Irreversible Impacts criteria has been undertaken and a Serious and Irreversible Impact to the species is considered unlikely.</li> <li>• Potential indirect impacts on records of <i>Persoonia nutans</i> and <i>Hibbertia puberula</i> subsp. <i>puberula</i> in the Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland immediately adjoining the southern extent of the MPE Stage 2 site. Indirect impacts may include increased sedimentation, changes to hydrology and increased risk of weed invasion, from adjoining areas.</li> </ul> <p>The assessment identified the following additional offset credit requirements, based on the impacts described above:</p> <ul style="list-style-type: none"> <li>• Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland of the Cumberland Plain, Sydney Basin Bioregion – 2 credits required;</li> </ul> |
| Species                                                                         | Impacted individuals or area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Credits required           |                              |                  |                                             |                       |     |                                                  |                              |                            |                                                                                 |                       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Nodding Geebung ( <i>Persoonia nutans</i> )                                     | 12 <u>individuals</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 924                        |                              |                  |                                             |                       |     |                                                  |                              |                            |                                                                                 |                       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <i>Hibbertia puberula</i> subsp. <i>puberula</i>                                | <del>1102</del> <u>49 ha</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <del>4400</del> <u>101</u> |                              |                  |                                             |                       |     |                                                  |                              |                            |                                                                                 |                       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Small-flower Grevillea ( <i>Grevillea parviflora</i> subsp. <i>parviflora</i> ) | 79 <u>individuals</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1106                       |                              |                  |                                             |                       |     |                                                  |                              |                            |                                                                                 |                       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Environmental aspect | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|                      | <p>Potential indirect impacts on records of <i>Persoonia nutans</i> and <i>Hibbertia puberula</i> subsp. <i>puberula</i> in the Hard-leaved Scribbly Gum – Parramatta Red Gum heathy woodland immediately adjoining the southern extent of the MPE Stage 2 site. Indirect impacts may include increased sedimentation, changes to hydrology and increased risk of weed invasion, from adjoining areas of proposed fill.</p> <p>Some loss of specific fauna habitat components, including live trees, tree hollows, foraging resources, and groundlayer habitats such as ground timber and minor leaf litter. Removal of buildings currently within the MPE Stage 2 site may remove potential marginal roosting habitat for microchiropteran bats.</p> <p>Potential for minor impacts to groundwater dependent ecosystems, such as drawdown of groundwater from the root zone, may occur as a result of excavation during construction. While this may have some potential to affect adjacent areas of retained vegetation and habitat that may utilise the shallow groundwater aquifers present, any impacts are expected to be minor given the limited scope of excavation proposed, particularly in the southern portion of the MPE Stage 2 site. The detailed design process would further consider potential groundwater impacts and effects on groundwater-dependent ecosystems. In most cases, any impacts would be mitigated at the design phase.</p> <p>The small areas of habitat to be removed for MPE Stage 2 Project are currently fragmented by the existing development. There is good quality fauna habitat on land immediately adjacent to the MPE Stage 2 site, known as the Boot land, which would be retained. The Boot land contains approximately 83 hectares of</p> | <ul style="list-style-type: none"> <li>• <i>Hibbertia puberula</i> subsp. <i>Puberula</i> – 2 credits required; and</li> <li>• <i>Persoonia nutans</i> – 1 credit required.</li> </ul> <p>The combination of the small area of proposed loss and very low vegetation integrity of much of the habitat present is the key reason for the low offset requirement.</p> <p>The provision for offset of these impacts is included within MPE Stage 2 SSD 7628 CoC B104. The implementation of these offset credits has been included in the MPE Stage 2 SSD 7628 Mod 2 application.</p> |



| Environmental aspect  | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|                       | <p>native vegetation in moderate to good condition which would not be impacted by the MPE Stage 2 Project.</p> <p>Minimal impact on wildlife and habitat corridors as neither the MPE Stage 2 Project would not alter existing connectivity values and would not further sever native vegetation or form a hard barrier within existing connecting links.</p> <p>Construction activities in proximity to Anzac Creek have the potential to adversely affect aquatic habitat, particularly the construction of a swale in the south of the MPE Stage 2 site to drain stormwater to Anzac Creek. Impacts to aquatic habitat are expected to be minor.</p>                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Traffic and transport | <p>An assessment of potential construction and operational traffic impacts was undertaken for MPE Stage 2 SSD 7628 by Arcadis (Section 7 and Appendix K of the MPE Stage 2 SSD 7628 EIS (Arcadis, 2016)). The preparation of the traffic and transport assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for traffic and transport (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p> <p>Overall, it was concluded that traffic impacts associated with the MPE Stage 2 Project and the resultant proposed changes to the Concept Plan Approval would be temporary and short-term (and cumulative scenario including the MPE Stage 2 Project) would result in only marginal traffic impacts to the surrounding road network in the presence of mitigation and management measures.</p> | <p>Given the scale and extent of the proposed increase in construction and operation boundary for the MPE Site, the proposed modification to the Concept Plan Approval would not result in any changes to the construction and operational traffic impacts approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to traffic and transport is required as a result of the Proposed Modification.</p> |
| Noise and vibration   | A Noise and Vibration Assessment was prepared by Wilkinson Murray (2016) (Appendix N of this EIS) to assess the potential noise and vibration impacts arising from the construction and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Given the scale and extent of the proposed increase in construction and operation boundary for the MPE Site, the proposed modification to the Concept Plan Approval would not result in any changes to the                                                                                                                                                                                                                                                                                         |

| Environmental aspect | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Proposed Modification                                                                                                                                                                                                                                                                                                                                                            |
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|                      | <p>operation of the MPE Stage 2 Project. The preparation of the Noise and Vibration Assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for noise and vibration (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p> <p>In addition, a Noise and Vibration Assessment was prepared by Wilkinson Murray (2016) as part of the MPE Concept Plan Modification 2 (Arcadis, 2017) to assess the potential noise and vibration impacts arising from the construction and operation of the of the MPE Stage 2 Project to ensure consistency with the MPE Concept Plan Approval is maintained.</p> <p>The assessment identified that construction noise levels associated with the construction of Stage 2 of the MPE Project would comply with established construction noise management levels (NMLs) for standard construction hours set in accordance with the <i>Interim Construction Noise Guideline</i> (DECC, 2009) at all receivers. Out of hours works would also comply with NMLs, except for a predicted 1 dB exceedance at Wattle Grove, which is considered imperceptible.</p> <p>Operational noise levels are not expected to exceed criteria set out in the Industrial Noise Policy with the proposed management and mitigation measures in place.</p> | <p>construction and operational noise and vibration impacts approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to noise and vibration are required as a result of the Proposed Modification.</p>                                                                               |
| Air quality          | <p>An Air Quality Impact Assessment was prepared by Ramboll Environ (2016) (Appendix M of this EIS) to assess the potential air quality impacts arising from the construction and operation of the MPE Stage 2 Project. The preparation of the Noise and Vibration Assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for noise and vibration (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p> <p>In addition, an Air Quality Impact Assessment was prepared by Ramboll Environ (2016) as part of the MPE Concept Plan</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>The proposed modification to the Concept Plan Approval would not result in any changes to the construction and operational air quality impacts approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to air quality are required as a result of the Proposed Modification.</p> |

| Environmental aspect | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                   |
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|                      | <p>Modification 2 EIS (Arcadis, 2016) to assess the potential air quality impacts arising from the construction and operation of the MPE Stage 2 Project in the context of the MPE Concept Plan Approval. The assessment concluded that construction and operation phase emissions to air for the Concept Plan Approval would comply with all relevant impact assessment criteria.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                         |
| Contamination        | <p><i>A Preliminary Environmental Site Assessment of the MPE Site and Rail Corridor Lands</i> (Preliminary ESA) (Golder Associates, 2013) was prepared as part of the Concept Plan Approval application. The Preliminary ESA did not identify any significant contamination issues which would preclude the development of the MPE Site. It provided recommendations regarding further assessment based on the staged development of the MPE Project to identify the extent of contamination and the remediation actions required. These assessment recommendations are reflected in the Concept Plan Conditions of Approval (Condition 2.1 – Soil and Water).</p> <p>In accordance with the Future Assessment Requirements of the Concept Plan Conditions of Approval, contamination has been considered as part of the subsequent SSD applications for MPE. For the most recent SSD application, the MPE Stage 2 Project, a Contamination Summary Report was prepared by JBS&amp;G (November 2016) and included in Appendix Q of the MPE Stage 2 EIS. The Contamination Summary Report (JBS&amp;G, 2016) concluded that, based on the extensive investigations undertaken at the MPE Site prior to, and during, construction of the MPE Project, there is no evidence of widespread residual contamination at the MPE Site. The inclusion of the Contamination Management Plan (CMP), which replaces the existing Environmental Management Plan prepared by GHD (2016), as part of the Construction Environmental Management</p> | <p>The proposed modification to the Concept Plan Approval would not result in any changes to the construction and operational impacts to contamination approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to contamination are required as a result of the Proposed Modification.</p> |

| Environmental aspect    | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|                         | Plan is considered sufficient to manage any residual contamination risk.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Stormwater and flooding | <p>The Stormwater and Flooding assessment was undertaken by Arcadis (December 2016) and included as Appendix P of the MPE Stage 2 SSD 7628 EIS. The preparation of the Stormwater and Flooding Assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for stormwater and flooding (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p> <p>Construction of the MPE Stage 2 Project, in particular raising of the MPE site, would have the potential to cause flooding impacts on surrounding properties during a significant rainfall event, in the absence of flood management measures.</p> <p>During operations, the development of the MPE Stage 2 Project would result in changes to the catchment boundaries and would result in an increase in surface water generation and pollutant loads as a result of the increase in impervious surfaces on the site. The stormwater management system for the MPE site, which includes onsite detention (OSD) in the form of sediment basins, outlet channels and water sensitive urban design (WSUD) elements has been designed to provide adequate system capacities and mitigate potential adverse flood impacts and increases in stormwater discharge from the site that may otherwise result from the MPE development.</p> | <p>The proposed adjustment to construction and operation boundary to accommodate an amended design for OSD 2 directly addresses the outcomes sought in respect of amended stormwater basin designs (MPE Stage 2 SSD 7628 CoC B40) without altering the function or outcomes of the MPE Concept Stage 2 SSD 7628 development.</p> <p>Its function as a basin would not alter the capability or capacity of the site's stormwater management system, nor would it alter the downstream hydrology, channel geomorphology or water quality from that assessed within the original assessment.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to stormwater and flooding are required as a result of the Proposed Modification.</p> |
| Indigenous heritage     | Artefact prepared an Aboriginal Heritage Impact Assessment to determine the potential impacts of the Proposal on Indigenous heritage significance (refer to Appendix S of the MPE Stage 2 SSD 7628 EIS). The preparation of the Aboriginal Heritage Impact Assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for heritage (Condition 2.1 of the MPE Concept Plan Approval (as modified)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>The proposed modification to the construction and operation area of the MPE Site would not result in any change to indigenous heritage values or the assessed indigenous heritage impact or to indigenous heritage management and controls in either the construction or operation stage of the MPE Project.</p> <p>The proposed modification to the construction and operation area to accommodate the revised OSD 2 footprint is proximate to the three isolated finds located along the vehicle track at the southern extent of the proposed footprint extension.</p>                                                                                                                                                                                                           |



| Environmental aspect    | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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|                         | <p>No impacts to Indigenous heritage were identified for the operational phase of the Proposal.</p> <p>Further, three isolated finds are located to the south of the Proposal site. An exclusion zone would be provided around these artefacts, thereby avoiding any disturbance during construction of the Proposal.</p> <p>Mitigation measures proposed include the establishment of exclusion zones around the identified artefacts on site and the implementation of an unexpected find procedure.</p> | <p>The toe of the southern batter would not extend onto the vehicle track where the isolated finds were identified. The track would be maintained in its current structure and position to enable inspections, monitoring and maintenance works.</p> <p>These isolated finds, identified as Isolated Finds 2, 3 and 4, were identified as having low archaeological significance with low research potential as part of the <i>Aboriginal Cultural Heritage Assessment</i> prepared by Archaeological &amp; Heritage Management Solutions (AHMS, 2012) as part of the <i>MPE Concept Plan Environmental Assessment</i> (Hyder Consulting, 2013).</p> <p>The Isolated Finds are identified and described in Section 3.1.1.1 of the MPE Stage 2 Construction Heritage Management Plan (CHMP) (Arcadis, 2018) and the Isolated Finds will be managed in accordance with measures contained in the CHMP.</p> <p>Should impacts to these Isolated Finds be identified as being unavoidable during construction, requirements and/or approval would be sought to salvage these items in consultation with OEH and the Registered Aboriginal Parties.</p> <p>Further, the Unexpected Finds Procedure, provided in Section 3.3.1 of the CHMP, will be implemented during construction of the proposed modification.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to Indigenous heritage are required as a result of the Proposed Modification.</p> |
| Non-indigenous heritage | <p>Artefact prepared a Non-Indigenous Heritage Impact Assessment to determine the potential impacts of the Proposal on non-Indigenous heritage (refer to Appendix T of the MPE Stage 2 SSD 7628 EIS). The preparation of the Non-Indigenous Heritage Impact Assessment for MPE Stage 2 satisfies the Future Environmental Assessment Requirement for heritage (Condition 2.1 of the MPE Concept Plan Approval (as modified)).</p>                                                                          | <p>The proposed modification to the Concept Plan Approval would not result in any changes to the construction and operational impacts to Non-indigenous heritage approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to Non-indigenous heritage are required as a result of the Proposed Modification.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Environmental aspect           | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Proposed Modification                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Visual amenity and landscaping | <p>Reid Campbell has undertaken an assessment of the visual amenity implications, including from light spill, associated with the Proposal. A Landscape Plan has been prepared by Groundlink to identify the landscaping features of the Proposal and is included in Appendix E of the MPE Stage 2 SSD 7628 EIS. In addition to this a Visual Impact Assessment (VIA) (Reid Campbell, 2016) and Light Spill Assessment (Arcadis, 2016) (refer to Appendix R of the MPE Stage 2 SSD 7628 EIS) have been prepared to assess the potential visual and light spill impacts of the Proposal.</p> <p>Overall, the Proposal is in keeping with the surrounding land uses and any impacts would be effectively minimised through the use of landscaping and urban design, the maximum anticipated visual impact at any view point would be Moderate. The proposed landscape and built form treatments would result in an improvement in the visual amenity of the entire site and would increase the current level of screening of the site. Urban design and planning principles would assist with the breakdown of the bulk and scale of the development.</p> <p>In addition to the above, the light spill assessment concluded that the light spill to residential properties from the MPE Project, would be well within the required criteria as specified in Australian Standard AS4282-1997 – <i>Control of the Obtrusive Effect of Outdoor Lighting</i>. Accordingly, no light spill impacts to surrounding sensitive receivers are expected.</p> | <p>The proposed modification to the Concept Plan Approval would not result in any changes to the construction and operational impacts to visual amenity and landscaping approved as part of the Concept Plan Approval.</p> <p>No changes to the MPE Concept Plan conditions of approval or statement of commitments relating to visual amenity and landscaping are required as a result of the Proposed Modification.</p> |

## 7.0 Conclusion

This modification seeks to adjust the construction and operation area of the MPE site by providing an additional 1.5 ha of area available in the Butcher's Knife.

The additional area is required to accommodate amended stormwater infrastructure design in response to the requirements of MPE Stage 2 SSD 7628 CoC B40 and particularly B40(c)(iii) to provide OSDs with 1V:4H batter slopes.

The additional area requirement would have a nominal increased impact on flora species, as described in Table 2, that are able to be effectively offset under the mechanisms already included within MPE Stage 2 SSD 7628 CoC B104.

While the extension of the southern boundary of the MPE development would result in minor additional impacts to flora, it is not expected to result in any additional construction or operation impacts for the remaining environmental attributes (fauna, traffic and transport; noise and vibration; air quality, stormwater and flooding; geology, contamination; heritage (indigenous and non-indigenous); visual amenity and landscape; and greenhouse gases and climate change) beyond those already considered and approved for the MPE development.

In accordance with section 4.55(1A) of the EP&A Act, the proposed modification is considered appropriate to approve as:

- The proposed modification is of minimal environmental impact; and
- The consent as proposed to be modified is substantially the same development as the development for which consent was granted;

Additionally, the modification enables the outcomes of MPE Stage 2 SSD 7628 CoC B40(c)(iii) in respect of OSD batter slopes to be achieved without compromising other components of the development as approved.