Preliminary report on archaeological excavations at Bulla for CHMP 11935

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This public access version has been edited to omit details on the location of Aboriginal cultural heritage



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1. Background

As part of the planning for the proposed Bulla Bypass and Melbourne Airport Link to Outer Metropolitan Ring, VicRoads commissioned a cultural heritage management plan (number 11935), which is compulsory under the *Aboriginal Heritage Act* 2006. The CHMP consists of a desktop assessment (background research of historical and archaeological records), standard assessment (ground survey of the activity area within which the development is taking place) and complex assessment (test excavations). The desktop and standard assessments were carried out by Dr Vincent Clark & Associates in cooperation with Wurundjeri Tribe Land and Compensation Cultural Heritage Council, the Registered Aboriginal Party, in November/December 2011. The results were compiled in a report that was distributed to VicRoads and Wurundjeri in March 2012 (Anderson 2012).

During the ground survey, Aboriginal cultural deposits consisting of almost 650 artefacts were identified at 49 places within the activity area which were recorded with the Victorian Aboriginal Heritage Register (VAHR). The greatest number and concentration of artefacts are located beside and above Deep Creek, north of Bulla,

These

consist of stone artefacts, mostly flaked or knapped stone and some ground stone, and include a variety of materials.

On the basis of the survey findings, an assessment was prepared in April 2012 which considered the impact of the proposed road alignment options on archaeological sites, including five alignment options for the route of the Bulla bypass. This assessment found that all of the Bulla bypass alignments would affect recorded sites but that the abundance of cultural material meant the northernmost alignment (BB4) would have a particularly negative impact. The assessment was based entirely on material recorded on the surface, and therefore did not account for the presence or nature of below-ground deposits.

To enable a more informed assessment of the impact of the alignment options on Aboriginal cultural material, a programme of test excavations was planned. This forms the first stage of the complex assessment, and it is focused on the planned route of the Bulla bypass, covering the section of the activity area between Wildwood Road in the east and Sunbury Road in the west. The testing took place during ten days in November/December 2012 and January 2013, and involved archaeologists from Dr Vincent Clark & Associates and representatives of Wurundjeri. The present report contains initial results from the test excavations to inform an updated assessment of the impact of the alignment options in light of the new information.

2. Study area

The activity area for CHMP 11935 – the legally constituted area in which the investigation takes place – consists of 561.2 hectares of land approximately 25km northwest of Melbourne city centre (Figure 1). This activity area was divided into three sections and then 16 subsections (Figure 2). During the ground survey in November/December 2011, large parts of this activity area were visited, and intensive survey focused on areas where there was suspected to be artefacts present and where artefacts were visible on the surface (Anderson 2012). Sites were registered on the basis of recorded surface artefacts and detailed maps of ground cover conditions were produced (Figure 3 and 4).

The first stage of the complex assessment focused on the part of the activity area which will form the Bulla bypass at the crossing of Deep Creek. There has been very little archaeological investigation of this area: only one ground survey and no excavations have

taken place, during which one site was recorded (Weaver 2006). Following the desktop/standard assessment report and alignment options assessment, VicRoads opted to discard the northern alignment (BB4) for the Bulla bypass. This left four alignment options (BB1 North, BB1 South, BB2 and BB3). Test excavations focused on Deep Creek valley, between Wildwood Road and Sunbury Road, within Sections 2B, 2C, part of 2D and 2E, and especially targeted the four alignments (Figure 5 and 6).

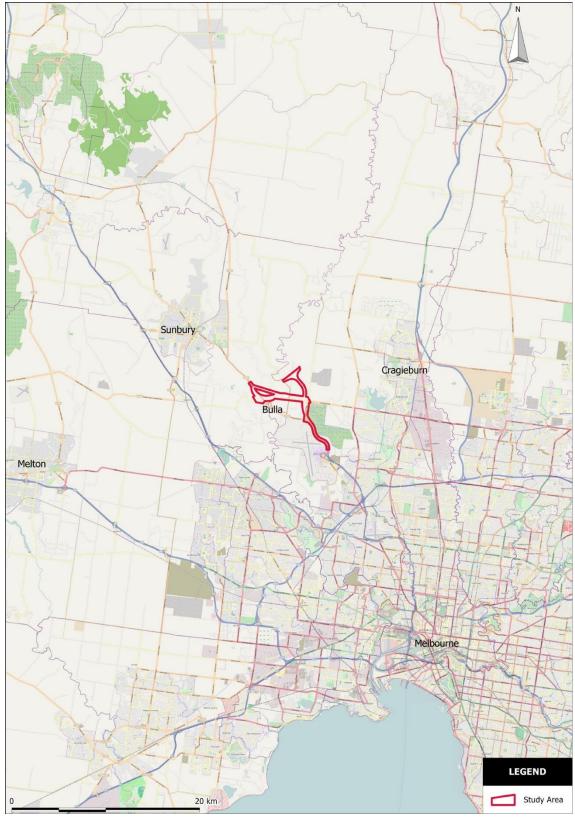


Figure 1: Location of activity area for CHMP 11935



Figure 2: Activity area with sub-sections, projected on to aerial image



Figure 3: Sites recorded beside Deep Creek (sections 2C and 2E), on the basis of surface artefacts



Figure 4: Ground cover conditions and surface artefact distributions beside Deep Creek (sections 2C and 2E)

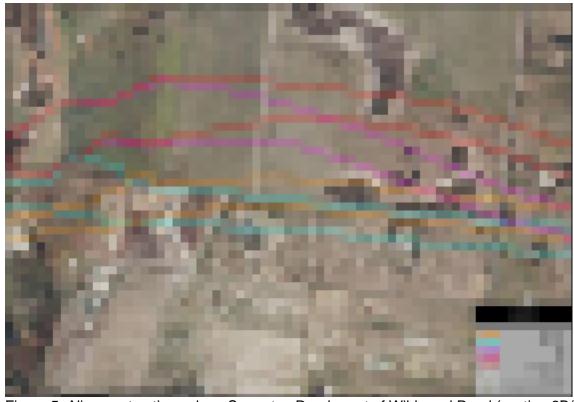


Figure 5: Alignment options along Somerton Road, west of Wildwood Road (section 2B/2C)

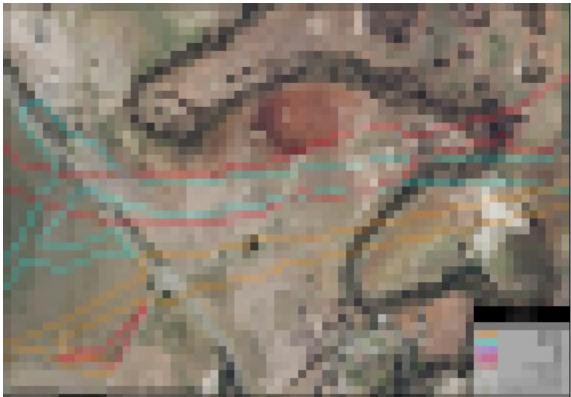


Figure 6: Alignment options at the crossing of Deep Creek, east of Sunbury Road (section 2C/2E)

3. Aims and methods

The testing had two specific aims: 1. to clarify the presence and extent of cultural remains in areas where ground conditions did not allow for the recording of material on the surface; and 2. to investigate the nature of cultural deposits at locations where sites had already been recorded. Despite the recording of numerous surface artefacts, it was unknown whether similar quantities were present in areas with more vegetation and less erosion. Also, the nature of recorded artefact scatters was unknown. It was first important to clarify whether these scatters had resulted from erosion and/or re-deposition, i.e. whether there were *in situ* cultural deposits below ground. Second, it was necessary to investigate the nature and significance of places where subsurface cultural deposits were identified.

To fulfil these aims, two main investigative methods were used. Areas of low visibility where archaeological deposits were suspected were tested by digging lines of small shovel probes or test holes (THs), typically 0.4m x 0.4m. Areas targeted using this method include topographic features such as escarpments, slope terraces and beside streams. This testing was carried out both in areas where there were no previously recorded surface finds and in proximity to previously recorded artefact scatters. The second method involved excavating larger pits measuring at least 1m x 1m (TPs), which were positioned within and near to known cultural deposits. By systematically excavating 1m² units, the nature and stratigraphy of cultural deposits were investigated, including soil conditions, the depth and condition of artefacts and contexts, and a sample of provenanced material culture was collected. This allowed for an assessment of the nature and significance of cultural deposits, especially to assess the context and attributes of material culture.

4. Results of test excavations

During ten days of fieldwork, 55 THs and 14 TPs measuring 1m² were excavated. Excavated locations were distributed across the study area, with TPs focusing on areas of previously recorded or suspected cultural deposits and some limited excavation of THs to verify the spatial extent of subsurface artefact deposits.

4.1 Section 2B - Somerton Road

Immediately west of Wildwood Road (section 2B), two north/south aligned transects (THs 001-008) and two TPs (01 and 02) were excavated to the north of Somerton Road.

an east/west aligned transect (THs 009-012) was excavated to the south of Somerton Road (Figure 9). No artefacts were found in any of these excavations, in which the soil consists of fine, pale brown silt overlying clay at depths of approximately 150mm in most places and 200-300mm in places where vegetation caused increased deposition and less erosion (Figure 7).

On the plain to the west of the eucalypt groves there is a transition in the soil type from light silt to dark, basaltic clay further west. The terrain is relatively flat with gentle undulations up until where the ground drops sharply to the west into a gulley that runs parallel with Deep Creek. Two transects were positioned on the escarpment (THs 013-020), aligned in a northwest/southeast direction in order to capture the upper part of the slope, the crest, and the area immediately behind (Figure 9). No artefacts were found in these eight THs, in which the soil consists of basaltic clay with low silt content and contains frequent, angular basalt rocks (Figure 8). Despite moderate ground visibility, and in some cases full visibility where