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RE-LOCATION OF 132KV TRANSMISSION LINES, MOLONGLO STAGE 3 URBAN AREA: SUPPORTING DOCUMENTATION

Cultural Heritage Assessment

DRAFT

December 2020

RE-LOCATION OF 132KV TRANSMISSION LINES, MOLONGLO STAGE 3 URBAN AREA: SUPPORTING DOCUMENTATION

Cultural Heritage Assessment

DRAFT

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Calibre Consulting

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Report No.	8139/R03/V5
Date:	December 2020

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Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
V1	Nicola Roche	11 September 2018	Nicola Roche	11 September 2018
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V5	Ashley O'Sullivan	2 December 2020	Ashley O'Sullivan	2 December 2020

Executive Summary

Umwelt (Australia) Pty Ltd (Umwelt) has been engaged by Calibre Professional Services on behalf of the Suburban Land Agency to prepare an Aboriginal Cultural Heritage Assessment (ACHA) to support planning approvals for the relocation and undergrounding of the 132kV transmission lines currently located through the Molonglo Stage 3 Urban Area (**Figure 1.1**). The project area is within the north side of the Molonglo River Corridor. A number of heritage assessments have been previously undertaken for the Molonglo Stage 3 Urban Area, which the majority of the project falls within. The area is within the traditional lands of the Ngunawal people.

This assessment has been undertaken to determine the potential for Aboriginal and/or historic heritage sites to occur within the portion of the project area that has not previously been subject to an Aboriginal Cultural Heritage Assessment using both our existing understanding of the environmental, archaeological and cultural context and the outcomes of the current project area survey.

Archaeological site patterning throughout the Molonglo Valley area suggests that there is potential for Aboriginal and historic heritage sites within the project area. Generally, the following Aboriginal site types have the potential to occur:

- Artefact scatters and isolated finds are moderately likely to occur within the project area, predominantly in exposed or eroded areas. Parts of the project area are in proximity to a major watercourse (either Deep Creek or Molonglo River). Archaeological patterning for the region indicates that areas in close proximity (generally less than 200m) to reliable water sources retain the highest potential for these sites to occur. Impacts from European occupations such as vegetation clearance and topsoil removal for roads and tracks may have affected this potential in some areas.
- Scarred trees are unlikely to occur, but may exist if unidentified old growth trees or remnant woodland are present in the project area.
- Grinding grooves may be present within the project area, but given that outcrops or large boulders of sandstone are generally uncommon across the soil landscapes that make up the project area, these are unlikely to occur.
- While one piece of flaked glass has been identified within the region, this is the only evidence for post-contact archaeology and as a result this type of artefact is unlikely to occur within the project area.
- Based on the regional model, other site types are unlikely to occur within the project area.

With regarding to historic heritage, the following site types have potential to occur:

- Remains of nineteenth century structures, such as dwellings, stock yards and other rural farm use items. These items may remain as intact structures, ruins or archaeological deposits
- Fence lines, that may be found along site boundaries or stock yard borders
- Early tracks, stock routes and roads
- Early survey markers, such as trigonometric stations.

The landscape of the project area was generally undulating lower slopes, with exposed areas present within existing tracks and eroded slopes. Field investigation undertaken as part of this assessment resulted in the identification of three previously unidentified Aboriginal objects (all isolated artefacts). No areas of potential archaeological deposit (PADs) or historic heritage items were identified within the project area. All three sites identified are considered to have low scientific significance. This is primarily due to the low research potential and low rarity value of the sites, as they were found in highly eroded or disturbed contexts and are a common site type within the Molonglo Valley area. Based on feedback provided by one of the Registered Aboriginal Organisations (ROA), all the sites that were located during the survey are culturally significant and important for Ngunawal people's connection to Country.

The recommendations below are made to ensure that the proposed construction of new high voltage transition lines minimises impact on Aboriginal cultural heritage where possible and complies with all relevant legislative requirements. We highlight that the preferred heritage outcome is to avoid impacts to heritage items.

- The newly identified site in proximity to the proposed works, MV-HVL-IF-1 should be inspected and fenced off prior to construction beginning (**Figure 6.1**). This fencing should give each site a 5m perimeter, to ensure that no direct or indirect impacts can occur during construction. Upon completion of construction, the fencing should be removed.

- No further Aboriginal or historical archaeological work is recommended, and the project may proceed with caution. Should unanticipated discoveries be made during construction, work should cease and follow the protocols provided in **Section 9.0 – Unanticipated Discovery Plan**.

- The three newly identified sites (MV-HVL-IF-1, MV-HVL-IF-2 and MV-HVL-IF-3) will be registered with ACT Heritage.

- Following finalisation, a copy of this report should be provided to ACT Heritage for their review and approval.

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1.0 Introduction

1.1 Project Description

Umwelt (Australia) Pty Ltd (Umwelt) has been engaged by Calibre Professional Services on behalf of the ACT Government, Suburban Land Agency (SLA) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) to support planning approvals for the relocation and undergrounding of the 132kV transmission lines currently located through the Molonglo Stage 3 Urban Area (**Figure 1.1**). This report is provided for the information of the SLA as supporting documentation for an amendment to an existing exemption made under Section 211 (s211) of the *Planning and Development Act 2007* (PD Act).

The purpose of this assessment is to undertake desktop and field investigation to determine if the realignment of the proposed 132kV transmission lines will impact any previously unidentified historical or Aboriginal cultural heritage items.

1.2 Project Area

The project area is primarily located with the Molonglo Valley, which is approximately 15km west of the Canberra City centre, following the lower reaches of the Molonglo River. Cultural heritage assessments have been undertaken throughout the Molonglo Valley (Stage 1, 2 and 3) in recent years to support the development of a new urban area that will house 55,000 people. These cultural heritage assessments have informed our understanding of the Molonglo Valley as a whole, identifying numerous sites that were not otherwise registered and increasing our knowledge on Aboriginal utilisation of the area.

This current project area is made up of portions of the proposed transmission line footprint that has not previously been subject to an Aboriginal Cultural Heritage Assessment (refer to **Figure 1.1**). For the purposes of the survey, the project area was been broken into the William Hovell Drive Survey Area and Tuggeranong Parkway Survey Area. However, updates to the design since the time of original survey have resulted in the Tuggeranong Parkway Survey Area no longer forming part of the s211 exemption application. Results of the survey in this location are still provided **Section 6.4**, given the presence of isolated Aboriginal objects within the survey unit.

1.3 Project Methodology

The project methodology was designed by Umwelt, in accordance with the project brief provided by Calibre Professional Services and included input from the ACT Heritage Unit and Registered Aboriginal Organisations (RAOs). The methodology was designed to fulfil the primary aims of the heritage assessment, and is split into three stages: Background Research; Field Investigation; and Report Production.

1.3.1 Background Research

A search was undertaken of the ACT Heritage Register and copies of relevant reports requested from the ACT Heritage Unit to ensure that all background information for the project (including previous assessments, previously recorded sites) was available for this assessment. All previous assessments available were summarised and provided in this report. Further to this, a search of the ACT National Trust Register and the Register of the National Estate was undertaken to ensure that no previously recorded historical archaeological sites occurred within the project area.

1.3.2 Field Investigation

After review of all relevant documentation and land access arrangements, field investigation of the project area was undertaken. The investigation focused on the identification of any landforms of archaeological interest and previously unidentified Aboriginal sites / potential archaeological deposits (PADs). Further information on the detailed survey methodology for the project can be found in **Section 6.1**.

1.3.3 Report Production

The background research and outcomes of the field investigation for the project area have been compiled and provided in this report, clearly presenting the findings.

1.4 Project Team

This assessment has been prepared by Ashley O'Sullivan (Senior Archaeologist) and Steph Howden (Senior Consultant) with technical direction provided by Nicola Roche (Manager – Cultural Heritage), Caitlin Adcock (Senior Environmental Planner), Amanda Mulherin (Environmental Scientist) and Karina Carwardine (Principal – Environmental Impact Assessment, ACT).

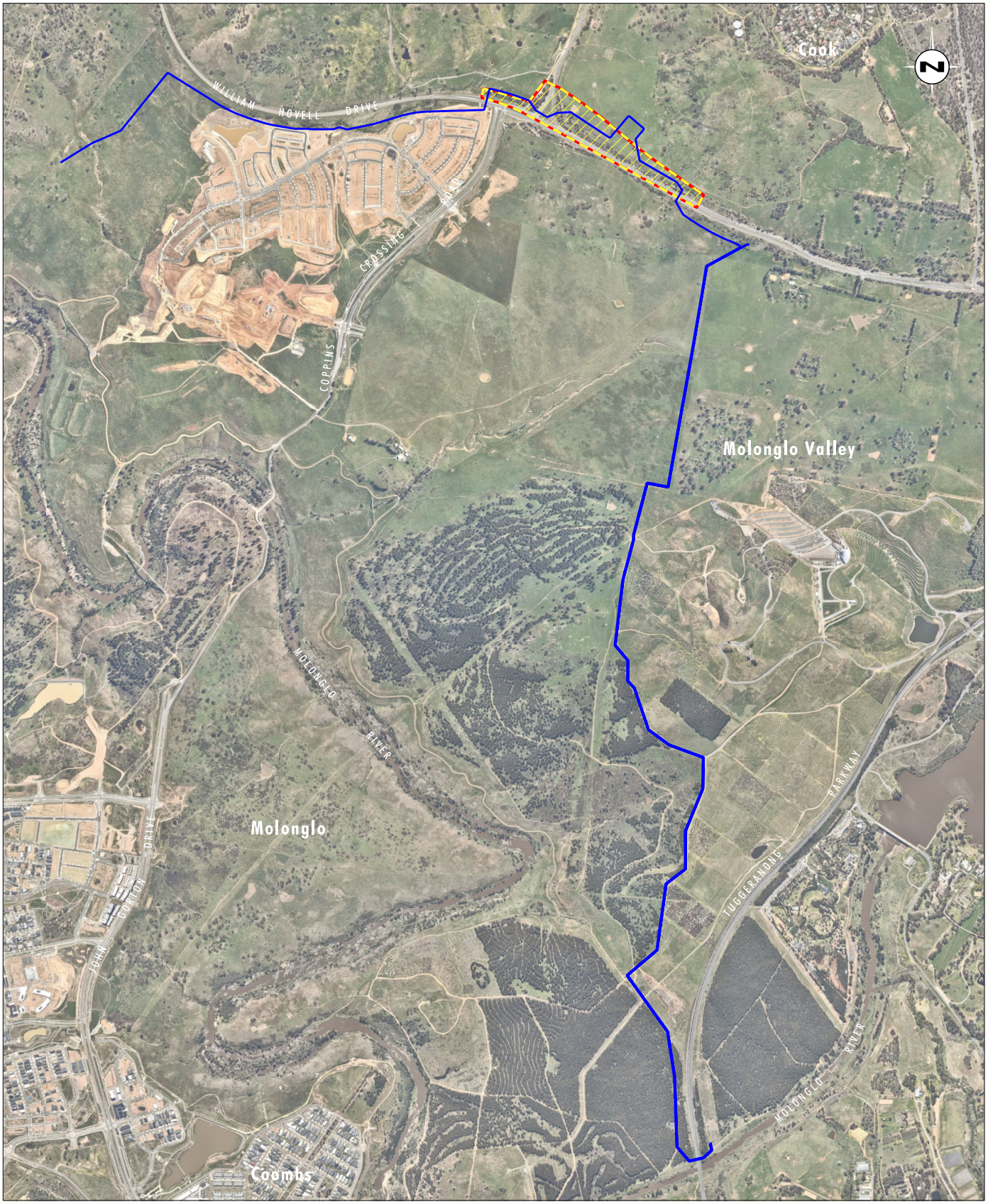

Image Source: Nearmap (2020)
Data Source: Calibre (2018)

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1:25 000

Legend
- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary

FIGURE 1.1

Project Area Location

File Name (A4): R03/8139_004.dgn
20191018 15.01

2.0 Heritage Register Searches

The following sections provide the results of the desktop analysis drawn from the searches of the statutory and non-statutory heritage registers, schedules and databases and the review of other existing heritage information available for the project area.

2.1 Commonwealth Registers

2.1.1 Australian Heritage Database

A search of the Australian Heritage Database, incorporating the Commonwealth Heritage List, National Heritage List, Register of the National Estate (RNE) and World Heritage List was undertaken on 22 September 2020.

No items are listed on the Commonwealth Heritage Register or National Heritage List for the Project area.

The RNE was closed in 2007 and is no longer a statutory list. The RNE is now an archive of 13,000 places in Australia that includes places of local and state significance. Many places in the RNE are now included in other statutory lists, such as state heritage lists, or local government heritage registers. As a result, those places receive protection under the relevant federal, state, territory or local legislation. RNE places can be protected under the EPBC Act if they are included in another Commonwealth statutory heritage list or are owned by the Commonwealth.

There are no items within the project area listed on the RNE. A cork oak plantation listed on the RNE is located approximately 1.6 kilometres to the east of the 132kV transmission line, adjacent to the Glenloch Interchange.

2.1.2 National Native Title Register

A search of the National Native Title Tribunal's online database was undertaken on 22 September 2020 and showed no Indigenous Land Use Agreements, Native Title Applications, Registrations or Determinations in the ACT.

2.2 ACT Heritage Register

The Heritage Register is a public list containing registration details of each recognised heritage place or object in the ACT, including natural, indigenous and built. Records of provisionally registered, as well as nominated places and objects are maintained on the register by the Heritage Council.

An updated search of the ACT Heritage Register was undertaken on 23 September 2020. The search identified four Potential Archaeological Deposits with management constraints within the project area. Sites and PADs listed below in **Table 2.1** have been recorded within the vicinity of the project area.

Table 2.1 Aboriginal sites or areas of archaeological potential identified in proximity to the project area

Site Name	Site Type	Description	Recorded By
CLB7	Artefact	[redacted]	Knight 2003
WHDPAD1	Potential Archaeological Deposit	[redacted]	Past Traces 2018
WHDPAD2	Potential Archaeological Deposit	[redacted]	Past Traces 2018
WHDPAD3	Potential Archaeological Deposit	[redacted]	Past Traces 2018
WHDPAD4	Potential Archaeological Deposit	[redacted]	Past Traces 2018
WHDPAD5	Potential Archaeological Deposit	[redacted]	Past Traces 2018

2.3 Non-Statutory Register

2.3.1 The National Trust of Australia (ACT)

The National Trust of Australia (ACT) Heritage Register is not a statutory list. Furthermore in 2004 the *National Trust Act* ceased classifying heritage sites and instead nominates them to the ACT Heritage Register (local), National Heritage List (national significance) and Commonwealth Heritage List (heritage sites controlled by Commonwealth Government).

No items are listed on the National Trust of Australia (ACT) Heritage Register for the project area or within the immediate vicinity.

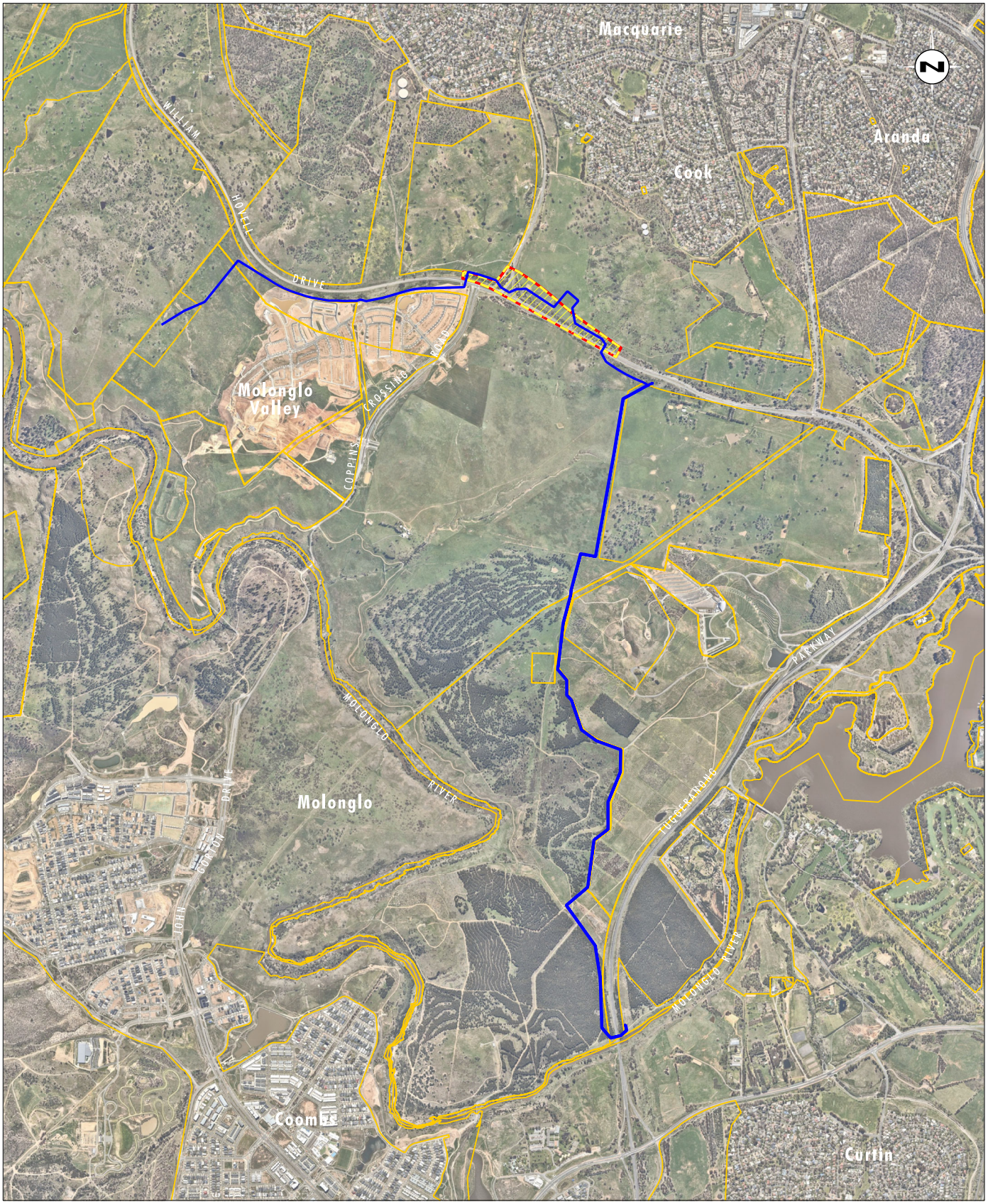

Image Source: Nearmap (SEP 2020)
Data Source: Calibre (2018)

0 0.5 1.0 2.0km
1:35 000

Legend

- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary
- Heritage Site Area

FIGURE 2.1

Heritage Sites

3.0 Representative Aboriginal Organisation Consultation

3.1 ACT Heritage Consultation

During the course of the project, consultation with ACT Heritage has been ongoing.

3.2 Consultation with the RAOs

Representative Aboriginal Organisation (RAO) consultation for this project has been undertaken in accordance with ACT Heritage recommendations. The four RAOs registered with ACT Heritage were contacted and invited to participate in development of the methodology and field investigation. These organisations were:

- Buru Ngunawal Aboriginal Corporation (BNAC)
- King Brown's Tribal Group (KBTG)
- Mirrabee (formerly Little Gudgenby River Tribal Council (LGRTC))
- Ngarigu Currawong Clan (NCC).

Consultation with all the RAOs listed above was undertaken during this project. **Table 3.1** provides a detailed breakdown of RAO consultation undertaken.

One comment was provided by the ROAs on the final draft report (refer to **Appendix 1**).

Table 3.1 Representative Aboriginal Organisation consultation during this project

Phase of Consultation	RAO	Contact Person	Response	Date Undertaken
Notification of project and invitation to participate in development of methodology and field investigation.	BNAC	Mr Wally Bell	Happy with methodology and available to undertake field investigation.	21 August 2018
	KBTG	Mr Carl Brown	Happy with methodology and available to undertake field investigation.	21 August 2018
	LGRTC	Ms Matilda House	Did not respond.	21 August 2018
	NCC	Mr James Mundy	Did not respond.	21 August 2018
Field investigation	BNAC	Mr Justin Bell	Participated in field investigation and provided input on archaeological and cultural heritage value of the project area.	29 August 2018
	KBTG	Mr Carl Brown	Was unable to participate in field investigation due to clashing commitments.	29 August 2018

Phase of Consultation	RAO	Contact Person	Response	Date Undertaken
Report Review	*BNAC*	*Mr Wally Bell*	Did not respond.	20 March 2019 – 10 April 2019
	KBTG	*Mr Carl Brown*	Did not respond.	20 March 2019 – 10 April 2019
	LGRTC	*Ms Matilda House*	Did not respond.	20 March 2019 – 10 April 2019
	NCC	*Mr James Mundy*	Did not respond.	20 March 2019 – 10 April 2019
Updated Report Review and Opportunity for Further Comment	*BNAC*	*My Wally Bell*	Letter response received on 20 May 2020. The draft report and recommendations were deemed appropriate for the protection and preservation of Ngunawal culture. Further details have been included in **Section 5.2** and recommendations have been included in **Section 8.1.1**.	22 April 2020 – 13 May 2020
	KBTG	*Ms Tina Brown*	Did not respond.	22 April 2020 – 13 May 2020
	Mirrabee (formerly LGRTC)	*Ms Matilda House*	Did not respond.	22 April 2020 – 13 May 2020
	NCC	*Mr James Mundy*	Did not respond.	22 April 2020 – 13 May 2020

4.0 Environmental Context

4.1 Geology

The project area is located within the Mount Painter Volcanic groups, dating to the late Silurian period. The Mount Painter Volcanics found in the project area are primarily acidic, with types of volcanic rock including ignimbrites, siltstones and tuff. Typically, due to the deep soils and topographic landscape, there are few rock outcrops associated with this geological process. Exception to this geological practice are found in close proximity to major waterways, with shallow topsoil deposition and rock exposures created by the fast moving waterways. Where present, fine-grained materials such as silcrete, tuffs and high quality quartz are found throughout the project (and general) area, and would have been utilised by Aboriginal people (**Figure 4.1**).

4.2 Soils

The project area is located upon two soil landscapes, the Burra and Williamsdale groups, with the northern part (William Hovell Drive survey area) in close proximity to the Campbell soil landscape and the southern part (Tuggeranong Parkway survey area) in close proximity to the Lower Molonglo Variant B (**Figure 4.2**). The northern part of the project area (William Hovell Drive survey area) is located entirely upon the Burra soil landscape, while the southern portion (Tuggeranong Parkway survey area) is located entirely upon the Williamsdale soil landscape (Jenkins 2000).

The Burra soil landscape is described as complex, primarily due to the steeply dipping landscape and its broad coverage area. The variance of the upper soil profile is found across four primary landscape features: crest and upper slopes, midslopes, lower slopes and open depressions. Crests and upper slopes generally consist of deposits less than 50cm, open depressions are generally 50-100cm with midslopes and lower slopes between 50cm -150cm. The Burra soil landscape has been subject to typically extensive disturbance and alteration of landscape, soils and drainage networks within suburban areas. Within rural contexts, minor sheet erosion and moderate gully erosion is widespread.

The Williamsdale soil landscape often has considerable changes in soil profile within its vast coverage area, and as such is considered to have a widely variable soil profile. Generally found on lower slopes and in close proximity to drainage lines, deposits of this soil profile range from 50-150cm. This profile is highly susceptible to erosional processes (both water and wind) across all different land use types, including cultivation, grazing and urban development.

The Campbell soil landscape is a collection of erosional remnants of various volcanic blocks that form the generally isolated ridges, hills and mountains of the Canberra lowlands. Soils consist of generally shallow (<50cm), well drained materials formed on the crests and upper slopes with deeper topsoils (50-150cm) generally found in mid to lower slopes. This soil profile is generally subject to high or very high erosion, due to historic vegetation clearance. In some areas, revegetation has been undertaken to attempt to control the high erosion levels.

Lower Molonglo Variant B soil landscape (not shown in **Figure 4.2**, but contained within the Molonglo River) generally consists of exposed bedrock with little soil development apart from patches of shallow sand veneers in hollows of the rocky streambed. It is distinguished by larger, high-energy watercourses with incised channels, but little or no sand bar development. This profile is restricted to the streambed and banks of the lower reaches of the Molonglo River (as the soil landscape name suggests), between Lake Burley Griffin and the Molonglo River's confluence with the Murrumbidgee River. The land this soil landscape is formed on is generally unused due to severe flood risk and erosion hazard.

4.3 Hydrology

The closest substantial water course to the project area is the Molonglo River, with the Tuggeranong Parkway section of the project area located on the banks of the Molonglo River (**Figure 4.3**). The Molonglo River is part of the Murrumbidgee catchment within the Murray-Darling basin, and feeds Lake Burley Griffin to the west of the project area. Deep Creek, a first order tributary that runs to the north of the Molonglo River, cuts through the northern part of the study area. A number of other minor tributary creek lines run in close proximity to the project area. As a reliable source of fresh water and associated resources, the Molonglo River would have been a focal point of Aboriginal occupation of the Molonglo Valley. Other, less reliable water courses would also periodically provided an attractive camping location. Generally, land within proximity to reliable water courses is identified as having high potential for Aboriginal objects or sites, as these areas were of high value to Aboriginal people.

4.4 Past Vegetation

Vegetation within the project area has been impacted by historical clearance by early European settlers, for farming and agricultural practices. Eucalyptus open woodland would have been the dominant vegetation type across the two parts of the project area, with the species most likely to occur including *Eucalyptus blakeyi* (Blakely's Red Gum), *Eucalyptus bidgesiana* (Apple Box) and *Eucalyptus melliodora* (Yellow Box). Any remaining original vegetation is now generally isolated to remnant stands of Eucalypts and associated species on ridgelines. Grassland coverage would have primarily comprised of *Themeda, Austraodathonia, Austrostipa* and *Poa* species, with these species generally still present today.

4.5 Existing Disturbance

Historical and recent development of the project area can impact the potential for Aboriginal objects or sites to occur throughout. The project area is generally within a part of the Canberra area that has not been subject to extensive disturbance through urban development.

However, as described above, the area would have been subject to historical clearance of vegetation, with this generally impacting the erosional process across the area and likely minimising the potential for culturally scarred trees to occur. Some revegetation has occurred across nearby ridgelines to assist in managing sediment movement down these slopes into drainage lines and other water courses.

Road, drainage and electrical infrastructure has had the largest impact on areas within or near to the project area, with the construction of William Hovell Drive, Coulter Road, Coppins Crossing Road and Tuggeranong Parkway likely removing any remnant topsoil. Associated drainage works bordering the roadways further minimises the likelihood of the original soil profile remaining, and as a result any areas within the road reserve generally have a low to nil likelihood of Aboriginal objects or sites remaining. In some cases, these items can be identified in heavily disturbed contexts, but will generally not have any associated sub-surface potential. Impacts associated with existing electrical infrastructure within the general locality Include the installation of poles and wires and ongoing clearance and vehicle movements within the easement.

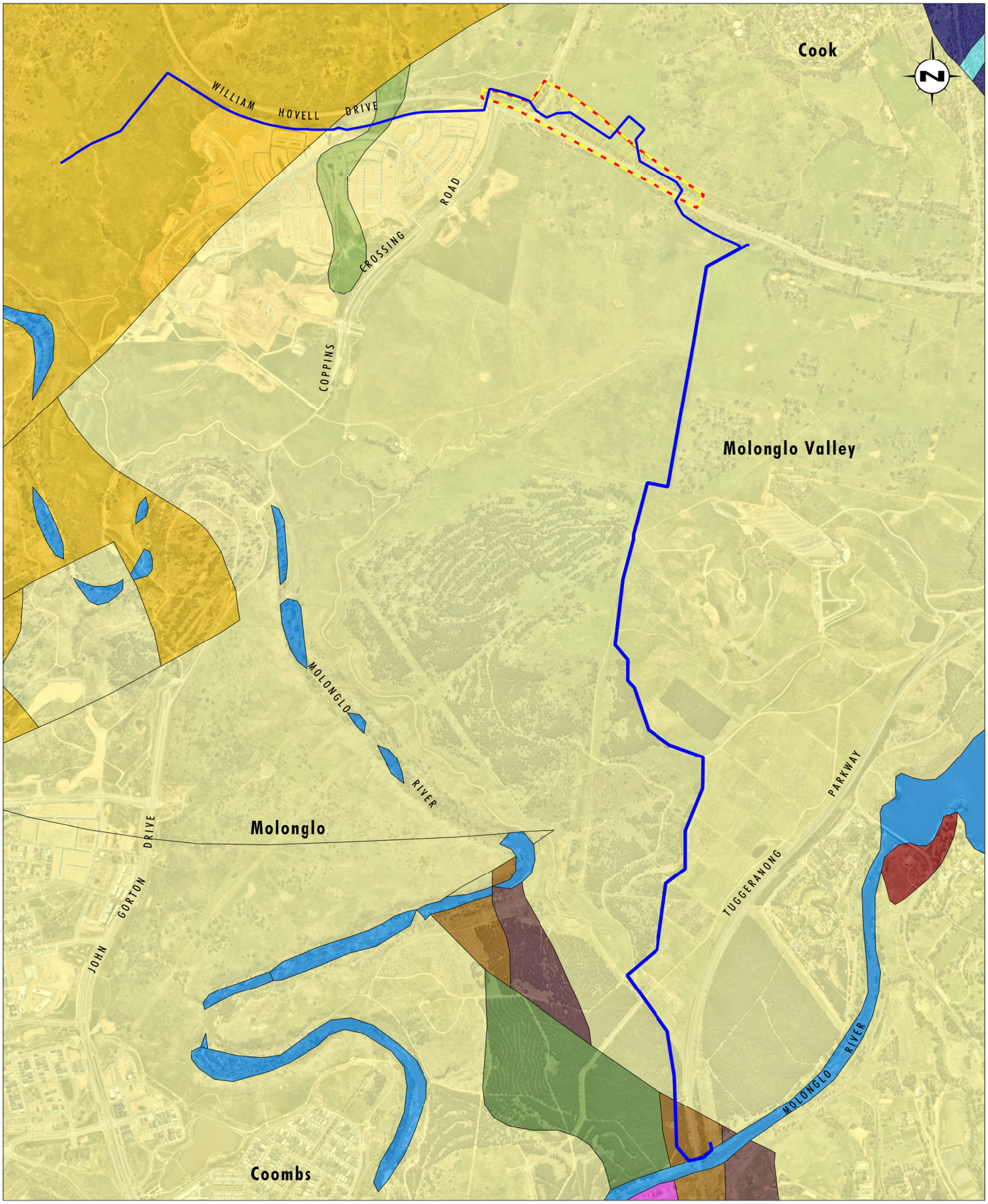

Image Source: ACT Government (2016)
Data Source: Calibre (2018)

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Legend

- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary
- Conglomerate
- Ignimbrite
- Ignimbrite, tuff
- Mudstone, siltstone
- Sandstone
- Sandstone, mudstone, shale, quartzite, phyllite, slate
- Sandstone, siltstone
- Shale
- Tuff, ashstone
- Tuff, sandstone, shale, ashstone
- Water

FIGURE 4.1

Geology

File Name (A4): R03/8139_007.dgn
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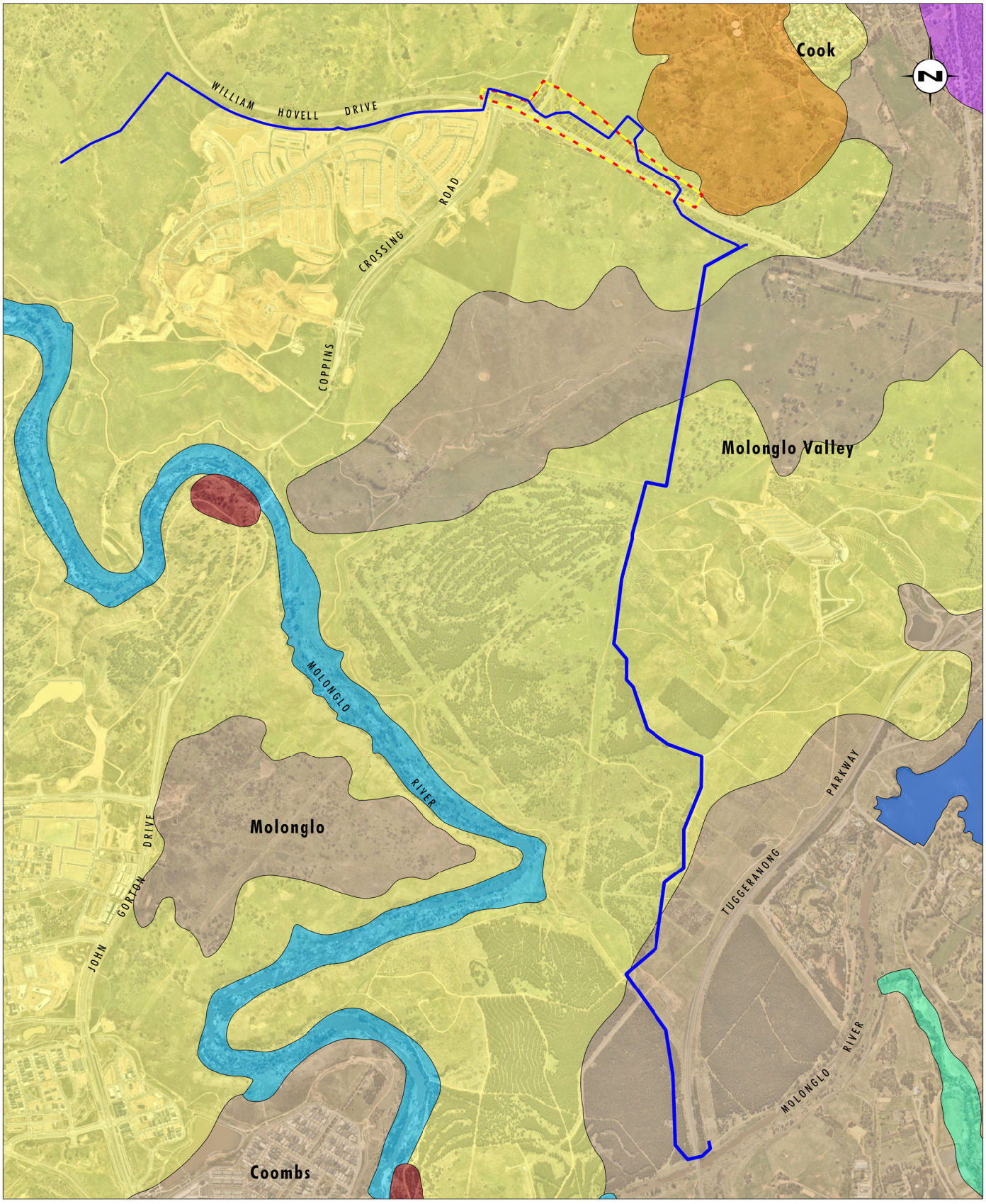

Image Source: ACT Government (2016)
Data Source: Calibre (2018)

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Legend

- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary
- Burra
- Campbell
- Ginninderra Creek
- Paddy's River Variant b
- Piallige Variant b
- Queanbeyan
- Water
- Williamsdale

FIGURE 4.2

Soil Landscapes

File Name (A4): R03/8139_008.dgn
20191018 14.52

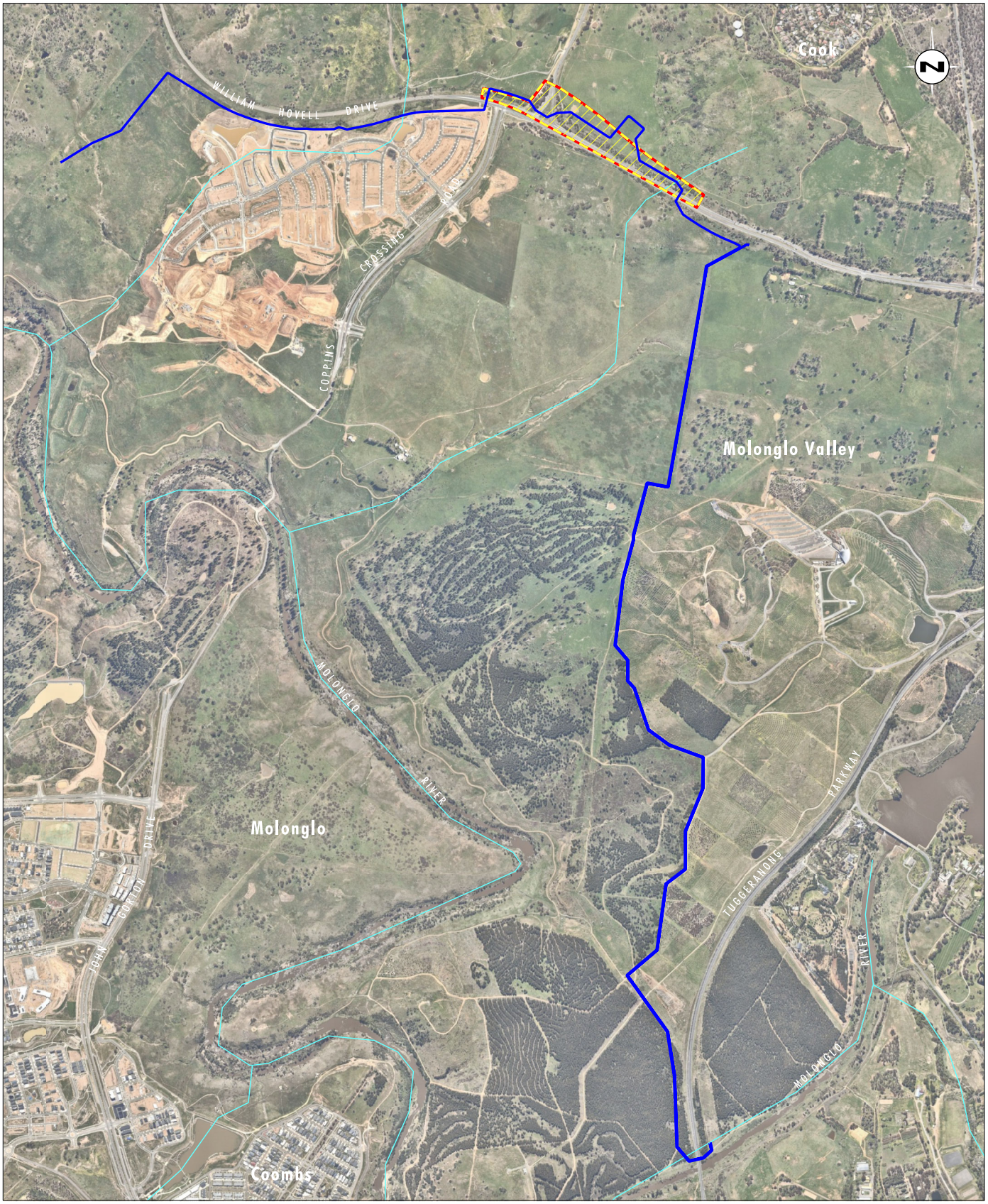

Image Source: ACT Government (2016)
Data Source: Calibre (2018)

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1:25 000

Legend

- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary
- Drainage Line

FIGURE 4.3

Hydrology

5.0 Archaeological and Cultural Background

5.1 Ethnographic Background

Understanding of the organisation (both socially and by language group) of Aboriginal people in the Canberra region is limited to a small number of written and oral history documents (primarily Avery 1994, Flood 1980, Gillespie 1984). Through dispossession of land and the subsequent loss of these histories, historians/ethnographers have only been able to put together small parts of the story of Aboriginal life and custom through nineteenth century ethnographic accounts.

Similarly to distribution across other parts of Australia, Aboriginal people generally identified tribal territories through drainage basins, major waterways or other geographical landmarks, with this evident in the southern uplands (Flood 1980). As described above in the environmental section, the local relief throughout this area creates significant drainage basins with clearly identifiable major waterways (such as the Murrumbidgee and Molonglo Rivers) and would have signified tribal boundaries in the past. These areas were used seasonally, with the major waterways acting as guidelines to return to different areas throughout the seasons. These waterways also acted as communication lines, with groups that were present within a catchment area generally sharing common language and beliefs.

Flood (1980) identified that the Bogong moth was of great important to Aboriginal people in the area. It inhabits the mountain areas, and was an important food source for communities who are believed to have travelled a great distance to exploit this resource and partake in associated ceremonial activities. This also would have led to trade and exchange of other items / ceremonial practices during the spring and summer months, with Aboriginal people from as far as the coast participating in these trade networks (Avery 1994).

First contact between Aboriginal people of this area and Europeans is likely to have occurred in the 1820s, through explorers such as Throsby, Smith, Vaughn and Wild. While they did not directly interact with Aboriginal people, fires in the distance were observed and suggestions of Aboriginal campsites are made (Gillespie 1984). Early accounts of interaction between Aboriginal groups and early pastoralists were documented, predominantly near Yass and Lake George. These interactions generally led to violence between the two groups, as Aboriginal people fought to keep their traditional hunting grounds from being cleared for stock grazing and agriculture. In some cases, there are examples of Aboriginal people utilising resources from these early pastoral areas, through various methods (either by force, in exchange for work or given freely).

Gillespie (1984) suggested that not all relationships between Aboriginal people and early pastoralists led to violence, with the Palmer, Davis and Wright families having amicable relationships with Aboriginal people they employed and the wider community. Another example is Ginninderra Station, which had a number of Aboriginal people playing on their cricket team.

5.2 Information Provided by the RAOs

Mr Wally Bell provided comments on the draft Cultural Heritage Assessment report on behalf of Buru Ngunawal Aboriginal Corporation (BNAC) on 20 May 2020 (refer to **Appendix 1**). The recommendations proposed in **Section 8.1** were deemed appropriate for the three sites located during the survey. However, based on their experience working on large scale construction projects four additional recommendations were provided to ensure the protection of cultural heritage during the construction of the project(refer to **Section 8.1.1**).

5.3 Regional Aboriginal Archaeological Background

Through recent development of the Canberra area, and specifically the recent project planning for the Molonglo Valley Stages 1, 2 and 3, a number of archaeological assessments have been undertaken that have further informed our understanding of how Aboriginal people used the local landscape.

One of the first and most significant assessments of the Canberra region was undertaken by Flood (1973, 1980), who documented in great detail the available information on the Aboriginal inhabitants of the area. Flood documented a site on the slopes of Black Mountain Peninsula, which consisted of a large, high density artefact scatter. Prior to the formation of Lake Burley Griffin, Black Mountain Peninsula was a deep bend in the Molonglo River recognised as a good source of fish and other river subsistence. Barz (1985) undertook an assessment in close proximity to the peninsula for an extension to the National Botanic Gardens, identifying four Aboriginal sites and further confirming the importance of Black Mountain to Aboriginal people.

Another significant assessment undertaken to further our understanding of Aboriginal land use and site patterning across the area was Bulbeck and Boot (1990), who were engaged by ACT Forests to survey the Stromlo Pine Forest. Through the findings of this assessment, they identified that Aboriginal people generally favoured the occupation of lower spurs overlooking water courses. The site patterning also identified that while not as commonly used, intermediate slopes were utilised due to their ease of access. Steep terrain and areas further away from water courses were generally not considered favourable for Aboriginal people.

Navin Officer has undertaken a wide array of assessments in the region and throughout Canberra, including assessments for West Belconnen Urban Land Releases, the National Botanic Gardens, development of fire trails within all Canberra nature parks, Black Mountain, and ActewAGL development of the northern bank of the Molonglo River, all of which have relevance to the current assessment. The works at West Belconnen (Navin Officer 1995, in 2003a) identified four scarred trees and six artefact scatters (all low density), with all scatters located adjacent to major creek lines. The assessment undertaken for the National Botanic Gardens (Navin Officer 1995), confirmed the results of the Barz assessment and further identified one potentially scarred tree. Navin Officer (2003a) undertook survey and excavation along fire trails within all of Canberra's nature parks, including Black Mountain, O'Connor Ridge, Bruce Ridge, Aranda Bushland, Rob Roy Range and Gungahlin Hill. Areas of highest archaeological sensitivity were landscape features such as low gradient spurs, lower slopes, and flats adjacent to major drainage lines and water courses.

Generally, Aboriginal sites across the region have been found on mid-lower slopes and creek flats in proximity to major water courses (generally <100m). The Molonglo River and associated tributaries are the most likely water resources within the region for Aboriginal people to utilise, and lower slopes in close proximity to this resource have been proven to contain Aboriginal cultural deposits.

5.4 Regional Historic Archaeological Background

Historical research has been undertaken to gain an understanding of the regional context and how the project area relates to early European land use patterns, and any non-visible or sub-surface disturbance that can be identified.

The project area was entirely located in the Parish of Weetangera (**Figure 5.1**). In 1912, the western extent of the William Hovell Drive survey area was owned by GE Shumack and J Kinlyside and the land was divided in to quite small holdings (between 40 and 69 acres). The other portion of the William Hovell Drive survey area was entire owned by Donald McDonald, across two separate 100 and 160 acre leases. The Tuggeranong Parkway survey area was entirely contained within the Yarralumla / Yarrowlumla property, held by Francis Mowatt. This property was successively owned after Mowatt by the Murray, Gibes and Campbell families (Coulthard-Clark 1988).

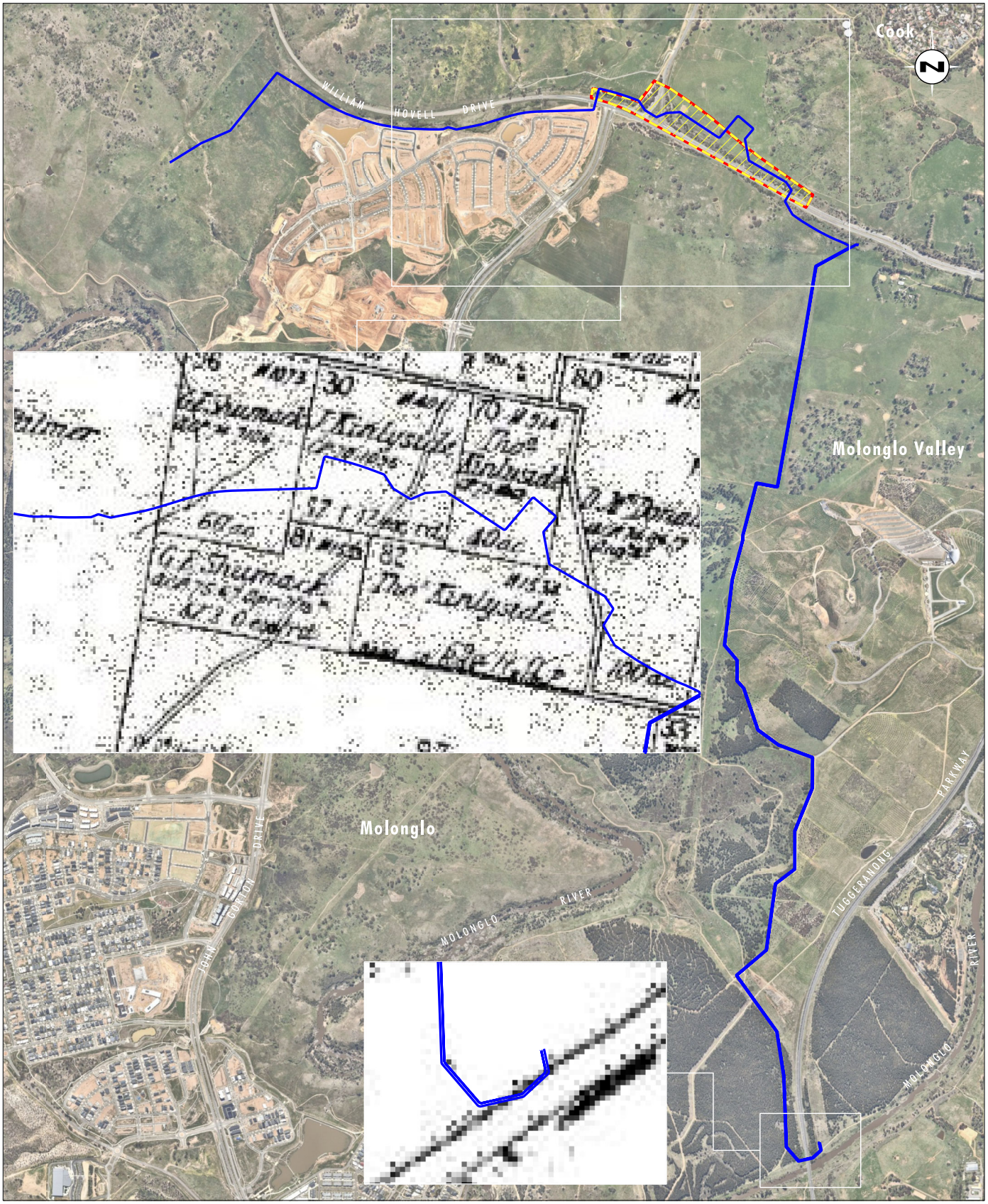

Image Source: Nearmap (SEP 2020)
Data Source: Calibre (2018)

0 0.5 1.0 1.25km
1:25 000

Legend

- Project Area
- Underground Transmission Line Alignment
- S211 Exemption Boundary

FIGURE 5.1

Parish Map

5.5 Local Archaeological Studies

Table 5.1 below describes a number of studies undertaken in proximity to the current project area. The location of these studies in relation to the project area is shown in **Figure 5.2**.

Table 5.1 Studies undertaken in close proximity to the current project area

Assessment	Author	Summary
William Hovell Drive Duplication – Bindubi Street to Coulter Drive – Cultural Heritage Assessment	Navin Officer 2002	This assessment was undertaken to determine if there were heritage constraints for the proposed duplication of William Hovell Drive, between Bindubi Street and Coulter Drive (including areas that are within the boundary of the current assessment). At this time, there were no previously recorded or heritage listed Aboriginal or historic sites or features within the project area. A predictive model for this area suggested that given the location of the roadway within the general landscape, there was some potential for artefact scatters or isolated finds. It was determined that this area was unlikely to contain significant or high density Aboriginal cultural deposits, as there were more favourable areas for Aboriginal people within the locality. The field investigation did not identify any Aboriginal or historic heritage sites or objects within the project area. The assessment recommended that the work proceed with an unexpected finds procedure put in place.
National Arboretum Proposed Sewerage Pipeline: Artefact Salvage Program	CHMA 2011	This assessment was undertaken as part of a salvage of three Aboriginal sites (SP1, SP2 and SP3) identified along a proposed sewerage pipeline easement, located to the southwest of the Canberra International Arboretum and Gardens (and to the east of the current project area). This assessment formed part of a larger overarching assessment prepared by CHMA (2008, in 2011) and Australian Archaeological Survey Consultants (2005, 2008 in CHMA 2011) for the Arboretum and Gardens, North Weston and Weston Creek residential developments. The 2005 AASC assessment across the Arboretum and Gardens identified six Aboriginal heritage and two non-Aboriginal heritage sites, which were salvaged during a 2008 assessment. The CHMA 2011 assessment salvaged the three sites identified along the proposed sewerage easement. Site types salvaged across the area generally were made up of artefact scatters, with some of these sites isolated finds. Of note was the presence of a flaked glass artefact, identified during the sewerage pipeline salvage, which demonstrates the potential for post-contact archaeology in the area. Based on the outcomes of this assessment, all sites identified in association with the Canberra International Arboretum and Gardens have been subject to archaeological salvage.

Assessment	Author	Summary
Molonglo Stage 3 Future Urban Releases: Detailed Heritage Assessment – Aboriginal and Historical Heritage	Biosis 2012	This assessment was undertaken for the proposed Stage 3 Molonglo Valley Future Urban releases on the north side of the Molonglo River (primarily to the south and west of the current project area). Predictive modelling suggested that the potential for Aboriginal sites within the project area was high, and likely to be dominated by low density stone artefact scatters on lower lying areas with larger sites situated on elevated terraces or slopes adjacent to water courses. Scarred trees were likely to occur where remnant woodland and old growth trees remained. The potential for historical sites to occur was also identified, related to the early pastoral settlement of the Molonglo Valley. Field investigation identified 33 previously unrecorded sites consisting of artefact scatters and isolated finds. Nine Potential Archaeological Deposits (PADs) were identified, all in conjunction with artefact scatters. One new historical heritage site was identified, consisting of the Kallenia Rivers Woolshed. This was determined to meet the criteria for nomination to the ACT Heritage Register. This assessment recommended that surface collection of the identified sites be undertaken, and test excavation of the PAD areas (as well as areas outside the PAD to test the predictive model) be undertaken.
Molonglo Stage 3 Future Urban Releases: Subsurface Testing Report and Further Studies	Biosis 2013	This assessment is the follow up to the Biosis 2012 report, and undertook surface collection and test excavation of the identified Aboriginal sites and PADs (plus testing outside of the PAD areas) and undertook further research and material analysis of the Kallenia Rivers Woolshed. A total of 147 test pits were excavated across the nine PAD areas and outside of the PAD areas. Surface collection resulted in 335 Aboriginal objects being recovered from across the 33 sites. Test excavation provided unexpected results, with the predictive model suggesting that sub-surface deposits would be identified in gently sloping elevated areas above the Molonglo River. However, these PADs returned little to no Aboriginal cultural materials during the sub-surface testing. More generally, the PAD testing returned very little cultural material when compared to the surface scatters. The presence of surface scatters, but no distinct sub-surface deposits suggests that these areas were most likely used transiently by Aboriginal people. This is further suggested by the lack of flaking or knapping floors present in the scatters. This lack of sub-surface deposits may also reflect the level of disturbance across the area that was not previously identified. With regard to the Kallenia Rivers Woolshed, it was assessed as having high significance and recommended that it be maintained and a site specific CMP be developed to assist in the long-term curation and management of this site.
Molonglo Stage 3 Additional Areas Cultural Heritage Assessment	Biosis 2014	This assessment was undertaken for the proposed Molonglo Stage 3 Residential Development Area C, situated to the east of the current project area. Predictive modelling suggested that open camp sites (artefact scatters) and isolated finds are the most common site types likely to occur, with scarred trees likely in areas with remnant woodland and old growth trees. The potential for historical sites to occur was also identified, related to the early pastoral settlement of the Molonglo Valley. Field investigation identified 32 previously unrecorded and one previously recorded Aboriginal cultural heritage site, with all but one being low density artefact scatters. A number of Potential Archaeological Deposits (PADs) were identified during the assessment, commonly in association with the artefact scatters. From a historical perspective, one previously unrecorded historical site was identified (a bottle dump).

Assessment	Author	Summary
William Hovell Drive Duplication – Aboriginal and Historical Cultural Heritage Assessment	Past Traces 2018	Past Traces were engaged by WSP to undertake Aboriginal and Historical archaeological assessment of the proposed duplication of William Hovell Drive (located within and west of the current project area). The survey identified one Aboriginal object (located outside the current project area) and a number of Potential Archaeological Deposits (PADs) associated with Deep Creek (located on the south and north sides of William Hovell Drive, to the west of Coppins Crossing Road). While no impact to the PADs was identified by the proposed road duplication, should impacts be necessary to these areas in the future, archaeological test excavations would be necessary. It is noted that these PAD areas are located in proximity to the project area, however the proposed works will not impact any of the curtilages of these PAD areas.

Figure redacted from public display

Figure 5.2 Previous Studies

5.6 Predictive Model

The following archaeological predictive models have been formulated based on the results of the desktop assessment that identified a number of Aboriginal and historic heritage sites across in the local and regional context. This site patterning has been broken down and compared directly to the characteristics present within the current project area.

5.6.1 Aboriginal Archaeology

The environmental, ethnographic and archaeological background of the project area suggests that Aboriginal people would have likely used this area in some way, whether it is through transient movement or more established campsites. Archaeological assessments undertaken in proximity to the current project area suggest that if Aboriginal cultural heritage items are to remain, they will most likely come in the form of surface scatter or isolated finds in exposed or eroded areas (such as existing tracks or eroded slopes). The following broad model can be suggested for the project area:

- Artefact scatters and isolated finds are moderately likely to occur within the project area, predominantly in exposed or eroded areas. Given parts of the project areas are in proximity to watercourses (either Deep Creek or Molonglo River or associated tributaries), areas in close proximity (generally less than 200m) are retain the highest potential for these sites to occur. Impacts from European occupations such as vegetation clearance and topsoil removal for roads and tracks may have removed this potential in some areas.
- Areas of potential archaeological deposits (potentially associated with surface artefacts) may occur in landforms with direct access to water resources and where topsoil deposits remain extant. The presence or absence of PADs will be closely linked to the extent of disturbance.
- Scarred trees are unlikely to occur, but may exist if unidentified old growth trees or remnant woodland are present in the project area.
- Grinding grooves may be present within the project area, but given that outcrops or large boulders are generally uncommon across the soil landscapes that make up the project area, these are unlikely to occur.
- While one piece of flaked glass has been identified within the region, this is the only evidence for post-contact archaeology and as a result this type of artefact is unlikely to occur within the project area.
- Based on the regional model, other site types are unlikely to occur within the project area.

5.6.2 Historical Heritage

Based on the land use history of the project area and surrounding region, potential heritage features may include:

- Remains of nineteenth century structures, such as dwellings, stock yards and other rural farm use items. These items may remain as intact structures, ruins or archaeological deposits;
- Fence lines, that may be found along site boundaries or stock yard borders;
- Early tracks, stock routes and roads;
- Early survey markers, such as trigonometric stations.

Given the location of the project areas and based on the results of previous assessments, it is unlikely that historical heritage items will be found during field investigation for this assessment.

6.0 Field Investigation

6.1 Survey Methodology

The main aims of the field investigation were to:

- Identify any Aboriginal objects or sites present within the project area through visual inspection.
- Identify any potential deposits or landforms of archaeological interest that may be present within the project area.
- Identify evidence of previous and existing disturbance that may have impacted any Aboriginal objects that may have been present.
- Discuss and identify any cultural values of the project area with the Representative Aboriginal Organisations.

The survey methodology involved the field team traversing the project area, which covers a number of landforms and road corridors. Due to the size of the project area, coverage of the entire area was possible through distribution of the team. Generally, the field investigation team walked between 5 – 10 metres apart, and covered all areas twice to allow for maximum opportunity to identify Aboriginal stone artefacts, or the potential for these to occur. Any areas with good ground exposure were examined for archaeological evidence such as stone artefacts scatters or isolated finds. Where identified, ground surfaces and cuttings were also examined to document landscape configuration, soil profiles, soil disturbance, erosion and potential for subsurface archaeological deposits.

The survey was split into a northern survey parcel (William Hovell Drive survey area), and a southern survey parcel (Tuggeranong Parkway survey area). Results will be provided as such below.

6.2 Project Team and Participation

The field investigation was conducted by Ashley O'Sullivan (Senior Archaeologist) accompanied by Justin Bell (Buru Ngunawal Aboriginal Corporation).

6.3 William Hovell Drive Survey Area

Generally, this part of the project area was covered with medium to dense grass coverage, with the only clear ground surface visibility available on existing tracks or eroded patches on hill slopes. Vegetation varied across this survey area, with the area to the south of William Hovell Drive covered with dense grass and both areas to the north of William Hovell Drive (either west or east of Coulter Drive) covered with a finer grass and much better for ground surface visibility. The only visibility available on the south side of William Hovell Drive was a cutting that has been made for sheep movement under William Hovell Drive (**Plate 6.1**). Also, on the south side of William Hovell Drive is a small drainage line that runs directly in to Deep Creek (**Plate 6.2**). This part of the survey area was at the lower edge of a gentle slope that continues north to the other side of the William Hovell Drive, and follows the reaches of Deep Creek.

The north side of William Hovell Drive to the west of Coulter Drive had generally fair visibility with some exposures present amongst the consistent grass coverage. The land in this part of the survey area was generally quite flat and one of the lowest points in the general area. These features suggest that it would not have been the most appropriate location for Aboriginal occupation or use, as other more favourable elevated areas occur to the north (outside of the project area).

An area that forms a traffic island at the intersection of Coulter Drive and William Hovell Drive was also surveyed to determine if there were any Aboriginal objects in this disturbed context, but none were found (**Plate 6.3**).

Similarly, the part of the survey area to the east of Coulter Drive and north of William Hovell Drive had fair visibility, with a number of tracks and slope erosion providing the best opportunity to assess the soil profile (**Plates 6.4** and **6.5**). The existing tracks in this area are heavily eroded / graded, and indicate that topsoil in this area is generally quite thin. While some of the landforms in this area are of a type associated with artefact scatters in other areas, they are heavily disturbed and contain limited depth of topsoil. [redacted]

No scarred trees, potential archaeological deposits (PADs), historic heritage sites or other site types were observed within the William Hovell Drive survey area. The lack of potential archaeological deposits identified throughout this survey area is generally attributed to the lower slopes present throughout this survey area being subject to erosion from vegetation clearance on upper slopes, and topsoil removal in key areas to create tracks. In undisturbed areas, topsoil depth identified was quite low and not conducive to sub-surface archaeological deposits.

6.3.1 MV-HVL-IF-1

[redacted]

Table 6.1 Artefacts in proximity to the William Hovell Drive survey area

Grid Reference	Artefact	Material	Size (mm)
[redacted]	MV-HVL-IF-1	IMTC	[redacted]

Plate 6.1 Existing sheep track and general grass coverage in the southwest of the William Hovell Drive survey area.

Plate 6.2 General grass coverage along an existing drainage line, looking east on the south side of William Hovell Drive.

Plate 6.3 View across heavily disturbed area in the centre of the roadway..

Plate 6.4 Example of the grass coverage and track exposures in the north eastern part of the William Hovell Drive survey area.

Plate 6.5 Location of MV-HVL-IF-1 (pink, centre of track) along cut and exposed track. Looking west, towards proposed impact area.

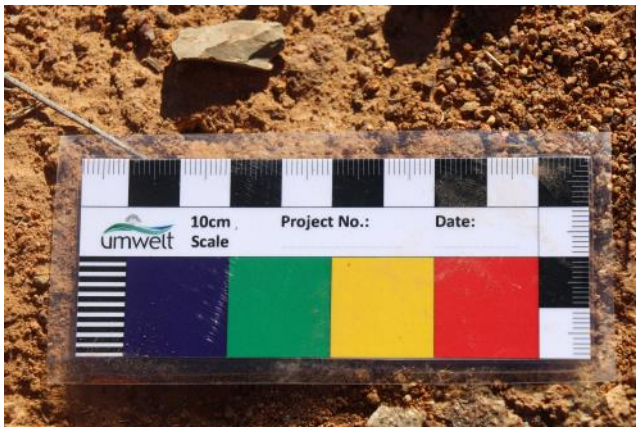

Plate 6.6 MV-HVL-IF-1

6.4 Tuggeranong Parkway Survey Area

At the time of survey, this area formed part of an area that would be subject to s211 Exemption application. However, this area is no longer part of the s211 Exemption application due to necessary design changes. Given the undertaking of survey effort and identification of Aboriginal sites, this information will remain part of the assessment.

Given the proximity of this survey area to the Molonglo River, prior to survey this area was anticipated to have the highest potential to contain Aboriginal objects. The visibility across the survey area was generally good, with a number of heavily eroded tracks / fire trails present. The fire trail along the banks of the Molonglo River provided an indication of the level of previous disturbance that has occurred in this area (**Plates 6.7** and **6.8**), with the track removing much of the subsurface potential. Further to this disturbance, impacts from the development of the bridge (**Plate 6.8**) and erosion from a rough track were observed (**Plates 6.9** and **6.10**).

The lower slope that extends north in the eastern part of this survey area was heavily eroded, likely due to light vehicle movement. A number of naturally occurring cobbles were identified in this area, with signs of recent fracture due to this vehicle movement however these did not exhibit diagnostic features indicative of stone artefact manufacture [redacted]

No scarred trees, potential archaeological deposits (PADs), historic heritage sites or other site types were observed within the Tuggeranong Parkway survey area. The lack of potential archaeological deposits in this area can be attributed to the heavy erosion present on the lower slope identified, and the impacts from the creation of the fire trail. These two locations would have previously had archaeological potential, but with these impacts (both natural and recent), this sub-surface potential no longer remains.

6.4.1 MV-HVL-IF-2 and MV-HVL-IF-3

[redacted]

Table 6.2 Aboriginal sites identified in proximity to the Tuggeranong Parkway survey area

Grid Reference	Artefact	Material	Size (mm)
[redacted]	MV-HVL-IF-2	Quartz	[redacted]
[redacted]	MV-HVL-IF-3	Volcanic	[redacted]

Plate 6.7 View east across fire trail within project area, on the banks of the Molonglo River.

Plate 6.8 View west across fire trail within project area, on the banks of the Molonglo River.

Plate 6.9 Example of the heavily eroded track, looking towards project area / Molonglo River.

Plate 6.10 Location of MV-HVL-IF-2 and MV-HVL-IF-3 on heavily eroded track, facing south towards the Molonglo River (not visible).

Plate 6.11 MV-HVL-IF-3

Plate 6.12 MV-HVL-IF-3

Figure redacted from public display.

Figure 6.1 Northern Project Area Archaeological Survey

Figure redacted from public display.

Figure 6.2 Southern Project Area Archaeological Survey

7.0 Significance Assessment

7.1 Principles and Evaluation Criteria

7.1.1 ACT Heritage Criteria

The *ACT Heritage Act 2004* (s.10) specifies that a place or object has heritage significance if it meets one or more of the following criteria:

a) Importance to the course or pattern of the ACT's cultural or natural history;

b) Has uncommon, rare or endangered aspects of the ACT's cultural or natural history;

c) Potential to yield important information that will contribute to an understanding of the ACT's cultural or natural history;

d) Importance in demonstrating the principal characteristics of a class of cultural or natural places or objects;

e) Importance in exhibiting particular aesthetic characteristics valued by the ACT community or a cultural group in the ACT;

f) Importance in demonstrating a high degree of creative or technical achievement for a particular period;

g) Has a strong or special association with the ACT community, or a cultural group in the ACT for social, cultural or spiritual reasons;

h) Has special association with the life or work of a person, or people, important to the history of the ACT.

While other criteria may in cases be applicable, criteria c, d and g generally apply to Aboriginal heritage places or objects located within the ACT.

Further to the definition of heritage significance, the Heritage Act specifies criteria for natural heritage significance (s.10A(1)) and cultural heritage significance (s.10B).

A place or object has natural heritage significance if it –

a) Forms part of the natural environment (i.e. native flora, native fauna, geological formations or any other naturally occurring element); and

b) Has heritage significance primarily because of the scientific value of its biodiversity, geology, landform or naturally occurring elements.

A place or object has cultural heritage significance if it –

a) Is –

   (i) Created or modified by human action; or

   (ii) Associated with human activity or a human event; and

b) Has heritage significance.

7.2 Assessment of Significance

7.2.1 Heritage Significance

Key to the assessment of significance is the relationship between a place or object and its broader natural, Aboriginal cultural and/or historic context. To assist in applying the Heritage Act criteria, a range of themes can be identified specific to the ACT. The ACT Heritage Council's *Heritage Assessment Policy* (AHC 2018) provides a list of ACT specific aspects, along with a number of general themes that can be applied. The themes of the ACT (AHC 2018:5):

> *'are those that have shaped the broad pattern and evolution of the ACT, distinguishing its history in the context of other Australian states and territories, providing its significant character and identity. These themes include its history prior to the declaration of the Federal Capital Territory in 1911, and subsequent to it.'*

The level of significance is also a factor to be considered. A place or object's level of significance if determined by its historical and geographical context and the group of people that the place or object has significance or meaning (AHC 2018). The levels include personal, interest group, local, state, national and world. To be included on the ACT Heritage Register, the place or object must have Territory-level significance (or above).

7.2.2 Scientific Significance

Scientific significance is determined by assessing the research potential, educational value, rarity and representativeness of archaeological sites. Research potential considers the contents of the site and the condition of the site, with sites that contain a large range of cultural materials that are in excellent condition valued inherently higher than those with little to no cultural material. Given that the three sites identified during this assessment are all isolated finds within disturbed contexts, their research potential is low. The education value of the sites identified generally ties to their identification within the disturbed contexts, and not necessarily through future research outcomes. As a result, while there is educational value in these sites, it only adds a small amount of value to the overall archaeological picture. Representativeness relates to the regional distribution of site types, and how the site being assessed relates to that. The three sites identified were all isolated finds, a common site type throughout the local and regional area and do not present any different information to our understanding of Aboriginal people's use of the landscape. This also ties into the rarity aspect of significance, as this is a common site type, it is not considered rare within the local area.

As a result, all three isolated artefact sites are considered to have low scientific significance.

7.3 Aboriginal Community Cultural Significance

Sites of potential antiquity and which contain cultural material are frequently identified as of importance to Aboriginal people, and as such the site can be considered to have associated cultural values. As part of the consultation undertaken for this assessment, the RAOs have been asked to provide any comment on the cultural value of the sites identified or the project area more generally.

[redacted]

BNAC highlighted, as the Traditional Custodians for the ACT and surrounding area, that:

> *'all sites, objects and lands within our tribal boundary do hold a very significant spiritual and cultural importance to us as a direct cultural heritage link to Country'.*

7.4 Significance of the Newly Identified Sites

Table 7.1 presents the significance assessment for the three newly identified sites in close proximity to the project area.

Table 7.1 Significance Assessment of the three sites identified

Site Name	Scientific Significance	Cultural Significance	Level	Heritage Register Criteria
MV-HVL-IF-1	Low	Low	Local	a, c, g
MV-HVL-IF-2	Low	Low	Local	a, c ,g
MV-HVL-IF-3	Low	Low	Local	a, c, g

8.0 Management Strategy and Conclusions

8.1 Management Strategy and Recommendations

The development of heritage management recommendations in the context of the proposed impacts in the project area are based on the significance or heritage values of the area, the relevant legislative protection and the feasibility of avoiding impacts to heritage items.

Based on the findings of this report, the project area is best described as having low potential for Aboriginal objects or sites within the curtilage. The northern part of the project area is generally on the lower parts of low gradient slopes, and has been subject to various impacts including damming of Deep Creek, road infrastructure development and various horse trail impacts (construction of fence lines, tracks, etc). The southern part of the project area has been subject to impacts through the development of fire trails, the bridge across the Molonglo River and existing high voltage infrastructure. Three previously unrecorded Aboriginal sites were identified in proximity to the project area, and their management should form part of the overall project approvals. As they are outside the project area and will not be subject to impact by the project, these artefacts can remain in situ and protective measures can be adopted to ensure that the artefacts come to no harm during construction.

No historical heritage items or potential for these to occur was observed during the field investigation.

While no Aboriginal or historical heritage sites were identified within the project area, this does not preclude the potential for unanticipated discoveries occurring during construction.

The recommendations below are made to minimise the impact of the project on Aboriginal cultural heritage and to ensure compliance with relevant legislative requirements. We highlight that the preferred heritage outcome is to avoid impacts to heritage items.

- The newly identified site in proximity to the proposed works, MV-HVL-IF-1 should be inspected and fenced off prior to construction beginning (**Figure 6.1**). This fencing should give each site a 5m perimeter, to ensure that no direct or indirect impacts can occur during construction. Upon completion of construction, the fencing should be removed.

- No further Aboriginal or historical archaeological work is recommended, and the project may proceed with caution. Should unanticipated discoveries be made during construction, work should cease and the protocols provided in **Section 9.0 – Unanticipated Discovery Plan** should be followed.

- The three newly identified sites (MV-HVL-IF-1, MV-HVL-IF-2 and MV-HVL-IF-3) will be registered with ACT Heritage.

- Following finalisation, a copy of this report should be provided to ACT Heritage for their review and approval.

  If further changes are made to the project which require impacts outside of areas previously investigated or the project area assessed in this report, further assessment should be undertaken to identify and appropriately manage Aboriginal and Historic heritage objects/sites/place that may occur within any additional areas.

8.1.1 Recommendations from Registered Aboriginal Organisations

BNAC recommended that:

- Documented measures are put in place to clearly define work areas as part of the site inductions.

- Develop and provide [to personnel] a more in-depth understanding of the sensitivity and significance of sites and the legislative obligations to preserve objects/sites from damage.

- Vehicle and equipment access, laydown areas and site offices should be located within the disturbance footprint that has already been surveyed or it will require additional cultural survey works.

- Calibre Consulting / SLA consider providing opportunities to the RAOs to undertake the fencing of cultural heritage sites (namely MV-HVL-IF-1), as it is essential in maintaining culturally appropriate engagement with Ngunawal people in managing cultural sites.

9.0 Unanticipated Discovery Plan (UDP)

No Aboriginal archaeological sites have been discovered in the project area. Although there is a low potential that Aboriginal archaeological material will be discovered during construction works, it is possible that Aboriginal archaeological material may be present.

Based on current understanding of archaeological sites in this landscape generally, such sites are likely to be low density scatters of artefacts (densities <2 artefact/m^2). This site type is generally classified as being of low significance and conservation value.

If previously unrecorded Aboriginal archaeological material is exposed during the construction works, work in the vicinity of the archaeological objects must cease and the site must be reported to the ACT Heritage Council. The ACT Heritage Council will determine any additional requirements.

Unanticipated discoveries include all Aboriginal site types (although most site types are considered to be very unlikely, refer **Section 5.6.1**). This includes (but may not be limited to), low, moderate to high density artefact scatters, scarred trees, stone procurement (quarry) sites, ochre deposits and skeletal remains (burials).

Please Note: There are two different processes presented for the mitigation of these anticipated and unanticipated discoveries. The first process applies for the discovery of Aboriginal or historic places, objects or features (refer to **Table 9.1**), which include all site types mentioned above, with the exception of skeletal remains (burials). The second process applies exclusively to the discovery of skeletal remains (burials) (refer to **Table 9.2**). There are very strict protocols for the discovery of human skeletal material. Human skeletal remains are considered to be a potential crime scene until it is confirmed by police that this is not the case.

Table 9.1 Process for Discovery of Aboriginal Places, Objects or Features

Step	Details
1	If any project personnel, contractors or subcontractors believe that they have discovered or uncovered Aboriginal or historical places, objects or features, the individual should notify the person in charge of the activity (Site Supervisor) that is currently under way. The Site Supervisor is to inform operators that are working in the general vicinity of the area that earth disturbance works should stop immediately. Remember health and safety requirements when approaching machinery operators.
2	A buffer protection zone of 20 m x 20 m should be established around the suspected Aboriginal or historical places, objects or features. No unauthorised entry or earth disturbance will be allowed within this 'archaeological zone' until such time as the suspected Aboriginal places, objects or features have been assessed, and appropriate mitigation measures have been carried out.
3	The discovery must be reported to the ACT Heritage Council within five working days (in accordance with Section 51 of the *Heritage Act 2004*). The Site Supervisor should do this. The Site Supervisor should also contact a qualified archaeologist to conduct a heritage assessment of the material.
4	A heritage assessment should be conducted by a qualified archaeologist in consultation with the RAOs (in accordance with Section 75 of the *Heritage Act 2004*). If possible, this assessment should be completed within 1 working week of the discovery.
5	Based on the findings of the assessment, appropriate management recommendations should be developed for the Aboriginal places, objects or features. These recommendations should be submitted to the ACT Heritage Unit for review and endorsement.
6	Once endorsement has been obtained, the prescribed management recommendations should be carried out by the appropriate personnel. If salvage collection or excavation of archaeological material is required, the work is to be done in accordance with the regulations set out in the *Heritage Act 2004* and with appropriate archaeological procedure. The archaeologist may retain custody of salvaged Aboriginal archaeological material for up to three months for analysis. If a longer time is needed, the archaeologist must consult with the RAOs and seek approval from the ACT Heritage Council. When analysis is complete, all material, labelled, bagged and catalogued is to be provided to ACT Heritage of the RAOs, together with a management plan for where it will be placed.
7	On the completion of the prescribed works, the relevant authorities (ACT Heritage Unit) should advise the Site Supervisor (or other Project Personnel) that construction works may recommence in the 'archaeological zone'. If there are further constraints to construction works in the 'archaeological zone', then the Site Supervisor should be informed of these. It is the responsibility of the Site Supervisor to inform construction crews of these constraints. Generally, construction work may recommence within an area of exclusion when: • The appropriate protective measures have been implemented • Relevant archaeological material recording forms have been completed • All parties agree there is no other prudent or feasible course of action • Any relevant disputes have been resolved

Table 9.2 Process for Unanticipated Discovery of Skeletal Material

Step	Details
1	Under no circumstances should the suspected skeletal remains be touched or disturbed. If these are human remains, then this area potentially is a crime scene. Tampering with a crime scene is a criminal offence.
2	Any person discovering suspected skeletal remains should notify operators that are working in the general vicinity of the area that earth disturbing works should stop immediately. Remember health and safety requirements when approaching machinery operators. The person who discovers the suspected skeletal remains must inform the Site Supervisor immediately.
3	A buffer protection zone of 50 m x 50 m should be established around the suspected skeletal remains. No unauthorised entry or earth disturbance will be allowed within this buffer zone until such time as the suspected skeletal remains have been assessed.
4	The relevant authorities (ACT Police and Coroner's Office) are to be contacted and informed of the discovery. If there is reason to believe that the remains are Aboriginal, the Site Supervisor must also notify ACT Heritage Council and RAOs. If the skeletal remains are suspected to be of Aboriginal origin, the authorities may decide to seek the advice of an archaeologist or appropriate expert in relation to the discovery. No media is to be contacted in regard to the discovery of human remains. No photos of human remains are to be taken without appropriate approval of the RAOs.
5	Should the skeletal remains be declared an Aboriginal burial site, the following procedures will be implemented: • An archaeologist, in consultation with the RAOs should carry out an assessment of the skeletal remains • Based on the findings of the assessment, appropriate management recommendations should be developed. These recommendations should be submitted (in the form of a Conservation and Management Plan) to the ACT Heritage Unit and the Heritage Council for review and endorsement • Once endorsement has been obtained, the prescribed management recommendations should be carried out by the appropriate personnel • The treatment of salvaged Aboriginal human skeletal remains must be in accordance with the direction of the RAOs and Act heritage Council. • On the completion of the prescribed works, the relevant authorities (ACT Heritage Unit) should advise the Site Supervisor (or other Project Personnel) that construction works may recommence in the 'archaeological zone'. If there are further constraints to construction works in the 'archaeological zone', then the Site Supervisor should be informed of these. It is the responsibility of the Site Supervisor to inform construction crews of these constraints. • As noted for non-skeletal finds, certain criteria must be met before works can recommence.

10.0 References

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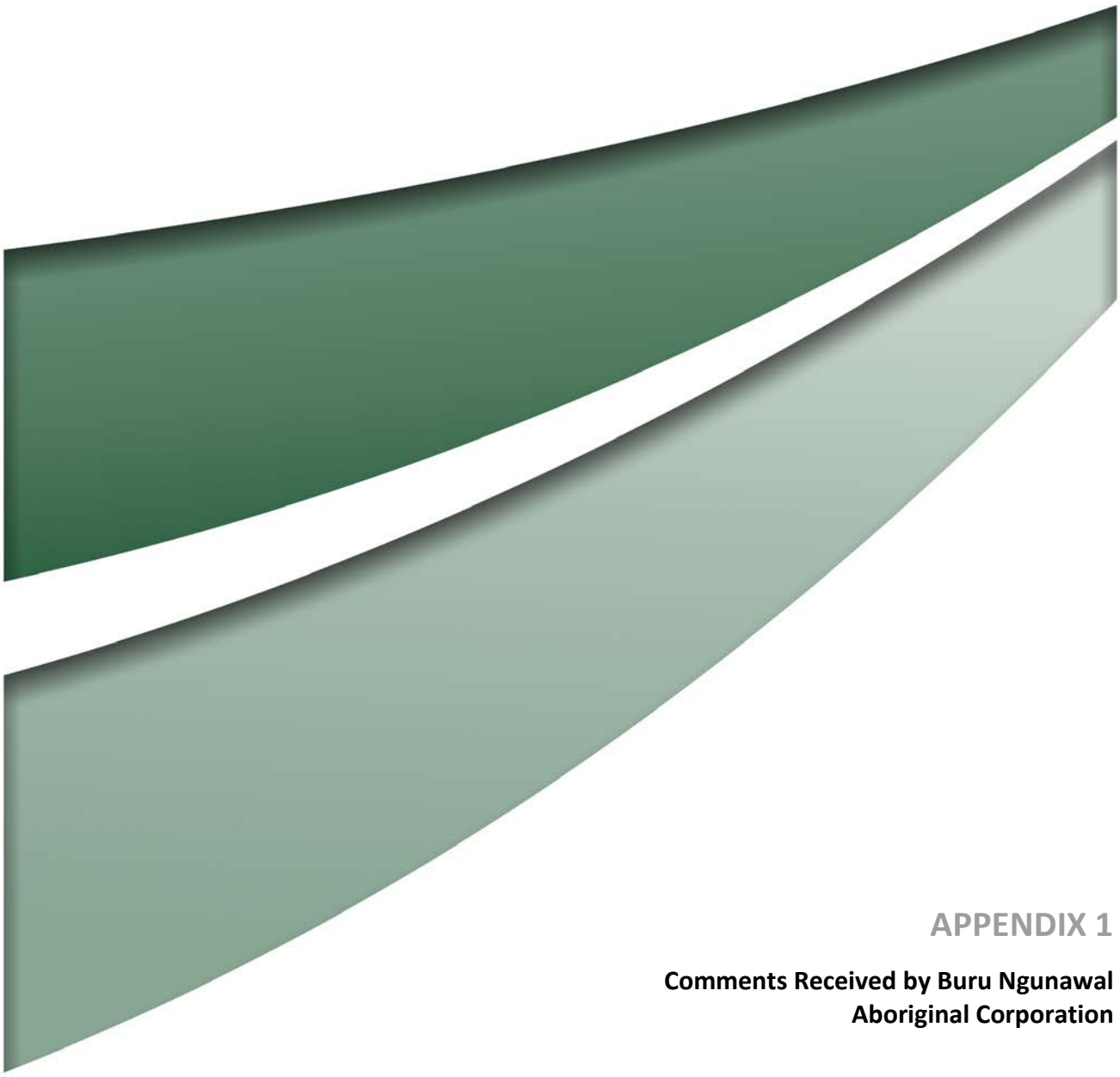

APPENDIX 1

Comments Received by Buru Ngunawal Aboriginal Corporation

ABN : 24 059 704 833

Umwelt (Australia) Pty Limited
75 York Street
Teralba, NSW 2284

Att: **Ashley O'Sullivan**
Senior Archaeologist

139c Re-location of 132kV Transmission Lines, Molonglo Stage 3 Urban Area

Thank you for your correspondence in which you provided a report on the above requesting input from Buru Ngunawal Aboriginal Cultural Consultancy (BNACC) as the Representative Aboriginal Organisation under ACT Government Heritage legislation.

BNACC members are the Traditional Custodians for the ACT and surrounding areas in NSW. We would like to point out that all sites, objects and lands within our tribal boundary do hold a very significant spiritual and cultural importance to us as a direct cultural heritage link to Country.

In response to the documentation provided, BNACC having participated in the onsite consultations would like to request that because of the presence of Aboriginal cultural sites within the vicinity, experience with working with large scale construction works such as this also indicates that disturbance does occur outside the proposed project footprint. BNACC would like to have some documented measures in place to clearly define work areas as part of the site inductions. This is a management tool to prevent these sorts of impacts from occurring. There remains a requirement to provide and develop a more in-depth understanding of the sensitivity and significance of sites and the legislative obligations to preserve such objects/sites from damage.

New recent changes to the ACT Heritage Act provide details of the financial repercussions of damaging cultural sites/objects.

The draft report and the provision of the recommendations for the protection and preservation of our Ngunawal culture is greatly appreciated.

BNACC considers the recommendations as proposed at 8.1 Management Strategy and Recommendations are appropriate for the three sites. BNACC would also like it noted that vehicle and equipment access, laydown areas and site offices be located within the footprint of the area already survey or it will require additional cultural survey works to be conducted.

BNACC would appreciate, as a gesture of goodwill, being involved in any fencing exercise as it is essential in maintaining a culturally appropriate engagement with Ngunawal people in managing cultural sites.

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BNACC looks forward to progressing the requests made above and to be actively involved in working towards a healthy and productive process in developing a better understanding of Aboriginal cultural significance and its connection to Country and provide an avenue to progress the reconciliation process.

Thank you for the opportunity to provide comment.

Yours faithfully

Wally Bell (Ngunawal TC)

Chair

20 May 2020

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