19/10/2017

Mr Robert Mowle

Lateral Planning

Goulburn NSW 2580

Dear Robert,

Re: Aboriginal Due Diligence Assessment Report –Proposed subdivision Breadalbane Road Collector

This letter report provides Aboriginal heritage due diligence advice for the proposed subdivision of Lot 20 DP777962, Lot5 DP264152, Lot 29, DP750008,Lot 13 DP264152 and Lot 75 DP750008 Breadalbane Road, Collector. The land parcel is located to adjacent to the north of the Federal Highway and covers an area of approximately 130ha. The study area is shown on Figure 1.

The subdivision proposal is to divide the project area into 2 ha properties. The proposal would involve the following impacts:

- Construction of new entranceways
- Installation of boundary fencing.
- Construction of housing with associated infrastructure and underground services

These works are high impact and would have a negative impact on any Aboriginal heritage located within the project boundary. Aboriginal heritage sites may be located on the surface or subsurface in areas of high potential for the preservation of archaeological remains of past usage by Aboriginal groups.

To assess the potential impacts of the proposed works on Aboriginal heritage this Due Diligence Heritage Assessment has been undertaken. This report has been prepared under the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010). The results of this archaeological due diligence assessment, in report format, will act as a suitable document to be incorporated, as appropriate, into the proponents Development Application detailing the study areas suitability for subdivision.

The field survey and associated research has been conducted in accordance to the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (OEH 2010) and the *Code of Practice for the investigation of Aboriginal Objects in NSW* (OEH 2010). It identifies the heritage values of the study area and suggests suitable mitigation approaches.

Project Background

As a preliminary background for the project the Pejar Local Aboriginal Land Council (LALC) were engaged to undertake a field survey of the project area and provide information on Aboriginal Cultural Values that may be present. This assessment and field survey by the LALC did not result in

the identification of any heritage sites or known cultural values within the project area. One area that was thought to hold potential for subsurface archaeological deposits was identified by the LALC located in the south west corner of the project area.

Following this assessment advice was received from the NSW Office of Environment and Heritage (OEH) that a heritage assessment was require to determine the impacts of the potential subdivision on Aboriginal and Historical heritage within the project area. As a result, this assessment in has been undertaken to address this issue.

The subdivision proposal will have a major impact on ground surfaces within the project boundaries. The impacts will consist of construction of access roads, installation of boundary fencing, housing envelopes and associated infrastructure. As a result of the widespread ground surface impacts from the subdivision proposal, field survey focused on all areas within the project boundaries, particularly focusing on any areas of ground surface exposure and landforms considered to hold potential for the subsurface preservation of Aboriginal objects.

Project Objectives

The following is a summary of the major objectives of the due diligence assessment:

- Identify Aboriginal objects and places known to exist within the Project Area through a search of the Aboriginal Heritage Information Management System (AHIMS) maintained by the Office of Environment and Heritage (OEH).
- Assessment of Landscape for landforms that may contain potential for unrecorded sites and to determine level of disturbance of landscape features.
- Undertake site visit to visually inspect areas identified for impact, or areas holding potential and to verify levels of disturbance. If registered sites (AHIMS) occur within the project area, record and assess condition.
- Complete due diligence report containing recommendations to minimise potential impacts to heritage values within the project area.

Aboriginal Consultation

A preliminary field assessment has been completed by the Pejar LALC. Consultation with the Aboriginal community is not a requirement of the Due Diligence Code and this Due Diligence assessment has been undertaken without further consultation with the LALC. If impacts to Aboriginal heritage are found to occur as a result of the development then consultation will be undertaken with the LALC and the wider Aboriginal community as required by NSW Office of Environment and Heritage (2010).

Assessment Results

AHIMS Search

A search of the OEH AHIMS database was undertaken which revealed no previously recorded heritage sites within the project area or the immediate vicinity. A further extensive search was then undertaken over a wider 1km surrounding area centred on the project area (AHIMS Search No 167087). Two sites were returned within this enlarged area, both consisting of isolated finds. These sites are located on mid to lower slopes near Byrnes Creek to the south of the project area at approximately 300m distance.

The sites located in this area consist of isolated finds of stone artefacts and conform to the wider site predictive model for the Goulburn/Collector area (Fuller 1989). This model predicts a site location model of small sites located on level ground in proximity to water sources, such as small creek lines or drainage lines. The location of previously recorded sites is shown in Figure 1.

Landform Assessment

The study area consists of gentle gradient undulating slopes with several drainage lines. Along these drainage lines are small elevated knolls. Native tree cover is present within the central and eastern portions of the study area with large areas of cleared land in the north eastern section.

Review of previous sites located in the vicinity indicates a site location model based on proximity to water resources such as small creek lines or springs (Koettig 1981, 1982). Scarred trees can occur anywhere in the landscape where mature trees remain. Level terraces above creek lines would appear to be the preferred location of camp sites, a factor repeated through most assessed areas of southern NSW. These areas are considered to hold high potential for both surface sites and areas of subsurface potential deposits.

Gradual gradient middle slope areas and rolling hill crests are generally considered to be amorphous and common through the landscape. These landforms do not hold any attractive features making them a focus of occupation, unless associated with changes in vegetation or proximity to water courses.

Creek flat areas and lower slopes in close proximity to water sources are considered to hold moderate potential for Aboriginal heritage sites based on their aspect (level to gently sloping). Most common site placements are located on level terraces above the creek line, set back from the immediate creek bank. These areas have often suffered high levels of disturbance from previous farming activities which have impacted directly (damming, stock impacts) or indirectly (erosion, invasive weeds).

From review of aerial photos of the project area it would appear that landforms or areas of high potential are located within the project area, in proximity to the creek and drainage lines and focused on areas of level terraces. It would appear most probable that the area would have been traversed in the course of group movements and hunting and gathering activities, with camping locations focused on the drainage lines. Archaeological traces of these activities would consist of isolated artefacts or small artefact scatters which can occur anywhere throughout the landscape. The locations of these areas of high potential are shown on Figure 2.

Site Visit

A site visit and field survey of the study area was undertaken on the 25th to 29th September 2017 to verify the findings of the desktop review of landforms and disturbance. The aim of the investigation was to identify heritage objects or places of potential archaeological Deposit (PAD). Based upon the background research, known Aboriginal site patterning, current aerial photography, existing ground disturbances and consultation with the land owner, a pedestrian survey methodology was developed.

Special attention was given to areas along drainage lines and on the surrounding terrace landforms considered to hold high potential based on landform modelling. All surveyed areas and items of interest were recorded on a topographic map of the study area (using a GPS and GDA 94 coordinates), along with levels of visibility, erosion, soil conditions, and evidence of land disturbance.

The site visit resulted in the following findings.

The area of the proposed works has been subject to low levels of prior disturbance. This disturbance is evident in the form of vehicle tracks, stock impacts and removal of native vegetation in sections of the project area. Ground surface visibility is estimated to be fair across the project area, within some sections, notably the central and southeast portions grass coverage was extensive and surface visibility was as low as 5%.

The combination of ground surface visibility and the rate of exposures throughout the study area combined to make the field survey result in a moderately effective coverage. The conditions across the project area at the time of field survey is shown in plates 1 to 4.

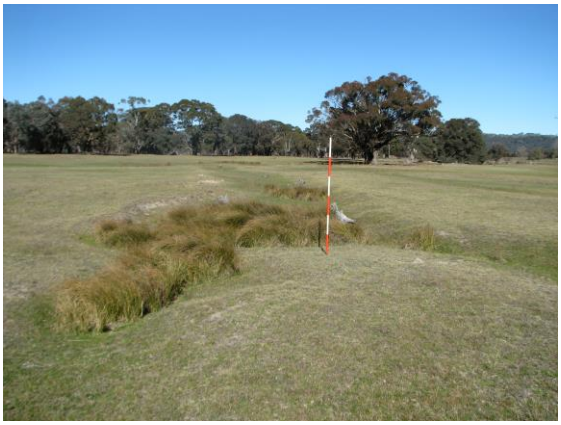


Plate 1: Example of creek line form and topography Block A looking SW

Plate 2: Examples of creek bank/gully erosion at 724299. 6135293

Plate 3: Creek zone in SW corner of Block A, looking SW. Level terrain, creek is a gentle depression.

Plate 4: Highly disturbed NE corner of study area (dam, house, old highway concentration point). Looking NE from 725665. 6135310.

Identified sites

During the field survey four Aboriginal heritage sites and two potential historical heritage sites were identified. Details of each of these heritage sites are provided below under the individual site descriptions. The location of these heritage sites are shown in Figure 2.

Aboriginal Heritage sites

CDD1 -Artefact scatter

MGA Zone 55 GPS 723934. 6135269

Five stone artefacts located in a low gradient spur toe/creek terrace interface zone. Most of the artefacts are exposed at the edge of a borrow pit with a single artefact occurring in a patch of rabbit digging 27 metres east of the borrow pit, at the base of power pole CE 152226.

Site exposure area is approximately 4m x 1m (adjacent to borrow pit). The local deposit comprises a very light grey and orange brown gravely silt soil. There is considerable potential for additional artefacts to occur in the area.

Artefacts visually identified and recorded during the field survey consisted of the following:

- Quartz flake 17mm x 19mm x 5mm
- Grey silcrete flake 17mm x 12mm x 2mm
- Grey silcrete microblade core fragment/steep edge scraper 14mm x 14mm x 6mm
- Quartz flaked piece/core fragment 30mm x 32mm x 15mm
- Quartz flaked piece 17mm x 9mm x 4mm

Site location is shown in Plate 5 with identified artefacts in Plate 6.

Plate 5: Location of CDD1

Plate 6: Artefacts CDD1

CDD2 - Isolated artefact

GPS MGA Zone 55 724188. 6135198

Site CDD2 consists of a single quartz flake exposed on a restricted bare surface (28mm x 24mm x 6mm). Landscape setting is the low gradient surface of a concise crest feature dividing two drainage lines. The artefact is located approximately 97 metres north of power pole CE 152200.

The landform associated with the artefact has considerable archaeological potential.

Site location is shown in Plate 7 with identified artefact in Plate 8.

Plate 7: Location of CDD2

Plate 8: Artefact CDD2

***CDD3** - Isolated artefact*

GPS MGA Zone 55 724135. 6135081

Site CDD3 consists of a single stone artefact (Quartz Flake measuring 33mm x 25mm x 7mm) exposed at the edge of a drainage line, west-south-west of power pole CE 152200 and directly opposite an accumulation of old dumped wire and posts in the drainage line.

The edge of the drainage line exhibits some gully erosion and stock trail impacts. The associated deposit comprises a very light grey gravely silt soil. There is potential for additional archaeological material to occur in association with this deposit.

Site location is shown in Plate 9 with identified artefact shown in Plate 10.

Plate 9: Location of CDD3

Plate 10: Artefact CDD3

CDD4 - Artefact scatter

GPS MGA Zone 55 724199. 6134873

Site CDD4 consists of thirteen stone artefacts exposed on a low crest feature adjacent to a creek line. The artefacts are apparent in two adjacent exposure zones: a linear stock trail to the north and a concentration of rabbit digging to the south. Site area is approximately 10m x 25m.

The site is situated upstream of a prominent dam in the creek line, adjacent to the fence line defining the Federal Highway corridor. Associated deposit is a light grey brown fine sandy silt soil. There is considerable potential for additional archaeological material to occur in association with this deposit and the relevant landform feature.

Artefacts exposed on stock trail consisted of the following:

- Grey banded metamorphic/silcrete flake 40 x 34 x 15
- Grey silcrete microblade core 35 x 25 x 21 (2 platforms, 7 negs)
- Quartz flaked piece 35 x 20 x 11
- Quartz core 32 x 40 x 35

Artefacts exposed by rabbit digging along fence included the following:

- Quartz flake 33 x 30 x 11
- Grey silcrete flake 21 x 11 x 11
- Quartz flake 11 x 7 x 2
- Quartz flake 16 x 14 x 2
- Quartz flake 14 x 14 x 3
- Quartz flaked piece 12 x 6 x 4
- Grey silcrete flake 20 x 14 x 5
- Quartz flake 26 x 11 x 9
- Quartz flake 18 x 8 x 1

The areas of site exposure are shown in Plates 11 and 12. A sample of artefacts is shown in Plate 13.

Plate 11: Location of site extent

Plate 12: Site location

Plate 13. Sample artefacts CDD4

Historical Heritage sites

CDDH1 - *Possible hut site*

GPS MGA Zone 55 724126. 6135264

Apparent remains of a hut/building. Comprises a possible collapsed stone hearth at the north-eastern end and a series of four roughly equidistant postholes that partially define the platform/hut base. Structure dimensions approximately 10m x 4m in a north-east/south west alignment. The structure is situated atop a rise or crest overlooking the confluence of two drainage lines. Fragments of old ceramic were noted in the adjacent area towards the creek. This area will require further investigation to determine if the potential site holds heritage values.

The site location is shown in Plate 14.

Plate 14: Location of potential historical site

***CDDH2** - Historical mine shaft/test pit*

GPS MGA Zone 55 724227. 6134904

Photos of shaft construct: 25, 26, 27.

Two rectangular pits approximately 30 metres apart on the side of a spur/lower slope feature. They appear to comprise a shaft of indeterminate depth cut well into the local bedrock and a shallow shaft commencement or test pit located upslope and to the east (now excavated by wombat digging).

The shaft is approximately 3m x 1.5m in size and exhibits adjacent mullock mounding (Plates 15 and 16).

Plate 15. Site CDDH2

Plate 16. Site CDDH2

Areas of Potential Archaeological Deposit (PAD)

Areas of PAD are defined as landforms that hold higher potential than their surrounds to contatin subsurface deposits of past Aboriginal occupation. Areas of PAD are present in association with all of the identified Aboriginal heritage sites (CDD1 – 4) and in several locations on terrace landforms in association with the drainage lines in the central portion of the study area. The locations of the heritage sites and areas of PAD are shown on Figure 2.

Summary

As a result of the site visit, field survey of alignments and background research, it is considered that the project has moderate potential to impact on unrecorded Aboriginal heritage sites or areas of PAD. Four Aboriginal and two potential historical heritage sites were recorded as a result of the field survey and may be impacted by the development.

Areas of high sensitivity are present in the central section as shown on Figure 2 which would require further investigation to determine the full impact of development within this section. These further investigations would consist of a program of subsurface testing (hand excavation) through these landforms to determine if any deposits are present, and if present their significance.

Two potential historical heritage sites were identified which will require validation through additional research and subsurface testing. This additional research will then determine their significance and whether they pose a constraint on the project.

Recommendations

Based on this due diligence assessment the following actions are recommended for the project.

Recommendation 1: Works to proceed without further heritage assessment in areas without heritage constraints.

The proposed works can proceed without further assessment within the areas where no Aboriginal or historical objects or places have been identified as occurring. The potential of impacting unrecorded sites within these areas during the proposed works is assessed as extremely low, based on landform analysis and prior levels of disturbance.

Recommendation 2: No impacts to occur in areas of identified heritage sites.

No impacts can occur to Aboriginal heritage sites without an Aboriginal heritage Impact Permit (AHIP) granted by the NSW Office of Environment and Heritage (OEH). Application for an AHIP requires the completion of a full detailed Aboriginal Cultural Heritage Assessment Report (ACHAR) in accordance with OEH guidelines. Impacts to all identified heritage sites must be avoided, and if impacts cannot be avoided then completion of an ACHAR and application for an AHIP will be required for the project.

Recommendation 3: Subsurface testing of identified areas of PAD is required.

Areas of PAD are located within the study area. If impacts cannot be avoided in these areas, a program of subsurface testing in accordance with the Code of Practice (hand excavation) will be required in each of the areas of PAD.

Recommendation 4: Further investigation of potential historical heritage sites is required.

Two areas of potential historical heritage have been identified through the field survey. These two areas require further research and subsurface testing prior to any impacts occurring in these areas.

Recommendation 5: Discovery of Unanticipated Aboriginal cultural material.

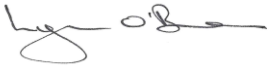
All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal material that has not been previously identified, but might be unearthed during construction activities. In the event that Aboriginal material is discovered during construction the following steps should be undertaken:

- Cease Work: Works must cease in the vicinity of the find and a fenced buffer zone of 10m around the find be erected.
- Notification: OEH must be notified of the find.
- Management: A qualified heritage consultant should be engaged to assess and record the find in accordance with the legislative requirements and OEH guidelines. If the find is Aboriginal in nature, consult with OEH in regards to appropriate steps and management. This would usually involve consultation with the Aboriginal community and may require application for an Aboriginal Heritage Impact Permit.

Adherence to these recommendations will result in the low potential for the proposal to negatively impact on Aboriginal heritage values.

If you have any further questions in regards to the due diligence report, please contact me to resolve them. My contact details are provided below.

Regards



Lyn O'Brien

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FIGURES

Figure 1: AHIMS Sites within and around the project area

Legend

AHIMS Sites

Project Area

N

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0 75 150 300 450

Meters

GDA 1994 MGA Zone 55

PastTraces Heritage Consultants

Figure 2: Field Survey Results

Legend

- Artefact Scatter
- Historical
- Isolated Find
- Project Area
- PAD

N

20/10/2017

1:11,500

0 75 150 300 450

Meters

GDA 1994 MGA Zone 55

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REFERENCES

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Koettig, M. (1981). *Collector to ACT Border Archaeological Survey for Aboriginal Sites.* Reporto Department of Main Roads NSW.

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