6.5 Aboriginal heritage

The Aboriginal heritage supplementary technical memorandum is provided in **Appendix E** and a summary is provided below. This section should be read in conjunction with Section 7.5 of the EIS and the Aboriginal cultural heritage assessment report provided in Appendix I of the EIS.

6.5.1 Assessment methodology

The assessment involved the following:

- Desktop assessment comparative analysis of the additional areas within the amended construction footprint (ie the areas that are outside of the construction footprint as described in the EIS), against known or potential areas of Aboriginal heritage sensitivity
- Site investigation carried out in January 2020 in any areas of Aboriginal heritage sensitivity
 within the additional areas within the amended construction footprint, in order to confirm either
 the presence of Aboriginal heritage objects, to document vegetation cover or to identify ground
 exposures and substantial ground disturbance. The site visit was accompanied by a
 representative from the Deerubbin LALC
- Refinement of boundaries of Aboriginal sites identified in the EIS to exclude areas that are unlikely to contain archaeological deposits, such as areas occupied by dams, roads and buildings. This process was carried out in consultation with the Deerubbin LALC and TfNSW in accordance with the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) Stage 2 (Roads and Maritime 2011) process
- Preparation of significance assessments prepared for Aboriginal sites identified within the additional areas of amended construction footprint assessed in this supplementary assessment in accordance with the Australian International Council on Monuments and Sites (ICOMOS) Burra Charter described in Section 7.5.2 of the EIS
- Assessment of potential Aboriginal heritage impacts that may result due to the construction and operation of the amended project and, if required, identification of additional environmental management measures, or updates to existing measures proposed in the EIS.

The assessment focussed on the changes in potential impacts to Aboriginal cultural heritage associated with the changes in construction footprint as a result of the amended project, as ground disturbance would occur during construction.

6.5.2 Existing environment

The existing environment has not changed since the preparation of the EIS. The environment described in Section 7.5.3 of the EIS is still applicable to the amended project.

The 19 Aboriginal sites were identified within the construction footprint as described in the EIS and an additional seven Aboriginal sites within the detailed investigation area (located outside of the construction footprint as described in the EIS). The EIS also identified five 'site complexes' associated with particular creek systems or ridgetop complexes. The overall significance of these Aboriginal sites and site complexes are provided in Table 7-85 of the EIS.

A desktop review carried out for the amended project confirmed that two of the seven sites previously outside the EIS construction footprint (PAD-OS-7 and KC/ED2) would now be located within the amended construction footprint.

6.5.2.1 Revision of site boundaries

The Aboriginal site boundaries presented in Section 7.5.3 of the EIS were refined to exclude areas that are unlikely to contain archaeological deposits, such as areas occupied by dams, roads and buildings. This process was carried out in consultation with the Deerubbin LALC and TfNSW in accordance with the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) Stage 2 (Roads and Maritime 2011) process.

In addition, the location and boundaries of two Aboriginal sites (PAD-OS-7 and KC/ED2) now located within the amended construction footprint were reassessed based on the original site card and site investigations. These are discussed in the following sections.

PAD-OS-7

PAD-OS-7 is located north-east of the project near Ropes Creek adjacent to the M7 Motorway, Villiers Road and Wallgrove Road (see **Figure 6-27** and **Figure 6-28**). It is associated with the previously registered AHIMS site 45-5-2721.

During the site inspection, it was identified that the landform that was subject to test excavation carried out as part of the EIS was observed to extend further south than the original site recording documented. As a result, the boundaries for PAD-OS-7 as shown in the EIS (see Figure 7-69 of the EIS) have been extended in consultation with Deerubbin LALC and TfNSW, The amended boundary is shown in **Figure 6-29**.



Figure 6-27 Facing south from Ropes Creek toward terrace defined as an area of PAD-OS-7



Figure 6-28 Photo facing south showing ground surface visibility at PAD-OS-7

Figure 6-29 Updated PAD-OS-7 boundary

KC/ED2

KC/ED2 is located adjacent to the Western Sydney Parklands Wylde Mountain Bike trail, along Elizabeth Drive (see **Figure 6-30** and **Figure 6-31**). It is registered as AHIMS site 45-5-2310.

From a desktop review, it was found that the amended construction footprint would partially intersect the southern portion of the site KC/ED2. This amendment to the construction footprint is required to enable utility relocations along Elizabeth Drive.

However, further investigation identified no observed artefacts within the areas in the amended construction footprint within the boundary of this site, and the area was found to be highly disturbed. The boundary of KC/ED2 has therefore been refined and is now located 30 metres east of the mapped location in the EIS, and outside of the amended construction footprint (see **Figure 6-9**). The amended project is therefore not expected to impact on this site.



Figure 6-30 Photo facing east from KC/ED2



Figure 6-31 Photo facing west toward Elizabeth Drive from KC/ED2

Based on the above findings, a total of 20 Aboriginal sites are located within the amended construction footprint and six Aboriginal sites are located within the detailed investigation area (outside of the construction footprint). The location of the revised Aboriginal site and site complexes within the amended construction footprint is shown in **Figure 6-32**.

Figure 6-32 Revised boundary of KC/ED2

6.5.3 Assessment of potential impacts

6.5.3.1 Construction impacts

All 19 Aboriginal sites within the construction footprint as described in the EIS would be subject to direct harm as a result of the amended project (see Section 7.5.4 of the EIS). Further information on the terminology use (ie type and degree of harm) is provided in Section 7.5.2 of the EIS.

Based on the amended construction footprint, the amended project has the potential to impact two additional Aboriginal sites (PAD OS-7 and KC/ED2). These are discussed in detail in the following sections. No other Aboriginal archaeological material was identified at any other properties associated with the proposed changes.

PAD-OS-7

The construction footprint as described in the EIS was amended in the area near PAD-OS-7 due to changes at ancillary facility site 9 (AF 9). This amended ancillary facility is required to support the delivery of the M7 Motorway interchange and associated enabling works along Elizabeth Drive. As a result, PAD-OS-7 is now within the amended construction footprint.

Overall, PAD-OS-7 is of low significance at a local level as it provides limited evidence of the use of the area by Aboriginal people. The site has low-moderate scientific significance as the integrity and structure of the site is low-moderate due to disturbance as a result by agricultural activities. The site has low representativeness/rarity due to the presence of stone artefacts in a deep alluvial profile. The site has low-moderate research and educational potential pertaining to the manner in which Aboriginal populations lived in the area. Further information on the significance assessment carried out is provided in Table 3-1 of **Appendix E**.

The PAD-OS-7 site will be avoided by the amended construction footprint by the erection of an exclusion zone and appropriate barrier / fencing which will be provided along the portion of the site that extends closest to, and extending into the amended construction footprint, with visible signage notifying construction personnel to avoid ground impacts. The Aboriginal site impact assessment for PAD-OS-7 is provided in **Table 6-33**, focusing on the change in impact when compared to the assessment presented in the EIS.

Table 6-33 Aboriginal site impact assessment

Site name	Registered AHIMS sites	Assessed significance of site	Type of harm	Degree of harm	Consequence of harm				
Project as per EIS (See Table 7-86 of the EIS)									
PAD-OS-7	45-5-2721	(not assessed)	No harm	None	No loss of value as this site is about 130 metres from the construction footprint as per the EIS				
Amended project									
PAD-OS-7	45-5-2721	Low	No harm	None	No loss of value as this site will be contained within an exclusion zone				

Overall, KC/ED2 is of low significance at a local level as it provides limited evidence of the use of the area by Aboriginal people. The site has low scientific significance as the integrity and structure of the site is low due to disturbance as a result of infrastructure and road building activities. The site has low representativeness/rarity due to the presence of surface artefacts in a disturbed context. The site has low research and educational potential pertaining to the manner in which Aboriginal populations lived in the area. Further information on the significance assessment carried out is provided in Table 3-2 of **Appendix E**.

In summary, a total of 20 Aboriginal sites are located within the amended construction footprint, however the number of sites subject to direct harm (19) would be consistent with the project as described in the EIS with the implementation of an exclusion zone around PAD-OS-7. In addition, the 19 Aboriginal sites identified within the construction footprint as presented in the EIS are not likely to experience any additional impacts as a result of the amended construction project.

The revised Aboriginal site and site complexes within the amended construction footprint is shown in **Figure 6-33**.

Aboriginal cultural heritage values

There would be no additional impact to Aboriginal cultural heritage values as a result of the amended project when compared to the EIS given the general similarity in construction footprints, construction activities and implementation of management measures.

6.5.3.2 Operation impacts

Aboriginal heritage impacts (either direct or indirect) associated with the operation of the amended project are not anticipated, as impacts are related to construction activities and associated ground disturbance. This is consistent with the EIS assessment (see Section 7.5.4 of the EIS).

6.5.4 Cumulative impact

The cumulative Aboriginal heritage impacts associated with the amended project would be consistent with those as described in the EIS (see Section 7.5.5 of the EIS). Overall, there is likely to be moderate cumulative Aboriginal cultural heritage impacts associated with the amended project and the other ongoing and planned developments in the area.

6.5.5 Environmental management measures

Aboriginal heritage impacts associated with the amended project are generally consistent with impacts described in the EIS and would therefore be managed through the implementation of the proposed management measures described in Section 7.5.6 of the EIS.

However, two new additions have been proposed to manage impacts associated with the amended project, shown in **bold** text in **Table 6-34**. In summary, active protection in the form of an exclusion zone will now be required on the boundary of PAD-OS-7 (AHIMS site 45-5-2721). The intent is to avoid impacts to the portion of the site inside the amended construction footprint.

Table 6-34 Revised environmental management measures (Aboriginal heritage) (bold text shows change from EIS)

Impact	Reference	Environmental management measures	Responsibility	Timing
Impacts on identified cultural deposits	AH08	Exclusion zones will be set up in the form of an appropriate barrier / fencing along the portion of AHIMS site 45-5- 2721 (PAD-OS-7) that extends into the amended construction footprint, with visible signage notifying construction personnel to avoid ground impacts	Contractor / TfNSW	Prior to construction and during construction
	AH09	Archaeological text excavation will be carried out at PAD-OS-7 in the instance that construction restrictions result in impacts to that site. Test excavations would be conducted in accordance with Requirement 16a of the Code of Practice (DECCW 2010), Stage 2 PACHCI (Roads and Maritime 2011) and in consultation with RAPs	Contractor / TfNSW	Prior to construction

Figure 6-33 Revised Aboriginal site and site complexes within the amended construction footprint

Page 1 of 3

Figure 6-33 Revised Aboriginal site and site complexes within the amended construction footprint

Page 2 of 3

Figure 6-33 Revised Aboriginal site and site complexes within the amended construction footprint

Page 3 of 3