Moorebank Precinct West
Stage 2 Proposal
Response to Submissions

Appendix I: Visual impact assessment

Part 4, Division 4.1, State Significant Development

June 2017
VISUAL IMPACT ASSESSMENT

MPW Stage 2 Response to Submissions – Addendum Impact Assessment

28 MARCH 2017
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1 INTRODUCTION

SIMTA are seeking approval for the construction and operation of the Moorebank Precinct West (MPW) Stage 2 Proposal (the Proposal), which will be the second stage of development under the MPW Concept Approval (SSD 5066).

An Environmental Impact Statement (EIS) was prepared for the Proposal seeking approval under Part 4, Division 4.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act). In particular, the EIS was prepared to address, and be consistent with, the following:

- The Secretary's Environmental Assessment Requirements (SEARs) (SSD 16-7709) for the Proposal, which were issued on 14 July 2016
- The relevant requirements of the MPW Concept Approval (SSD 5066) granted by the Planning Assessment Commission (PAC) on 3 June 2016
- The relevant requirements of the approval under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) (No. 2011/6086).

The EIS was publicly exhibited, in accordance with clause 83 of the Environmental Planning and Assessment Regulations 2000 (EP&A Regulations), between 26 October 2016 and 25 November 2016. During this exhibition period submissions were invited from all stakeholders including members of the community and government stakeholders. In response to the submissions received, and also to respond to design progression, amendments have been made to the Proposal (the Amended Proposal), as detailed below.

1.1 Report purpose

The purpose of this report is to provide further environmental assessment for the Amended Proposal and serve as an addendum to the Visual Impact Assessment provided within the EIS. A summary of the works included in the Amended Proposal is provided below.

1.1.1 Amended Proposal

The MPW Stage 2 Proposal (the Proposal) involves the construction and operation of an intermodal terminal (IMT) facility to support a container freight throughput volume of 500,000 twenty-foot equivalent units (TEUs) per annum. The Proposal also includes the construction and operation of approximately 215,000 m² GFA, freight village (800 m²) and associated infrastructure.

The Amended Proposal alters the Proposal based on design development, submissions received during exhibition of the EIS and consultation with key stakeholders. A summary of the amendments to the Proposal is as follows:

- Alignment of the operational hours for warehouses to the IMT facility and Port freight operations to enable freight movements outside of peak traffic times
- Drainage works:
  - Inclusion of the OSD (Basin 10) and relocation of another OSD (Basin 3) along the eastern boundary of the operational area, adjacent to the western verge of Moorebank Avenue
  - Re-sizing of OSD basins along the western boundary of the operational area
  - Reduction to the widths of selected OSD outlet channels
  - Provision of an additional covered drain within the Endeavour Energy easement
• Identification of container wash-down facilities and de-gassing area within the IMT facility
• Illuminated backlit signage within the warehousing area
• Inclusion of an upgraded layout for the Moorebank Avenue/Anzac Road intersection
• Adjustments to warehouse layouts.

The amendments to the Proposal are shown in Figure 1.
Figure 1: Amendments to the Proposal
2 IMPACT ASSESSMENT

2.1 MPW Stage 2 Proposal Assessment

Reid Campbell, in conjunction with Arcadis, were appointed by SIMTA to undertake a Visual Impact Assessment of the Proposal, including a Light Spill Study, which forms the second stage of the MPW Concept and Stage 1 Approval (SSD 5066) granted by NSW Department of Planning and Environment (NSW DP&E) on 3 June 2016. The Visual Impact Assessment and Light Spill Study was provided at Appendix T of the MPW Stage 2 EIS (the EIS). This report is herein referred to as the EIS VIA.

The EIS VIA sought to identify and evaluate the visual impacts of the Proposal on the surrounding environment and nearby sensitive receivers, including an analysis of views from key vantage points and proposed management/ mitigation measures to address the identified visual impacts.

2.2 Amended Proposal Assessment

Reid Campbell has undertaken an assessment to identify the impacts of the Amended Proposal, included as part of the MPW Stage 2 Response to Submissions.

Key amendments to the Proposal

The following key amendments to the Proposal have been considered as part of this assessment:

<table>
<thead>
<tr>
<th>Amendment</th>
<th>Reason for consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage works – the inclusion of the OSD (Basin 10) along the eastern boundary of the operational area, adjacent to the western verge of Moorebank Avenue</td>
<td>Proposed location along eastern site boundary would be close to receivers and publicly accessible areas (Moorebank Avenue)</td>
</tr>
<tr>
<td>Container wash-down facilities and degassing</td>
<td>Would affect built form within the Proposal site</td>
</tr>
<tr>
<td>Adjustments to warehouse layouts</td>
<td>Would affect built form within the Proposal site</td>
</tr>
<tr>
<td>Illuminated backlit signage</td>
<td>Proposed changes may impact surrounding areas</td>
</tr>
</tbody>
</table>

Other amendments to the Proposal

The following amendments to the Proposal would not result in any changes to the visual impact assessment undertaken as part of the EIS VIA, therefore no further assessment is required:

<table>
<thead>
<tr>
<th>Amendment</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of warehousing operation</td>
<td>Inconsequential to built form</td>
</tr>
<tr>
<td>Drainage works:</td>
<td></td>
</tr>
<tr>
<td>• Additional covered drain within easement</td>
<td>Works contained within the Proposal site and would not impact surrounding receivers</td>
</tr>
<tr>
<td>• Resizing of OSD basins</td>
<td></td>
</tr>
<tr>
<td>• Relocation of an OSD (Basin 3)</td>
<td></td>
</tr>
<tr>
<td>• Reduction to the widths of selected OSD outlet channels</td>
<td></td>
</tr>
<tr>
<td>Upgrade layout for Moorebank Avenue/Anzac Road</td>
<td>Changes inconsequential to visual impact</td>
</tr>
</tbody>
</table>
2.2.1 Methodology

The following section describes the approach for the assessment undertaken as part of the visual impact of the Amended Proposal. Information has been evaluated on a qualitative basis using a range of criteria against which the relative importance of each observer location can be described. The criteria used for this assessment includes:

- context
- setting
- site elements
- site character
- adjacent development
- distance to view (foreground, middle ground and background)
- land use
- visual prominence of the development
- potential changes to the view setting.

For each observer location, these criteria have been addressed under three category headings: ‘visual adaptation’, ‘visual sensitivity’ and the resulting ‘visual impact’. A comparative description of each category used in the visual impact evaluation process is summarised below:

Visual Adaptation

Visual adaptation describes any significant changes to the landscape and visual amenity that is likely to occur as a result of the Amended Proposal from a particular viewpoint, including:

- the prominence of the Amended Proposal and its individual components with regard to scale, form, colour and texture in contrast with the surrounding landscape; and

- the compatibility of the development within the context of the particular landscape zoning/primary use (such as residential, parklands and other non-industrial related uses) on the basis that integration of the Amended Proposal is likely to incur a higher visual impact in those zones which are inhabited by non-industrial related activity. To this extent, ‘compatibility’ relates only to the specific viewpoint locations and not the degree to which the development can be seen as described under ‘prominence’ above.

Visual Sensitivity

Visual sensitivity refers to the likely duration of views and number of observers from a given viewpoint and is independent of the ‘prominence’ of the Amended Proposal. In locations where visual amenity has a higher perceived importance, and the duration of views and number of observers is greater than surrounding areas, the resulting visual sensitivity is regarded as being higher. Visual sensitivity is expressed in relative terms in this study with residential areas being of higher visual sensitivity and industrial areas having a lower sensitivity. Other areas of higher sensitivity include roads where, despite a short duration of views, there are large numbers of potential
viewers and parks where the duration of views is not particularly long, but where a high degree of importance is placed on visual amenity.

**Visual Impact**

The resulting visual impact is summarised on a qualitative basis against the above criteria. Table 1 that follows provides a matrix that breaks down visually how impact ratings are achieved.

*Table 1 - Overall Impact Rating as a combination of Visual Sensitivity and Visual Adaptation*

<table>
<thead>
<tr>
<th>Visual sensitivity</th>
<th>High</th>
<th>Moderate/High</th>
<th>Moderate</th>
<th>Low/Moderate</th>
<th>Low</th>
<th>Negligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Moderate/High</td>
<td>Moderate/High</td>
<td>Moderate</td>
<td>Negligible</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>High</td>
<td>Moderate/High</td>
<td>Moderate/High</td>
<td>Moderate/High</td>
<td>Moderate</td>
<td>Negligible</td>
</tr>
<tr>
<td>Moderate</td>
<td>Moderate/High</td>
<td>Moderate/High</td>
<td>Moderate</td>
<td>Low/Moderate</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>Moderate/High</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low/Moderate</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Moderate</td>
<td>Negligible</td>
<td>Low/Moderate</td>
<td>Low</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

**Assessment of Visual Impact**

The Amended Proposal considers the viewpoints adopted in the EIS and assesses the visual impact of the key amendments to the Proposal from only the relevant viewpoints. Both the EIS VIA viewpoints and the relevant Amended Proposal viewpoints are shown in Figure 2 below.
2.2.2 Results

Key amendments to the Proposal

The key amendments to the Proposal would result in potential for visual impacts to arise at the following viewpoints:

**View 07**

<table>
<thead>
<tr>
<th>Viewing location</th>
<th>North-east of site, Junction of M5 Motorway and Moorebank Avenue, looking south</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential key amendment viewed from this location</td>
<td>Container wash-down and de-gassing facility</td>
</tr>
<tr>
<td>Visual Adaptation</td>
<td>Approximate Viewing Distance 60m to site boundary (approx.)</td>
</tr>
</tbody>
</table>
### Prominence of the Development
This viewpoint as considered in the EIS VIA, looks south down Moorebank Avenue showing existing industrial facilities to the east and industrially zoned land to the west. The road is lined with large trees on either side that provide some screening of the Proposal site. The primary areas for access and egress to the proposed development would be visible from this location.

### Landscape Compatibility
The addition of new industrial elements to this area would be compatible with this landscape as identified in the EIS VIA. The addition of a container wash-down and de-gassing facility would not further detract from the landscape compatibility, maintaining a moderate visual adaptation, as determined in the EIS VIA.

### Visual Sensitivity
The existing industrial land-use would suggest a low visual sensitivity in this location.

A sensitive receiver identified as Kitchener House, a heritage item, sits in the immediate foreground of this view location. This receiver is however, currently in a primarily industrial area and as such visual sensitivity for the location would remain low as determined previously, with the heritage item remaining relatively unaffected.

As means of mitigation, implementation of strong urban design principles as part of the proposed landscape strategy would help to improve the existing landscape treatment of the area.

### Visual Impact
#### EIS VIA Assessment:
The assessment of this view along Moorebank Avenue undertaken as part of the EIS VIA determined that the overall development of the Proposal would be prominent from this location and would have a low to moderate visual impact.

#### Amended Proposal Assessment:
From this location, the addition of the container wash-down and de-gassing facility as part of the Amended Proposal is unlikely to be visible from surrounding receivers and would not alter the visual impact as determined in the EIS VIA. The visual impact of the Amended Proposal would therefore remain the same, that is, low to moderate.
**View 07**

*Existing view*

*Simulated View*

* shows trees at maturity
**View 08**

<table>
<thead>
<tr>
<th><strong>Viewing location</strong></th>
<th>West of the site on Moorebank Avenue looking south west</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potential key amendment viewed from this location</strong></td>
<td>Inclusion of the OSD (Basin 10) along the eastern site boundary</td>
</tr>
</tbody>
</table>

**Visual Adaptation**  
**Approximate Viewing Distance**  
20m to site boundary (approx.)

**Prominence of the Development**  
As identified in the EIS VIA, this portion of Moorebank Avenue consists of industrial facilities on either side of the road. The proposed development would be highly prominent from this location with relatively unobstructed views of the Proposal site. At this location, sections of the Rail Link connection would be visible in the middle ground with the primary container yard in the background.

The addition of the OSD (Basin 10) along the eastern site boundary would be visible in the foreground.

**Landscape Compatibility**  
From this viewpoint, the proposed development would have a high impact on this existing landscape amenity, as it would require clearance of most existing vegetation. At this location operational equipment and container yards would likely be of a larger scale than most elements in the immediate foreground and so would be visible. The EIS VIA proposes a landscape buffer zone of varying width to help break down the prominence of any built form as part of the development. The addition of an OSD in the Amended Proposal would not detract further from the landscape compatibility and would still contribute to breaking down the prominence of the proposed development in bulk and scale.

**Visual Sensitivity**  
The industrial land-use and brevity in duration for which observers in the area (driving by) are exposed creates a low visual sensitivity in general along the Moorebank Avenue corridor. This viewpoint would therefore continue to have a low visual sensitivity as determined in the EIS VIA.

**Visual Impact**

**EIS VIA Assessment:** The assessment of this view along Moorebank Avenue undertaken as part of the EIS VIA determined that the overall development would be prominent from this location with a moderate visual impact achieved.

**Amended Proposal Assessment:** As the land-use surrounding this viewpoint is primarily industrial, this location does not qualify as having a high visual amenity. As such, the addition of an OSD along the
eastern boundary of the Proposal site; although visible, does not alter the visual impact as determined in the EIS VIA. The visual impact of the Amended Proposal would therefore remain the same, that is, moderate.

View 08

* shows trees at maturity
Adjustments to warehouse layouts

The provision of an adjusted warehouse layout as part of the Amended Proposal would not result in significant changes to the visual amenity of the nearby sensitive receivers already assessed as part of the EIS.

Urban design concepts presented in the EIS have been maintained to ensure the break down of bulk and scale with adherence to the site's height limits for industrial development and would mean adjustments to warehousing layouts would not have any further implication to visual impacts as determined previously. Further, the Revised Stormwater and Drainage Design Drawings (refer to Appendix H of this RtS) contain updated sections that support this conclusion.

For these reasons the visual impact of the key amendments at these viewpoints would be relatively unchanged as illustrated in Table 2 below, which identifies consistency with the visual impacts assessed for the Proposal in the EIS.

<table>
<thead>
<tr>
<th>View Location Name</th>
<th>Area</th>
<th>Type</th>
<th>Visual Adaptation</th>
<th>Visual Sensitivity</th>
<th>Visual Impact EIS VIA</th>
<th>Visual Impact Amended Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>View 01</td>
<td>Casula</td>
<td>Public Space</td>
<td>Low</td>
<td>Low/Moderate</td>
<td>Low/Moderate</td>
<td>Low/Moderate</td>
</tr>
<tr>
<td>View 02</td>
<td>Casula</td>
<td>Public Space</td>
<td>Low/Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>View 03</td>
<td>Casula</td>
<td>Public Space</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>View 04</td>
<td>Casula</td>
<td>Public Space</td>
<td>Low</td>
<td>Moderate</td>
<td>Low/Moderate</td>
<td>Low/Moderate</td>
</tr>
<tr>
<td>View 05</td>
<td>Casula</td>
<td>Public Space</td>
<td>Negligible</td>
<td>Low/Moderate</td>
<td>Negligible</td>
<td>Negligible</td>
</tr>
<tr>
<td>View 06</td>
<td>Casula</td>
<td>Residential</td>
<td>Low</td>
<td>Moderate</td>
<td>Low/Moderate</td>
<td>Low/Moderate</td>
</tr>
</tbody>
</table>

Illuminated backlit signage

As detailed in the Light Spill Assessment included in the EIS VIA, when assessing the obtrusive lighting effects on neighbouring properties the calculations considered high output LED fittings mounted to 15-30 metre poles. Results from the obtrusive lighting analysis show zero effect on neighbouring properties. Therefore, it can be assessed that illuminated backlit signage, which have a much lower output, would not have any effect on the neighbouring properties and would not alter the obtrusive lighting results included in the EIS VIA.

2.2.3 Mitigation measures

No mitigation measures in addition to those included in the EIS would be required to avoid, minimise and/ or manage any additional impacts to visual amenity as a result of the Amended Proposal.
2.3 Conclusion

The visual impact assessment of the Amended Proposal has determined that the potential impacts would generally result in impacts to visual amenity that would be consistent with those identified and assessed as part of the EIS VIA. As such, the outcomes and recommendations of the assessment undertaken for the EIS VIA are still relevant and applicable to the Amended Proposal.