Proposed construction of a walking track between Jigamy Farm and Fisheries Flat, via Eden, NSW: Aboriginal cultural heritage due diligence assessment – Addendum August 2024



Ву

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with input from Tom Knight and Ben Cruse

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Report to Wolfpeak and Eden Local Aboriginal Land Council



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Introduction and background

This report is an Aboriginal heritage due diligence assessment in respect of two proposed realignments of an earlier route proposed for Node 1 of the Bundian Way walking track, between Jigamy Farm at Pambula Lake and Fisheries Flat in Twofold Bay in southern NSW. The two realignments comprise 320 metres of track at the northern end of the walking track, within land owned and managed by Eden LALC/ Twofold Aboriginal Corporation, and nine kms of new track from Pinnacles Beach, south to Worang Headland in Beowa National Park, owned and managed by NPWS.

The former realignment involves moving the walking track further away from the established youth camp on Jigamy Farm, as the original alignment went very close to the buildings, and could present a potential security risk.

The reasons for realignments within Beowa National Park are twofold. The first, for the track between the existing walking track at Pinnacles Beach and Terrace Beach track, is in response to NPWS comments on the draft Review of Environmental Factors (REF) prepared by Wolfpeak. NPWS was concerned about the impact of walkers on populations of hooded dotterels nesting on Pinnacles Beach. The second reason is to take walkers off the North Head Road between Terrace Beach track and Worang Point, to provide a more enriching experience by walking through tall open forests instead of on a road.

This report is an addendum to previous due diligence reports prepared for Node 1 of the Bundian Way (see Feary 2022a, b and c). These contain information in accordance with the requirements of the regulator, Heritage NSW, as outlined in the *Due Diligence Code of Practice for protection of Aboriginal objects in New South Wales* (DECCW, 2010). Information in the previous reports is not repeated in this current report, which must be read in conjunction with the earlier reports.

Acknowledgements

Thanks go to BJ Cruse, Miriam Wolstencroft and Twofold Aboriginal Corporation for organising and undertaking the field investigations for the youth camp component of this report. Thanks go to Tom Knight for agreeing to conduct the survey in Beowa National Park in my absence and to Stacey Muscat from Eden LALC for field assistance. Yully Forest from Creative Lines provided the route maps and Tim Stubbs from Wolfpeak provided background information.

'YOUTH CAMP' SECTION OF WALKING TRACK

1. Proposed works

The youth camp component of the walking track comprises approximately 320 metres of track realignment between Jigamy Creek and the boundary between Eden LALC land and the national park as shown in Figure 1. Specifications for track construction will be in accordance with that described in the initial due diligence report and REF.

2. Previous investigations

The initial survey for the Bundian Way was conducted in 2021 and its location in the vicinity of the youth camp is shown in Figure 2 (Feary, 2022). One site was found on/close to the proposed route in the area, comprising a single silcrete flake (labelled 'youth camp' in Figure 2). Because of the potential for other artefacts to be present, the report recommended monitoring during vegetation clearing for the track (mainly leaf litter) with a buffer, to avoid any artefacts (Feary, 2022). Figures 3 and 4 show the location of the isolated flake, and the silcrete flake respectively.



Figure 1: Proposed realignment 2024



Figure 2: Map showing location of site on walking track route



Figure 3: Environmental context of 'youth camp' artefact, on upper ridge crest



Figure 4" 'Youth camp' artefact

An amended alignment for the walking track between Jigamy Farm and The Pinnacles was surveyed in early 2022 by archaeologist Gerard Niemoeller. The amendment affected a small section of the walking track located within Eden LALC land (Figure 5). The route was unchanged in the vicinity of the recorded site, which was not re-located during the survey. No sites were found and the alignment was assessed as traversing landforms of low archaeological potential (Feary, 2022b).



Figure 5: Feburary 2022 realignment of northern section of walking track showing location of site 'youth camp'

3. Predictions

The landform affected by the proposed realignment of the walking track on Jigamy Farm is the midlower slope of a low flat-topped ridge line sloping gently towards the lake and bounded to the east and west by creek lines, of which Jigamy Creek is likely to be a permanent water source (Figure 6). Generally, such landforms have a low-medium potential for containing Aboriginal sites, being stone artefact scatters. The location is too far from the coastline to have potential for middens to be present. Culturally modified trees may be present if mature forest is still extant. Previous investigations have identified a single silcrete flake, however, ground visibility was poor and artefacts could be present.

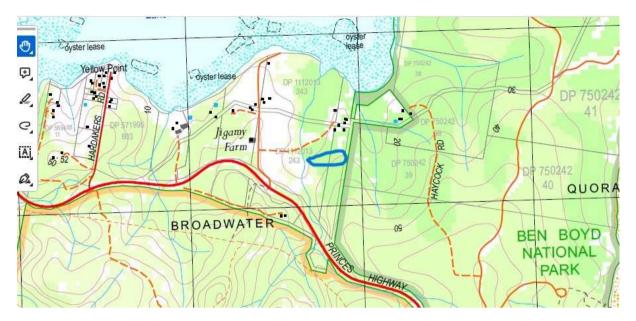


Figure 6: Map showing topographic details associated with the realignment

4. Field investigations

Field investigations were conducted on 30 May 2024 by a field crew including the CEO for Eden LALC, BJ Cruse (Eden LALC Heritage Officer), Eden LALC Board members Alison Simpson (also representing Twofold Bay Corporation) and Sarah Manton, Yully Forest and Owen Humphreys from Creative Lines and James Schlunke from Wolfpeak. The following information has been taken from a report on the investigation provided to Sue Feary by Twofold Aboriginal Corporation.

The field investigation involved the field crew walking a 300 metre long and 21 metre wide transect following a proposed realignment of the walking track as shown in Figure 1 above, and carefully inspecting the ground for stone artefacts and other evidence of pre- contact Aboriginal occupation and use. The 21 metre wide inspection corridor allowed for any deviations of the track to avoid artefacts and ensure they are not impacted during walking track construction.

It was noted that vegetation varied from approximately 40% relatively young growth open forest on raised ground and 60% low reaching tea tree forest and wetlands vegetation on lower ground. The latter area becomes a semi marsh land, particularly during the wet season, which reduces the potential for Aboriginal sites to be present.

- The survey did not identify any evidence of pre-contact Aboriginal occupation and the report made the following observations:
- the area assessed hosts no old growth trees for which scars or carvings could have existed; hence no tree scars or carvings were detected.
- There were no rocky outcrops within the nearby creek bed on the lands studied therefore no axe grinding grooves or rock engravings were located.
- The proposed development area contains no rock shelters for which hand stencils occur or where charcoal drawings have potential to exist.

- A search was made with zero findings for stone arrangements, stone manuports, stone flakes and stone artefacts or middens.
- due to 60% of the immediate location being a semi marsh place with more suitable areas for camps are within proximity, it is unlikely that Aboriginal sites would be present.

5. Conclusion and recommendations

On the basis of this survey and previous surveys, there are no constraints on cultural grounds to walking track construction on Jigamy Farm, providing the track is realigned to avoid the single artefact recorded in 2021.

Monitoring by members of Eden LALC during initial vegetation clearing is recommended for sections that that are elevated and well-drained. The track should be realigned to avoid any found artefacts, with at least a 3 metre buffer.

BEOWA NATIONAL PARK SECTION

6. Proposed works

It is proposed to construct approximately 9 kms of new walking track from the Pinnacles walking track in the north, to connect with the recently constructed section of the Bundian Way walking track in the south as shown in Figure 7.

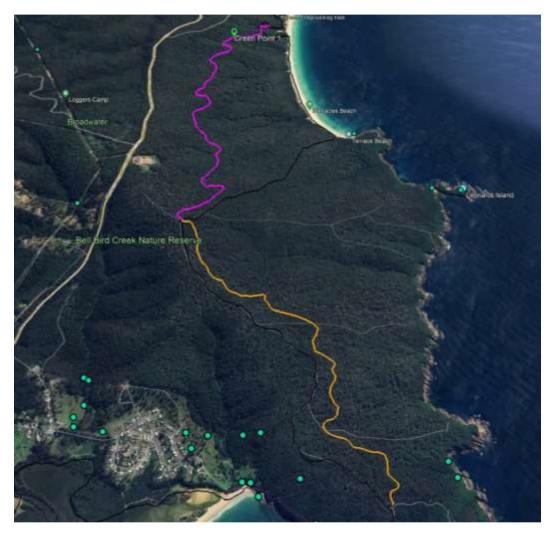


Figure 7: Proposed realignment of Bundian Way in Beowa National Park (purple and yellow lines)

Specifications for track construction will be in accordance with that described in the initial due diligence report and REF. The new track between Pinnacles and Terrace Beach track (northern section) is approximately 5 kms long and replaces an earlier proposal that traversed Pinnacles/Long Beach. The presence of nesting hooded dotterels required re-location away from the coastline to avoid disturbance to the birds.

The section of track from the Terrace Beach track, south towards Worang Point (southern section) replaces an earlier alignment which followed the existing North Head road to connect with the Terrace Beach track. The Eden LALC advised Wolfpeak that walkers would have a better experience

if they were able to walk through the forest rather than along the road. The new walking track is roughly parallel with and between 100 and 300 metres to the east of the road.

7. Previous investigations

The initial Aboriginal cultural heritage due diligence assessment for this section of the Bundian Way Node 1 followed a completely different alignment to the northern section realignment, being largely located along the beach or in clifftop heathlands (Figure 8). There has been no previous systematic investigation of the proposed realignment.

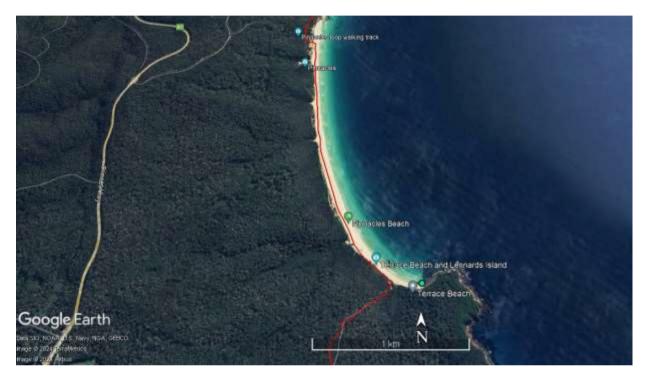


Figure 8: Map showing original alignment of Bundian Way along the back of the beach

Previous investigations involving landforms and vegetation comparable to that of the proposed realignment occurred during the 2021 survey from Jigamy Farm across to the Pinnacles (Feary, 2022a). A single artefact was found on Jigamy Farm and a possible scarred tree within Beowa National Park (Figure 9).



Figure 9: Results of 2021 survey from Jigamy Farm to Pinnacles

For the section south of the Terrace Beach track, the initial 2021 cultural heritage survey followed the existing unsealed road, and no artefacts were recorded (Feary, 2022a) (Figure 10). Despite the disturbed nature of unsealed roads, surveys on logging roads in timber production forests across southeastern NSW have been found to frequently contain artefacts because they are often the only places that provide any archaeologicial visibility (Byrne, 1983; 1984a and b; Feary, 1988).



Figure 10: North Head road

8. Predictions

The landscape of both the northern and southern section is dominated by gently sloping, flattopped west-east trending ridge lines, separated by a series of parallel creeks whose headwaters often intersect with the proposed walking track alignment. Such landforms – ridgelines and elevated, flat land near creeks - are generally considered to have medium to high potential for containing scatters of stone artefacts (DECCW, 2010). Open, near-coastal eucalypt forest also has potential for containing culturally modified trees if it has not been extensively logged.

In regard to the subject area, early assessments of the archaeology of near-coastal forests have suggested that sites (middens) tend to be found either on the immediate coastline, with artefact scatters, representing campsites, being found further inland, with something of a 'gap' in between (Byrne, 1984). This was shown to be the pattern during archaeological surveys for the upgrade of the Light to Light walk in the southern portion of Beowa National Park (Feary & Niemoeller, 2019).

Forest associated with the northern end of the realignment has been previously logged and contains few mature trees, whereas the forests associated with the southern realignment still contain large, mature eucalypts.

It can be predicted that small scatters of stone artefacts may be present, associated with flat-topped ridgelines and flat, elevated land near creek lines. Culturally modified trees may also be present in the southern section of the realignment.

9. Field investigation

Archaeological field investigations for the realignments were undertaken on 8-9 July 2024 by archaeologist Tom Knight, assisted by Stacey Muscat from Eden LALC. The information in this section has been taken from a report prepared by Tom Knight on his field observations and analysis.

The entire proposed realignments (approximately 10 kms) were inspected on foot with a transect 'search width' of approximately 6 metres. Figures 11 and 12 show the survey transect for the northern and southern sections respectively. The ground was carefully searched for stone artefacts where bare earth was exposed and all mature trees were inspected for cultural scarring. Archaeological visibility was documented and locations with archaeological potential were recorded. Note was made of factors causing ground disturbance and their likely impacts on artefact detection.

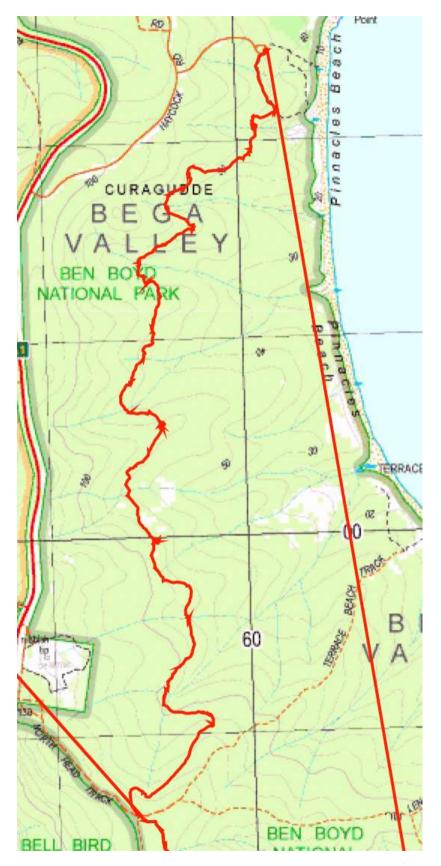


Figure 11: Northern realignment, Beowa NP between Pinnacles and Terrace Beach Track (red line)

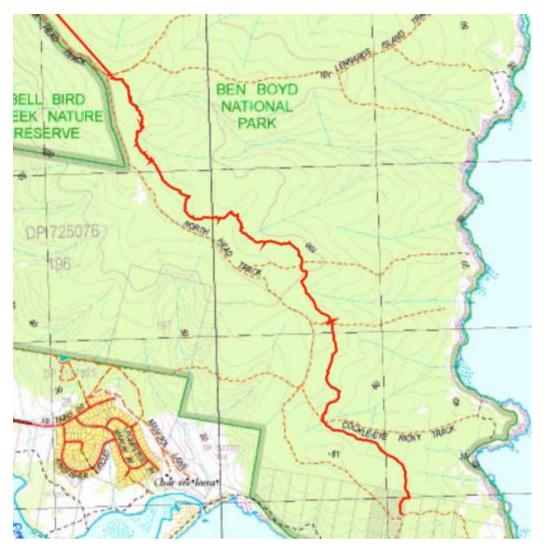


Figure 12: Southern realignment, Beowa NP between Terrace beach track and newly constructed Bundian Way (red line)

9.1. Results

One possible scarred tree was recorded during the survey, for which further investigation is required in order to determine its veracity. The tree will not be harmed or impacted in any way by the proposed walking track. Details of the tree are at Appendix 1. No other archaeological evidence was observed during the survey.

9.2. General description of landforms

The northern survey transect contoured mid- to upper-slope topography on the eastern side of the ridge line, approximately one kilometre to the west of the local coastline. Localised topographies encountered included simple slopes (upper ridge side), spur tops, crests and sides. Nine uppermost reaches of first and second order drainage lines were also encountered. Zones of higher disturbance from past land use (chiefly forestry) were noted in some places. The northernmost several hundred metres of the transect passed through an area previously planted to pine trees.

The southern section of the proposed re-alignment effectively ran along the eastern side of a broad, amorphous ridge between Worang Point in the south and the site of the Eden Rubbish Tip in the north. Within this greater topographic corridor (i.e. upper ridge side and upper slope) it took in more localised features such as spur crests, gently sloping spur sides and gentle simple slopes. Approximately five first order drainage lines were encountered, all at the headwaters within the highest points of the respective catchments.

9.3. Archaeological visibility and disturbance

Archaeological visibility was generally very low due to leaf litter and understorey shrubs and grasses, and restricted to occasional bare patches, animal digging and four wheel drive tracks that were crossed at points. These vehicle tracks provided comparatively very good surface visibility (albeit for a very limited extent) at points in the landscape where a slightly elevated archaeological potential might be expected (i.e. following natural Aboriginal pathways such as spur tops between the forest and the coastline), e.g. Cockle-eye Ricky track in the southern section (see Figures 13 to 17).

Previous disturbance to the landscape was generally quite low and restricted to parts of the northern transect. The heaviest levels of change evident within the local soils can be expected to occur in the form of natural mixing through bioturbation by vertebrates such as bandicoots and invertebrate action. Bioturbation is highly apparent across the entire landscape but most marked on lower lying low gradient surfaces such as creek flats and flat ridge tops. This has resulted in a 'microhummocky' terrain surface that is evidence of substantial mixing of upper soil levels at least (Figure 18).



Figure 13: Example of ground visibility, southern section - flat terrain



Figure 14: Example of ground visibility in Banksia/eucalypt forest, southern section



Figure 15: Improved visibility, Cockle-eye Ricky track



Figure 16 : Example of visibility on low lying, boggy terrain – northern section



Figure 17: Example of ground visibility adjacent to drainage line, northern section



Figure 18: Example of bioturbation

9.4. Archaeological potential

Four areas of archaeological potential were identified, all in the northern section of the proposed track realignment. Figure 19 shows the locations of areas of archaeological potential (Beowa 1-4). These were identified on the basis of landform elements.

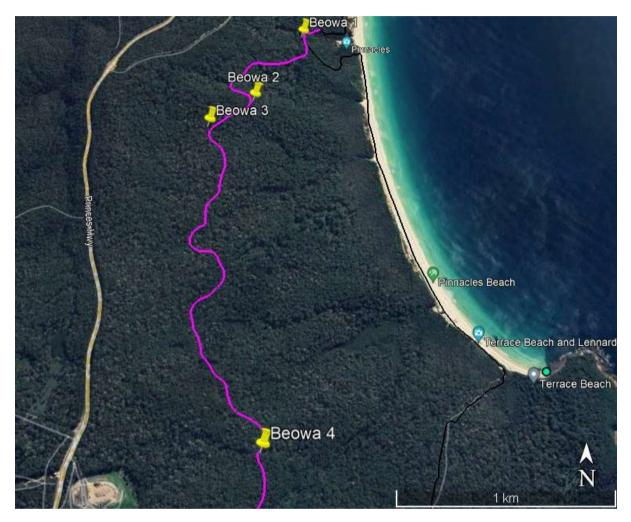


Figure 19: Locations of archaeological potential

Grid reference GDA94 Z 55 760079E 5902052N

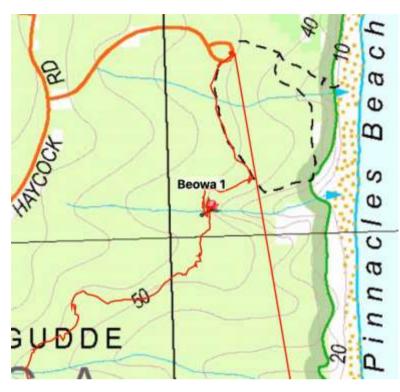


Figure 20: Eden 1:25K topographic map showing location of Beowa 1

Comprises a well incised first order drainage line with a concise low gradient spur top constituting its south bank. This position represents a zone archaeological potential within the local landscape. Of note is the presence of planted pine trees (now largely cleared) on the south side of the creek, indicating some level of disturbance.



Figure 21: South bank of drainage line, looking south. This position is a concise low gradient spur crest.

Grid reference GDA94 Z 55 7597619E 5901577N

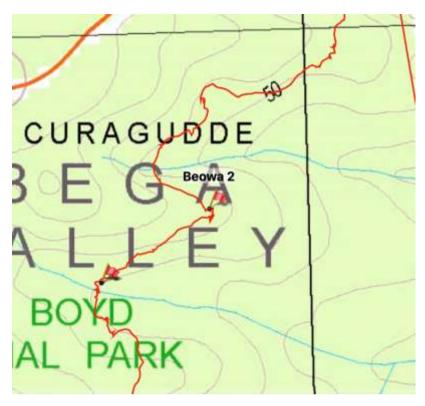


Figure 22 Eden 1:25K topographic map showing location of Beowa 2

Comprises a concise low gradient spur top with archaeological potential. Abundant bioturbation is apparent.





Grid reference GDA94 Z 55 7597498E 5901408N

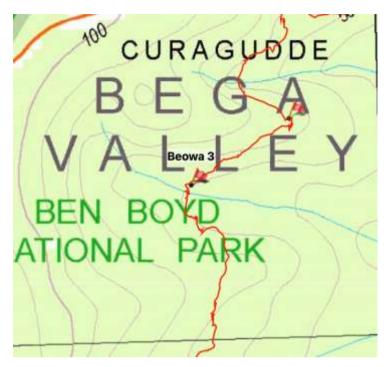


Figure 24 Eden 1:25K topographic map showing location of Beowa 3

Flat area which is locally uncommon and may have archaeological potential. A substantial degree of bioturbation is evident resulting in a 'micro-hummocky' terrain surface that is evidence of substantial mixing of upper soil levels at least.



Figure 25: Flat terrain, Beowa 3

Grid reference GDA94 Z 55 759676E 5899605N

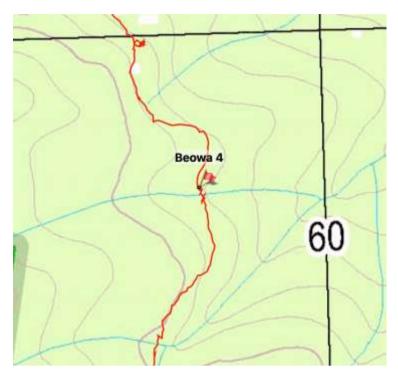


Figure 26 Eden 1:25K topographic map showing location of Beowa 4

Drainage line with level flanking terrain. This setting i.e. flats on both sides of the creek, has archaeological potential.



Figure 27: View from south side of drainage line looking north.

10. Conclusions and recommendations

On the basis of this survey and previous surveys, there are no constraints on cultural grounds to construction of the walking track along the proposed re-alignment in Beowa National Park. The archaeological investigation identified one possible scarred tree that is not on the realignment and will not be harmed.

Monitoring by members of Eden LALC during initial vegetation clearing should occur at the four locations of archaeological potential as described in Section 9.4 above. Monitoring should occur for at least 5 metres along the route on each side of grid reference. If artefacts are found, careful searches should be conducted to identify all artefacts in the near vicinity. The track should be adjusted to avoid the artefacts, with a suitable buffer. The adjusted route should be inspected to ensure no artefacts are present. If it is impossible to avoid the site, works will need to stop at this location and advice sought on the need for an Aboriginal Heritage Impact Permit (AHIP).

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Appendix 1: Possible scarred tree description

BST1 Potential Aboriginal Scarred Tree GPS refs 759534. 5899977

A potential cultural scar on the lower west-facing trunk of an old blackbutt tree. Scar dimensions are: 140cm long x 20cm wide x 25cm deep. Base of scar is 110cm above ground level. The tree is old and approximately 30m tall. Approximate trunk girth at breast height (DBH) is 3.6 metres.

The tree occurs to the immediate east/downslope of the proposed walking track corridor. Some areas of historical disturbance from forestry occur along the transect to the south of the scarred tree location.

