

EXTENT



TRIPOLI WAY EXTENSION

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

Prepared for Shellharbour City Council

2 May 2024 — Final 01



SYDNEY

MELBOURNE

BRISBANE

HOBART

**PEOPLE
CENTRED
HERITAGE**



EXTENT HERITAGE PTY LTD
ABN 24 608 666 306
ACN 608 666 306
accounts@extent.com.au
extent.com.au

SYDNEY
Level 3/73 Union Street
Pyrmont NSW 2009
T 02 9555 4000

MELBOURNE
Level 1, 52 Holmes Street
Brunswick East VIC 3057
T 03 9388 0622

BRISBANE
Level 2, 109 Edward Street
Brisbane QLD 4000
T 07 3051 0171

HOBART
Level 3, 85 Macquarie Street
Hobart TAS 7000
T 03 6144 5880

Document information

Extent Heritage project no.:	0222046
Client:	Shellharbour City Council
Project:	Tripoli Way Extension – Cultural Heritage Study
Site Location:	Tripoli Way, Albion Park
Author(s):	Catherine Fenech Hannah Morris

Document Control

Version	Internal reviewer	Date	Review type
Draft 01	Hannah Morris	11/02/24	QA
	Catherine Fenech	13/02/24	Client review addressed
Final	Oliver Macgregor	30/04/24	QA

Readers are advised that this report contains pictures of and information about deceased persons.

Copyright and moral right

Historical sources and reference materials used in the preparation of this report are acknowledged and referenced in figure captions or in text citations.

Unless otherwise specified in the contract terms for this project Extent Heritage Pty Ltd

- vests copyright of all material produced by EXTENT HERITAGE PTY LTD (but excluding pre-existing material and material in which copyright is held by a third party) in the client for this project (and the client's successors in title);
- Retains the use of all material produced by Extent Heritage Pty Ltd for this project for professional presentations, academic papers or publications.

EXECUTIVE SUMMARY

Shellharbour City Council propose to undertake development on approximately 5.7 ha of land to extend the existing road of Tripoli Way (hereafter, referred to as the 'study area'). This extension would traverse and extend the existing Tripoli Way and The Expressway alignment running parallel and to the north of Tongarra Road/Illawarra Highway. The project encompasses the full length and surrounding area of the existing Tripoli Way and continues east to link into Terry Street/Illawarra Highway and west to link into Tongarra Road/Illawarra Highway at the intersection of Broughton Avenue. The project aims to alleviate traffic impacts through the Albion Park Township which are anticipated to increase due to predicted traffic growth along Tongarra Road, both from background traffic and current and future land development in the local area from townships including Calderwood, Tullimbar, and Albion Park.

Extent Heritage Pty Ltd (Extent Heritage) have been engaged by Shellharbour City Council to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) to identify any Aboriginal object, places, or cultural heritage values within the proposed study area of the Tripoli Way Extension. The results of the Aboriginal archaeological testing program documented in this report will be used to inform the management measures for the Tripoli Way Extension.

Key findings

- The test excavation program investigated TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton Road.
- The investigation revealed Aboriginal archaeological remains across TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton comprise low-density background scatters.
- One isolated surface artefact, Tulkeroo ISO: ground edge axe (AHIMS ID 52-5-0961), was identified as having been imported to the site with a deposit of introduced gravels.
- All the identified artefacts and assemblages, and their wider sites, were assessed as having low scientific value due to the limited assemblage which restricted detailed analysis and information that could contribute substantially to the understanding of Aboriginal archaeology and cultural heritage in the region.
- The study area was determined to have low aesthetic and historical significance, but Community consultation acknowledged the social important of the continued occupation of the wider Illawarra area and use of its resources over many generations.
- No archaeological investigations of TWE_PAD3 and TWE_PAD4 were carried out as they would not be impacted by the proposed development. These two areas still hold archaeological potential and unknown significance.
- Based on the current Masterplan, three identified Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, and Eastern Transect. One site would be fully impacted: Tulkeroo ISO: ground edge axe.

Recommendations

The following recommendations are made based on the identified potential for Aboriginal heritage impact and the statutory requirements of the *Code of Practice* (DECCW 2010b):

1. Where possible, impacts to identified Aboriginal sites should be avoided.
2. An AHIP is required to authorise harm to the Aboriginal sites located within the study area. These sites cannot be impacted until an approved AHIP has been obtained, and all impacts must conform with the AHIP conditions.
3. If the proposed project design changes during the course of the project and this results in changes to the anticipated impacts to TWE_PAD3 and TWE_PAD4 or any other Aboriginal site, further archaeological assessment must be undertaken prior to harm.
4. If changes are made to the proposed works which result in impact to locations outside of the current study area, further archaeological investigation and survey may be required.
5. No surface artefacts were identified during this archaeological investigation. However, if any were to be identified in the future, Aboriginal representatives must be given an opportunity to collect them prior to the commencement of construction works.
6. An appropriate Keeping Place or reburial site must be determined for permanent storage of the Aboriginal objects collected during the test excavation program. The permanent storage location must be chosen in consultation with the RAPs.
7. If unexpected Aboriginal objects are uncovered during construction, and impact to these objects is not permitted under the AHIP, work must cease and a qualified archaeologist and Heritage NSW must be informed to determine whether further Aboriginal heritage assessment or permit approvals are required.
8. If suspected human remains are located during any stage of the proposed works, work must stop immediately, and the NSW police and Heritage NSW must be notified.

CONTENTS

Executive Summary	i
Location of information for AHIP purposes	x
1. Introduction	1
1.1. Project overview	1
1.2. The study area	1
1.3. Proposed works	3
1.4. Approach and methodology	7
1.5. Authorship	7
2. Planning Context	8
2.1. Commonwealth legislation.....	8
2.2. State legislation.....	9
Environmental Planning and Assessment Act 1979 (NSW)	10
3. Aboriginal Stakeholder Consultation.....	11
3.1. Consultation process in NSW.....	11
3.2. Identification of RAPs	11
3.3. Assessment methodology	12
3.4. Participation in field survey.....	12
3.5. Test excavation methodology.....	12
3.6. Participation in test excavations.....	12
3.7. Review of the ACHAR.....	13
4. Landscape Context	13
4.1. Hydrology.....	13
4.2. Geology and topography	17
4.3. Soil landscape	19
4.4. Past vegetation	20
5. Research background.....	21
5.1. Aboriginal histories.....	21
5.2. Regional history	32
5.3. AHIMS search results	33
5.4. Review of previous studies.....	39
5.5. Predictive model	47

5.6.	Discussion.....	49
6.	Survey Methodology.....	52
6.1.	Aims.....	52
6.2.	Survey personnel.....	52
6.3.	Survey sampling strategy	53
6.4.	Survey procedure	59
6.5.	Site definitions and recording.....	66
7.	Archaeological potential.....	67
7.1.	Potential archaeological deposits	67
7.2.	Comparative areas	69
7.3.	Summary.....	71
8.	Archaeological test excavation.....	72
8.1.	Aims.....	72
8.2.	Sample strategy and coverage.....	72
8.3.	Excavation procedure	76
8.4.	Test excavation results	78
8.5.	Ground disturbance	85
8.6.	Soil profiles	86
8.7.	Summary.....	89
9.	Excavation results	90
9.1.	Lithic analysis	90
9.2.	Artefact analysis.....	91
9.3.	Results.....	93
9.4.	Tulkeroo ISO: ground edge axe	95
9.5.	Summary.....	95
10.	Analysis and discussion.....	95
10.1.	TWE_PAD1 (AHIMS ID 52-5-1123).....	95
10.2.	Summary	96
10.3.	TWE_PAD2 (AHIMS ID 52-5-1122).....	96
10.4.	Summary	97
10.5.	TWE Eastern Transect (AHIMS ID 52-5 1130).....	97
10.6.	Summary	97
10.7.	Hamilton Road.....	98

10.8.	Summary	98
10.9.	Discussion	98
10.10.	Revised site extents	100
11.	Post excavation tasks	103
11.1.	Test excavation report.....	103
11.2.	Artefact analysis	103
11.3.	Site recording form	103
11.4.	Management of recovered Aboriginal objects.....	103
12.	Significance assessment.....	104
12.1.	Assessment criteria.....	104
12.2.	Significance assessment	105
12.3.	Scientific significance	105
12.4.	Historic significance	105
12.5.	Aesthetic significance	106
12.6.	Social significance	107
12.7.	Statement of significance.....	108
13.	Impact assessment	109
13.1.	Proposed development.....	109
13.2.	Avoidance and minimisation of impacts.....	110
13.3.	Potential Aboriginal heritage impact.....	111
14.	Management and mitigation strategy.....	115
14.1.	Guiding principles	115
14.2.	Aboriginal Heritage Impact Permit	115
14.3.	Unexpected finds	116
14.4.	Discovery of human remains	116
15.	Conclusions.....	117
15.1.	Key findings.....	117
15.2.	Recommendations.....	117
16.	References.....	119
17.	Abbreviations.....	126
18.	Glossary	128
	Appendix A. Archaeological Context and AHIMS information	130
	A.1. Site type information.....	130

A.2. AHIMS search	133
A.3. Individual site cards.....	134
Appendix B. Consultation record.....	135
Appendix C. Test excavation methodology	136
Appendix D. Archaeological test excavation report and lithics report.....	137
Appendix E. Management methodologies	138
E.1. Community collection methodology	138
E.2. Reburial methodology	138

LIST OF TABLES

Table 1. List of Registered Aboriginal Parties.....	11
Table 2. Aboriginal site officers participating in the archaeological survey.....	12
Table 3. Summary of participants in the test excavation program.....	12
Table 4. Summary of AHIMS features.	33
Table 5. AHIMS sites located within 200m of the study.....	35
Table 6. Summary of AHIMS features clustered along Hazleton Creek, directly south of the study area.....	35
Table 7. Anticipated justification by Extent Heritage for identification of PAD locations determined by Biosis (2021).	39
Table 8. Participants in archaeological survey.....	52
Table 9. Survey units and attributes	53
Table 10. Landform coverage.....	54
Table 11. Summary of sample area.....	73
Table 12. Artefact distribution across test pits	91
Table 13. Spatial distribution of artefacts across PAD1.....	93
Table 14. Spatial distribution of artefacts recovered from TWE_PAD2	93
Table 15. Spatial distribution of artefacts recovered from Hamilton Road	94
Table 16. Summary of scientific significance	109
Table 17. Impact to known Aboriginal archaeological remains.....	112
Table 18. Aboriginal site feature definitions	130

LIST OF FIGURES

Figure 1. Study area.....	3
Figure 2. Study area showing impacts (western portion).	4
Figure 3. Study area showing impacts (central portion).	5
Figure 4. Study area showing impacts (eastern portion).....	6

Figure 5. Map showing key waterways in the vicinity of the study area: Macquarie Rivulet, Frazer's Creek, Hazleton Creek, and unnamed tributaries.....	15
Figure 6. Indicative location of waterways identified in the 1949 aerial of the study area. No waterways on the northern side of Macquarie Rivulet have been mapped	15
Figure 7. Indicative location of waterways in 1949 against modern waterways. No waterways on the northern side of Macquarie Rivulet have been mapped.....	16
Figure 8. Map showing approximate area of channelisation of Hazleton Creek (white bracket).	16
Figure 9. Map showing approximate area of Lake Illawarra during the High Holocene (~7,000 to 2,000 BP) (source: GML Section 2.3.3 with Extent Heritage additions).	17
Figure 10. Overview of topographic map of the study area (10m contours), showing foothills of Mount Johnston (top-left) and Stockyard Mountain (centre-bottom).	18
Figure 11. Detail of topographic map of the study area (2m contours), showing foothills of Mount Johnston (top-left) and Stockyard Mountain (centre-bottom).	19
Figure 12. Soil landscapes surrounding the study area	20
Figure 13. Language groups of the NSW south coast according to Tindale (Tindale 1974).....	22
Figure 14. c.1848 lithograph of Condon's Creek depicting Aboriginal people (probably the Wodi Wodi group) fishing at Bass Point, in a stream to a beach that is probably modern-day Killalea Lagoon. By Captain Robert Westmacott (https://antiqueprintmaproom.com/product/condon-s-creek/).....	24
Figure 15. Waterolour by Gritten, H. (1860). <i>First Nations Communities in the Illawarra</i> . Kiama Library.	26
Figure 16. Holden, RH. (1875). <i>Earliest known portrait of King Mickey Johnson</i> . National Library of Australia.	30
Figure 17. Unknown Photographer. (1896). <i>Micky Johnson</i> . National Portrait Gallery.....	31
Figure 18. Ground edge axe (AHIMS ID 52-5-0961) (Biosis 2021, plate 9-10).	34
Figure 19. Results of extensive AHIMS search	37
Figure 20. Location of AHIMS sites in the vicinity of the study area.	38
Figure 21. Areas of archaeological sensitivity as identified by Biosis (2021).	40
Figure 22. Location of archaeological assessments in the vicinity of the study area. Note: works undertaken by Navin Officer (2002) are within the Kayandel (2008) works area.	41
Figure 23. AHIMS sites and excavations along Hazleton Creek, in the vicinity of the study area.....	43
Figure 24. Area of archaeological investigation by Past Traces Heritage Consultants (2019).	44
Figure 25. Artefact Heritage (2015) Albion Park Rail Bypass project boundary, with associated AHIMS sites.....	46
Figure 26. Detail of Artefact Heritage (2015) Albion Park Rail Bypass project boundary, with associated AHIMS sites.	46
Figure 27. Arbitrary buffer along waterways most prominent in the 1949 aerial, located both inside and outside the study area. Second order waterways with buffer of 50m and Macquarie Rivulet with a buffer of 100m (source: Extent Heritage 2023).	50
Figure 28. Areas of sensitivity within the study area based on proximity to water. Level of Lake Illawarra during the High Holocene also shown for reference (source: Extent Heritage 2023).	51
Figure 29. Location of survey units.....	55
Figure 30. Landforms associated with SU1, SU2, SU3, and SU4.....	56
Figure 31. Landforms associated with SU4, SU5, SU6, SU7, SU9, and SU9.....	57

Figure 32. Landforms associated with SU8, SU9, and SU10	58
Figure 33. Location of SU1 and area traversed during survey	61
Figure 34. Location of SU2 and area traversed during survey	62
Figure 35. Location of SU3 and area traversed during survey	62
Figure 36. Location of SU4 and area traversed during survey	63
Figure 37. Location of SU5 and area traversed during survey	63
Figure 38. Location of SU6 and area traversed during survey.	64
Figure 39. Location of SU7 and area traversed during survey	64
Figure 40. Location of SU8 and area traversed during survey	65
Figure 41. Location of SU9 and area traversed during survey.	65
Figure 42. Location of SU10 and area traversed during survey.	66
Figure 43. Area of archaeological sensitivity at western portion of study area: TWE_PAD1 and TWE_PAD2 (Extent Heritage 2023).	69
Figure 44. Area of archaeological sensitivity and additional transect area at eastern portion of study area: TWE_PAD3, TWE_PAD4, and Eastern Transect (Extent Heritage 2023).	70
Figure 45. Location of Hamilton Road area of archaeological investigation (Extent Heritage 2023)	70
Figure 46. Areas of investigation within the study area based on topography and proximity to water (Extent Heritage 2023).	71
Figure 47. Location of test pits across TWE_PAD1. Test pits not to scale	74
Figure 48. Location of test pits across TWE_PAD2. Test pits not to scale.	75
Figure 49. Location of test pits across Eastern Transect. Test pits not to scale.	75
Figure 50. Locations of test pits across Hamilton Road. TP56 was abandoned due to disturbance and identification of fills. Test pits not to scale.	76
Figure 51. The field team undertaking testing in TWE_PAD2 south of Hazelton Creek (NearMaps 5/12/2023).	77
Figure 52. The field team sieving along Hazelton Creek, TWE_PAD2	78
Figure 53. TWE_PAD1 looking west across the entire PAD area to Hazelton Creek.	79
Figure 54. TWE_PAD1 looking west to Hazelton Creek showing informal vehicle track.	79
Figure 55. TWE_PAD1 looking west showing storage of farming equipment and materials.	79
Figure 56. TWE_PAD1 looking west showing Hazelton Creek and associated riparian corridor.	79
Figure 57. TWE_PAD2 looking west, parallel to Hazelton Creek.	80
Figure 58. Exposure along Hazelton Creek, TWE_PAD2 looking north.	80
Figure 59. TWE_PAD2 looking east, along Hazelton Creek.	80
Figure 60. Tributary at the western extent of TWE_PAD2. Looking southwest to Tongarra Road. ...	80
Figure 61. Eastern portion of TWE_PAD2, looking east, approximate location of TP17-19	81
Figure 62. Northeastern extent TWE_PAD2 looking south. Approximate location of TP12.	81
Figure 63. TWE_PAD2 looking south in approx. location of TP12-15.	81
Figure 64. Eastern portion of TWE_PAD2 looking east, approximate location of TP20.	81
Figure 65. TWE_PAD2 looking east, overview of approximate location of TP21-27.	81
Figure 66. TWE_PAD2 asphalt vehicle access track. Approximate location of TP30 looking east.	81
Figure 67. TWE_PAD2 asphalt vehicle access track and crossing of Hazelton Creek looking east. ...	82
Figure 68. TWE_PAD2 asphalt vehicle access track and power poles. Overview of approximate location of 28-31 looking northeast.	82

Figure 69. Eastern transect looking northwest.....	82
Figure 70. Eastern transect looking south along Illawarra Highway.....	82
Figure 71. View along Illawarra Highway facing northeast	83
Figure 72. View of the Eastern transect, facing northwest.....	83
Figure 73. Hamilton Road excavation area showing fence lines (extent of study area) on either side, location of stormwater drain, and vegetation at the top of the gully of Macquarie Rivulet, facing north.....	84
Figure 74. Hamilton Road excavation area showing fence lines (extent of study area) on either side, location of stormwater drain, and vegetation at the top of the gully of Macquarie Rivulet, facing north.....	84
Figure 75. Hamilton Road showing TP57, with TP56 back-left and TP58 back-right, facing west.....	85
Figure 76. Hamilton Road showing TP58, with TP57 back-left and TP56 back-right, facing east.....	85
Figure 77. TWE_PAD_1: location of proposed test pits across Albion Park and Fairy Meadow soil landscapes	86
Figure 78. TWE_PAD_2: location of proposed test pits across Albion Park and Fairy Meadow soil landscapes.....	87
Figure 79. Eastern Transect: location of proposed test pits across the Fairy Meadow soil landscape.....	87
Figure 80. Hamilton Road: location of proposed test pits across the Fairy Meadow soil landscape.....	88
Figure 81. Revised extent of TWE_PAD	101
Figure 82. Revised extent of TWE_PAD2.	101
Figure 83. Revised extent of Hamilton Road	102
Figure 84. Revised extent of the Eastern Transect.....	102
Figure 85. Areas of proposed impacts overlaying study area (Shellharbour City Council).	110
Figure 86. Area of proposed impacts in relation to areas of identified archaeology.	113
Figure 87. Proposed AHIP application area.....	114
Figure 88. Approximate artefact reburial location recommended by Extent Heritage, marked with yellow circle.	140

LOCATION OF INFORMATION FOR AHIP PURPOSES

Aboriginal cultural heritage assessment report key information checklist

	Key information	Report part
1	Identification of restricted information	To be updated in final version if applicable
2	Identification of confidential information	To be updated in final version if applicable
3	Copyright owner	Document control page
	Indemnification of persons using the report	Document control page
4	Description of the proposed activity	Section 1.3
5	Proposed term of the AHIP (staging and timing of proposed activity)	See AHIP application
6	Description of the area where the proposed activities are to be undertaken	Section 1.2
	Description of environment/landscape	Section 4
	Topographic map showing the land to which the AHIP application applies	Figure 87
7	Description and identification of Aboriginal objects and AHIMS sites	Section 9, Section 10
	Map of heritage values and associated landscape elements	Figure 86Figure 86. Area of proposed impacts in relation to areas of identified archaeology.
	Description of past and/or current Aboriginal land use	Section 5
	AHIMS site numbers	Table 17
8	Details of other AHIP applications within the subject area	N/A
9	Details of the Aboriginal community consultation process	Section 3 and Appendix B
	Associated documented evidence	Appendix B
	List of registered Aboriginal parties	Section 3 and Appendix B
	Copies of submissions received, issues raised and responses	Appendix B
10	Statement of significance of the cultural heritage values	Section 12.7
11	Description of the actual or likely harm	Section 13.3
12	Description of the measures to avoid harm	Section 13.2

1. INTRODUCTION

1.1. Project overview

Shellharbour City Council propose to undertake development on approximately 5.7 ha of land to extend the existing road of Tripoli Way (Figure 1) (hereafter, referred to as the 'study area'). This extension would traverse and extend the existing Tripoli Way road and The Expressway alignment running parallel and to the north of Tongarra Road/Illawarra Highway. The project encompasses the full length and surrounding area of the existing Tripoli Way and continues east to link into Terry Street/Illawarra Highway and west to link into Tongarra Road/Illawarra Highway at the intersection of Broughton Avenue. The project aims to alleviate traffic impacts through the Albion Park Township which are anticipated to increase as a result of predicted traffic growth along Tongarra Road, both from background traffic and current and future land development in the local area from townships including Calderwood, Tullimbar, and Albion Park.

Extent Heritage Pty Ltd (Extent Heritage) have been engaged by Shellharbour City Council to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) to identify any Aboriginal object, places, or cultural heritage values within the proposed study area of Tripoli Way. The results of this assessment will be used to inform the development of a master plan for the Tripoli Way extension.

1.2. The study area

The study area (Figure 1) is located on the northern side of Tongarra Road and Illawarra Highway, at the northern extent of Albion Park. It lies within the boundaries of the Shellharbour Local Government Area (LGA) and Illawarra Local Aboriginal Land Council (LALC). The study area is within the county of Camden and Jamberoo Parish.

The study area comprises all or part of the following land parcels:

LOT 2 / DP 1250747	LOT 2 / DP 714125
LOT 1178 / DP 1202087	LOT 3 / DP 714125
LOT 68 / DP 253407	LOT 10 / DP 1151689
LOT 1 / DP 559819	LOT 31 / DP 1237947
LOT 2 / DP 736092	LOT 25 / DP 1237947
LOT 11 / DP 1205733	LOT 26 / DP 1237947
LOT 12 / DP 1205733	LOT 61 / DP 30476
LOT 0 / SP 88106	LOT 1179 / DP 20287

LOT 0 / SP 47846	LOT 33 / DP 253407
LOT 1 / DP 628732	LOT 32 / DP 253407
LOT 10 / DP 536561	LOT 31 / DP 253407
LOT 24 / DP 1138317	LOT 30 / DP 253407
LOT 2 / DP 220429	LOT 24 / DP 30705
LOT B / DP 38838	LOT 25 / DP 30705
LOT 23 / DP 1138317	LOT 26 / DP 30705
LOT 220 / DP 1138309	LOT 27 / DP 30705
LOT 21 / DP 1107336	LOT 28 / DP 30705
LOT 0 / SP 94622	LOT 29 / DP 30705
LOT 1 / DP 225240	LOT 34 / DP 30705
LOT 2 / DP 225240	LOT 25 / DP 225240
LOT 3 / DP 225240	LOT 24 / DP 225240
LOT 4 / DP 225240	LOT 22 / DP 225240
LOT 5 / DP 225240	LOT 21 / DP 225240
LOT 6 / DP 225240	LOT 20 / DP 225240
LOT 7 / DP 225240	LOT 19 / DP 225240
LOT 1 / DP 1251688	LOT 18 / DP 225240
LOT 0 / SP 104542	LOT 102 / DP 547372
LOT 3 / DP 605111	LOT 101 / DP 547372
LOT 1 / DP 38838	LOT 14 / DP 225240
LOT 15 / DP 248001	LOT 13 / DP 225240
LOT 1 / DP 1069961	LOT 12 / DP 225240
LOT 1 / DP 1119325	LOT 11 / DP 225240
LOT 4 / DP 714125	LOT 2 / DP 38838
LOT 1 / DP 714125	



Figure 1. Study area

1.3. Proposed works

The proposed development would involve construction works associated with the development of the Tripoli Way Extension, including bulk earthworks, construction of infrastructure (roads, footpaths, stormwater, etc.), environmental controls, and landscaping.

Proposed works were extended to include a temporary compound outlined in Figure 2. Works within this additional space consist of impacts restricted to top soil clearing to a maximum depth of 150 mm.

The primary objective of this project is to alleviate congestion on the Illawarra Highway in Albion Park by establishing an uninterrupted travel route connecting Terry Street in the east to Broughton Avenue in the west, effectively bypassing the town centre. This will involve the extension, widening, and improvement of both Tripoli Way and The Expressway in Albion Park. Currently, Tripoli Way stretches from Hamilton Road to Calderwood Road, while The Expressway spans from Moles Street to Calderwood Road. Upon completion, the project will provide a continuous transportation route for vehicles, running from the Broughton Street/Illawarra Highway intersection in the west to Terry Street/the Illawarra Highway in the east, effectively avoiding the Albion Park Town Centre.



Figure 2. Study area showing impacts (western portion).

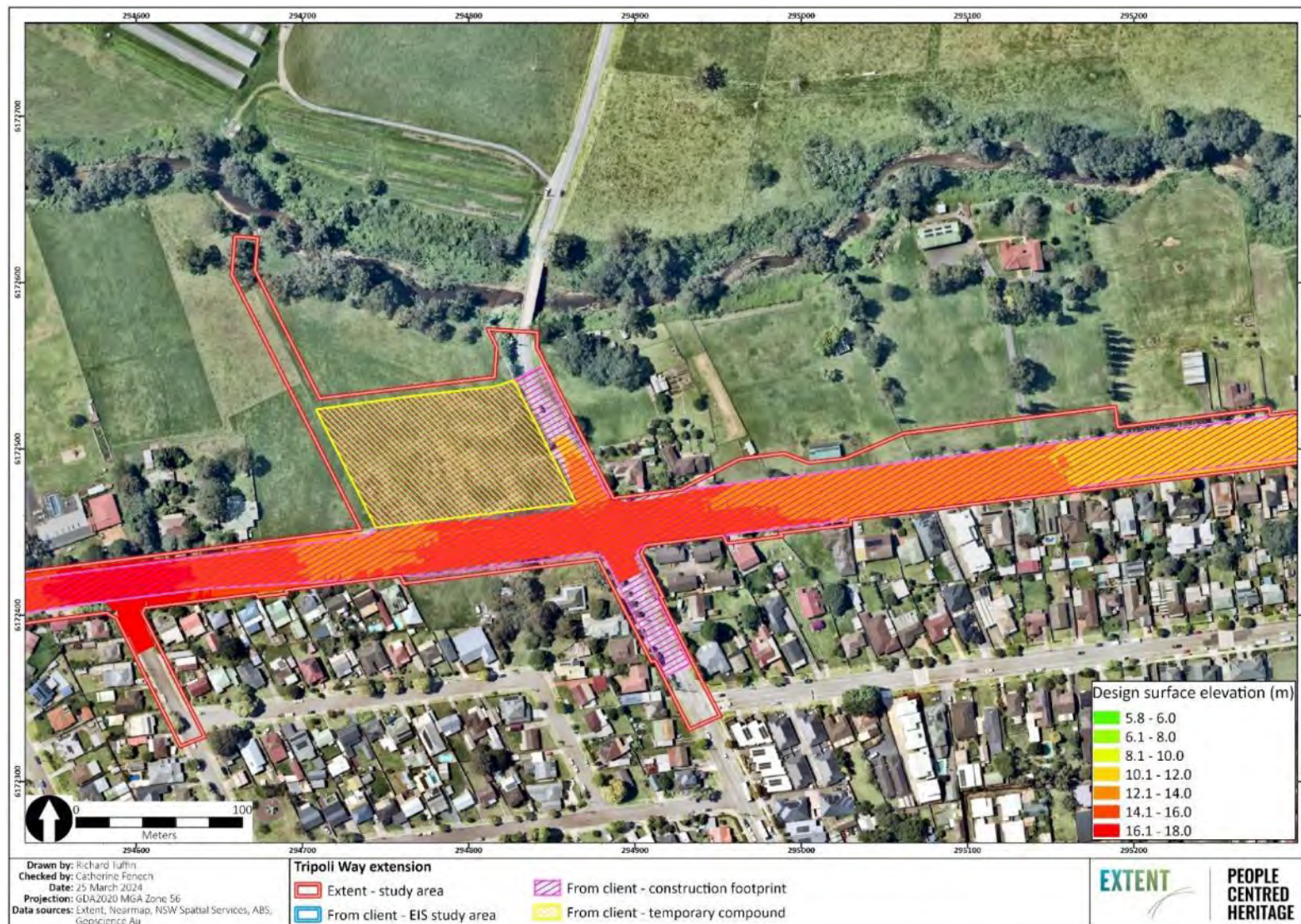


Figure 3. Study area showing impacts (central portion).

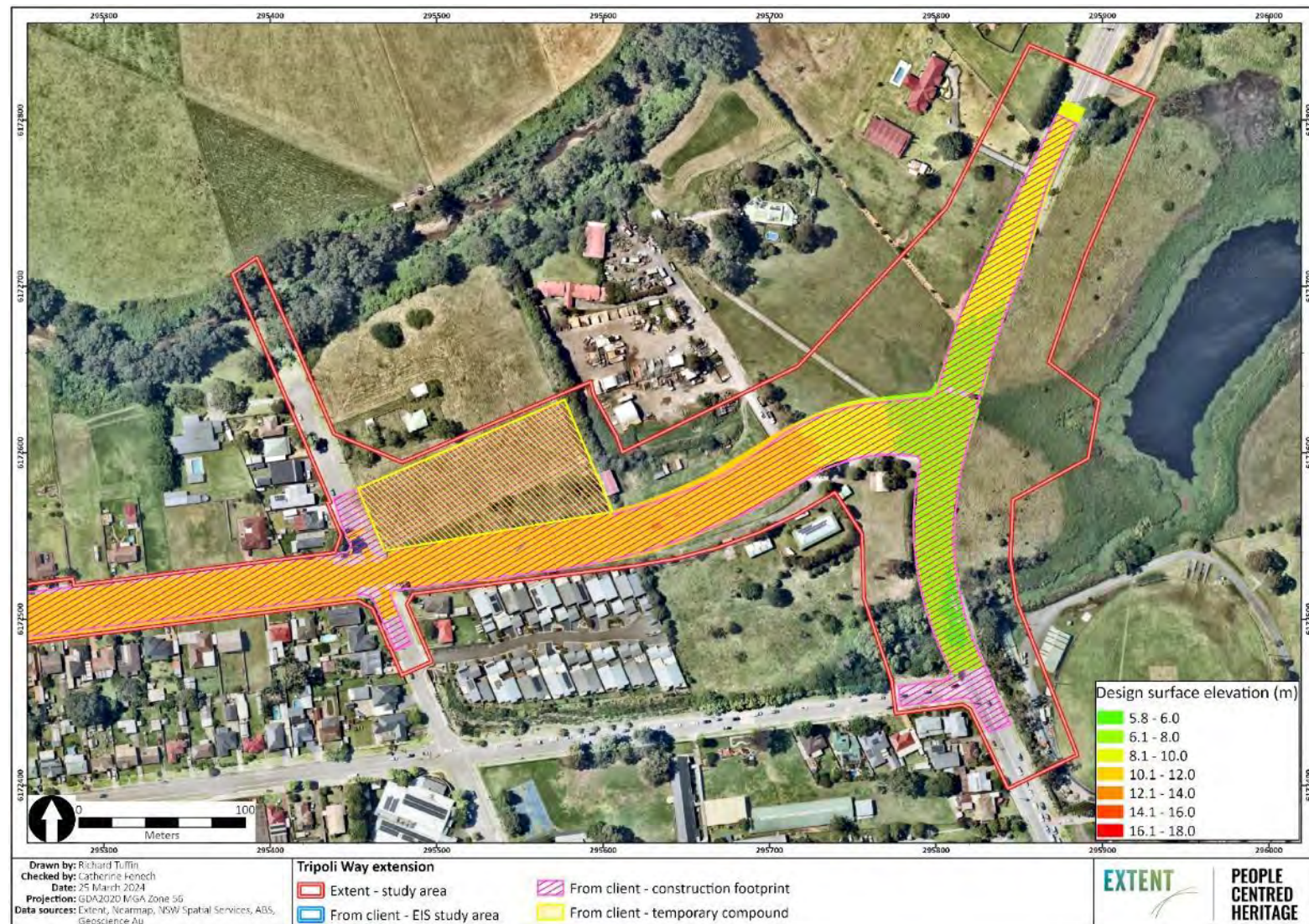


Figure 4. Study area showing impacts (eastern portion).

1.4. Approach and methodology

This ACHAR has been prepared in accordance with the:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010 (the Code of Practice) (Department of Environment Climate Change and Water [DECCW] 2010a).
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW [the Guide] (OEH 2011).
- Aboriginal cultural heritage consultation requirements for proponents 2010 [the Consultation Requirements] (DECCW 2010b).
- The Burra Charter 2013 (Australia ICOMOS 2013).

The objectives of this report are to:

- Identify the Aboriginal cultural heritage values of the study area, including archaeological and cultural values.
- Assess the significance of any identified values.
- Identify Aboriginal cultural heritage values that may be impacted by the proposed works, including consideration of cumulative impacts, and measures to avoid significant impacts.
- Ensure appropriate Aboriginal community consultation in the assessment process.
- Identify any recommended further investigations, mitigation and management measures required.

To satisfy the objectives of this report, the following tasks will be completed:

- Review of existing archaeological data, including assessments previously completed within the vicinity of the study area and relevant heritage databases.
- Investigate the environmental context of the study area.
- Synthesise background information into a predictive model to inform an assessment of archaeological potential across the study area.

Complete a full coverage survey of the study area to test the results of the predictive model and further inform an assessment of archaeological potential.

1.5. Authorship

This report was authored by Hannah Morris (Senior Heritage Advisor, Extent Heritage) and Catherine Fenech (Heritage Advisor, Extent Heritage), with review by Dr Oliver Macgregor.

2. PLANNING CONTEXT

The study area is subject to several legislative acts and statutory controls that govern the management of environmental heritage. An overview of the legislation relevant to heritage matters is provided below.

2.1. Commonwealth legislation

2.1.1. Native Title Act 1993 (Cth)

The Native Title Act 1993 (Cth) (NTA) recognises the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs. Section 24KA of the Native Title Act 1993, requires that native title claimants are notified of any 'future act' which may result in a change in land use for Crown lands affected by claims. 'Future act' is defined in section 233 of the Act as a proposed activity or development on land and/or waters that may affect native title, by extinguishing (removing) it or creating interests that are inconsistent with the existence or exercise of native title. If after one month there was no response, then the proponent will be deemed to have fulfilled their obligations under the Act.

A search of the National Native Title Tribunal database was completed on 5 July 2022. There is currently one Native Title claims registered which covers the study area and broader southeast coastline. The Native Title claim was entered to the register on 31 January 2018 by the South Coast People. The Tribunal file number is NC2017/003, the Federal Court file number is NSD1331/2017. No determination appears to have been made regarding the claim.

2.1.2. Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) took effect on 16 July 2000. Subsequently, the *Environment and Heritage Legislation Amendment Act (No.1) 2003* amends the EPBC Act to include 'national heritage' as a matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

Under Part 9 of the EPBC Act, any action that is likely to have a significant impact on a matter of National Environmental Significance (known as a controlled action under the Act), may only progress with approval of the Commonwealth Minister for the Department of the Environment (DoE). An action is defined as a project, development, undertaking, activity (or series of activities), or alteration. An action will also require approval if:

- It is undertaken on Commonwealth land and will have or is likely to have a significant impact on the environment on Commonwealth land; and,
- It is undertaken by the Commonwealth and will have or is likely to have a significant impact.

The EPBC Act defines 'environment' as both natural and cultural environments and therefore includes Aboriginal and historic cultural heritage items. Under the Act protected heritage items are listed on the World Heritage List (WHL), NHL (items of significance to the nation) or the CHL (items belonging to the Commonwealth or its agencies). These last two lists replaced the Register of the National Estate (RNE). The RNE is no longer a statutory list; however, it remains available as an archive.

A search of the heritage databases was completed on 5 July 2022 summary of register searches is outlined below:

- WHL: No listed items are located within the study area.
- NHL: No listed items are located within the study area.
- CHL: No listed items are located within the study area.

RNE: No listed items are located within the study area.

2.2. State legislation

2.2.1. National Parks and Wildlife Act 1974 (NSW)

The *National Parks and Wildlife Act 1974* (NSW) (NPW Act), administered by Heritage NSW, provides protection to all Aboriginal places and objects in NSW. The NPW Act gives the Director General of Heritage NSW responsibility for the proper care, preservation and protection of 'Aboriginal objects' and 'Aboriginal places', defined under Section 5 of the Act as follows:

- an Aboriginal object is any deposit, object or material evidence (that is not a handicraft made for sale) relating to Aboriginal habitation of NSW, before or during the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.
- an Aboriginal place is a place declared so by the Minister administering the NPW Act because the place is or was of special significance to Aboriginal culture. It may or may not contain Aboriginal objects.

Part 6 of the NPW Act provides specific protection for Aboriginal objects and places by making it an offence to harm them and includes a 'strict liability offence' for such harm. A 'strict liability offence' does not require someone to know that it is an Aboriginal object or place they are causing harm to be prosecuted. Defences against the 'strict liability offence' in the NPW Act include the carrying out of certain 'Low Impact Activities', prescribed in section 58 of the *National Parks and Wildlife Regulation 2019* (NPW Regulation), and the demonstration of due diligence.

An Aboriginal Heritage Impact Permit (AHIP) issued under Section 90 of the NPW Act is required if impacts to Aboriginal objects and/or places cannot be avoided. An AHIP is a defence to a prosecution for harming Aboriginal objects and places if the harm was authorised by the AHIP and the conditions of that AHIP were not contravened. Consultation with Aboriginal communities is required under Heritage NSW – Department of Premier Cabinet (DPC) policy when an application

for an AHIP is considered and is an integral part of the process. AHIPs may be issued in relation to a specified Aboriginal object, Aboriginal place, land, activity or person or specified types or classes of Aboriginal objects, Aboriginal places, land, activities or persons. Section 89A of the NPW Act requires notification of the location of Aboriginal sites within a reasonable time, with penalties for non-notification.

Environmental Planning and Assessment Act 1979 (NSW)

The *Environmental Planning and Assessment Act 1979* (NSW) (EPA Act) requires that consideration is given to environmental impacts as part of the land use planning process. In NSW, environmental impacts are interpreted as including cultural heritage impact. Proposed activities and development are considered under different parts of the EP&A Act, including:

- Major projects (State Significant Development under Part 4.1 and State Significant Infrastructure under Part 5.1), requiring the approval of the Minister for Planning.
- Minor or routine development requiring local council consent, are usually undertaken under Part 4. In limited circumstances, projects may require the Minister's consent.
- Part 5 activities which do not require development consent. These are often infrastructure projects approved by local councils or the State agency undertaking the project.

The EP&A Act also controls the making of environmental planning instruments (EPIs) such as Local Environmental Plans (LEPs) and State Environmental Planning Policies (SEPPs). LEPs commonly identify, and have provisions for the protection of, local heritage items and heritage conservation areas. The LEP relevant to this project is the Shellharbour Local Environmental Plan 2013.

The objectives of the LEP with respect to heritage conservation is provided in Clause 5.10 which (amongst other objectives) aims to conserve identified local heritage places, including archaeological sites, and requires development consent for any works that affect that item. Schedule 5 of the LEP lists items of environmental heritage within the LGA, including archaeological sites, buildings, and conservation areas. These items may be of national, state, or local heritage significance

3. ABORIGINAL STAKEHOLDER CONSULTATION

3.1. Consultation process in NSW

Aboriginal stakeholder consultation for the project has been undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a; the 'Consultation Requirements').

3.2. Identification of RAPs

In accordance with Stage 4.1.2 of the Consultation Requirements, Extent Heritage corresponded with the following organisations to obtain the names of Aboriginal people who may hold cultural knowledge of the study area:

- Greater Sydney Local Land Services
- Shoalhaven City Council
- Native Title Service Corporation (NTSCorp)
- Illawarra LALC
- Nowra LALC
- Heritage NSW – DPC
- National Native Title Tribunal
- Office of the Registrar, Aboriginal Land Rights Act 1983

In accordance with Step 4.1.3 of the Consultation Requirements, an advertisement was placed in the Illawarra Mercury inviting Aboriginal individuals or organisations to register an interest in the project. In addition, correspondence was sent to all Aboriginal individuals and organisations identified through the completion of Step 4.1.2 on 25 January 2023, inviting them to register an interest in the project by the same date, 10 February 2023.

The consultation process has resulted in the identification of 13 Registered Aboriginal Parties (RAPs) (Table 1). A follow-up email formally acknowledging their registration and presenting the project was sent on 15 February 2023.

Table 1. List of Registered Aboriginal Parties.

Organisation	Contact
Freeman & Marx	Clive Freeman
Gumaraa Aboriginal Experience Pty Ltd	Richard Campbell
James Davis (Wodi Wodi Traditional Owner)	James Davis
Kamilaroi Yankuntjatjara Working Group	Phil Khan
Thoorganura	John Carriage
Tungai Tonghi	Troy Tungai
Illawarra Local Aboriginal Land Council	Aara Welz

Organisation	Contact
South Coast People via NTSCorp	Sandy Chalmers
Gunjeewong Cultural Heritage Aboriginal Corporation	Shayne Dickson
Coomaditchie	Kirsty
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson
Woronora Plateau Gundungara Elders Council	Kayla Williamson

3.3. Assessment methodology

A copy of the proposed ACHAR survey methodology was provided to the RAPs for review on 26 June 2023 following confirmation of site access. At the end of this period, no comments were received.

3.4. Participation in field survey

A limited number of Aboriginal representatives were invited to participate in the site survey (Table 2). The survey was led by Hannah Morris (Senior Heritage Advisor, Extent Heritage).

Table 2. Aboriginal site officers participating in the archaeological survey

Organisation	Contact
James Davis (Wodi Wodi Traditional Owner)	James Davis
Illawarra Local Aboriginal Land Council	Steve Harris

3.5. Test excavation methodology

A copy of the proposed test excavation methodology was provided to the RAPs for a 28-day review on 20 September 2023. At the end of this period, only one group (Gumaraa) provided a comment on the proposed methodology acknowledging receipt of the email.

3.6. Participation in test excavations

The test excavation program was carried out in three sessions between 4 December 2023 and 17 January 2024. Along with Extent Heritage, representatives from the Illawarra Local Aboriginal Land Council, South Coast People, James Davis (Wodi Wodi Traditional Owner), and Woronora Plateau Gundungara Elders Council undertook the excavations and provided cultural knowledge and expertise. Table 3 lists all participants in the test excavation.

Table 3. Summary of participants in the test excavation program

Organisation	Name	Role
Illawarra Local Aboriginal Land Council	James Cochrane Ali Maher	Traditional owner representatives
James Davis (Wodi Wodi Traditional Owner)	Clint Davis Paul Bell James Davis	Traditional owner representatives
South Coast People	Leeroy Boota	Traditional owner representative
Woronora Plateau Gundungara Elders Council	Paul Cummings	Traditional owner representative

3.7. Review of the ACHAR

Prior to finalisation, the RAPs will be provided a draft copy of this report and the ATER to provide comment in accordance with Section 4.4. of the Consultation Requirements.

Organisation	Name	Feedback
Clive Freeman	Clive Freeman	Clive called to discuss the ACHAR, and was in favour of the information presented.
Illawarra ILALC	Aara Welz	Support of recommendation to employ sensitive design solutions to in the first instance avoid impacts. Supports notion that if conservation is not feasible, salvage excavation is the recommended mitigation method. A follow up email was sent in reply by Catherine Fenech, Extent Heritage, to seek further clarification on this feedback.

4. LANDSCAPE CONTEXT

4.1. Hydrology

The Macquarie Rivulet catchment area spans approximately 1,10km² with the majority of the catchment contained in Shellharbour LGA. The highest point of the catchment is Mount Murray, 12.9km to the west of the study area. From Mount Murray, the Macquarie Rivulet broadens to a large flat floodplain which flows into Lake Illawarra in the east (SCC 2019).

Three waterways flow through the study area (Figure 5). The study area lies within this floodplain, directly to the south of the Macquarie Rivulet itself. It only crosses the study area very briefly, at the end of Calderwood Road. The rivulet is a permanent fifth order water way running west to east.

Hazleton Creek, located in the western part of the study area, runs southwest to northeast and joins the Macquarie Rivulet just outside the study area. Hazleton Creek is a permanent, third order waterway. It is fed by two unnamed, non-perennial first order waterways, which meet Hazleton Creek at the southwestern border of the study area.

In the southeast portion of the study area, an unnamed, non-permanent first order waterway flows east to join Frazers Creek, located around 300m from the study area. This waterway is likely to have been modified to some degree by farmers to assist with water management.

An analysis of the earliest available aerial of the study area from 1949 shows how much the waterways have shifted over the last seventy years (Figure 6). Figure 7 compares the location of modern waterways to those in 1949. This is caused by the construction of housing, roads, associated infrastructure, and agricultural practices such as damming and other water management activities. This includes deliberate channelisation of waterways, which has occurred to a portion of Hazleton Creek within the study area (Figure 8) and across the wider landscape (Figure 7). Natural processes such as flooding can also cause both erosion and silting up of riverbanks, moving bends in the creeks.

The extent of Lake Illawarra has also changed vastly. Since the Holocene period, the lake has receded significantly (Figure 9). Hydrological modelling and the application of environmental scenarios known to have occurred in the past (namely the 1-1.5m sea level rise occurring between ~7,000 and 2,000 BP) would have caused the water level in the lake to rise. While the current edge of the lake is approximately 2.5km to the northeast of the study area, its banks may have been located as close as the northern boundary of the study area.



Figure 5. Map showing key waterways in the vicinity of the study area: Macquarie Rivulet, Frazer's Creek, Hazleton Creek, and unnamed tributaries.

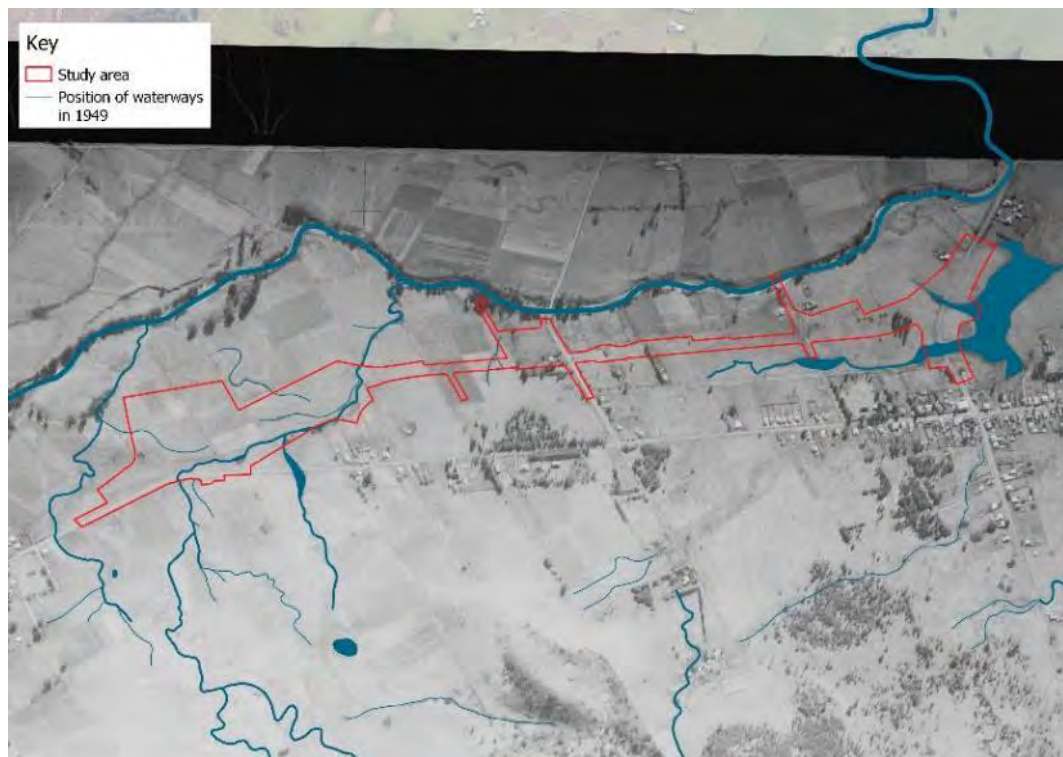


Figure 6. Indicative location of waterways identified in the 1949 aerial of the study area. No waterways on the northern side of Macquarie Rivulet have been mapped



Figure 7. Indicative location of waterways in 1949 against modern waterways. No waterways on the northern side of Macquarie Rivulet have been mapped.



Figure 8. Map showing approximate area of channelisation of Hazleton Creek (white bracket).



Figure 9. Map showing approximate area of Lake Illawarra during the High Holocene (~7,000 to 2,000 BP) (source: GML Section 2.3.3 with Extent Heritage additions).

4.2. Geology and topography

The study area is between the base of the wider Illawarra Escarpment, which runs north to south along the south coast of NSW, and Lake Illawarra. The study area is situated in the flat that runs along the Macquarie Rivulet (Figure 10). The base of Mount Stockland is adjacent to the southern edge of the study area. The hill has a maximum height of 86m above sea level (asl), and a gradient of approximately 9.3%. The slope has been modified and landscaped for the construction of residential housing. To the northwest of the study area, on the northern side of the Rivulet, is Mount Johnston. The hill is significantly higher than Mount Stockland, with a maximum elevation of 184m asl and gradient of approximately 12%.

The study area is located within the Illawarra Subtropical Rainforest subregion of the wider Sydney Basin bioregion. The Illawarra Subtropical Rainforest primarily consists of Permian volcanic rock but can occur over a range of rock types (OEH 2022).

The underlying geology of the region comprises the Shoalhaven Group (ASUD 2019) which consists of sandstone, siltstone, shale, polymictic conglomerate, and claystone. The Shoalhaven Group was deposited during the Permian Period (c. 298.9-251.9 million years ago). The makeup includes Yadboro (thin shale and sandstone), Burrawang and Tallong Conglomerates (cobbles in coarse grain sandstone), and the Badgerys Breccia (pebble breccia and sandstone lenses) (ASUD 2019).

Over the course of the Holocene epoch (c. 11,650 cal. BP–present), channel and floodplain alluvium comprising of gravel, sand, silt, and clay were also deposited along the bank of the Macquarie Rivulet and, to a lesser extent, along the banks of Hazleton Creek.



Figure 10. Overview of topographic map of the study area (10m contours), showing foothills of Mount Johnston (top-left) and Stockyard Mountain (centre-bottom).



Figure 11. Detail of topographic map of the study area (2m contours), showing foothills of Mount Johnston (top-left) and Stockyard Mountain (centre-bottom).

4.3. Soil landscape

Within the study area, two natural soil landscapes occur. The Fairy Meadow soil profile is found at the eastern and western extents of the study area, and the Albion Park profile is found along the southern portion of the study area (Figure 12).

The Fairy Meadow soil landscape is located along the channels and floodplains of the Macquarie Rivulet and its tributaries, such as Hazleton Creek. The subsurface of the Fairy Meadow soil landscape is characterised by fluvial sand, silt, and clay overlying a limestone base (ASUD 1975). The landscape where Fairy Meadow soils are found are flat to gently sloping floodplains and valley flats. The soil profiles generally consist of moderately deep sediment layers with an A horizon topsoil of alluvial black sandy loam over a B horizon of brown clay. The Fairy Meadow landscape is also active swamp land at risk of localised flooding and seasonal waterlogging, and with the potential for very high erosion risk during periods of concentrated flow.

The Albion Park soil landscape is located on the upper slopes and gentle foot slopes of the Berry formation and is found along the southern portion of the study area. The associated soils generally consist of moderately deep (50-100cm) layered sediments with an A horizon topsoil of black sandy clay loam to dark brown loam, over a B horizon of mottled grey-brown to yellow orange clay. The surface geology of the Albion Park soil landscape is the Berry Formation, consisting of siltstone, mudstone, and fine sandstone. The Albion Park landscape is highly erosional and is at risk of

localised flooding, seasonal waterlogging, and a high erosion risk during periods of concentrated flow.

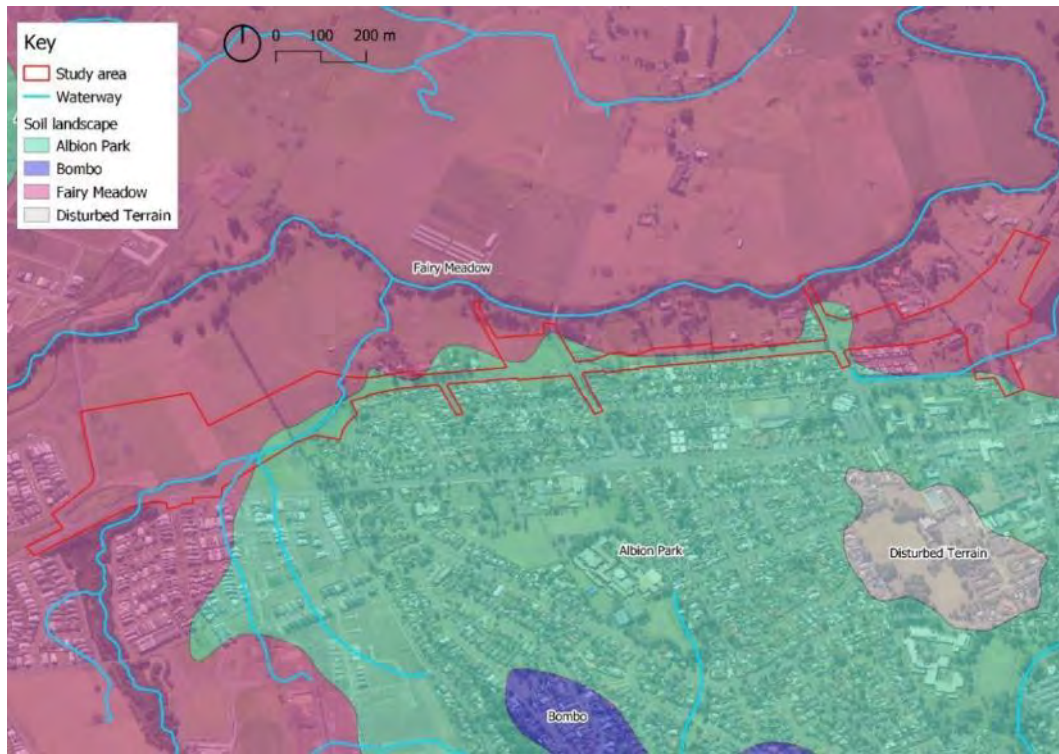


Figure 12. Soil landscapes surrounding the study area

4.4. Past vegetation

The native vegetation in the study area and the rest of the Illawarra Subtropical Rainforest is primarily densely closed rainforest canopies. However, highly disturbed stands of canopy may be irregular and open. The high nutrient soils of this region characteristically support Brush Bloodwood (*Baloghia inophylla*), Flame Tree (*Brachychiton acerifolius*), Giant Stinging Tree (*Dendrocnide excelsa*), Native Tamarind (*Diploglottis australis*), Brown Beech (*Ficus spp.*, *Pennantia cunninghamii*), and Red Cedar (*Toona ciliata*). Species of *Eucalyptus*, *Syncarpia* and *Acacia* may also be present.

The vegetation of the Fairy Meadow soil profile has been almost completely cleared but includes isolated stands of low open forest and woodland supporting Woollybutt (*Eucalyptus longifolia*) Cabbage Gum (*Eucalyptus amplifolia*), Forest Red Gum (*Eucalyptus tereticornis*), Swamp Oak (*Casuarina glauca*), River Oak (*Casuarina cunninghamiana*), Roughbarked Apple (*Angophora floribunda*), Forest Oak (*Allocasuarina torulosa*), Two-veined Hickory (*Acacia binervata*), Decorative Paperbark (*Melaleuca decora*), Prickly-leaved Paperbark (*Melaleuca styphelioides*), and Northern Boobialla (*Myoporum acuminatum*). Blackbutt (*Eucalyptus pilularis*) and thin-leaved stringybark (*Eucalyptus eugenioides*) are present in freely draining areas.

The vegetation of the Albion Park soil profile has also been extensively cleared, although remnant stands of tall open forest exist. Common species include Thinleaved Stringybark (*Eucalyptus eugenioides*), Cabbage Gum (*Eucalyptus amplifolia*), Northern Boobialla (*Myoporum acuminatum*), Forest Red Gum (*Eucalyptus tereticornis*), Woollybutt (*Eucalyptus longifolia*), Decorative Paperbark (*Melaleuca decora*) and Prickly-leaved Paperbark (*Melaleuca styphelioides*) are present in poorly drained areas.

5. RESEARCH BACKGROUND

5.1. Aboriginal histories

5.1.1. Pre-contact Aboriginal history in the Shoalhaven

Aboriginal people have lived within the area known as Shellharbour for over 45,000 years (NPWS 2003, 14). At Bass Point, 10.5km east of the study area, archaeological evidence date to 6,000 years before present (BP) (SCC 2019). As a result, some people suggest that Bass Point is the oldest dated coastal campsite in NSW (KL 2022).

The area now known as Illawarra was called 'Yerrowah' in the Tharawal language, meaning 'meeting place' (SCC 2019). The name has also been recorded as 'Wonwin', meaning 'Place where there were big fish' (SCC 2019).

More than thirty-eight Aboriginal language groups (previously referred to as 'tribes') have been recognised within NSW (NPWS 2003, 14). The area around Albion Park was home to the Wodi Wodi (other spellings include Wodiwodi and Wadi Wadi) people, a subdivision of the Tharawal (other spellings include Dharawal) language group (Tindale 1974). This area is also part of the traditional lands of the Dharug language group, which includes over seventeen subgroups, including the Yuin, Wollaga, and Brinja people (Donaldson et al 2015, 2).

An estimated 4-5,000 people lived in the Illawarra area, making up a dozen or more smaller groups (Donaldson et al 2015, 2). The Wodi Wodi group was one of the largest in the region, comprised of around 250 men women and children (Donaldson et al 2015, 3). The Wodi Wodi people spoke a dialect of the Dharawal language. The Dharawal language group covers a large area, from Botany Bay in the north to Jervis Bay in the south.

It should be noted that the original mapping of Aboriginal language groups was created by European researchers, such as Tindale (Figure 13), and relies to some extent on accounts from early European explorers and settlers. These early European sources did not fully understand the nuances of Aboriginal communities or their cultures. Their contact with Aboriginal people across NSW also occurred after the spread of disease throughout Aboriginal communities which, in some places, had probably resulted in different groups being forced to live together to survive.



Figure 13. Language groups of the NSW south coast according to Tindale (Tindale 1974)

5.1.2. Movement and trade

The Dharawal people moved throughout their Country and those of their neighbours, depending on season and purpose. The Wodi Wodi people would spend the warm seasons along the coastal plains, making the most of the abundant marine resources. The colder months were spent closer to the escarpment and further inland, with people taking shelter in deep valleys and rock shelters (Donaldson et al, 2015, 3).

The Wodi Wodi generally camped at Bass Point from January to February, and favoured other camps at Tongarra, Shellharbour Village, and Minnamurra throughout the rest of the year (Donaldson et al 2015, 3). The Minnamurra River (6km southeast of the study area) was an important location where inland fresh water meets tidal saltwater at the river mouth located at Minnamurra Point. The ecosystem of an estuary offers both fresh and saltwater resources. The riverbank was lined with middens, and the nearby swamplands was rich with bird life. These middens stretched from Minnamurra River to Minnamurra Point, and the surrounding areas of Bass Point, Gerroa, Gerringong. There were also shell quarry sites in Shellharbour, Lake Illawarra (Donaldson et al 2015, 3), Killalea, Knights Hill, and Saddleback (KL 2022).

Long distance travel was a part of life, and men and women from the Shoalhaven travelled to Appin, Tumut, and beyond, to take part in council, organise events, evade trouble, trade, and reinforce political alliances and laws (Donaldson et al 2015, 4). Likewise, people from other

language groups travelled from inland to the coast to exchange resources and engage in social activities. The coastal region boasted many resources which were of interest to inland people, including fish, shellfish, waterfowl, insects, and ochre (DEC NSW 2005, 8). Neighbouring groups also travelled to take part in seasonal celebrations, such as the whale festival and the mass migration of four species of eel along the creeks of Illawarra (Donaldson et al 2015, 4).

Between four to five clans would attend regularly held corroborees within Illawarra. Hosted in specific seasons and locations, these events could last several weeks with several hundred guests and participants feasting on all the area had to offer. Yuin Elder Guaboo Ted Thomas referred to Lake Illawarra as a primary resource for both the Indigenous people of the area and those who would travel from other neighbouring groups:

“The Lake is a livelihood. That's where the tribes would come from south and north and everywhere. They can stay here for two or three days. Plenty of mussels, bimballas, oysters, fish and everything. They can have a couple of days here and then move on. Tucker was always plentiful.” (Donaldson et al, 2015, 3).

Local resources were often traded with neighbours and others further afield for commodities not locally available. The Illawarra region is rich with trade networks that cover thousands of kilometres and offer a wide range of goods, including quartz, ochre, axes, spearheads, shells, and even white clay harvested by the Gweagal clan in the Royal National Park (Donaldson et al 2015, 25). Possum skin cloaks were an important commodity to the Dharawal people, and they regularly traded fish, shellfish, waterfowl, and grubs with the Gandangara people to the west for possum skins. A full-length possum skin cloak was made of approximately fifty skins and protected against wind and rain, and the leather side often carried culturally and personally significant designs and patterns (Donaldson et al 2015, 25). Other important cultural aspects were also traded between groups, including songs, stories, and traditions (Donaldson et al 2015, 25).

Both women and men fished, but women tended to fish from bark canoes with lines and mother of pearl hooks while the men fished from the shore with barbed spears, targeting flathead and mullet. Fish were also trapped in tidal creeks and kept in holding pools for later consumption (Donaldson et al 2015, 24).

An alternate method of fishing used bark. Aboriginal people would soak bark bundles before placing them over a blazing fire. Once hot, the bundles emitted a strong odour. The whole bundle was then thrown into the dammed creek, stunning the fish and allowing for easy collection (Organ & Speechley 1997, 5). A lithographic from c.1848 shows Aboriginal people at Condon's Creek (10km southeast of the study area) using this technique (Figure 14).



Figure 14. c.1848 lithograph of Condon's Creek depicting Aboriginal people (probably the Wodi Wodi group) fishing at Bass Point, in a stream to a beach that is probably modern-day Killalea Lagoon. By Captain Robert Westmacott (<https://antiqueprintmaproom.com/product/condon-s-creek/>).

Collection of plant foods and seafood was primarily the responsibility of skilled Dharawal fisherwomen. Some lined their bark canoes with local gypsum which allowed them to light fires to cook their catch, and light to fish by night (Donaldson et al 2015, 20). Men were responsible or hunting terrestrial animals, like kangaroo, wallaby, and possum (Organ & Speechley 1997, 5). They also helped to collect plant foods during the winter months (Donaldson et al 2015, 3, 13).

Fire was an important part of managing Country and food procurement strategies. Fire was used to reduce undergrowth and to catch game (NPWS 2003, 189). Careful burning over many decades was used to control the plant species present in the local ecosystem which, in turn, dictated the animals the environment could support. Hot fires burned from January to March would open hard seeds and pods to germinate legumes.

Cool fires from September to October would encourage the growth of kangaroo grass (*Themeda triandra*), a favourite food of the grey kangaroo and used to make flour. The denser the grass, the cooler the fire was required to manage it. Slow burns allowed the vegetation to renew quickly after a burning period. The fresh shoots were highly sought after by young kangaroos, who are known to travel up to 30kms to feed on their preferred vegetation. As a Dharawal Elder, quoted by

Donaldson, explained that this knowledge was used to lure the grey kangaroos to the fresh green meadows: 'Instead of you hunting them, they come to you' (Donaldson et al 2015, 17).

5.1.3. Archaeological recourses

The typical tool kit for Aboriginal people living in the Illawarra region is complex, consisting of both extractive tools used for obtaining food and maintenance tools, which are used to make or maintain extractive tools. Extractive implements of the Illawarra include ground edge hatchets, several types of spears, spear throwers, shields, boomerangs, digging sticks, bark canoes, fishing lines and shell hooks, baskets, and water containers. Maintenance implements include large pebble choppers, files, and stone flake scrapers, adzes, and chisels. Implements in this region were made of stone, shell, bone, and a range of vegetable materials like wood, sap, vine, and hair (Organ & Speechley 1997, 6). Additional tools used as cooking implements were carried by women in small pouches (Organ & Speechley 1997, 5).

Stone arrangements, engravings and rock art sites which can be seen in the Jamberoo Valley and Foxground (both 15km south of the study area). Tool making sites and grinding groves can also be found throughout the Illawarra by the tens of thousands. These sites suggest constant use and regular visitation and are usually located on sandstone near places of running fresh water (Donaldson et al, 2015, 19).

The *gunyah* was a typical dwelling in the Illawarra region. It was a pitched circular structure made from local timber and plant fibres (Figure 15). The dwelling would be temporary and erected as needed. They were generally set up near the shorelines of sheltered beaches or by lagoons or creeks. Due to sea level rise over the past 15,000 years, very few campsites located in close proximity to the shoreline remain meaning much evidence of these *gunyah* have been lost (Organ & Speechley 1997, 6).

Dense middens indicate a heavy reliance on shellfish and marine species, including mussels, oysters, periwinkles, cockles, abalone, and sea urchins, along with crustaceans such as prawns, lobster, and crab (Donaldson et al, 2015).



Figure 15. Watercolour by Gritten, H. (1860). *First Nations Communities in the Illawarra*. Kiama Library.

5.1.4. British colonization

The Dieppe map produced in France in 1592 is thought to illustrate the Illawarra coastline, suggesting there was potentially pre-British knowledge of the Illawarra (Organ & Speechley 1997, 8). The first attempted landing by the British in Australia was made at Woonona Point (28km north of the study area) on 28 April 1770. However, Cook and his party were forced to turn back due to rough surf. During this attempt, the party observed Aboriginal people gathering on the beach and nearby rocky headland to observe, and bark canoes laid on the shore (Organ & Speechley 1997, 8).

By March 1796, the first documented British colonists arrive, explorers George Bass and Mathew Flinders, in the area. However, upon their arrival, the local Aboriginal peoples informed the colonisers that several escaped convicts, both men and women fleeing the penal colony in Sydney, were living among them. Bass and Flinders were followed by many other scientists, including the botanist Robert Brown in 1805. As such, the area was well document and the resources of the region well known before settlement began in earnest (Organ & Speechley 1997, 9). The traditional

walking routes of the Wodi Wodi, which were maintained by fire and continued use, were the same trails that allowed British colonisers to traverse the landscape.

Life changed irreversibly for the Wodi Wodi after the invasion of their lands following the arrival of the First Fleet in 1788. Theft of Country, dispossession, alienation from resources, disease and violence became a reality of life for Aboriginal people, having profound impact on this chapter of history. Between 1814 and 1816, the Illawarra opened to cedar-getters (Organ & Speechley 1997, 10). This was closely followed by farmers, and their livestock, who cleared land and established towns to support timber harvesting and agriculture (KL 2022). Charles Throsby was the first official settler of the area, arriving pre-1815, and early land grants began in earnest in 1816.

At this time, the Aboriginal peoples of the region were largely referred to as peaceful and harmless. In 1816, Governor Macquarie unofficially declared war on the Aboriginal peoples of Sydney, however he specifically excluded the Illawarra peoples from this action. This by no means spared the people of the Illawarra from the atrocities and bloodshed of invasion their kin suffered under Macquarie's campaign. However, it does illustrate the British view of the Illawarra during the early 1800s. As a show of force, a detachment of the 46th Regiment briefly set up camp at Red Point (a peninsular adjacent to the northeastern extent of Lake Illawarra) from April to May 1816. This location is now referred to as Hill 60, Port Kembla, and is a significant and prominent camp site for local Aboriginal people (Organ & Speechley 1997, 10).

The Aboriginal peoples of the Illawarra who survived the disease and violence wrought by colonisation were increasingly forced to live on the fringes of colonial society. With access to resources limited, they became dependent on the State (NSW Legislative Council 1845), and thus subjected to increasing levels of government control. No land rights or compensation were given to the people of the Illawarra, aside from the annual issue of a blanket on the occasion of the Queen's Birthday (Organ & Speechley 1997, 11). The bartering of fish and game for sugar, tea, flour, and alcohol also reflect the changes that occurred in Aboriginal economies and lifeways at this time.

In 1830, a conflict took place at Fairy Meadow between the Wollongong and Bong Bong peoples. An estimated seventy to one hundred Aboriginal men were killed in the conflict. A second conflict is recorded in 1842, in which a local elder of Lake Illawarra, Charley Hooka (Geroone), was killed by a party of Aboriginal people. Local lore suggests that Hooka died defending British settlers of Illawarra from attack. The ornate breastplate originally given to him by British authorities is now held in the National Museum of Australia (Organ & Speechley 1997, 10). The last recorded corroboree/initiation ceremony in the region took place at Wollongong on the New Year of 1839-1840 and was attended by Aboriginal people from Kiama, Liverpool, Brisbane Water, and Newcastle. A new song was acted out as part of the ceremony, and an Anglican parson W.B. Clark recorded the song as being a narrative of the arrival of British ships in Sydney (Organ & Speechley 1997, 11).

5.1.5. Mickey Johnson

A number of Indigenous people from the Illawarra region were noted in contemporary accounts (Organ & Speechley 1997, 9). Mickey Johnson was a well-known local figure who spent a portion of his life in Albion Park (Figure 16). According to his obituary, by the time of his passing in 1906 he was well known and well-liked by almost everyone the length and breadth of the south coast (NPG 2022). Born in the Clarence River Valley area, Mickey originally came to the Illawarra with Edward H Weston (Davis 2019, 8).

In his manuscript, 'Reminiscences of an Australian Pioneer,' Major Weston wrote: 'I traded off a blue serge shirt to a black called 'tommy' in exchange for one of his boys, a youngster about ten years old, called 'tiger'.' Tiger appears to be another name of Mickey's. This exchange appears to have taken place on Edward Ogilvie's Yulgibar station in the Clarence River Valley (Davis 2019, 8). Weston's land grant, 'The Meadows,' was formerly known as 'Johnston's Meadows', and so both Weston and Johnson/Johnston were surnames given to Mickey (Davis 2019, 8, 17).

Mickey met his wife, a Wodi Wodi woman named Rosie, around the 1860s. Both Micky and Rosie were communicators, bridging the linguistic gap between British and Indigenous communities. Clorinda Atchison, wife of Samuel Atchison who farmed the land at Bass Point, recalls visits from Rosie and that she particularly fond of Clorinda's baked custards (SCM 2018). Mickey and Rosie lived together at Berawurra reserve in 1883 (NPG 2022). The 1894 annual report of the NSW Aborigines Protection Board at lake Illawarra showed Mickey had instigated several improvements to the reserve. This led to him being regarded by non-Indigenous authorities as a 'chief' to his community, however this is unlikely to reflect his position within Indigenous society (NPG 2018; 2022).

Two years later the board recognised Johnson as 'King' of the Illawarra in a coronation ceremony at the 1896 Wollongong Show (NPG 2018, SCM 2018). During the ceremony attended by Rosie and several family members, Mickey was presented with a crescent breastplate (Figure 17). The item was donated by local politician Archibald Campbell (Member of the Legislative Assembly) and presented by Mrs Beatson, the mother of the then Mayor of Wollongong, acting as a representative of Queen Victoria (Organ 1993, 170). The ceremony was documented in several contemporary papers and articles, including quotes from all those involved. One such quote indicates that Bill Saddler, a noted Indigenous athlete of the time local to the Illawarra region announced to the gathered crowd that he wished it would be publicly known that he was in favour of Micky being crowned King, despite not being originally from Thurawal or Wodi Wodi Country (NLA 2022).

Mickey reportedly wore the inscribed breastplate until he passed away. As the often reported 'most photographed Indigenous man in NSW' (Davis 2019, 17) several images survive of Micky wearing his breastplate over fine suits. Micky used this position of influence within the non-Indigenous community to seek out certain privileges and to raise matters relating to the treatment of Indigenous people (NPG 2018). A quote from The Illawarra Journal 26 September 1894 page 2

(Davis 2019, 20) demonstrates Micky's attempts to foster a relationship between the Indigenous and colonial powers.

"King Mickey' speaks... 'we, the lake Illawarra blacks, beg to thank the kind people of Wollongong and Shellharbour for the monies and seeds given to us for use on our farm at the lake, and any further assistance will be thankfully received" (Davis 2019, 20)

His vocal dissatisfaction with the government and missions is believed to be the reason Mickey and Rosie later relocated to a quiet camp on the Minnamurra River, where he passed away from pneumonia in 1906 at age 72 (NPG 2018). His image has since been used by the Australian National Travel Association and NSW Government Printer on postage stamps commemorating the 150th anniversary of the settlement of the British Crown Colony of NSW and are held in the Joseph Davis Collection (Davis 2019, 6).



Figure 16. Holden, RH. (1875). *Earliest known portrait of King Mickey Johnson*. National Library of Australia.



Figure 17. Unknown Photographer. (1896). *Micky Johnson*. National Portrait Gallery.

5.1.6. Aboriginal resistance

Notwithstanding the devastation caused in this period, it is critical to note that while many of their kin had either perished or been forced away from their traditional lands, there are records of Aboriginal people who remained on Country throughout the nineteenth century. Campaigns of resistance were central to this survival and records and illustrate Aboriginal peoples' experiences of this period.

Two years after the arrival of the First Fleet, the Aboriginal warrior Pemulwuy (or 'Bembilwuyam', c. 1750–1802) was forced to resist British incursions on the lands of his people (NMA 2020). Pemulwuy began participating in several raids across the Sydney region from 1792 until 1802 (Kass et al. 1996, 49). These raids occurred north of the study area; however, the people of the Illawarra would have been aware of and impacted by these events (Organ & Speechley 1997, p. 9)

The rapid expansion of British settlement in the Illawarra from the early nineteenth century, led to increasing tension between colonists and Aboriginal people in the region. On 1 October of 1818, a group of settlers armed themselves with guns and knives and killed six Aboriginal people at a camp on the banks of the Minnamurra River (6km south of study area) (Kiama Municipal Council, 2024).

5.2. Regional history

5.2.1. Early Aboriginal occupation and the Last Glacial Maximum (c. 30,000 – 18,000 BP)

Aboriginal occupation of NSW spans at least 45,000 years (Stockton and Holland 1974; Nanson et al. 1987; JMCHM 2005b, 107-125), although older age-estimates have been obtained for artefacts and human remains found within the barrier sands of Lake Mungo in the Willandra Lakes Region (Bowler et al. 2003; Shawcross 1998).

The climate gradually became warmer and wetter while sea levels rose at the end of the Last Glacial Maximum (LGM) and Last Glacial Period (LGP) around 15,000 BP (Severinghaus and Brook 1999) which marks the transition from the Pleistocene to Holocene epoch. From this period onwards, there is a more continuous archaeological record for the Sydney region (Attenbrow 2010, 153). A number of early occupation sites dating to the late Pleistocene/early Holocene have been found in deep stratified rock shelter deposits and within alluvial deposits, particularly on the margins of large rivers such as the Hawkesbury-Nepean and Parramatta Rivers (McDonald 2008, 39-40).

5.2.2. Change during the Holocene (c. 12,000 BP – present)

The archaeological record indicates that significant and widespread changes occurred among Aboriginal cultures during the Holocene (Hiscock 2008). During this period, there appears to have been a decline in the use of silicified tuff as the preferred raw material and a greater use of other materials. There is a substantial growth, then decline, in the production and use of backed artefacts, and the introduction of ground-edged implements (with the peak period being approximately 4,000-1,000 BP). There appears to be a considerable increase in archaeological evidence of human occupation as well (e.g., McDonald 2008, 36).

It is also likely that the technological changes and possible population increase were accompanied by broad social changes. Hiscock and Attenbrow (2005) have suggested that changing climate conditions after c. 3,000 BP stimulated a change in foraging practice that may have incorporated a shift towards higher mobility. On the other hand, McDonald (2008, 40) suggests that by about 4,000 BP, people occupied smaller territories and used residential bases on a more permanent basis, as well as defined foraging ranges using annual and extended cycles.

5.3. AHIMS search results

The AHIMS database is presently managed by Heritage NSW – DPC and includes spatial and compositional information of Aboriginal sites (i.e., objects, places and declared Aboriginal Places) previously recorded through academic and compliance-based cultural resource management projects associated with modern various developments.

To cover the full extent of the study area, an extensive search of the AHIMS database were undertaken on 21 July 2022. Land surrounding the study area was included within the search parameters to gain information on the regional archaeological context and inform predictive statements regarding the archaeological potential of the study area. AHIMS search area 1 included an area of land at datum GDA, zone 56, latitude, longitude -34.5904,150.7352 by latitude, longitude -34.5551,150.797, with a buffer of 0 meters.

The AHIMS search results identified 62 registered sites. There are 20 standard AHIMS site features and a site can include more than one feature. The frequency of AHIMS site features is included in Table 4 below.

Table 4. Summary of AHIMS features.

Site Feature	Number	Frequency
Isolated artefact	26	42%
Artefact(s)	22	35%
Artefact(s), Potential Archaeological Deposit (PAD)	6	10%
Potential Archaeological Deposit (PAD)	8	13%

Site Feature	Number	Frequency
Total	62	100%

The sites are primarily found along waterways, a stable location for settlements or areas of occupation to occur. Isolated artefacts are located along main tributaries, but also non-permanent first order waterways. These waterways don't typically provide resources that support permanent or return settlement sites. Sites identified as containing 'artefact(s)' may possess one or more artefacts, from low density scatters to evidence of larger sites. While some of these AHIMS sites are located along first order waterways, they are also located along more established creeks and rivers.

One AHIMS site (AHIMS ID 52-5-961) is located within the study area. The site comprises one artefact—a ground edged axe (Figure 18). The artefact was identified by the landowner, Mr Paul Knight, and recorded by Biosis as part of their site survey (2021) for the Tripoli Way Extension project. The artefact was found in a deposit of imported gravel fill and likely came from one of the local quarries: Cleary Brothers or Boral.



Figure 18. Ground edge axe (AHIMS ID 52-5-0961) (Biosis 2021, plate 9-10).

Two sites are located within 200m of the study area boundary (Table 5). These sites, recorded by Navin Officer Heritage Consultants are areas of PAD, with one artefact also recovered. The areas of PAD were likely identified due to their close proximity to waterways. Both sites were archaeologically excavated (and are now destroyed) as part of the development of new residential housing. The archaeological excavations confirmed that both areas did not possess any subsurface archaeology. It can be assumed that these PADs should no longer be considered an indication of archaeological potential along the first order waterways which they are located beside.

Table 5. AHIMS sites located within 200m of the study

AHIMS ID	Site Name	Recorder	Site Feature
52-5-0439	Tullimbah Village PAD2	Navin Officer Heritage Consultants Pty Ltd	PAD
52-5-0434	Tullimbah PAD1	Navin Officer Heritage Consultants Pty Ltd	Artefact(s) and PAD

The AHIMS data shows isolated artefact, artefact(s), and PAD sites located along Hazleton Creek, and its tributaries. In particular, a cluster of registered and potential sites are located along Hazleton Creek, approximately 1km south of the study area (Table 6).

Table 6. Summary of AHIMS features clustered along Hazleton Creek, directly south of the study area.

Site Feature	AHIMS ID
Isolated artefact	52-5-0837
Artefact(s)	52-5-0084
	52-5-0522
Artefact(s), Potential Archaeological Deposit (PAD)	52-5-0040
	52-5-0041
Potential Archaeological Deposit (PAD)	52-5-0842

A large number of sites were identified across the landscape and concentrated within areas where relatively low amount of land disturbances has occurred (Figure 19). The wide distribution of artefact sites across various terrains in the landscape is indicative of their nature as part of the wider 'background scatter' of artefacts across the landscape within the Aboriginal archaeological record.

Culturally modified trees are most often identified within areas where remnant vegetation remains extant (e.g., along creek lines and away from urban areas). Based on the aerials of the study area, vegetation which would be associated with traditional modification practices was all removed before 1949 (Figure 6). As such, there is nil to low potential for such resources to be identified.

Grinding groove sites are identified on areas of exposed sandstone outcrops which are not common to the underlying geology of the area. In addition, no areas of exposed bedrock were identified across the study area. As a result, there is nil to low potential for grinding grooves to be identified.

Burials in the Illawarra area are commonly found along the banks of Lake Illawarra. These are commonly found in sand dunes along this highly significant body of water. No historical records



or ethnographic evidence of burials have been found to be associated with the study area. There is nil to low potential for burials to be found.

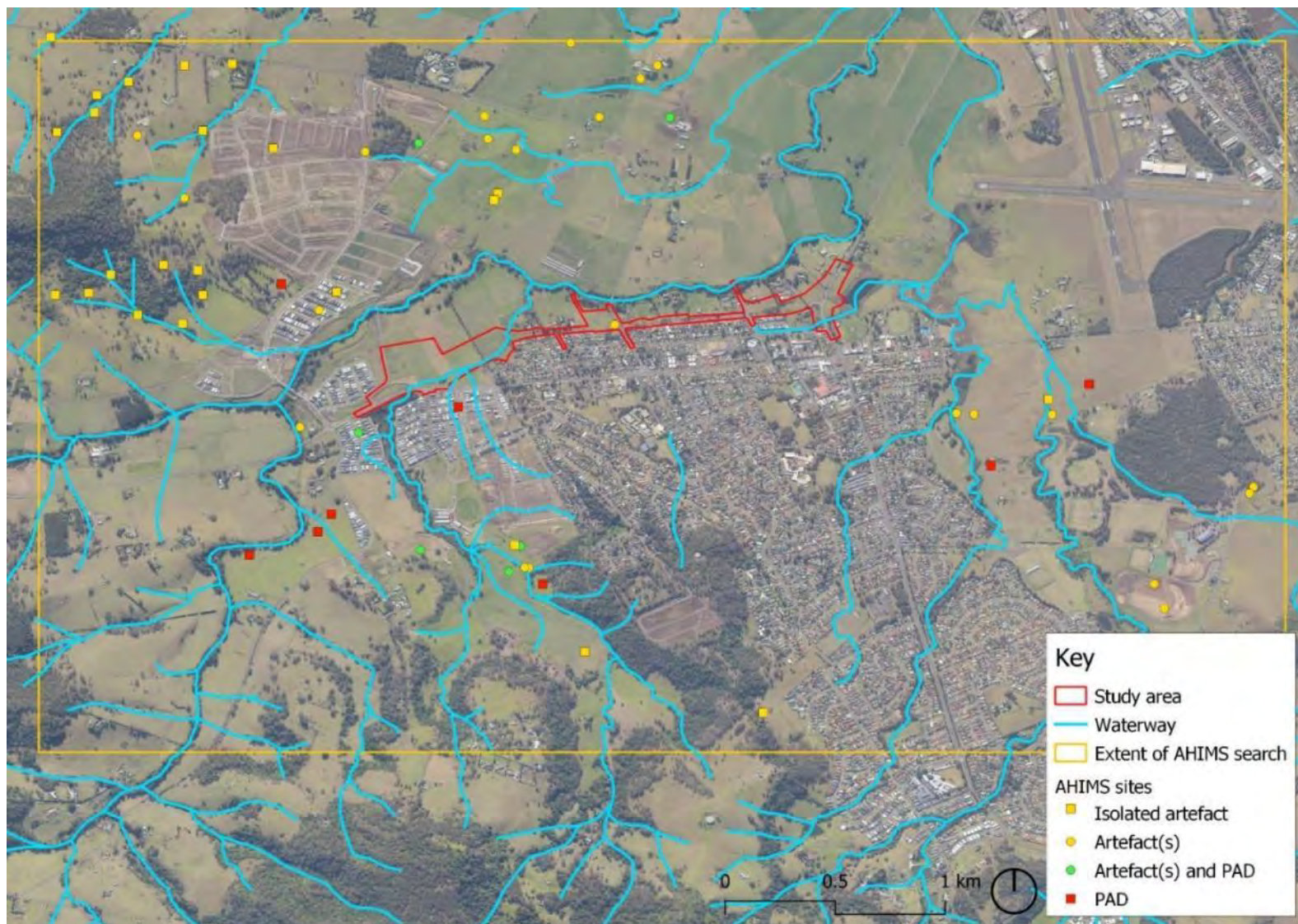


Figure 19. Results of extensive AHIMS search

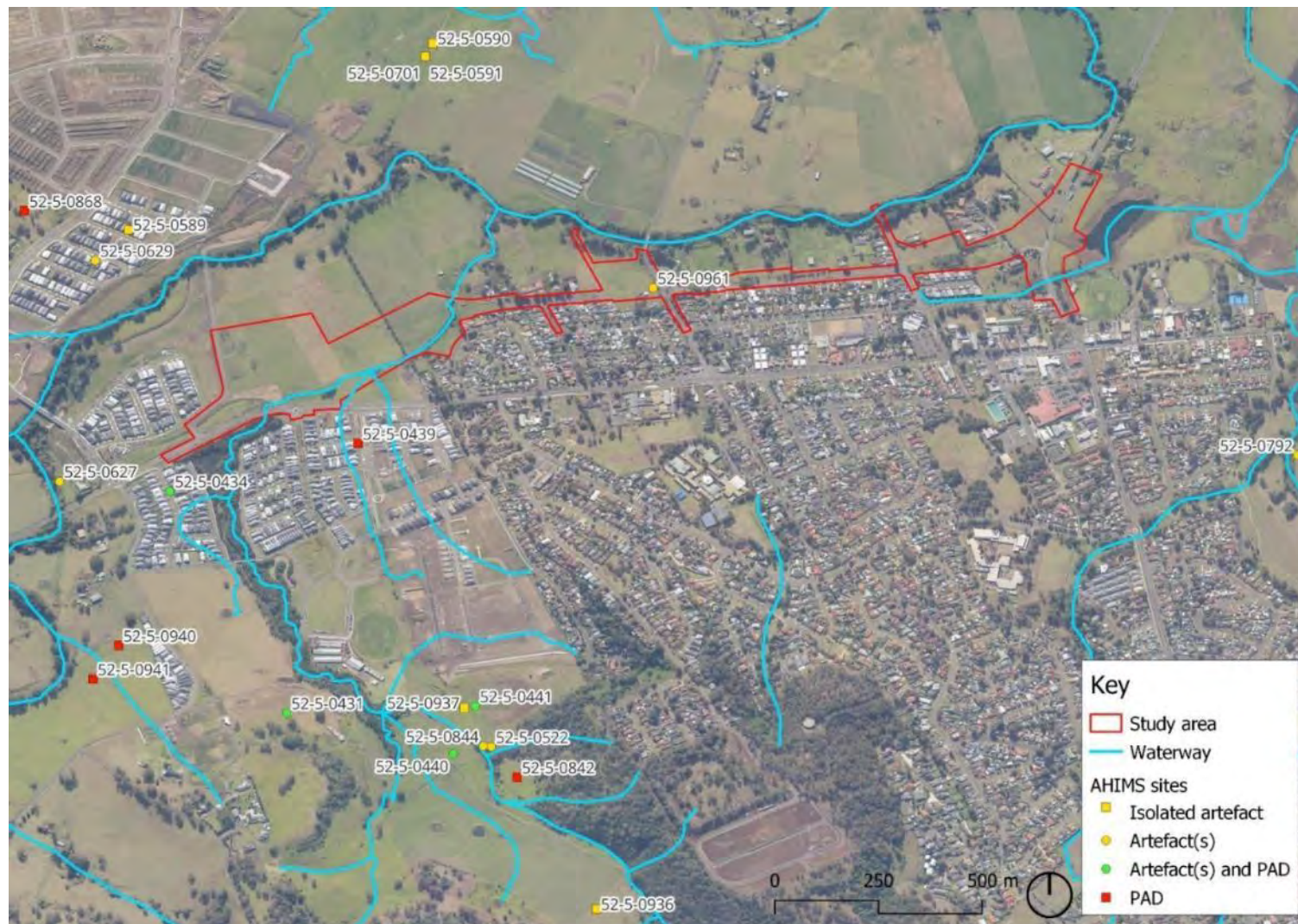


Figure 20. Location of AHIMS sites in the vicinity of the study area.

5.4. Review of previous studies

Biosis (2021) Aboriginal Cultural Heritage Due Diligence Assessment: Tripoli Way Bypass

In 2021, Biosis undertaken a due diligence assessment for the study area. Their assessment determined that there is a potential for flaked stone artefact scatters and isolated artefacts, as well as PADs, to be located within the study area. The report also concluded that the environment and location of the study area was not conducive to finding other site types such as shell middens, grinding grooves, art sites, and culturally modified trees.

A survey was undertaken by Biosis representatives (however, it is unclear whether any Aboriginal representatives were present to have input into the conclusions). Due to continued land access restrictions, the Biosis survey covered the same properties and public areas as the survey undertaken for this ACHAR (Biosis 2021, figure 7.1).

Based on the results of the survey and desktop predictive modelling, Biosis identified three areas of archaeological sensitivity (Figure 21; Table 7). PAD 1 was located on the eastern bank of Hazleton Creek, PAD 2 was located in the vicinity of AHIMS ID 52-5-0961 (Tulkeroo ISO: ground edge axe), and PAD 3 was located on a rise.

Due to significant ground disturbance, such as initial vegetation removal and construction of roads and residential developments, the remainder of the study area was determined to hold low archaeological potential.

Table 7. Anticipated justification by Extent Heritage for identification of PAD locations determined by Biosis (2021).

Sensitivity	Name	Justification
Moderate	PAD 1	The PAD is located on a terrace overlooking Hazleton Creek
	PAD 2	The PAD is located in the vicinity of an AHIMS site and toward the top of a low hill
	PAD 3	The PAD is located toward the top of a low hill
Low	Remainder of study area	The area west of Hazleton Creek is located within an alluvial soils and flood plains landscape that is subject to water logging which is not conducive to settlement. Heavy erosion may have also occurred in this location. The areas where residential development has been constructed would impact surface and subsurface soil deposits. The eastern half of the study area was not surveyed but was located away from key watercourses.

Hazleton Creek excavations

Between 2008 and the present, excavations have been conducted along Hazleton Creek, upstream and 800m south of the study area (Navin Officer 2002; Kayandel Archaeological Services [KAS] 2008; Australia Archaeology 2019) (Figure 22).

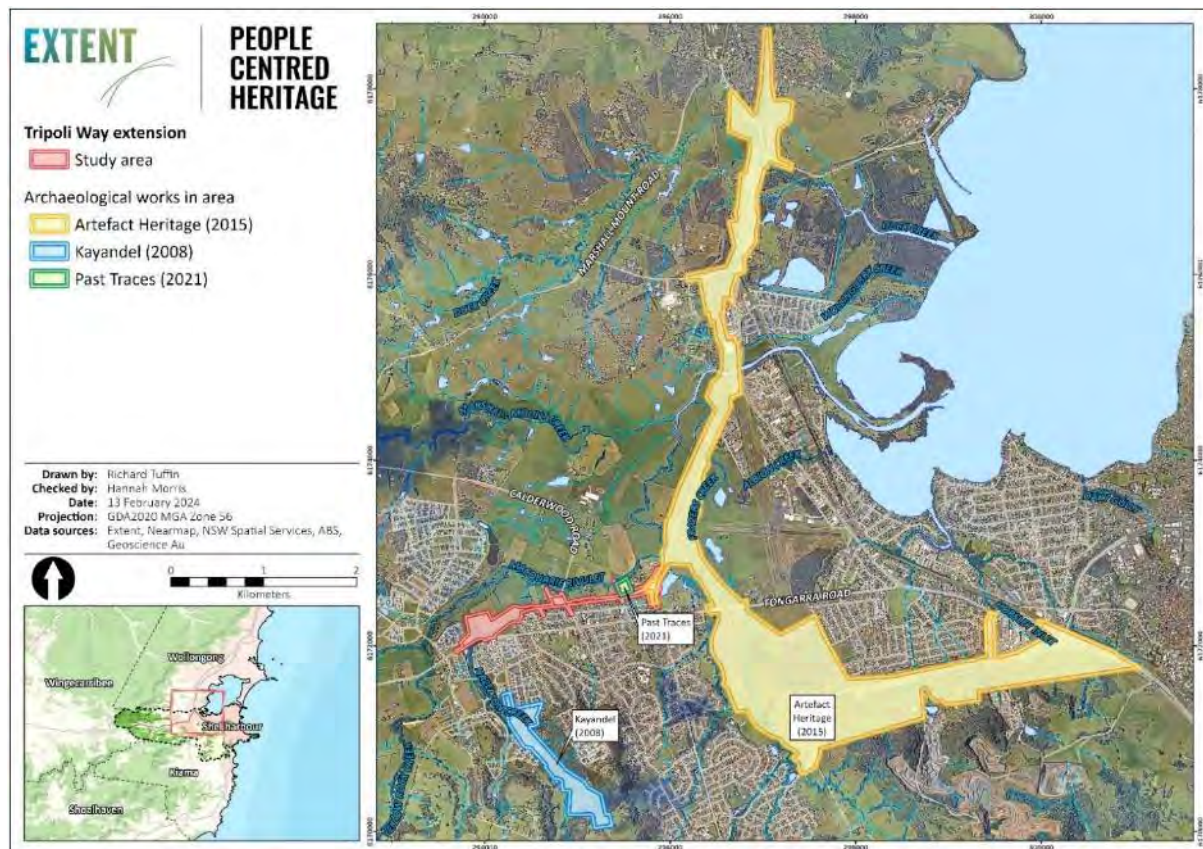


Figure 22. Location of archaeological assessments in the vicinity of the study area. Note: works undertaken by Navin Officer (2002) are within the Kayandel (2008) works area.

A total of 26 test pits were excavated over PADs 1, 2, and 4, using a mechanical excavator. Only 25% of the material was sieved (KAS 2008,17). The results comprised 33 artefacts recovered from 12 of the pits: 25 from PAD 1, 16 from PAD 2, and 3 from PAD 4.

PAD 1 (AHIMS ID 52-2-0434) comprised an area located on a gentle slope/terrace to the west of the edge of Hazleton Creek and elevated above the floodplain of the Macquarie Rivulet. An artefact scatter (HC1) was located at its southern extent, on an elevated terrace overlooking the floodplain of Hazleton Creek, which bounded the PAD to the east.

PAD 1 recovered only two artefacts in 12 test pits (Austral 2019, 47). One was an angular silcrete fragment representing either reduction debris or a broken flake fragment. The second was a complete flake with four negative scars on the ventral surface.

PAD 2 (AHIMS ID 52-2-0522) was located to the east of Hazleton Creek, on an elevated flat crest of a minor spur line running parallel to the creek. PAD 2 (AHIMS ID 52-5-0522) recovered 13 artefacts from 18 test pits (Austral 2019, 50). Three were proximal flakes, one was a distal flake, five were complete flakes, three were cores, and one was a scraper tool. Ten of the artefacts were silcrete, two were chert, and one was quartz.

PAD 4 (AHIMS ID 52-5-0440) was located on the western side of Hazleton Creek, between two watercourses located on the floodplain. PAD 4 (AHIMS ID 52-5-0440) did not recover any artefacts, likely due to the high levels of previous ground disturbance resulting from modification to Hazleton Creek, agricultural activities, and construction.

Across PADs 1, 2, and 4, a majority were found in spits 1 and 2, 0-20cm below the ground surface. Flakes were the predominant artefact type ($n = 24$), followed by flaked pieces and broken flakes. No secondary flaking or distinct tool types were identified. No cores were identified (KAS 2008, 39). The raw materials comprised fine-grained siliceous ($n = 13$), chert ($n = 9$), silcrete ($n = 4$), volcanic ($n = 3$), petrified wood ($n = 2$), jasper ($n = 1$), and quartz ($n = 1$) (KAS 2008, 40). Only three artefacts were recorded with cortex, but the sample was not statistically large enough to make inferences about correlation between cortex presence and raw material sources (KAS 2008, 43).

PAD 3 (AHIMS ID 52-5-0441) was located on the eastern side of Hazleton Creek, upslope from PAD 2. Only five artefacts were identified by Navin Office. PAD 5 (AHIMS ID 52-5-0842) has not been excavated. The artefact reburial location was registered as AHIMS ID 52-2-0844.

Tullimbar Village PAD 3 (AHIMS ID 52-5-0431) was located on the flat floodplain on the eastern side of Hazleton Creek. Mechanical excavations recovered 11 artefacts from five of 14 test pits (Navin Officer 2002). A majority of the artefacts were chert, although other raw materials included silcrete, tuff, and volcanic rock. The volcanic flake was recovered from the ground surface. The resulting interpretation was that the site was background scatter representing low intensity occupation or a transient camp of low archaeological significance.

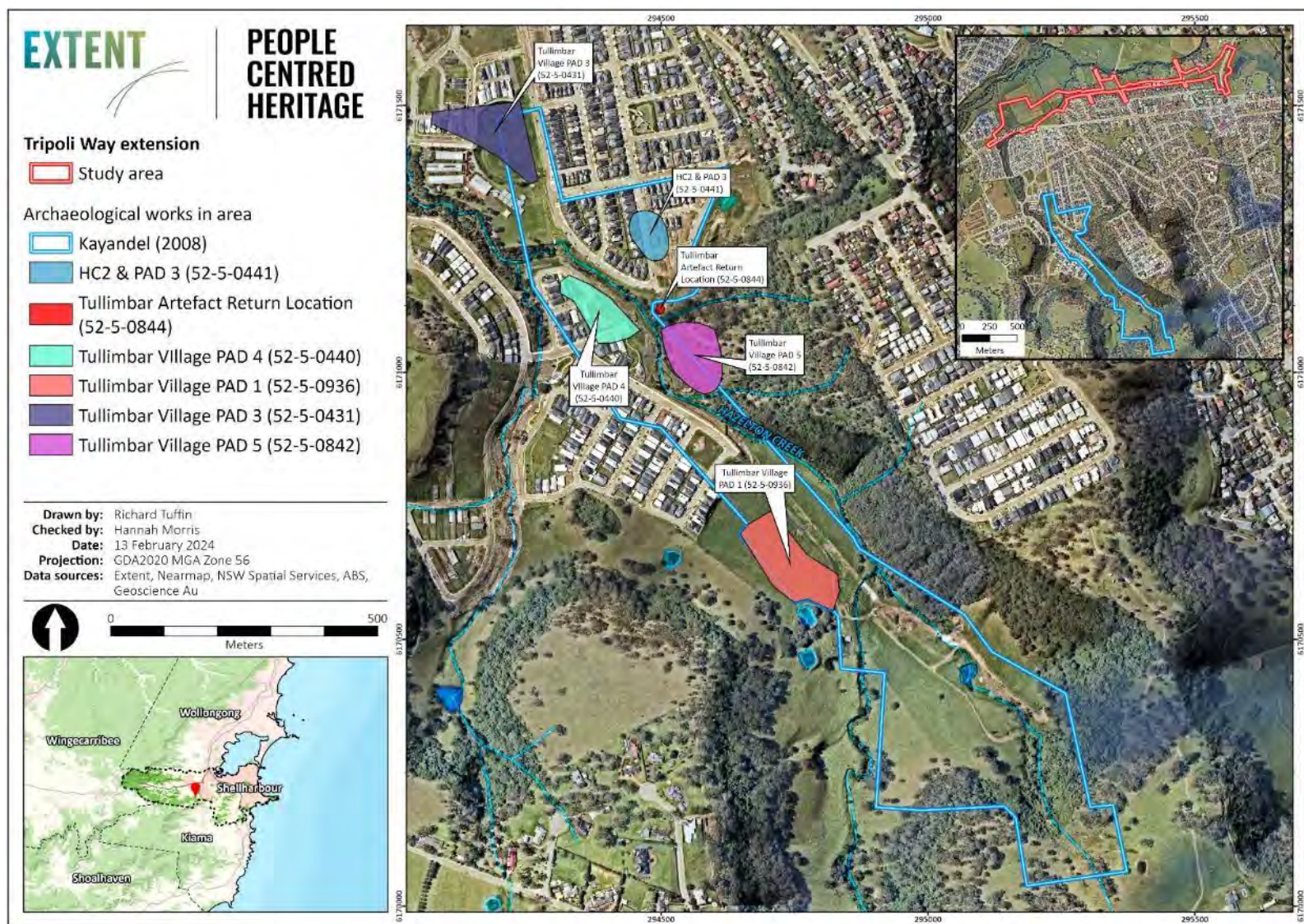


Figure 23. AHIMS sites and excavations along Hazelton Creek, in the vicinity of the study area.

**Past Traces Heritage Consultants (2019) Aboriginal Cultural Heritage Due Diligence Assessment LOT 1
DP106991 14 Hamilton Road Albion Park NSW**

Past Traces undertook a due diligence report directly adjacent to, and partially with, the Tripoli Way Extension study area. The site bounded Hamilton Road on the west and Macquarie Rivulet to the north. It comprised a private property used in the past for agricultural purposes. A site survey with the Illawarra LALC identified no artefacts or sites, in part due to the high grass, and was determined to hold low archaeological potential.

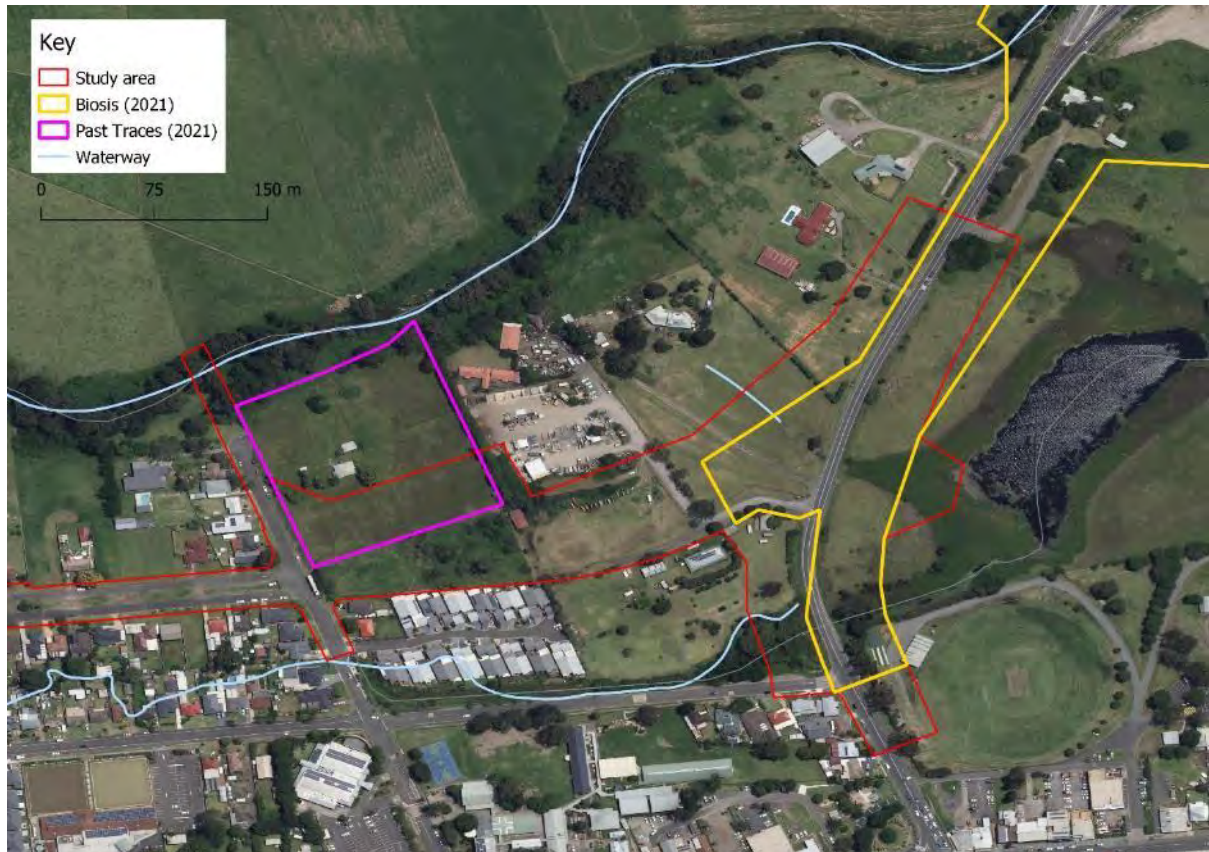


Figure 24. Area of archaeological investigation by Past Traces Heritage Consultants (2019).

Artefact Heritage (2017) 140-142 Calderwood Road Albion Park Aboriginal Cultural Heritage Assessment Report

According to the Past Traces report (2019), Artefact Heritage (2017) undertook test excavations at 140-142 Calderwood Road, approximately 1km northeast of the study area, on the opposite side of Macquarie Rivulet. Small artefact scatters and isolated artefacts (AHIMS ID 52-5-0848) were recovered. These sites were located on level areas or gentle rises outside the floodplain of the Macquarie Rivulet. High densities of artefacts were also found within the crest landform and artefact densities were noted as decreasing toward the base of the slope landscapes. An associated AHIMS number and report was not able to be identified.

Artefact Heritage (2015) Albion Park Rail Bypass PACHCI Stage 3 ACHAR

Artefact Heritage produced an Aboriginal Cultural Heritage Assessment Report for the Albion Park Rail Bypass, running north to south along the Princes Motorway between Koonawarra and Blackbutt (Figure 25). The study area also includes a small portion of Illawarra Highway and Tongarra Road, overlapping with the easternmost portion of the Tripoli Way Extension study area.

A total of 21 Aboriginal sites were identified as part of the survey. Of interest are the archaeological sites were located in the southern part of the study area (Figure 26). Two artefact sites and one PAD were located within 100m of Hazleton Creek and one of its tributaries (AHIMS ID 52-5-0757, 52-5-0788, and 520509825). Another two artefact sites and one PAD were identified along unnamed non-perennial waterway located directly to the west of Hazleton Creek (AHIMS IF 52-5-0792, 52-5-0789, and 52-5-0822). In addition, four artefact sites were located in paddocks (AHIMS ID 52-5-0765, 52-5-0764, 52-5-0787, and 52-5-0793).

YTOF AS 5 (AHIMS ID 52-5-0789) and YTOF IF 4 (AHIMS ID 52-5-0792) were located on an elevated terrace and gentle east facing slope toward an unnamed tributary of Frazers Creek. The sites contained a moderately dense subsurface artefact scatter and discrete artefact, respectively. YTOF AS 4 (AHIMS IF 52-5-0788) and YTOF IF 1 (AHIMS IF 52-5-0757) were located on an elevated, level terrace that rose above the flat immediately adjacent to the eastern end of Frazers Creek.

The landscapes associated with these four sites are directly comparable to that of TWE_PAD 1 located within the Tripoli Way Extension study area (Section 8). TWE_PAD 1 comprises a gentle slope, elevated on the eastern side of Hazleton Creek, on the opposite side of the waterway to the alluvial flats.

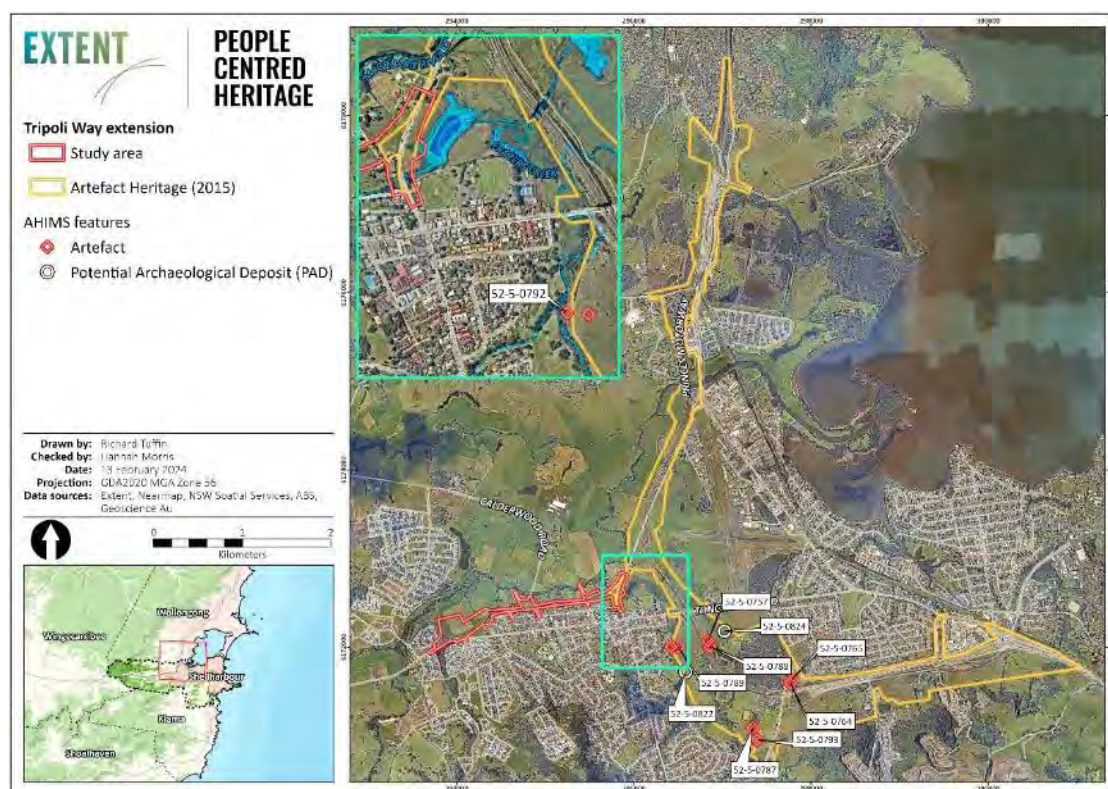


Figure 25. Artefact Heritage (2015) Albion Park Rail Bypass project boundary, with associated AHIMS sites

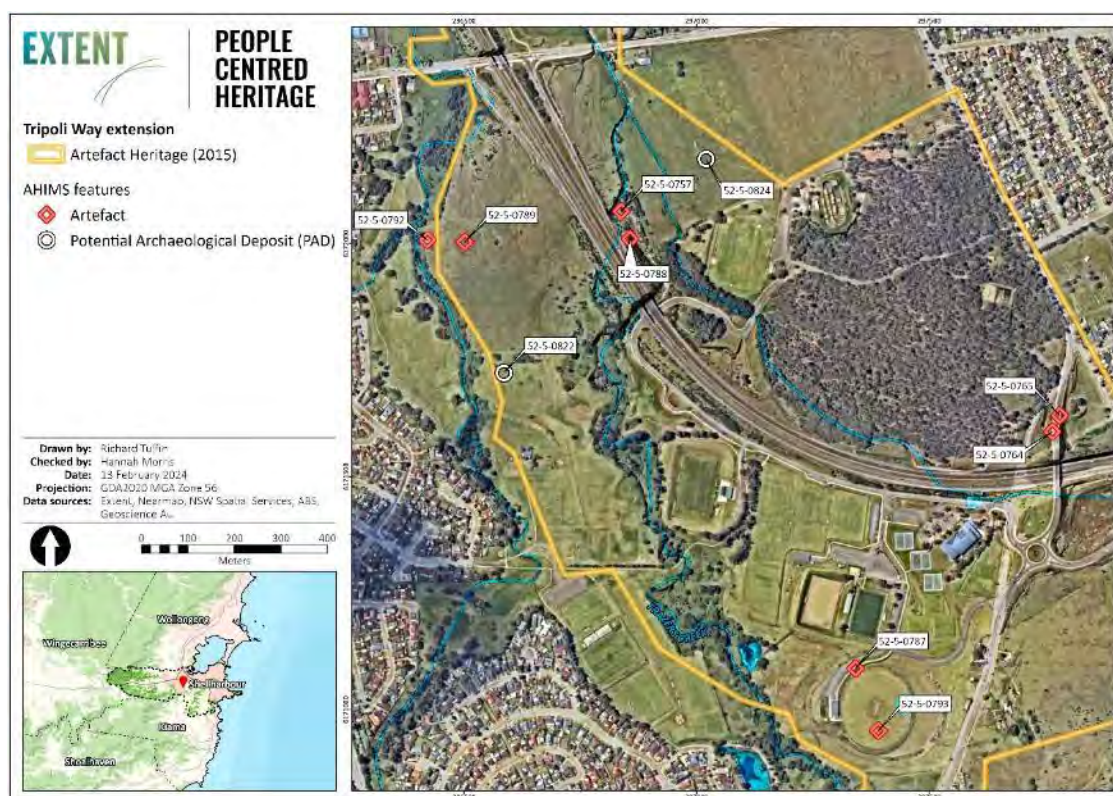


Figure 26. Detail of Artefact Heritage (2015) Albion Park Rail Bypass project boundary, with associated AHIMS sites.

5.5. Predictive model

Archaeological predictive models are used to identify and map areas where archaeological resources are likely to survive. The models are used in development and land use planning contexts to strategically identify Aboriginal cultural heritage risks. Each predictive model consists of a series of statements about the nature and distribution of evidence of Aboriginal land use that is expected in the subject site. These statements are based on the information gathered regarding:

- landscape context and landform units;
- ethnohistorical evidence of Aboriginal land use;
- historical disturbance and landscape modification;
- results of previous archaeological work in the vicinity of the subject site;
- historical accounts of Aboriginal occupation, and landscape character; and
- predictive modelling proposed in previous archaeological investigations.

Archaeological analyses of archaeological potential in the Illawarra have produced conflicting conclusions about where archaeology may and may not be present and preserved. As discussed below, the Dapto Land Review (GML 2015) has assessed the Fairy Meadow alluvial floodplain soil landscape as having the potential for Aboriginal archaeology, whereas reports such as Biosis (2014) have concluded the opposite. By following the predictive model outlined in the Dapto Land Review, a larger portion of the study area would be considered to hold archaeological potential. Using this model not only ensures a higher chance for Aboriginal archaeology to be identified but would also allow an opportunity to further develop the predictive models for the wider area.

GML Heritage (2015) Dapto Land Review

The Dapto Land Review provided a wide scale analysis of archaeological potential, known sites, and ethnography across the Illawarra Plains. The predictive model identifies archaeology in the region is likely to be found in the following locations (GML Heritage 2015, 150-151).

- Alluvial terraces with suitable soil profiles on the coastal plain and foothills terraces adjacent to Mullet Creek, Reid Creek, Robins Creek, and Duck Creek have a high potential for subsurface archaeological deposits.
- Foothill landforms contain numerous paleochannels, indicating a long history of extensive reworking of the alluvial landscape. Predictive modelling should not rely on the current position of a creek in order to determine a level of archaeological potential but needs to consider the presence and location of paleochannels and connected alluvial terraces.
- The extent of flood water levels and Lake Illawarra water rises means midden sites may be found up to 2.5km inland from the current lake's edge.
- Foothill landforms closest to the escarpment with flats (alluvial terraces) suitable for more intensive Aboriginal activities are likely to hold moderate to high archaeological potential.
- Archaeological sites on alluvial soils can contain stratified archaeological deposits.

Gravel beds (associated with alluvium and/or sandstone outcropping) are likely to have been used as sources for the extraction of raw stone material.

Sefton (1984) Archaeological Survey of West Dapto Stage 1 Release Area

Sefton, and later AMBS (2005), undertook a large archaeological assessment of the West Dapto region, north of the study area. Sefton developed the first predictive model for the area and identified four areas that hold significant archaeological potential:

- Level areas of the Western foothills zone and the Coastal Plain within 100m of a creek;
- Saddles on the ridges of Marshall Mount spur;
- Level areas in the Forest Creek Valley; and
- Level areas of the escarpment slopes.

Of relevance to the current study area is the first point. This model has been progressively revised (See below).

Dallas and Sullivan (1995) Archaeological Survey of West Dapto Stage 1 Release Area

Dallas and Sullivan were engaged to review known Aboriginal sites to create a predictive model of the nature and distribution of Aboriginal sites within the Wollongong LGA. This was a desktop study without field survey. However, it did include some limited site visits.

The authors noted that few archaeological investigations had been undertaken on the Illawarra Coastal Plain compared to the coastline, Lake Illawarra, and Woronora Plateau. As a result, Dallas and Sullivan noted that this would skew the patterning of Aboriginal occupation in the region.

Conclusions in the report of relevance to the study area are that:

- Open campsites were likely to be found within flat alluvial landforms in close proximity to creek lines across the LGA (cited in GML Heritage 2015, 51);
- Scar trees could be found across multiple landforms in the Illawarra, although the trees must be at least 150 years old;
- Post-contact sites may be found in close proximity to pastoral properties; and
- The availability of fresh water was a strong influence on site location.

Conversely, rock shelters, rock art sites, grinding grooves, and burials would not be expected to be identified within the study area.

AMBS (2006) Aboriginal Cultural Heritage Assessment of the Larkin's Lane Subdivision, Yallah

AMBS undertook survey and test excavations across a range of landforms, soil landscapes, and geomorphological units in the West Dapto Regional Area, building on Sefton's 1984 and Dallas and Sullivan's 1995 studies. The following landforms were cited as likely to contain higher frequencies of archaeological sites, and sites which contain higher artefact numbers/densities (AMBS 2006, table 101):

- Major creek lines which provide permanent and semi-permanent sources of water and elevated alluvial flats suitable for camping;
- Benched foot slopes adjacent to major creek lines and creek convergencies utilised for camping locations;

- Wetlands which provide a range of flora and fauna resources;

Any sources of stone material for flaking, although no specific sources are known to occur in the West Dapto region;

Biosis (2014) Vista Park, Wongawilli Master Plan: Archaeological Report

Biosis undertook survey and test excavations in land between the foothills and coastal plain. The works were completed on land surrounding an archaeological camp site, previously identified by AMBS (2005), named WDRA_AX_17. Biosis determined that the hill crest and upper slopes held moderate to high archaeological potential, while the alluvial flat adjacent to the creek system did not. This would be due to substantial ground disturbance associated with flooding and erosion.

According to an analysis of the work by GML Heritage (2015, 64), Biosis' interpretation of the results contrasted to some regional interpretations made by AHMS and GML Heritage. While Biosis assessed alluvial flat as having the least site integrity (due to natural processes including flooding and human land use practices), their conclusions do not hold up with work done by AMBS at the site. According to GML Heritage (2015, 64), 'their understanding of flooding events and associated taphonomic influences did not also consider fluvial energy, the quantity of sediment being deposited during any single [flood] event, and the localised landscape context.' As a result, 'while the interpretation may be correct for the two sites excavated by Biosis, the generalisation should not be applied to the whole [West Dapto Regional Area].'

5.6. Discussion

The availability of fresh water is a strong influence on site location. Hazleton Creek and the Macquarie Rivulet are perennial, permanent water sources. Large and/or permanent water supplies may have supported large numbers of people and/or long periods of occupation indicated by continuous scatters.

The first order tributaries, on the other hand, are subtle and shallow and do not provide constant access to water. Small and/or ephemeral water supplies (namely first order creeks) may have been able to support only small numbers of people and/or transient occupation. They are unlikely to have been associated with sites of continued or repeat occupation.

Predictive models for the Illawarra area have not developed a metric for how far Aboriginal people tended to camp from the banks of creeks and rivers. It is likely that people would occupy areas further away from more significant waterways, such as Macquarie Rivulet compared to smaller waterways, as these larger waterways are more prone to flooding. In this report, an arbitrary buffer of 50m along second order waterways and 100m along the Macquarie Rivulet has been applied as this is anticipated to be a reasonable distance for people to be both close enough to water resources and far enough from potential flooding (Figure 27). Testing of these areas would further assist in the development of predictive models in the area.

Open campsites are likely to be found within flat alluvial landforms in close proximity to Hazleton Creek, Macquarie Rivulet, and the lagoon. Elevated alluvial flats in particular hold the highest potential to have been used as camping sites. Areas where major creek lines converge are also associated with camping locations; however, the convergence of Hazleton Creek and Macquarie Rivulet is located outside the study area. Rises within the study area overlooking, and in close proximity to, significant waterways with a slope of less than 3% have been assessed as areas of high archaeological sensitivity (see Section 8: TWE_PAD1, TWE_PAD3, and TWE_PAD4).

Moderate to heavy ground disturbance has taken place across the whole study area. Areas where significant disturbance appears to have occurred are not considered to hold archaeological potential. Areas prone to flooding in the vicinity of Macquarie Rivulet would also be excluded. Discussions with landowners assisted in determining these locations. Finally, areas of interest located in gullies are unlikely to be conducive to Aboriginal occupation. Moreover, archaeology is more likely to have been disturbed from erosion and other natural processes.

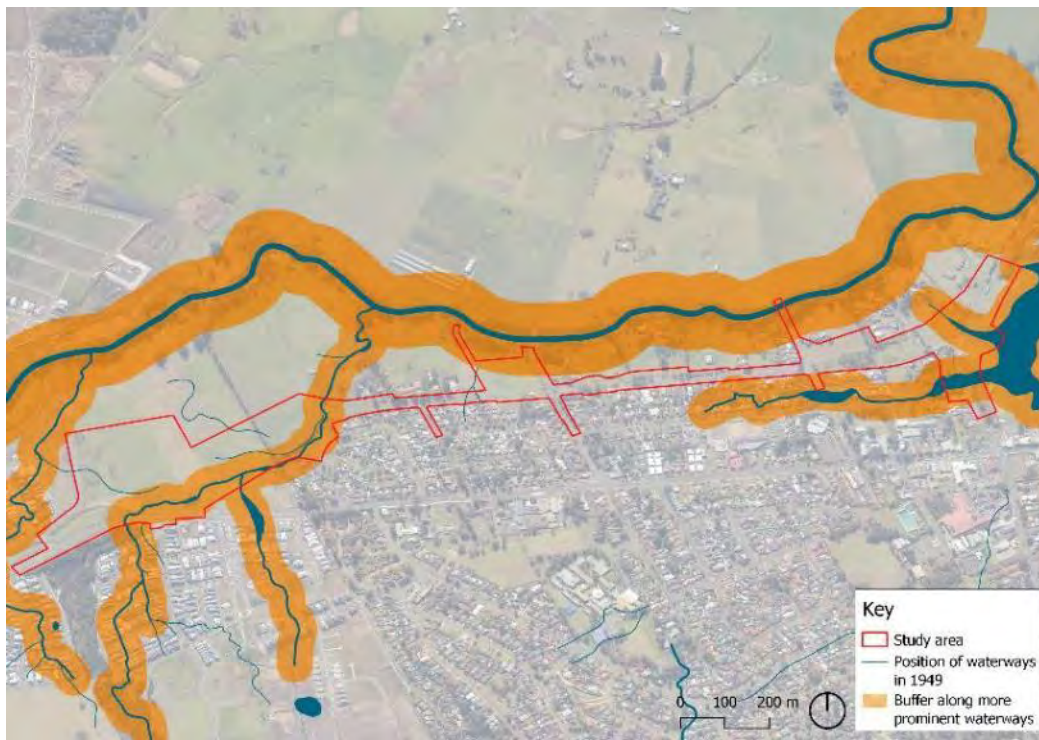


Figure 27. Arbitrary buffer along waterways most prominent in the 1949 aerial, located both inside and outside the study area. Second order waterways with buffer of 50m and Macquarie Rivulet with a buffer of 100m (source: Extent Heritage 2023).



Figure 28. Areas of sensitivity within the study area based on proximity to water. Level of Lake Illawarra during the High Holocene also shown for reference (source: Extent Heritage 2023).

6. SURVEY METHODOLOGY

6.1. Aims

The aims of the archaeological survey were to:

- Record a representative sample of all material traces and evidence of Aboriginal land use visible on the ground surface or visible as features.
- Identify those areas where it can be inferred that material traces or evidence of Aboriginal land use have a likelihood of being present under the ground surface (PADs).

To achieve this, the survey included:

- A pedestrian survey of five properties (Figure 3), with a focus along waterways;
- Visit to the three identified PADs;
- Verification of AHIMS ID 52-5-0961, the isolated artefact;
- Vehicular inspection of public access roads;
- Visual inspection of properties that were unable to be accessed for pedestrian survey to determine archaeological potential and necessity of further pedestrian survey;
- Inspection throughout accessible land to identify any stands of mature/old growth native trees and areas of ground surface visibility;
- Inspection of a sample of the landforms that will potentially be impacted;
- A proportionate emphasis on those landforms deemed to have archaeological potential;
- Pedestrian survey of pre-determined transects;
- Taking representative photographs of survey units and landforms where informative;
- Recording landform and general soil information for each survey unit;
- Recording the land surface and vegetation conditions encountered during the survey (accounting as appropriate for things like vegetation, rock outcrops, coarse fragments, etc.), and how these impact on the visibility of objects;
- Recording any Aboriginal objects observed during the survey;
- Recording any historical archaeological features observed during the survey; and
- Recording of spatial information suitable for mapping according to Code requirements and the calculation of survey coverage.

6.2. Survey personnel

The archaeological survey was undertaken on public roads and a select number of properties which where permission was granted.

Table 8. Participants in archaeological survey.

Name	Organisation	Role
Hannah Morris	Extent Heritage	Survey supervisor
James Davis	Wodi Wodi Traditional Owner	Site officer
Steve Harris	Illawarra Local Aboriginal Land Council	Site officer

6.3. Survey sampling strategy

The archaeological survey was designed to sample the study area in a manner targeting areas of ground surface visibility, significant landforms, and including a representative sample of all landforms. Any areas of ground exposure were examined for archaeological evidence such as stone artefacts and charcoal. Ground surfaces and cut-and-fill features were also examined to determine the degree of soil disturbance, erosion, and potential for subsurface archaeological deposits and/or features. The survey is also aimed at complementing a cultural values assessment, outlined below.

Biosis (2021) had previously undertaken an archaeological survey which covered the area proposed for this re-survey. Three PADs were identified during the Biosis survey. To verify these results and provide an updated analysis, Extent Heritage re-surveyed the study area. Due to a majority of the study area being under private ownership, the survey was constrained to the western portion of the study area and public roads.

Ten survey units were sampled (Figure 29). The survey units were either flat or lower slope landforms (Figure 30-Figure 32).

The area of effective coverage completed for this site visit is difficult to calculate as pedestrian access to properties was not always available. While this meant surface artefacts may not be identified, visual observations of the landscape and archaeological potential were able to be made from public access locations. The table will outline pedestrian and vehicular coverage only.

Table 9. Survey units and attributes

Survey unit	Landform	Survey unit area (sq m)	Visibility %	Exposure %	Effective coverage area (sq m)	Effective coverage %
1	Flat	13,763	5	5	9,092	66
2	Flat	119,549	10	10	28,539	24
3	Lower slope	12,786	5	2	6,929	54
4	Lower slope	7,943	75	10	5,350	67
5	Flat	9,587	50	5	8,385	87
6	Lower slope	8,340	50	5	8,078	96
7	Lower slope	6,503	75	10	5,676	87

Survey unit	Landform	Survey unit area (sq m)	Visibility %	Exposure %	Effective coverage area (sq m)	Effective coverage %
8	Lower slope	6,005	0	0*	0*	0*
9	Lower slope	18,227	75	10	15,244	83
10	Lower slope	69,427	50	5	0	0

*A clear visual observation of the property was able to be made

Table 10. Landform coverage

Landform	Landform area (sq m)	Area effectively surveyed (sq m)	% of landform effectively surveyed	Number of sites
Flat	142,889	46,016	32	0
Lower slope	129,231	41,257	31	1 (existing)



Figure 29. Location of survey units.



Figure 30. Landforms associated with SU1, SU2, SU3, and SU4



Figure 31. Landforms associated with SU4, SU5, SU6, SU7, SU9, and SU9



Figure 32. Landforms associated with SU8, SU9, and SU10

6.4. Survey procedure

Survey unit 1

Survey unit 1 was located at the western extent of the study area (Figure 33). It consisted exclusively of a public road and adjacent kerb.

SU1 was surveyed by vehicle. Pedestrian survey was not possible due to safety restrictions associated with walking along the roadside. The drive was undertaken in both directions by two people across two vehicles. The kerb, and associated disturbance, was visible from the car.

Survey unit 2

Survey unit 2 was located at the western extent of the study area, on the western side of Hazleton Creek (Figure 34). It consisted of the following lots:

- Lot 1178 / DP 1202087
- Lot 1182 / DP 1202087
- Lot 1 / DP 559819

Targeted pedestrian survey was undertaken by a team of three people. The focus of the survey was along Hazleton Creek. Both sides of the waterway were walked, as well as the water channel itself. Deviations were made to explore an area of exposed soil (east) and a large area of ground disturbance associated with significant earthworks (west).

The very western extent of the study area was not accessible due to waterlogging and fences. The remainder of the field was not surveyed. This was due to 0% visibility, no distinctive landscape features that were assessed as being of special interest, and physical restrictions.

Survey unit 3

Survey unit 3 was located at the western extent of the study area, on the eastern side of Hazleton Creek (Figure 35). It consisted of the following lots:

- Lot 1 / DP 559819
- Lot 68 / DP 253407

The northern half of the survey unit (Lot 1 / DP 559819) contained PAD 1, as identified by Biosis (2021). This area was comprehensively walked by a team of three. The southern half of the survey unit (Lot 68 / DP 253407) comprised target survey along Hazleton Creek

Survey unit 4

Survey unit 4 was located in the middle section of the study area (Figure 36). It consisted exclusively of a public road and adjacent kerb. The area directly in front of the three houses, while public land,

was not surveyed to avoid invasion of privacy. The area was otherwise walked by a team of three, and also included vehicular travel along the roads.

Survey unit 5

Survey unit 5 was located in the middle section of the study area (Figure 37). It consisted of the following lots:

- Lot 11 / DP 1205733
- Lot 2 / DP 7360092

A full pedestrian coverage of the eastern lot (Lot 11 / DP 1205733) was undertaken by a team of three. The western lot (Lot 2 / DP 7360092) was inaccessible and, as a result, not surveyed.

Survey unit 6

Survey unit 6 was located in the middle section of the study area (Figure 38). A full pedestrian coverage of the eastern lot (Lot 11 / DP 1205733) was undertaken by a team of three. It included PAD 2, as identified by Biosis (2021). The western lot (Lot 2 / DP 7360092) was inaccessible and, as a result, not surveyed.

Survey unit 7

Survey unit 7 was located in the middle section of the study area (Figure 39). It consisted exclusively of a public road, kerb, and an open area including vehicular access to adjacent houses. The area was walked by a team of three, and also included vehicular travel along the roads.

Survey unit 8

Survey unit 8 was located in the middle section of the study area (Figure 40). It consisted of the following lots:

- Lot 24 / DP 1138317
- Lot B / 38838

Both these properties were inaccessible, and, as a result, no pedestrian survey was possible. However, much of the land within the survey unit was visible from the road as it was relatively small and flat. The western lot (lot 24 / DP 1138317) included PAD 2, as identified by Biosis (2021). A majority of the PAD was visible. The exception was the very western extent of SU8 and PAD as this area sloped away.

Survey unit 9

Survey unit 9 was located in the eastern side of the study area (Figure 41). It consisted exclusively of a public road and adjacent kerb. The very western extent of the study area also included a small section of PAD 2, as identified by Biosis (2021). The area was walked by a team of three, and also

included vehicular travel along the roads. The very northern extent of the survey unit, which crossed Macquarie Rivulet, was not accessible due to dense vegetation.

Survey unit 10

Survey unit 10 was located in the eastern section of the study area (Figure 42). It consisted of the following lots:

- Lot 1 / DP 1069961
- Lot 1 / DP 1119325
- Lot 1 / DP 714125
- Lot 2 / DP 714125
- Lot 4 / DP 714125
- Lot 25 / DP 1237947
- Lot 26 / DP 1239747
- Lot 3 / DP 714125
- Lot 10 / DP 1151689
- Public roads

All private properties within SU10 were inaccessible and, as a result, no pedestrian survey was possible. One lot (lot 1 / DP 714125) was not visible from the public road as it was surrounded by the other private properties. Most of the land within this survey unit was not visible from the road



Figure 33. Location of SU1 and area traversed during survey



Figure 34. Location of SU2 and area traversed during survey



Figure 35. Location of SU3 and area traversed during survey



Figure 36. Location of SU4 and area traversed during survey



Figure 37. Location of SU5 and area traversed during survey



Figure 38. Location of SU6 and area traversed during survey.



Figure 39. Location of SU7 and area traversed during survey



Figure 40. Location of SU8 and area traversed during survey



Figure 41. Location of SU9 and area traversed during survey.



Figure 42. Location of SU10 and area traversed during survey.

6.5. Site definitions and recording

An Aboriginal site is generally defined as an Aboriginal object or place. An Aboriginal object is the material evidence of Aboriginal land use, such as stone tools, scarred trees, or rock art. Some sites, or Aboriginal places can also be intangible and although they might not be visible, these places have cultural significance to Aboriginal people.

The Heritage NSW – DPC guidelines state that one or more of the following criteria must be used when recording material traces of Aboriginal land use:

- The spatial extent of the visible objects, or direct evidence of their location.
- Obvious physical boundaries where present, e.g. mound site and middens (if visibility is good), a ceremonial ground.
- Identification by the Aboriginal community on the basis of cultural information.

For the purposes of this study an Aboriginal site would be defined by recording the spatial extent of visible traces or the direct evidence of their location.

Where areas of PAD are identified towards the margins of each survey unit, efforts must be made by the survey team to delineate each area of potential beyond the survey unit. Where the extent of

the PAD extends beyond the survey unit, efforts must be made to map the extent of that feature up to approximately 70 m outside the survey unit. If it is likely that these PADs continue beyond that point, the survey team must justify that the distance is adequate to provide an accurate representation of the PAD with regard to future planning and design for the project.

7. ARCHAEOLOGICAL POTENTIAL

The archaeological survey identified four areas of archaeological potential within the study area. A key feature of the PADs was their proximity to bodies of water and associated resources.

7.1. Potential archaeological deposits

7.1.1. TWE_PAD1

TWE_PAD1 consisted of an alluvial terrace that overlooks a key waterway, Hazleton Creek (Figure 47). While historical ground disturbance has occurred within the PAD, the landform type justified the area being tested. The terrace provides suitable vantage point over both the river and wider plain and is less prone to flooding than flatter surrounding areas. The area to the north of TWE_PAD1, on a wider flat at the confluence between Hazleton Creek and Macquarie Rivulet, was assessed as possibility being of higher sensitivity. However, this location is outside the study area boundary.

The western half of the PAD sits a pocket of the Fairy Meadow soil landscape, which is conducive to preserving stratified archaeological deposits. The eastern half is within the Albion Park soil landscape, known to be more erosional. The inclusion of both soil profiles within the extent of TWE_PAD1 was key to understanding site integrity and occupation patterning across the two landscapes.

Hazleton Creek forms the western extent of the PAD. The eastern extent was determined by the steepening of the hill and distance from the water. The study area boundary created the northern and southern edges of the TWE_PAD1.

7.1.2. TWE_PAD2

TWE_PAD2 ran along both banks of Hazleton Creek (Figure 48). The primary determinant of the area of sensitivity was the proximity to water. An arbitrary buffer of 50m along the 1949 course of Hazleton Creek was chosen as the extent of the PAD.

Agricultural activities, especially those associated with ploughing, have caused surface and subsurface ground disturbance up to a depth of approximately 30cm below the ground surface. These activities have shown to have impacted surface and shallow surface archaeological remains. While the integrity of the remains and associated soil profile were lowered, archaeological objects were likely to still remain.

In contrast, three key areas were excluded from the PAD from having undergone heavy ground disturbance. This includes the western extent of Hazleton Creek which was landscaped and graded for water management and road construction. Similarly, the public park on the eastern bank of Hazleton Creek was also excluded due to ground disturbance associated with the parkland, subsurface service installation, and channelisation of Hazleton Creek.

Within TWE_PAD2, certain areas were anticipated to hold higher archaeological sensitivity. These included micro-rises and alluvial terraces, and the confluences of Hazleton Creek and its tributaries. The results of the test excavations showed this not to be the case (Section 10.2).

The PAD is located on both the Albion Park and Fairy Meadow soil landscape. As the Albion Park soil landscape is erosional, it was assessed as unlikely to yield evidence of stratified archaeological deposits. The erosion may have also moved or removed archaeological objects. In contrast, the alluvial activities associated with the Fairy Meadow landscape were anticipated to better create and protect stratified deposits. The inclusion of both soil profiles within the extent of TWE_PAD1 was key to understanding site integrity and occupation patterning across the two landscapes (Figure 12).

7.1.3. TWE_PAD3

TWE_PAD3 was a small, raised area overlooking a lagoon located outside the eastern extent of the study area (Figure 44). The lagoon, and lagoons in general, are known to be associated with abundant, varied, and significant plant and animal resources. As a result, the PAD location was considered a potential location for resource and gathering, preparation of foodstuffs, and occupation. The raised area also provides a clear vantage point over the body of water.

The edge of the PAD was placed back slightly from the edge of the lagoon as it was expected that the water level would be higher following heavy rains. The eastern extent of the PAD was also restricted by the study area boundary. The PAD may extend further to the northwest; however, it is likely to have been truncated by the road.

7.1.4. TWE_PAD4

TWE_PAD4 held the same characteristics as TWE_PAD3, although the elevation of TWE_PAD3 is slightly higher and was assessed as a PAD for the same reasons (Figure 44). The PAD would have extended further east, outside the study area.

7.2. Comparative areas

7.2.1. Eastern Transect

The Eastern Transect was not identified as an area of archaeological potential (Figure 49). The area was instead identified to provide a wider analysis of archaeological potential in the area. The primary aim of excavating in the Eastern Transect was to compare the soil profiles and any identified archaeology to that of TWE_PAD3 and TWE_PAD4.

7.2.2. Hamilton Road

Like the Eastern Transect, Hamilton Road was not identified as a PAD (Figure 50). The test excavation methodology included the allocation of additional trenches in locations chosen at the discretion of the RAPs on-site. Despite the potential ground disturbance, including the installation of a large stormwater drain, the location adjacent to the Macquarie Rivulet warranted further investigation to confirm the presence or absence of archaeological remains.

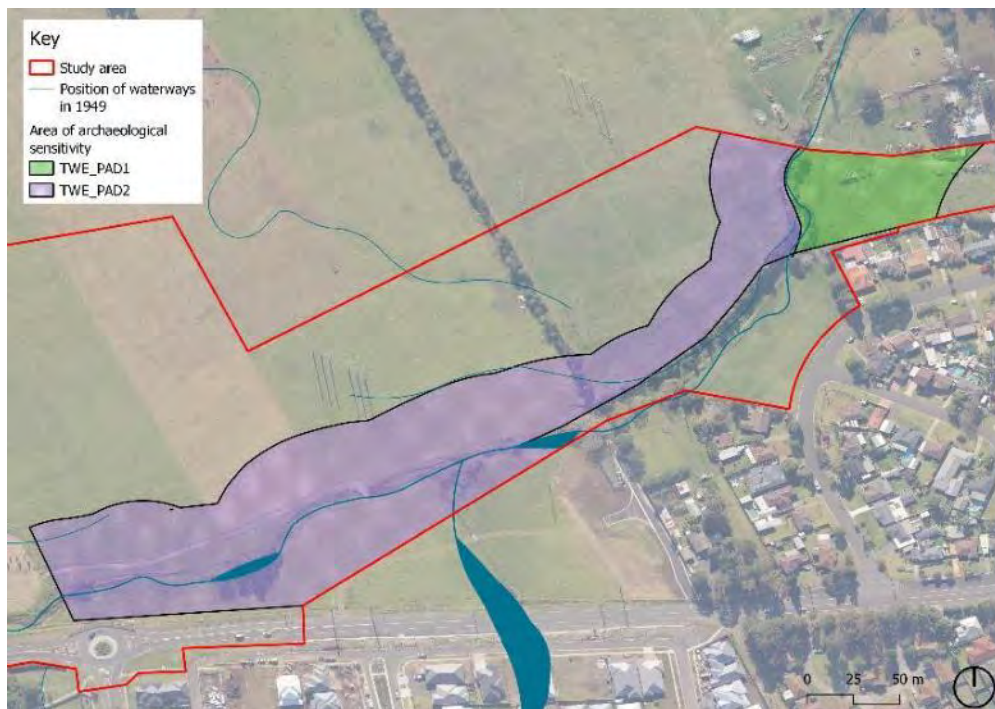


Figure 43. Area of archaeological sensitivity at western portion of study area: TWE_PAD1 and TWE_PAD2 (Extent Heritage 2023).

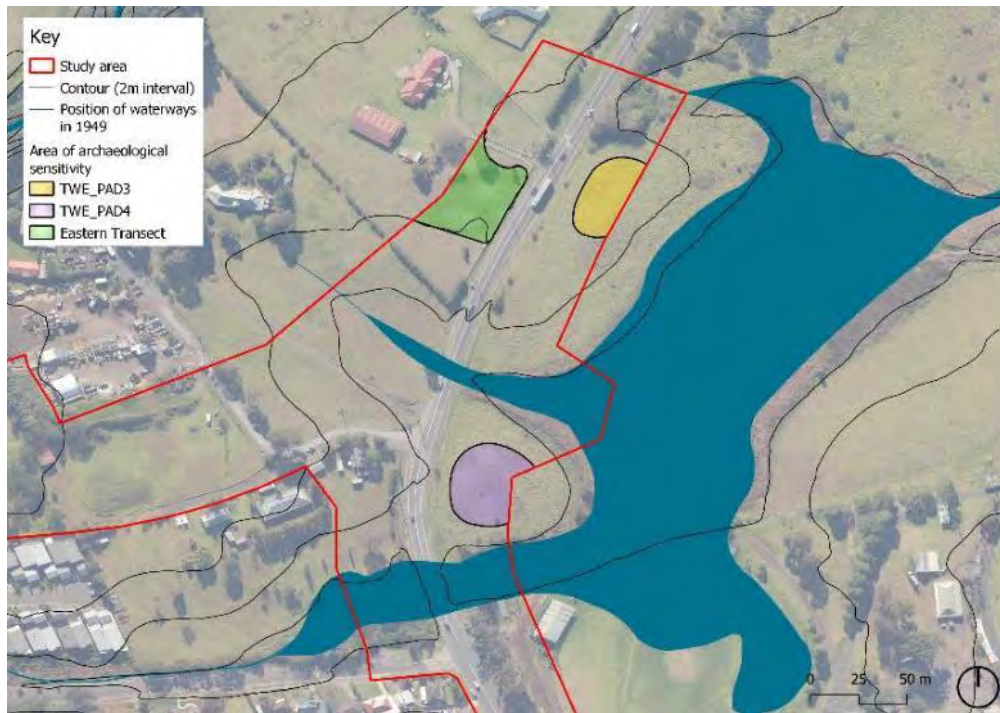


Figure 44. Area of archaeological sensitivity and additional transect area at eastern portion of study area: TWE_PAD3, TWE_PAD4, and Eastern Transect (Extent Heritage 2023).



Figure 45. Location of Hamilton Road area of archaeological investigation (Extent Heritage 2023)

7.3. Summary

Four areas of archaeological potential were identified during the background research and archaeological survey:

- TWE_PAD 1: an alluvial terrace on the eastern side of Hazleton Creek;
- TWE_PAD 2: the area within a 50m buffer of Hazleton Creek;
- TWE_PAD3: a low-rise overlooking the lagoon; and
- TWE_PAD4: a low-rise overlooking the lagoon.

Two additional areas for testing were also nominated:

- Eastern Transect: a ridge between two shallow gullies overlooking the lagoon; and
- Hamilton Road: a gentle slope adjacent to Macquarie Rivulet.

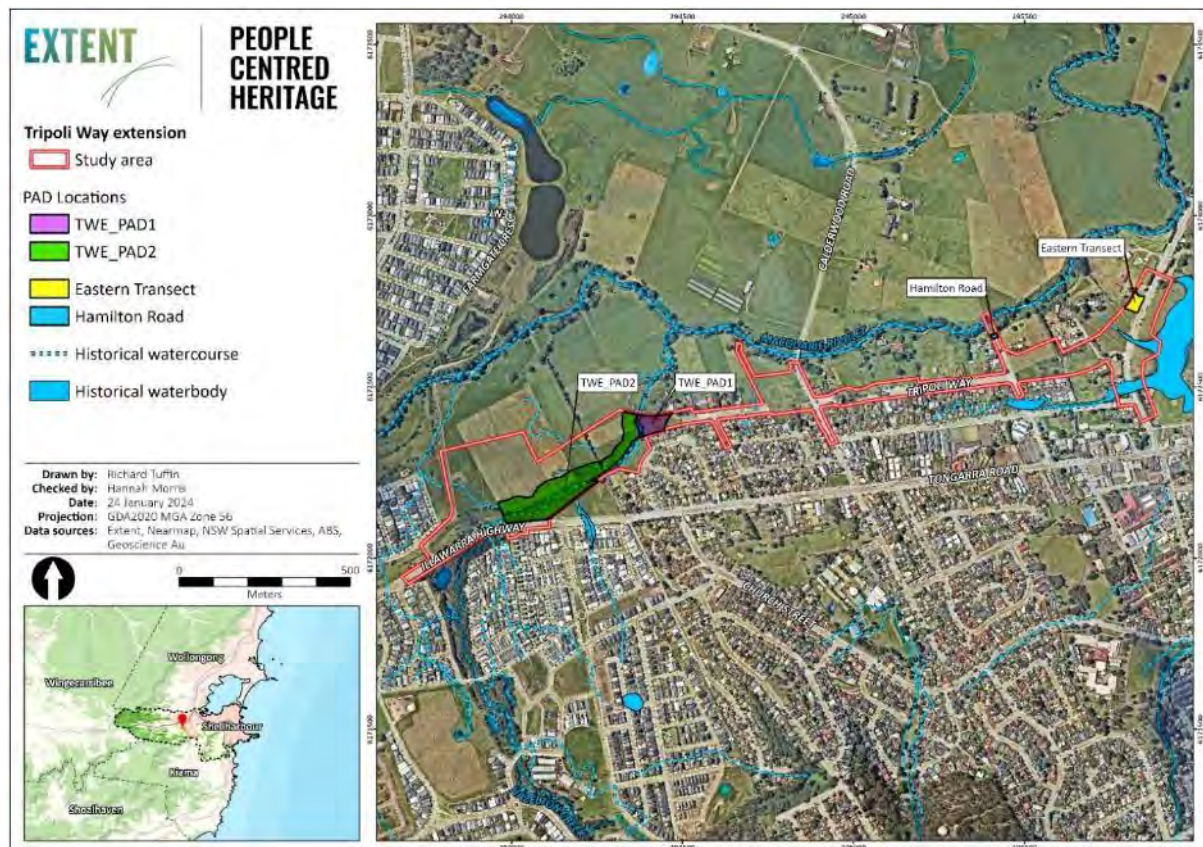


Figure 46. Areas of investigation within the study area based on topography and proximity to water (Extent Heritage 2023).

8. ARCHAEOLOGICAL TEST EXCAVATION

8.1. Aims

This Archaeological Test Excavation Report (ATER) has been prepared in accordance with the *Code of Practice* (DECCW 2010b). The aims and objectives of this report are to:

- identify any Aboriginal objects or places within the study area;
- assess the scientific significance of an identified Aboriginal objects or places;
- evaluate and discuss the impacts of the proposed works on identified Aboriginal objects or places; and
- develop management measures for the proposed impacts to identified Aboriginal objects or places.
- To satisfy the objectives of this report, the following tasks have been completed:
- a review of existing archaeological data, including assessments previously completed within the vicinity of the study area and relevant heritage databases;
- investigation of the environmental context of the study area;
- synthesis of background information into a predictive model to inform an assessment of archaeological potential across the study area; and
- completion of a test excavation program across the study area to test the results of the predictive model and identify subsurface Aboriginal objects.

8.2. Sample strategy and coverage

The areas chosen allowed the program to investigate the nature of any subsurface material present within the areas identified during the archaeological survey. The test excavation methodology for each of the areas of potential was as follows:

TWE_PAD1

- Eight test pits (TP1-TP8) were excavated within TWE_PAD1 (Figure 47). This sits on a raised alluvial terrace, overlooking Hazleton Creek and the plains and mountains to the west. While the site has undergone some ground disturbance, it is the primary focus of fieldwork investigations.
- The test pits were placed in rows running east-west and spaced at 20m intervals. The test pits ran along the extent of the PAD, resulting in a representative coverage of the area.
- There was the opportunity for the field team to excavate additional test pits, as testing revealed areas likely to contain higher archaeological potential. At the discretion of the RAPs, an additional four test pits (TP53-55 and TP59) were added to TWE_PAD1 as part of the allocation of additional test pits outlined in the methodology.

TWE_PAD2

- Thirty-three test pits were excavated along Hazleton Creek (TP9-TP41) (Figure 48), 25 of which were placed on the northern side of the creek (TP12-TP40) and 8 on the southern side (TP9-TP11 and TP37-TP41). The pits on each side of Hazleton Creek were laid in a single transect, extending along the entire length of the waterway located within the study area. The western extent of the PAD was observed as having significant ground disturbance during the site survey.
- The pits were placed at 20m intervals. Minor gaps between the test pits were included where tributaries joining Hazleton Creek were located (i.e. between TP20 and TP21, and TP11 and TP37). The confluences of Hazleton Creek and its tributaries was considered a focus-area.
- Test pits were placed approximately 25m from the 1949 location of the watercourse.

TWE_PAD3 and TWE_PAD4

- Three test pits were proposed to be excavated within TWE_PAD3 (TP42-TP44) and 4 test pits within TWE_PAD4 (TP45-TP48).
- PAD 3 and PAD 4 were not excavated due to redesign of the project concept plan, resulting in no impacts in these areas.

TWE Eastern Transect

- Four test pits were excavated on a small, elevated ridge between two gullies overlooking the lagoon in the eastern portion of the study area (TP49-TP52) (Figure 49).
- The Eastern Transect was not considered to be an area of PAD, however excavation of test pits in this area was undertaken to test the archaeological potential along a slope that overlooked a lagoon (potentially a significant body of water). The primary aim of these test pits was to compare the soil profiles and any identified archaeology to that of TWE_PAD3 and TWE_PAD4, however as PADs 3 and 4 were not excavated an effective analysis could not be undertaken.
- The test pits in the Eastern Transect were spaced 10m apart.
- The four test pits were originally located along two transects, however redesign reduced the proposed impacts in this location. As a result, all four test pits were relocated to be parallel and adjacent to the roadway.

Hamilton Road

- An additional three test pits (TP56-58) were excavated on the grass verge at the end of the Hamilton Road cul-de-sac, at the discretion of the Aboriginal representatives. Despite the potential ground disturbance, including the installation of a large stormwater drain, the location near the Macquarie Rivulet warranted further investigation to confirm the presence of absence of archaeological remains.
- It should be noted that TP56 was abandoned mid-excavation.

Table 11. Summary of sample area

Site	Area Excavated (metres ²)	Total area of PAD (metres ²)	Excavated percentage of total area (%)
TWE_PAD1	3 (12 test excavation units)	4,653	0.25
TWE_PAD2	8.25 (33 test excavation units)	30,526	0.03
TWE_PAD3	0 (due to redesign)	1,845	NA
TWE_PAD4	0 (due to redesign)	1,158	NA
Eastern Transect	1 (4 test excavation units)	1,544	0.06
Hamilton Road	0.75 (3 test excavation units)	282	0.26

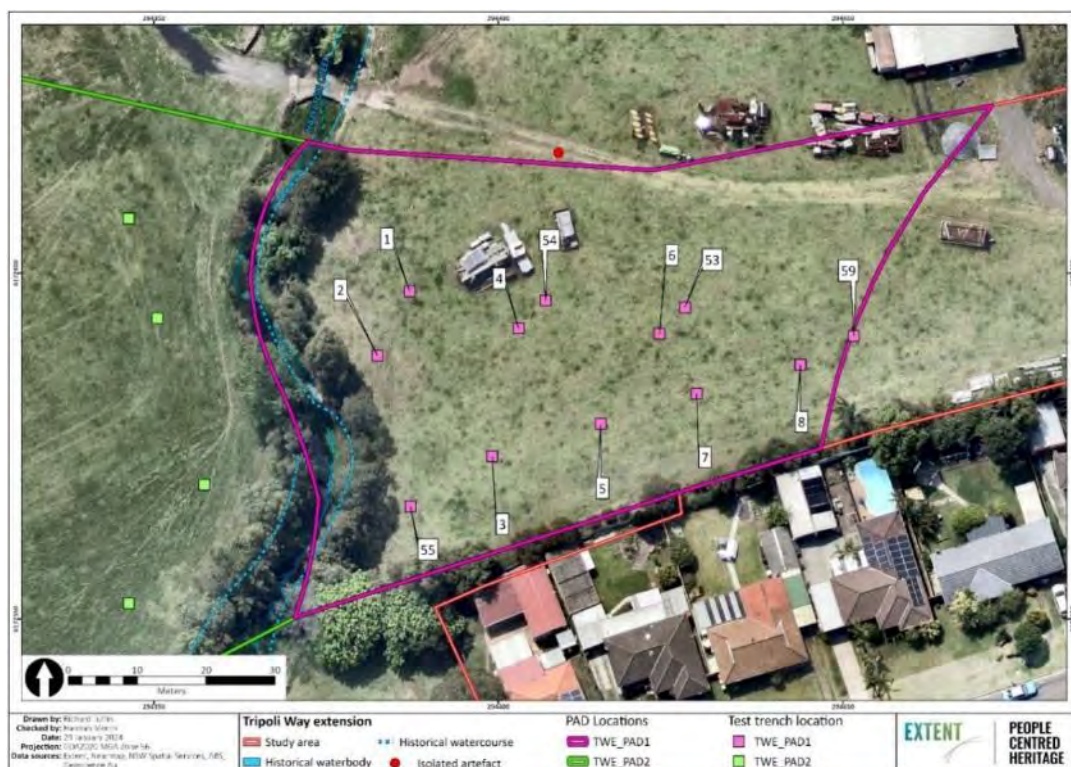


Figure 47. Location of test pits across TWE_PAD1. Test pits not to scale



Figure 48. Location of test pits across TWE_PAD2. Test pits not to scale.



Figure 49. Location of test pits across Eastern Transect. Test pits not to scale.



8.3. Excavation procedure

Test pits measured 50cm x 50cm in size. Excavation of the first test pit in each PAD occurred in 5cm spits, with subsequent pits excavated in 10cm spits. All excavations were carried out manually with hand tools.

All excavations continued until basal clay was exposed, culturally sterile units were identified, or water table was encountered.

All excavated material was wet sieved through a 3mm sieve. Excavations were recorded in accordance with the requirements of the *Code of Practice*, including scale drawings, photographs, and written descriptions of the test pit locations and soil profiles.



Figure 51. The field team undertaking testing in TWE_PAD2 south of Hazelton Creek (NearMaps 5/12/2023).



Figure 52. The field team sieving along Hazelton Creek, TWE_PAD2

8.4. Test excavation results

8.4.1. Description of areas

TWE_PAD1

- This area consists of a raised alluvial terrace, overlooking Hazelton Creek and the flood plains and mountains to the west.
- The area has been primarily cleared, with a young thinly wooded riparian corridor along the creek (Figure 53-Figure 56). The remainder of the area is densely grassed pasture, allowing for very little ground surface visibility (Figure 53-Figure 56).
- TWE_PAD1 has undergone some ground disturbance and is actively in use for agricultural livestock rotation. There is an informal dirt vehicle track within the PAD that runs from The Expressway in the east, across Hazelton Creek, and into TWE_PAD2 in the west. The ground surface visibility along this track is very good (Figure 54).
- Test pits 1-8, 53-55 and 59 were located to the south of the vehicle track due to the presence of farming equipment, sheds, and an assortment of large pieces of building equipment and materials, mostly comprised of metal, stacked in discrete locations near to the landowner's property (Figure 55).



Figure 53. TWE_PAD1 looking west across the entire PAD area to Hazelton Creek.



Figure 54. TWE_PAD1 looking west to Hazelton Creek showing informal vehicle track.



Figure 55. TWE_PAD1 looking west showing storage of farming equipment and materials.



Figure 56. TWE_PAD1 looking west showing Hazelton Creek and associated riparian corridor.

TWE_PAD2

- TWE_PAD2 comprises both sides of Hazelton Creek, along the full extent of the waterway located within the study area.
- The northern portion of the area along the southern bank of Hazelton Creek shows some minor erosion in one location, approximately 0.5% (Figure 58).
- The area is largely cleared however there is some young thinly wooded riparian corridor, primarily consisting of willow. The remainder of the area is densely grassed pasture, allowing for 0% ground surface visibility (Figure 57, Figure 60, Figure 63).
- The entire PAD has been subject to significant disturbance, primarily ploughing, trampling and agricultural use, along with power pole installation and associated anchors to the south (Figure 57, Figure 65) and north (Figure 68) of the PAD boundary, and farm fencing of several paddocks throughout (Figure 63, Figure 65, Figure 66).
- TWE_PAD2 follows Hazelton Creek and includes an erosional cataract in the northern bank of the waterway (near TP21-22).
- The PAD may be the remnant of a disturbed terrace along Hazelton Creek.

TWE_PAD2 includes a portion of semi formalised asphalt vehicle access track (Figure 66-Figure 68), which crosses the Hazelton Creek (Figure 68) in the western portion of the study area and continues from near TP28 to the western extent of the study area.



Figure 57. TWE_PAD2 looking west, parallel to Hazelton Creek.



Figure 58. Exposure along Hazelton Creek, TWE_PAD2 looking north.



Figure 59. TWE_PAD2 looking east, along Hazelton Creek.



Figure 60. Tributary at the western extent of TWE_PAD2. Looking southwest to Tongarra Road.



Figure 61. Eastern portion of TWE_PAD2, looking east, approximate location of TP17-19



Figure 62. Northeastern extent TWE_PAD2 looking south. Approximate location of TP12.



Figure 63. TWE_PAD2 looking south in approx. location of TP12-15.



Figure 64. Eastern portion of TWE_PAD2 looking east, approximate location of TP20.



Figure 65. TWE_PAD2 looking east, overview of approximate location of TP21-27.

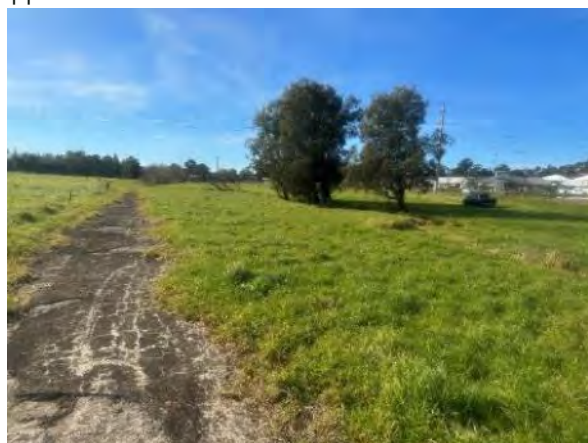


Figure 66. TWE_PAD2 asphalt vehicle access track. Approximate location of TP30 looking east.



Figure 67. TWE_PAD2 asphalt vehicle access track and crossing of Hazelton Creek looking east.



Figure 68. TWE_PAD2 asphalt vehicle access track and power poles. Overview of approximate location of 28-31 looking northeast.

TWE_PAD3 and TWE_PAD4

- TWE_PAD3 and TWE_PAD4 were located on small rises overlooking the lagoon.
- TWE_PAD3 and TWE_PAD4 were not excavated due to a redesign that prevents the areas being impacted.
- For further descriptions of these areas, see Section 8 of the ACHAR (Extent Heritage 2024).

Eastern Transect

- The Eastern Transect comprises a small, elevated ridge between two gullies overlooking the lagoon in the eastern portion of the study area (TP49-TP52).
- The area is located in a residential lot. It is covered in dense, manicured lawn grasses with 0% ground visibility (Figure 69 to Figure 72). Gardening also including a line of hedges and young trees.

Water services are located in the eastern extent of the transect.



Figure 69. Eastern transect looking northwest.



Figure 70. Eastern transect looking south along Illawarra Highway.



Figure 71. View along Illawarra Highway facing northeast



Figure 72. View of the Eastern transect, facing northwest.

Hamilton Road

- There test pits (TPs 56-58) were excavated in the Hamilton Road area, with TP56 being abandoned mid-way through the excavation.
- The area was located at the cul-de-sac on the northern extent of Hamilton Road (Figure 55- Figure 57).
- The area was bounded by two properties (the fence lines also being the extent of the study area) on the east and west, the kerb of Hamilton Road on the south, and vegetation located at the top of the gully associated with Macquarie Rivulet.
- The vegetation was dense and mostly comprised introduced weed species, including lantana, which was impenetrable, and, as a result, no test pits could be located there. The area was otherwise free of trees, with low grass that was mown.
- The area sloped downward to the north, considerably more than the road, to the top of the rivulet gully. The degree of slope was the same as identified in the properties on either side of the area.
- The area had undergone disturbance through the installation of a large stormwater drain running north to south in the centre of the Hamilton Road site (Figure 55).



Figure 73. Hamilton Road excavation area showing fence lines (extent of study area) on either side, location of stormwater drain, and vegetation at the top of the gully of Macquarie Rivulet, facing north.



Figure 74. Hamilton Road excavation area showing fence lines (extent of study area) on either side, location of stormwater drain, and vegetation at the top of the gully of Macquarie Rivulet, facing north.



Figure 75. Hamilton Road showing TP57, with TP56 back-left and TP58 back-right, facing west.



Figure 76. Hamilton Road showing TP58, with TP57 back-left and TP56 back-right, facing east.

8.5. Ground disturbance

The entire study area has undergone ground disturbance during its function as agricultural and pastoral lands from the early nineteenth century to the present. Ploughing across the study area has disturbed surface and subsurface archaeological remains to a depth of approximately 30cm. Active modern agricultural use across the study area includes disturbances such as the plantation, processing and harvesting of crops, and the rotation of livestock (cattle and goats), and access to the paddocks via both light and heavy agricultural plant.

The presence of dense grass makes it difficult to observe the surface damage by livestock, however given the general dampness of the soil and average rainfall in the area it can be assumed that a level of erosion and transportation of soils has occurred due to frequent livestock traversing and trampling in wet conditions.

The test excavations revealed that the natural A1 topsoil is likely to have been buried by topsoil or top dressing, possibly used to build up the natural land surface across the study area. A new A1, averaging 10–50cm in thickness, was being formed by grasses and active bioturbation, primarily by dung beetles. Based on an understand of the history of the site, the study area was most likely built up to level for farming purposes or through natural process over years of agricultural use (TP27).

Most of the test pits presented evidence of bioturbation caused by rootlets, small roots, and insect burrows. Other disturbances observed include the presence of modern material (TP7 and TP8) and imported gravels (TP37) which is likely due to the proximity to the current dwelling and relatively recent establishment and maintenance of vehicle access tracks.

8.6. Soil profiles

8.6.1. Overview

The study area consisted of two natural soil landscapes. The Fairy Meadow soil profile is found at the eastern and western extents of the study area, and the Albion Park profile is found along the southern portion of the study area (Figure 77).

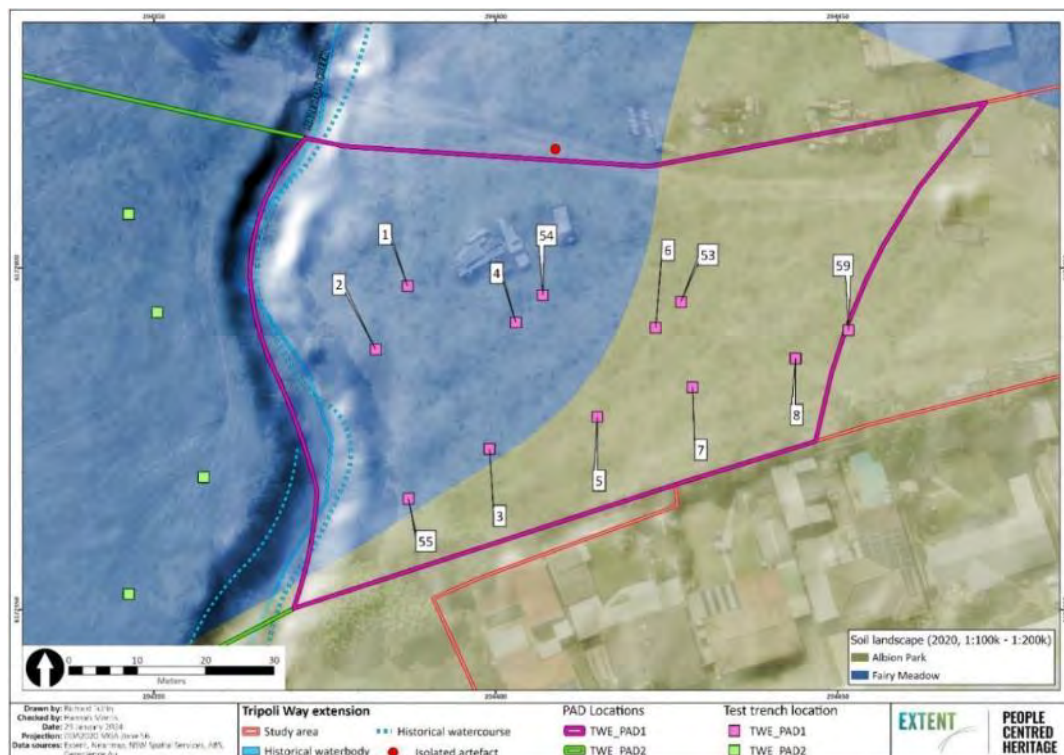


Figure 77. TWE_PAD_1: location of proposed test pits across Albion Park and Fairy Meadow soil landscapes

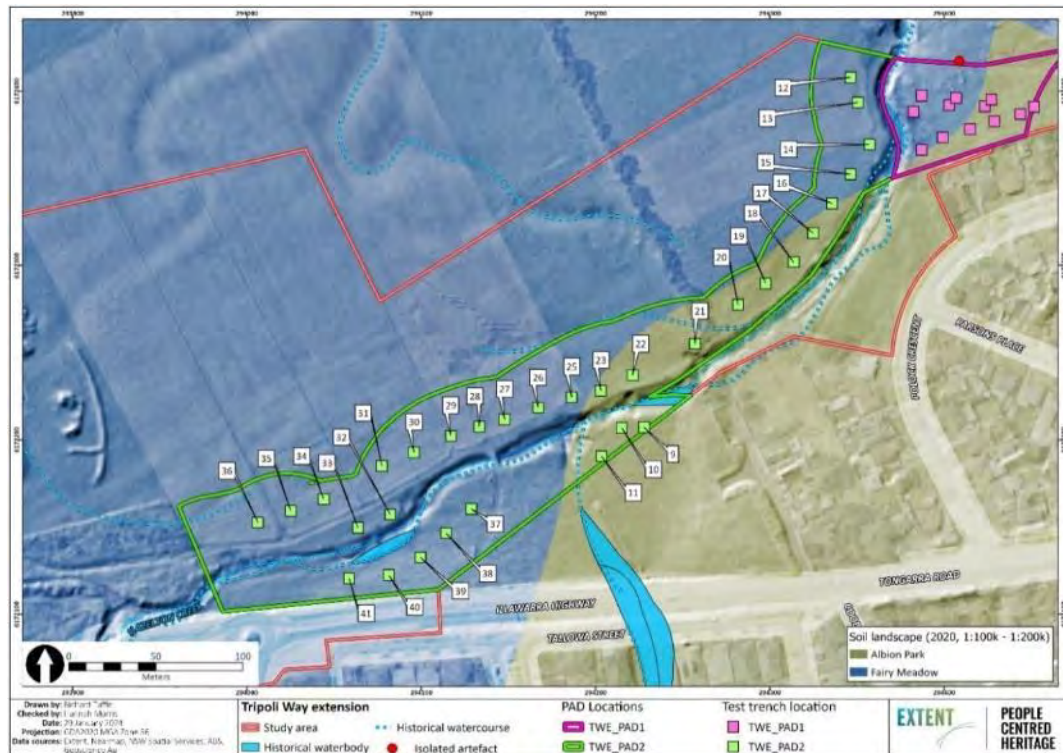


Figure 78. TWE_PAD_2: location of proposed test pits across Albion Park and Fairy Meadow soil landscapes.



Figure 79. Eastern Transect: location of proposed test pits across the Fairy Meadow soil landscape.

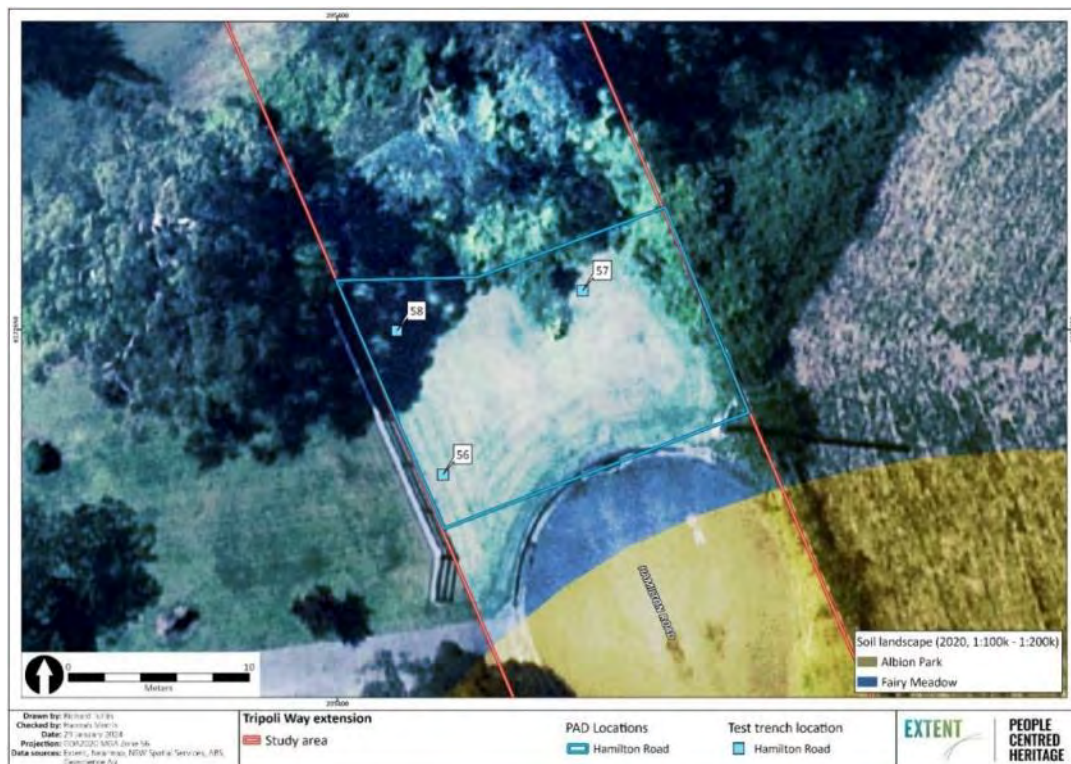


Figure 80. Hamilton Road: location of proposed test pits across the Fairy Meadow soil landscape.

8.6.2. Description

TWE_PAD1 and TWE_PAD2

Across the study area the soil profiles encountered within the test pits of TWE_PAD1 and TWE_PAD2 included both Albion Park and Fairy Meadow soil profiles (Figure 77-Figure 80). Despite the two profiles being anticipated, the soil horizons across the extent of both PADs generally consisted of the following:

- A0: The test pits were covered with low to high grasses, and 0% ground visibility. The only portions of the property with some surface visibility were located outside of the test pit locations (i.e. vehicle tracks and eroded banks).
- A1: The A1 had been built up by livestock grazing and rotation. The forming A1 was predominantly 10 to 20 mm thick. It was a mid-reddish-brown silty clay, with some humic material. It contained rootlets from the grass cover and few subangular gravel inclusions. The transition between the A1 and A2 was often difficult to distinguish but was predominantly identified at the base of the grass rootlets.
- A2: The A2 was a similar mid- to dark-reddish-brown silty clay, but was generally darker, likely due to increased moisture content. Sparse subangular gravels and minimal charcoal flecks were found throughout. Moderate to high levels of bioturbation caused by rootlets, small

roots, and insect burrows were common throughout, with dung beetles appearing to be a prevalent agent of bioturbation. The A2 often ranged between 10cm to 50cm in depth.

- Transition: Most test pits did not possess a clear transition between the A2 and B horizons. Most transitions were highly diffuse and identified by a gradual continuous increase in clay content which often occurred around the same depth as the water table.
- B: In the western extent of TWE_PAD2, laminated clays and gley colouring were observed. These features are often associated with wetland and waterlogged areas. Works ceased when B horizon clay or the water table was reached.

Eastern Transect

The soil profile across the Eastern Transect and Hamilton Road was Fairy Meadow (Figure 84). The soil landscape identified in the Eastern Transect was similar to that of TWE_PAD1 and TWE_PAD2. It comprised the following:

- The four test pits were in a single line 10m apart from one another, and therefore had a uniform soil profile composition.
- A0: The four test pits were covered by low grass. The topsoil comprised a very dark brown humic silty loam with grass roots. The layer was approximately 800mm thick.
- A1: The A1 was a mid-brown humic silty clay. Roots and insect burrows made the soil friable in places. The A1 included ironstone flecking and small pieces of gravels throughout. The A1 was 80-150mm thick. The transition to the A2 horizon was gradual and identified by reduced rootlets and flecking, and increased clay content.
- A2: The A2 horizon was a slightly cleaner soil layer. In TP57, in particular, it was very organic and was likely influenced by introduced soils for gardening. The A2 was between 200-250mm thick.
- B: The B horizon was a wet orange clay with a comparatively flat base to the surface landscape which slopes down to the southeast.

Hamilton Road

The Hamilton Road area was located on the Fairy Meadow soil landscape (Figure 83). The soil profiles encountered comprised only clay rich fill directly above B horizon clay. This level or type of fill was not identified across the rest of the areas tested. Despite the fill across TPs 57 and 58, two artefacts were identified (one in each trench).

8.7. Summary

Analysis of the soils encountered within each test pit showed that the soil profile across TWE_PAD1 and TWE_PAD2 are largely homogeneous, indicative of heavy disturbance likely resulting from ploughing. Due to this disturbance, distinct separation of the Fairy Meadow soil profile and the Albion Park soil profile was not able to be observed in the field. This indicates that any Aboriginal cultural heritage present across the PADs is likely to be retrieved from a secondary context.

The presence of intact Albion Park soils along part of TWE_PAD2 (e.g. TP21) was determined by the presence of poorly sorted gravels (indicative of turbid fast-moving water such as an old watercourse or flash flood event) and gleying (indicative of a waterlogged or wetland landscape). This evidence suggests there is some intactness of natural Albion Park soils present below the layers of disturbance caused by agricultural activities.

No natural soil profiles were identified at Hamilton Road, instead significant ground disturbance was observed by the introduction of fills across the area. This was likely due to the installation of the stormwater drain, and installation and management of Hamilton Road by Shellharbour City Council. The two identified artefact may have been imported to the site with the fills or been moved from their original locations within the Hamilton Road area.

The soil landscape identified in the Eastern Transect was similar to that of TWE_PAD1 and TWE_PAD2. Although, no evidence of waterlogging was observed due to the location of the test pits being uphill from any bodies of water.

9. EXCAVATION RESULTS

9.1. Lithic analysis

9.1.1. Overview

The lithics analysis report (Appendix D) provides analysis undertaken by Rebekah Hawkins (Senior Heritage Advisor, Extent Heritage) of the stone artefacts recovered from the Tripoli Way Extension test excavations. A summary of the report is provided here.

This analysis does not discuss or preclude the social significance or cultural meaning of these objects and further consultation would be required to determine this. It is likely that these objects held, and still hold, a level of significance to those who made them and those who are connected to the land today. This analysis aims to understand and determine the stone reduction activities undertaken on site and in turn reveal information on the source of the raw materials, post-depositional influences, and site chronology. The following research questions were used to guide the analysis and assess the extent and significance of the tangible Aboriginal heritage in the study area:

- Source information: What material resources were used; where did they come from; and what does this tell us about Aboriginal use of the region in the past?
- Stone reduction technology: How was the stone worked and used? Does this change over time? Can the function of the site be inferred from the artefact assemblage? What does this

tell us about Aboriginal occupation, use, settlement, and activities undertaken through time in this region?

- Post-depositional influences: What post-depositional influences have impacted on the assemblage, and what does this tell us about the integrity and significance of the site?
- Site chronology: When was the site occupied? Was the assemblage the product of repeated occupations or a single event? Is there spatial patterning in the assemblage, and what does this tell us about repeated use, activities and/or occupation of the region through time?

9.2. Artefact analysis

9.2.1. General results

A total of 44 Aboriginal objects were recovered from 20 of the 52 excavated test pits (38.4% of the test pits), equating to an average overall density of 3.4 artefacts/m². No test pit had high densities of artefacts (>10 artefacts per square metre). Overall, the assemblage is dominated by flakes (n = 35, 79.5%) with several flakes displaying retouch (n = 5, 11.4%), including two small, backed artefacts. No cores were identified, and very little cortex was evident on the objects.

The lithology of the artefacts was recorded, with specific lithologies identified where they could be (e.g. silcrete, chert and chalcedony). The assemblage is dominated by fine-grained siliceous material (n = 24, 54.5%). Chert was also identified (n = 7, 15.9%), with some silcrete (n = 5, 11.4%), indurated mudstone/tuff (IMT, n = 3, 6.8%) chalcedony (n = 2, 4.5%), quartz (n = 1, 2.3%). Quartzite (n = 1, 2.3%) and volcanic (n = 1, 2.3%).

Table 12. Artefact distribution across test pits

Test pit	Count	Test pit	Count	Test pit	Count	Test pit	Count
1	2	7	2	35	2	57	1
2	1	8	3	37	3	58	1
3	3	17	1	38	2	Total	44
4	4	18	1	41	2		
5	4	29	4	51			
6	2	33	1	54			

9.2.2. Vertical distribution

Artefacts were recovered between 0–90 cm with highest density between 10–20 cm (n = 17, 38.6%).

9.2.3. Spatial distribution

Across the study area the overall number of artefacts recovered was low. Despite this, the assemblage reflects some evidence of knapping on site and artefact discard. Test pits in TWE_PAD1 have slightly higher numbers given the size of the PAD, in comparison to those other areas excavated within the wider study area (TPs 1-8, 53-55 and 59, n = 24, 54.5% of the assemblage).

9.2.4. Vertical distribution – size analysis

Few artefacts less than 10 mm in maximum length are present within the recovered assemblage (n = 8, 18.2% of the assemblage). This may indicate low levels of onsite reduction and/or post-depositional influences removing these smaller artefacts.

9.2.5. Presence of historical artefacts

Several pieces of modern material, such as plastic and glass, were recovered during the excavations (TP7 and TP8). Introduced gravels and clay fill were also identified within the study area (TP37 and TPs65-58). This was likely in part due to historical and modern agricultural activities such as ploughing, plantation, processing and crop harvesting which have impacted the top 30 cm of the study area.

9.2.6. Procurement of raw materials analysis

The artefact assemblage recovered shows extremely low levels of cortex. This could be due to artefacts or knapping materials being prepared elsewhere, with the majority of knapping occurring on site restricted to maintenance of retouched items. This retouching would produce flakes with no cortex.

9.2.7. Cores

One core fragment was recovered during the excavations, this was recovered from TP5 Spit 4 (30-40cm below the ground surface). It is likely that cores were present on site, and they may have been removed for further knapping elsewhere or that they were not recovered during the test excavations due to the arbitrary placement of the test pits. The artefact numbers recovered do not show high levels of core knapping occurring on site.

9.2.8. Retouch and usewear analysis

The assemblage recovered five objects displaying retouch and/or usewear. This indicates that the knapping occurring on site was likely primarily associated with the maintenance and upkeep of tools.

9.3. Results

9.3.1. TWE_PAD1

PAD1 recovered the highest number of artefacts ($n = 24$), with nine out of the twelve (75%) test pits in the area producing artefacts (Figure 81). Spatially, the highest density identified was four artefacts in each TP4 and TP5 and overall, an average density of 8 artefacts / m^2 . Vertically, between 10-20cm sees a peak in artefacts ($n = 14$, 58.3%).

Three of the artefacts with retouch were recovered from TWE_PAD1 (12.5% of the TWE_PAD1 assemblage), including the two backed artefacts. The artefact assemblage was predominantly comprised of complete flakes ($n = 5$, 20.8%) and distal flakes ($n = 5$, 20.8%) with fewer numbers of proximal flakes ($n = 3$, 12.5%), single core fragment (4.2%) and a single complete tool (4.2%). The assemblage was dominated by flaked artefacts.

Table 13. Spatial distribution of artefacts across PAD1.

Test Pit	Count
1	2
2	1
3	3
4	4
5	4
6	2
7	2
8	3
54	3
Total	24

9.3.2. TWE_PAD2

Of the 33 test pits excavated in TWE_PAD2, 16 stone artefacts were recovered from eight of the test pits (24.2%). This produced a density of 4 artefacts / m^2 . Stratigraphically, the artefacts were recovered between 10-90cm, with no major peak in artefact numbers. The artefact assemblage was predominantly comprised of fragmented flakes. No cores and only one retouched item was recovered.

Table 14. Spatial distribution of artefacts recovered from TWE_PAD2

Test Pit	Count
17	1
18	1
29	4
33	1
35	2
37	3
38	2
41	2
Total	16

9.3.3. TWE Eastern Transect

Four test pits were placed along the eastern transect, recovering two artefacts from test pit 51 spit 1 (0-10cm). Only one of the four test pits recovered artefacts (25%). Stratigraphically, the artefact was recovered between 0-10cm.

Test Pit	Count
51	2
Total	2

9.3.4. Hamilton Road

Three test pits were placed near Hamilton Road, although one of these was not excavated to a sterile substrate. Two of the three test pits recovered artefacts (66%). The artefacts were found in TP57, 10-20cm below the surface, and TP58, 50-60cm below the surface. Both were located in modern fills.

Table 15. Spatial distribution of artefacts recovered from Hamilton Road

Test Pit	Count
57	1
58	1
Total	2

9.4. Tulkeroo ISO: ground edge axe

A surface artefact, Tulkeroo ISO (AHIMS ID 52-5-0961), was previously identified within the study area. The ground edge axe measured 150mm long by 85mm wide. It was generally round and tapered in toward one end, but did not show evidence of a distinctly sharpened edge on one end. The object had evidence of two distinct breakages on the ventral side, both located at the wider proximal end of the object.

This was not relocated during survey. The artefact was interpreted as having been imported to the site with a deposit of introduced gravel fill, and likely came from one of the local quarries: Cleary Brothers or Boral.

9.5. Summary

The sites within the project area show the use of a variety of raw materials. Low levels of cortex were identified on the artefacts, indicating reduction of the cortex occurred elsewhere with knapping occurring on site to be focused on cores with cortex already removed and retouching of existing tools. The size of the assemblage limits this discussion on technology.

The artefacts within the assemblage are products of several events across the study area over time. TWE_PAD1 shows higher artefact concentrations which may reflect a more preferable area for occupation and/or higher preservation. The presence of backed artefacts indicates the material was likely deposited within the last 4,000 years. However, it is acknowledged that people have been in this area for tens of thousands of years.

The entire study area has been subject to both natural and historical disturbances which have impacted the intactness, location, and analysis of Aboriginal archaeological materials. Overall, the assemblage is small and may reflect the removal of artefacts through agricultural land use and the introduction of fill. The previous identification of Tulkeroo ISO: ground edge axe also reflects the potential for imported artefacts in distinct locations where introduced fills may be identified.

10. ANALYSIS AND DISCUSSION

10.1. TWE_PAD1 (AHIMS ID 52-5-1123)

10.1.1. Assemblage

PAD1 recovered the highest number of artefacts of the four areas tested, with nine out of the twelve test pits in the area producing Aboriginal objects. Spatially, the highest density identified

was four artefacts in each TP4 and TP5. Across the area, artefacts were found primarily between 10-20cm below the ground surface.

The number of artefacts recovered demonstrated that some occupation of the area by Aboriginal people took place. However, TWE_PAD1 did not display a high density of artefacts compared to other occupation sites in the region. The small assemblage is not statistically significant enough to provide additional analysis. Consequently, the limited research potential has meant the assemblage of TWE_PAD1 holds low scientific significance.

Three of the artefacts with retouch were recovered from TWE_PAD1, including the two backed artefacts. The artefact assemblage was predominantly comprised of complete flakes and distal flakes with fewer numbers of proximal flakes, a single core fragment, and a single complete tool. The assemblage was dominated by flaked artefacts.

Fragmented artefacts can be associated with many events and impacts, this may be associated with repeated site occupation as stone objects can be broken by the site being trampled by people. However, as the artefact density is relatively low, it is likely that the assemblage was instead damaged by modern site disturbances, primarily cattle trampling and ploughing. In sum, it appears that TWE_PAD1 was not a location of frequent use by Aboriginal people.

10.2. Summary

The area of TWE_PAD1 (AHIMS ID 52-5-1123) was initially considered a PAD due to the proximity to Hazelton Creek and landform being a rise overlooking the waterway and wider landscape. The number and types of artefacts demonstrate that some occupation of the area by Aboriginal people took place, although the number of artefacts recovered does not suggest it was a location returned to frequently. Disturbance in the PAD boundary, caused by agricultural use and movement of artefacts down the hill have impacted the integrity of the soil landscape and consequently subsurface archaeological. The AHIMS site card associated with TWE_PAD1 has been created to show the artefacts recovered, but no further investigation of the area has been proposed.

10.3. TWE_PAD2 (AHIMS ID 52-5-1122)

10.3.1. Assemblage

Of the 33 test pits excavated in TWE_PAD2, 16 stone artefacts were recovered from eight of the test pits. Stratigraphically, the artefacts were recovered generally equally between 10-90cm.

TWE_PAD2 displayed a low density of artefacts but which were stratigraphically deeper than TWE_PAD1. This was undoubtedly due to PAD2 being located on the floodplain, whereas PAD1 was located on a rise overlooking the Hazelton Creek and the floodplain.

The artefact assemblage was predominantly comprised of fragmented flakes. No cores and only one retouched item was recovered. Fragmented artefacts are usually associated with repeated site occupation as stone objects can be broken by the site being trampled by people. However, as the artefact density is relatively low, it is likely that the assemblage was instead damaged by modern site disturbances, primarily cattle trampling and ploughing.

In sum, it appears that TWE_PAD2 was not a location of frequent use by Aboriginal people. This was likely due to the potential flooding nature of the PAD area.

10.4. Summary

The area of TWE_PAD2 (AHIMS ID 52-5-1122) was initially considered to be a PAD due to the proximity to Hazelton Creek. The low number and types of artefacts are reflective of transient movement across the landscape rather than a camping or regularly occupied location. While the evidence of fractured artefacts can reflect a location of returned occupation, the clear historical disturbance associated with land use suggests that these factors are the cause of the impacts to the subsurface archaeology. The AHIMS site card associated with TWE_PAD1 has been created to show the artefacts recovered, but no further investigation of the area has been proposed.

10.5. TWE Eastern Transect (AHIMS ID 52-5 1130)

10.5.1. Assemblage

Four test pits were placed along the eastern transect. Only one of the four test pits recovered artefacts. Stratigraphically, two artefacts were recovered between 0-10cm.

10.6. Summary

The Eastern Transect was not a PAD but was chosen for testing in order to scrutinise the predictive modelling produced by Extent Heritage as part of the test excavation methodology. The model suggested that there would be a higher potential for archaeology to be present on the small rises closer to the lagoon (TWE_PAD3 and TWE_PAD4) as the rises were flatter and closer to resources. TWE_PAD3 and TWE_PAD4 were ultimately not excavated due to changes in the impacts of the proposed development, a comparative study could not be produced.

Because of the limited archaeological potential anticipated in the Eastern Transect and identification of limited artefacts in the uppermost layer of the pit, it is likely that the two artefacts recovered were not in situ. It is instead likely that material was moved downhill by rain and erosional processes, or impacted by landscaping undertaken by the residential landowners of the property on which the transect was located.

No additional intact subsurface archaeological remains associated with the test pit findings are anticipated. As a result, the AHIMS site card associated with the site has been created to include the artefacts, but no further investigation of the area has been proposed.

10.7. Hamilton Road

10.7.1. Assemblage

Three test pits were placed near Hamilton Road, recovering two artefacts, although one of these was not excavated to sterile. The artefacts were found in TP57, 10-20cm below the surface, and TP58, 50-60cm below the surface. Both were located in modern fills.

The test pits did not contain any natural soil horizons, and instead only fills. This was likely due to the construction of the stormwater drain and construction and maintenance of the road. The artefacts may have been introduced to the site with the fills, or moved during the deposition of the fills. As a result, the area had low integrity and the artefacts were not considered in situ. Due to these factors, and the low number of artefacts, there is little to nil scientific value to the assemblage.

10.8. Summary

The area of Hamilton Road was not considered a PAD as it was anticipated to be heavily disturbed, including for example the installation of a stormwater drain. The position of the Hamilton Road cul-de-sac was near enough to the edge of the Macquarie Rivulet to warrant testing.

Upon interrogation, it was clear that the area was heavily disturbed. As the artefacts are not in situ and the soil integrity low, there is not likely to be any intact subsurface archaeological remains associated with the artefacts recovered. As a result, the AHIMS site card associated with the site is in the process of being created to include the artefact, but no further investigation of the area has been proposed and will not be impacted by the proposed activity.

10.9. Discussion

The discussion focuses on answering the following research questions:

- Post-depositional influences: What post-depositional influences have impacted on the assemblage, and what does this tell us about the integrity and significance of the site?

Both natural and historical activities have influenced Aboriginal archaeological material of the area. Natural weathering has caused some of the artefacts to crack and lose portions of their surfaces. Historical activities have caused impact to the top 30 cm of the soil profile, likely causing

some impact to the artefacts within this portion. Breakage rates do not appear to be high, however the assemblage is small and may reflect the removal of artefacts through these activities. The historical disturbance apparent in the test pit profiles display introduction of fill and disturbance to the top portion of the profile where majority of the artefacts were identified.

In the case of the isolated surface artefact, Tulkeroo ISO: ground edge axe (AHIMS ID 52-5-0961), the artefact has been interpreted as likely having been imported to the site. Without the knowledge that the artefact was recovered from introduced fills, the presence of a ground edge axe may have resulted in a misinterpretation of the archaeological record and significance of the site.

- Source information: What raw material resources were used; where did they come from; and what does this tell us about Aboriginal use of the region in the past?

There are a variety of raw materials that were identified within the assemblage, indicating selection for use by people. These materials can be seen to generally be fine-grained and siliceous, allowing for conchoidal fracture when knapped. Fine-grained siliceous material is the predominant material in the assemblage with some specific lithologies such as chert and chalcedony identified. Low levels of cortex were apparent on the artefacts within the assemblage, indicating the reduction that occurred on site was likely on cores with cortex already removed at a distance to the site. The cortex that is apparent on the artefacts reflects procurement from secondary sources such as river gravels.

- Stone reduction technology: How was the stone worked and used? Does this change over time? Can the function of the site be inferred from the artefact assemblage? What does this tell us about Aboriginal occupation, use, settlement, and activities undertaken through time in this region?

The size of the assemblage limits this discussion on technology and the lack of cores does not allow for an extensive discussion on reduction techniques. However, the presence of faceting platform preparation on flakes indicates core preparation that improves the production of flakes. The presence of backed artefacts that may have been discarded on site may reflect the use of the tools on site or transported through the landscape.

- Site chronology: When was the site occupied? Was the assemblage the product of repeated occupations or a single event? Is there spatial patterning in the assemblage, and what does this tell us about repeated use, activities and/or occupation of the region through time?

The artefacts within the assemblage are products of several events across the study area over time. Major reduction activity is not evident from the assemblage, however historical activities have likely affected the artefact numbers. TWE_PAD1 displayed higher artefact concentrations, and this may reflect a more preferable area for occupation and/or higher preservation. The presence of backed artefacts indicates the material was likely deposited within the last 4,000 years. However, it is acknowledged that people have been in this area for tens of thousands of years.

- Landforms. Is it possible to differentiate between occupation of different landforms based on the spatial patterning of the assemblage?

The overall artefact assemblage indicates a higher concentration of stone objects within TWE_PAD1. Higher artefact concentrations in TWE_PAD1 may reflect a more preferable area for occupation and/or higher preservation of archaeology as a result of natural influences and cultural land use. Given the history of the comparative preservation of these sites is most likely to be the result of increased disturbance across the wider site than evidence of increased occupation within TWE_PAD1.

10.10. Revised site extents

Three PADs and two areas were investigated as part of the test excavation program: TWE_PAD1 (AHIMS ID 52-5-1123), TWE_PAD2 (AHIMS ID 52-5-1122), the TWE Eastern Transect (AHIMS ID 52-5-1130), and Hamilton Road. The results of the test excavation program confirmed that each area contained zones of subsurface Aboriginal archaeology. As a result, the AHIMS records for the four areas investigated were updated to reflect that they are confirmed sites of known archaeology.

The extent of each of the areas were updated to include only areas of known Aboriginal archaeological remains. Figure 81-Figure 84 shows the location of each test trench that recovered artefacts. An arbitrary buffer of 50m was placed around each of these trenches to capture any additional artefacts that may be associated with each area. The buffer was restricted to the boundary of the original PAD as predictive modelling indicated that areas outside the PAD were only expected to possess a low potential for general background scatter. All areas outside the buffers were removed from the site extent.

Figure 81-Figure 84 also shows the revised locations of TWE_PAD1 (AHIMS ID 52-5-1123), TWE_PAD2 (AHIMS ID 52-5-1122), the TWE Eastern Transect (AHIMS ID 52-5-1130), and Hamilton Road. The extents of TWE_PAD3 and TWE_PAD4 remain the same as they were not investigated as part of this program.



Figure 81. Revised extent of TWE_PAD



Figure 82. Revised extent of TWE_PAD2.



Figure 83. Revised extent of Hamilton Road



Figure 84. Revised extent of the Eastern Transect

11. POST EXCAVATION TASKS

11.1. Test excavation report

A report detailing the results of the archaeological test excavation program was prepared following excavation and artefact recording activities were concluded. The excavation report was completed to the requirements outlined in Requirement 11 of the *Code of Practice* and can be found in Appendix D.

11.2. Artefact analysis

A report detailing the artefact analysis of Aboriginal stone objects recovered as part of the test excavation program and survey was prepared and completed as part of the post-excavation analysis and can be found in Appendix D.

11.3. Site recording form

Following the completion of the test excavation program, an update to the AHIMS database was lodged.

11.4. Management of recovered Aboriginal objects

All Aboriginal objects recovered from the test excavation program would be placed in labelled, resealable bags. Once test excavation has been completed, all recovered Aboriginal objects recovered will be stored temporarily in a locked room in the Extent Heritage office (3/73 Union St, Pyrmont NSW 2009).

Options for long-term management of retrieved Aboriginal objects will be discussed with registered Aboriginal stakeholders. However, it is anticipated that all Aboriginal objects retrieved from the test excavation program will be reburied within the study area in accordance with the requirements of the *Code of Practice*. The exact location of reburial would be decided following the completion of the test excavation report and assessment of site extent and scientific value.

12. SIGNIFICANCE ASSESSMENT

12.1. Assessment criteria

While all Aboriginal objects in NSW are protected under NSW legislation, the *National Parks and Wildlife Act 1974* recognises that the destruction of sites may be necessary to allow other activities or developments to proceed. In order for Heritage NSW – DPC to make informed decisions on such matters, a consideration of the significance of cultural heritage places and objects is an important element of the assessment process.

An assessment of the cultural heritage significance of an item or place is required in order to form the basis of its management. The Guide (OEH 2011: 10) provides guidelines, in accordance with the Burra Charter (Australia ICOMOS 2013) for significance assessment with assessments being required to consider the following criteria:

- Social values – does the area have a strong or special association with a particular community or cultural group for social, cultural, or spiritual reasons
- Historic values – is the area important to the cultural or natural history of the local area and/or region and/or state
- Aesthetic values – is the area important in demonstrating aesthetic characteristics in the local area and/or region and/or state.
- Scientific values - does the area have the potential to yield information that will contribute to an understanding of the cultural and natural history of the local area and/or region and/or state

An assessment of the scientific significance of an item or place is required in order to form the basis of its management. The Code of Practice required that the assessment must reflect best practice assessment processes as set out in the Burra Charter (Australia ICOMOS 2013):

- Research potential: does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- Representativeness: how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- Rarity: is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function, or design no longer practised? Is it in danger of being lost or of exceptional interest?
- Education potential: does the subject area contain teaching sites or sites that might have teaching potential?

It is important to note that heritage significance is a dynamic value and will be updated in consideration of the results of future investigations.

12.2. Significance assessment

The following section assesses the significance of the PADs investigated through test excavations, and surface artefacts identified during the test excavation program and survey. The assessment is necessary to provide recommendations and mitigation measures most effectively for managing all the sites identified across the study area. It is important to acknowledge that significance is fluid and can change over time.

12.3. Scientific significance

An assessment of the archaeological or scientific value of an item or place is required in order to form the basis of its management. The objective of undertaking archaeological significance assessment for a site is to determine its research potential in terms of potential contributions to our understanding of the past. Criteria used to evaluate archaeological potential include condition/integrity, representativeness, and rarity. The *Code of Practice* (DECCW 2010b) required that the assessment must reflect best practice assessment processes as set out in the *Burra Charter* (Australia ICOMOS 2013):

- Research potential: Does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- Representativeness: How much variability (outside and/or inside the study area) exists, what is already conserved, how much connectivity is there?
- Rarity: Is the study area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- Education potential: Does the study area contain teaching sites or sites that might have teaching potential?

The excavations demonstrated that all four areas tested did not contain the density or range of Aboriginal cultural material that would offer further research opportunities. The artefact types and overall assemblages are representative of the wider archaeological resources identified across the Illawarra region. Moreover, their locations (being especially impacted by historical disturbances) are not considered to provide unique examples of the use or occupation of the landscape by Aboriginal peoples.

As a result, the archaeology across TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton Road hold low scientific value and therefore low scientific significance. Individual artefacts and wider assemblages may have educational value to Aboriginal stakeholders.

12.4. Historic significance

The guidelines to the *Burra Charter* include the following discussion of historic significance:

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase, or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. (Australia ICOMOS 2013b)

In relation to Aboriginal cultural heritage, many post-contact places and sites would have historic value. Pre-contact places and items may also be significant according to this criterion, although the association with historic figures, events, phases, or activities may be more difficult to establish. Places of historic significance may include sacred or ceremonial sites, sites of resistance battles and massacres, places associated with Aboriginal communities after colonisation and the more recent past, and archaeological sites with evidence of technological developments.

Based on current research, the study area is not known to be associated with any specific people, events, or activities of historical importance to the Aboriginal community.

At time of the finalisation of this report, no specific information relating to this criterion had been provided during Aboriginal stakeholder consultation, however note contributions described in the social significance section below.

12.5. Aesthetic significance

This criterion refers to aspects of sensory perception and the ability of the site to elicit emotional responses referred to as sensory or sensori-emotional values. The guidelines to the *Burra Charter* note that assessments may include consideration of the form, scale, colour, texture and material of the item or place, as well as sounds and smells. With regard to pre-contact Aboriginal cultural heritage sites, the placement within the landscape would be considered under this criterion as would memoryscapes and the ability of the site to transmit such memories. It is important to consider that sensori-emotional values are not always equated with 'beauty'; for example, massacre sites or sites of incarceration may have value under this criterion. Individual artefacts, sites and site features may also have aesthetic significance.

The entire study area has been subject to significant disturbance through the clearance of native vegetation, agricultural activities, and development, all of which has compromised its aesthetic value. The sites within the project area consist of subsurface archaeological material. As a result, the project area exhibits no visible and evident signs of Aboriginal occupation and utilisation of the land. Based on this, the study area is considered to be of low aesthetic value.

12.6. Social significance

In Aboriginal heritage this criterion concerns the relationship and importance of sites to the contemporary Aboriginal community. Aspects of social and spiritual significance include people's traditional and contemporary links with a place or object as well as an overall concern by Aboriginal people for sites and their continued protection. Aboriginal cultural values may partially reflect or follow on from archaeological values, historic values, aesthetic values or be tied to values associated with the natural environment. This criterion requires the active participation of Aboriginal people in the assessment process as it is their knowledge and values that must be articulated.

The Dreaming tells of the Wodi Wodi people's journey in canoes from the north to the mouth of Lake Illawarra, led by the sacred sky-deity Baiame who passed down social laws and rites. The Wodi Wodi brought with them the sacred Dharawal (cabbage tree palm). Totems of the Wodi Wodi include the magpie, lyrebird, pelican, satin bowerbird, red-bellied blacksnake, and lace monitor (Department of Environ Conservation NSW 2005, 7).

Respected Wodi Wodi Traditional Owner, James Davis, spoke to his personal family history in the region and his work in the area across the past 25 years. James' grandparents live in the area and belong to the Wadi Wadi group. His family has been part of the Elders Corporation, Local Aboriginal Land Council, and other community organisations. His nan is a local woman of importance, so much so that she is included in the book, *Aboriginal Women's Heritage: Wollongong* (DEC 2004). She, like other displaced Aboriginal people, grew at the Hill 60 camp until WWII when occupants were moved to missions and camps.

Summarising the connection of Aboriginal people to the area, he says 'Lake Illawarra is important because it kept us alive' (pers. comms). The area is where the fresh and salt-water meet. The tide pushes the salt up into the tributaries, but not so far that there is no access to fresh drinking water: the Macquarie Rivulet 'the largest fresh water source in the area.' According to James Davis, the Saltwater people came down from the mountains to access food and water like at the Rivulet. His aunty told him about a freshwater spring in the area which was hidden beneath a rock that she used to use to fill up jugs.

Lake Illawarra was a 'fish market' and, along with the rivulet, supported mussels, oysters, crab, brim, mullets, eel, turtle, and bass. James' aunty and grandmother were raised on the Coomaditchi Mission. They used to collect fresh water long neck turtle eggs. There were hundreds of them at the lagoon. However, when the carp was released it killed all of them.

Jamie fished in the river growing up, but over time more housing and spills meant that the lake started to be like a big drain from everyone's houses and drains: 'years ago it was a lot cleaner.' He tells that all the shellfish are poisoned and you 'can't eat anything you catch near Dapto and

Berkley...Closer to the mouth of the river where the water is constantly flowing in and out it is safer to eat the fish and shellfish.'

Resources extended beyond seafood: 'we had the best of everything.' Recent developments have changed the vegetation, but there used to be forest that extended along the Lake and people would come down from the mountains to get nuts and berries. Now there are only small pockets of the bush left, like at Bass Point where the bush land is protected and classed as endangered.

12.7. Statement of significance

The archaeology identified as part of the test excavations of TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton Road is considered to have low scientific significance (Table 16). The number of artefacts is low and representative of archaeology found across the Illawarra region, and do not provide unique or additional research opportunities.

Due to historical and modern disturbances across the entire study area and adjacent landscape, there is low aesthetic significance associated with the proposed development site.

Based on current research, the specific boundary of the study area is not known to be associated with any specific people, events, or activities of historical significance. The wider region, however, holds social importance to members of the Aboriginal community for its provision of natural resources, historical connections with Aboriginal communities who lived in the escarpment, and the history of local families who have survived in the area for generations.

The particular scientific significance associated with TWE_PAD3 and TWE_PAD4 remains unknown as these areas have not been investigated.

Table 16. Summary of scientific significance

Site name (AHIMS ID)	Excavated	Research potential	Represent- ativeness	Rarity	Education potential	Overall significance assessment
TWE_PAD1 (AHIMS ID 52- 5-1123)	Yes	Low	Low	Low	Low	Low
TWE_PAD2 (AHIMS ID 52- 5-1122)	Yes	Low	Low	Low	Low	Low
TWE_PAD3	No	Unknown	Unknown	Unknown	Unknown	Unknown
TWE_PAD4	No	Unknown	Unknown	Unknown	Unknown	Unknown
TWE Eastern Transect (AHIMS ID 52- 5-1130)	Yes	Low	Low	Low	Low	Low
Hamilton Road	Yes	Low	Low	Low	Low	Low

13. IMPACT ASSESSMENT

13.1. Proposed development

The proposed development would involve construction works associated with the development of the Tripoli Way Extension, including bulk earthworks, construction of infrastructure (roads, footpaths, stormwater, etc.), environmental controls, and landscaping.

The primary objective of this project is to alleviate congestion on the Illawarra Highway in Albion Park by establishing an uninterrupted travel route connecting Terry Street in the east to Broughton Avenue in the west, effectively bypassing the town centre. This will involve the extension, widening, and improvement of both Tripoli Way and The Expressway in Albion Park. Currently, Tripoli Way stretches from Hamilton Road to Calderwood Road, while The Expressway spans from Moles Street to Calderwood Road. Upon completion, the project will provide a continuous transportation route for vehicles, running from the Broughton Street/Illawarra Highway intersection in the west to Terry Street/the Illawarra Highway in the east, effectively avoiding the Albion Park Town Centre. The project is required to alleviate traffic impacts through the Albion Park Township which are anticipated to increase due to predicted traffic growth along Tongarra Road, both from background traffic and current and future land development in the local area from townships including Calderwood, Tullimbar, and Albion Park.

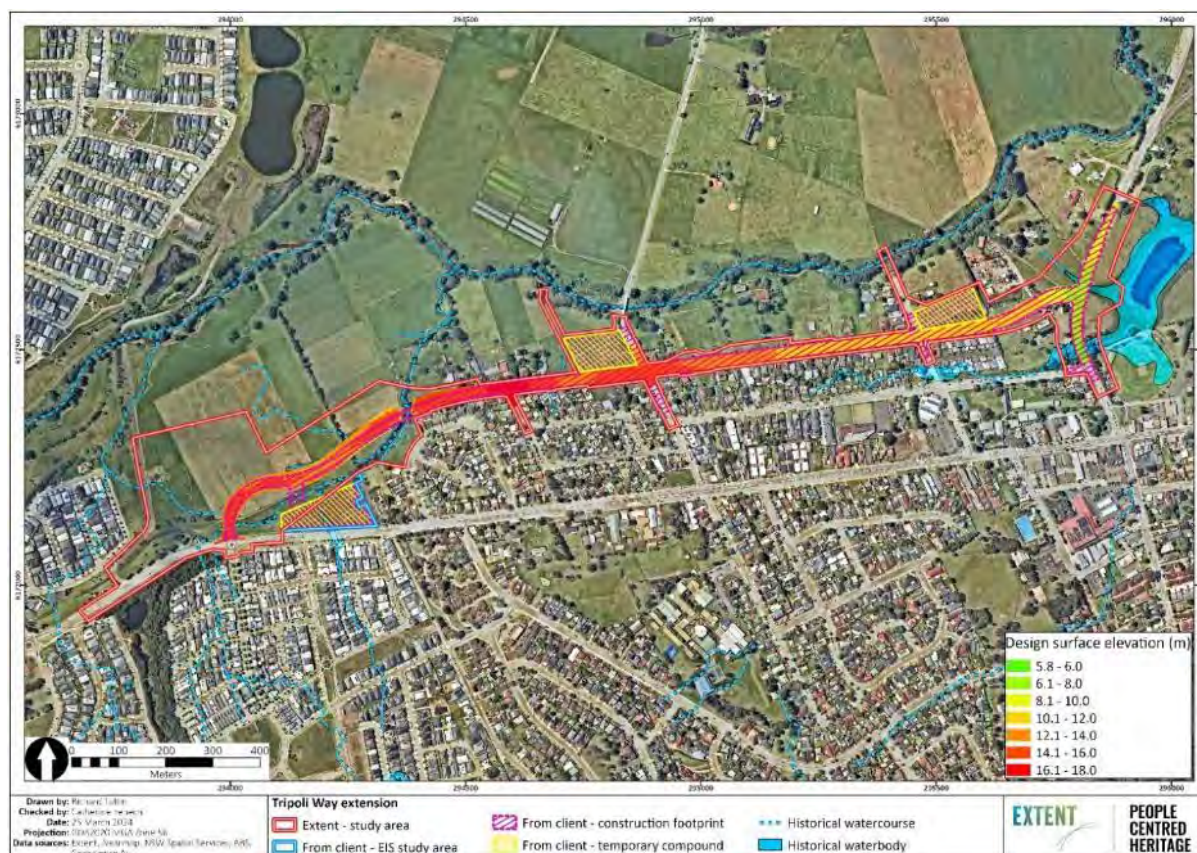


Figure 85. Areas of proposed impacts overlaying study area (Shellharbour City Council).

13.2. Avoidance and minimisation of impacts

An objective of the National Parks and Wildlife Act is the “conservation of objects, places or features...of cultural value within the landscape, including ... places, objects and features of significance to Aboriginal people ...” s.2A(1(b)(i)). The principles of ecologically sustainable development function to protect places and objects of cultural heritage value from unnecessary or avoidable harm, and to ensure that progressive development does not excessively deplete a given region’s cultural heritage resource.

Intergenerational equity is the principle whereby the present generation should ensure the health, diversity and productivity of the environment for the benefit of future generations (OEH 2011, 12). In terms of Aboriginal heritage, intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous AHIPs), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places. A consideration of intergenerational equity in relation to a development project involves assessing the project’s cumulative impact and considering whether this cumulative impact is at an acceptably low level.

Assessing cumulative impacts involves the consideration of the proposed impact in the context of existing developments and past destruction of heritage sites, as well as the population of heritage sites that still exist in the region of interest. This aims to avoid discussing the impact of a development in isolation, and aims to assess the impact in terms of the overall past and future degradation of a region's heritage resource. Assessing the cumulative impact of the project is highly dependent on the geographical 'scale' at which the assessment is made and the accessibility of information regarding the nature of and impacts to previously identified archaeological resources.

If the region is defined at a broad geographical scale that encompasses the Illawarra region, then the project would represent harm to Aboriginal sites that are comparable to sites that have been recorded in the region. Scatters of stone artefacts, on the ground surface or buried at shallow depths in soil profiles, have been frequently recorded in the region (see Section 5 for review of previous studies). The stone artefacts identified within the project area are typical of assemblages in the broader region, being predominately flaked artefacts made from silcrete, chert, and other fine-grained siliceous rock. The stone artefact assemblages in the project area do not, judging from the samples obtained through test excavations, contain artefact types or site features that are rare or unusual compared with other archaeological sites in this broad geographic region. These deposits are common across NSW to the point of almost being ubiquitous in the landscape.

Taking the above into consideration, and noting the relatively limited extent of development (i.e. a road corridor; compared to a residential subdivision or other large developments), there appears to be a low cumulative impact, however, because we do not have a comprehensive understanding of the number of sites and the nature of sites that remain unimpacted, this assessment is necessarily limited.

Harm to TWE_PAD3 and TWE_PAD4 have been able to be avoided, due a to redesign that prevents the areas being impacted. Hamilton Road (AHIMS ID 52-5-1130) will also not be subject to impact. There are however no feasible and practicable alternative alignments in the remainder of the study area. General feedback from the Illawarra LALC recommending salvage excavation as mitigation where impacts cannot be avoided has been noted, however, the overall results of the assessment indicate that the impacted areas retain low research potential and that the areas of impact are partial. Community collection of potential surface artefacts has been recommended.

13.3. Potential Aboriginal heritage impact

The development would involve construction works associated with road construction across the majority of the study area. The works are likely to cause a high level of disturbance, impacting both surface and subsurface archaeological remains located within these areas. The majority of the study area has been subject to the clearance of native vegetation, which has compromised the aesthetic value.

The results of the archaeological survey, background research and Aboriginal stakeholder consultation have provided evidence for the presence of Aboriginal objects within the study area. Design plans produced by Shellharbour City Council show, only part of the study area will be subject to ground disturbing works (Figure 85).

The works are anticipated to result in a direct impacts and loss of value to some identified Aboriginal sites (Figure 85) within this impact footprint. These comprise TWE_PAD1 (AHIMS ID 52-5-1123), TWE_PAD2 (AHIMS ID 52-5-1122), the Eastern Transect (AHIMS ID 52-5-1130), and Tulkeroo ISO (AHIMS ID 52-5-0961). These sites have all been determined to hold low scientific significance.

No impacts to Hamilton Road, or PADs TWE_PAD3 and TWE_PAD4 are anticipated. See Table 17 for a summary of proposed impacts.

Table 17. Impact to known Aboriginal archaeological remains

Site name/number	Type of harm	Degree of harm	Consequence of harm
TWE_PAD1 (AHIMS ID 52-5-1123)	Direct	Partial	Partial loss of value
TWE_PAD2 (AHIMS ID 52-5-1122)	Direct	Partial	Partial loss of value
TWE_PAD3	Nil	Nil	No loss of value
TWE_PAD4	Nil	Nil	No loss of value
TWE Eastern Transect (AHIMS ID 52-5-1130)	Direct	Partial	Partial loss of value
Hamilton Road	Nil	Nil	No loss of value
Tulkeroo ISO: ground edge axe (AHIMS ID 52-5-0961)	Direct, Community Collection	Whole	Total loss of value

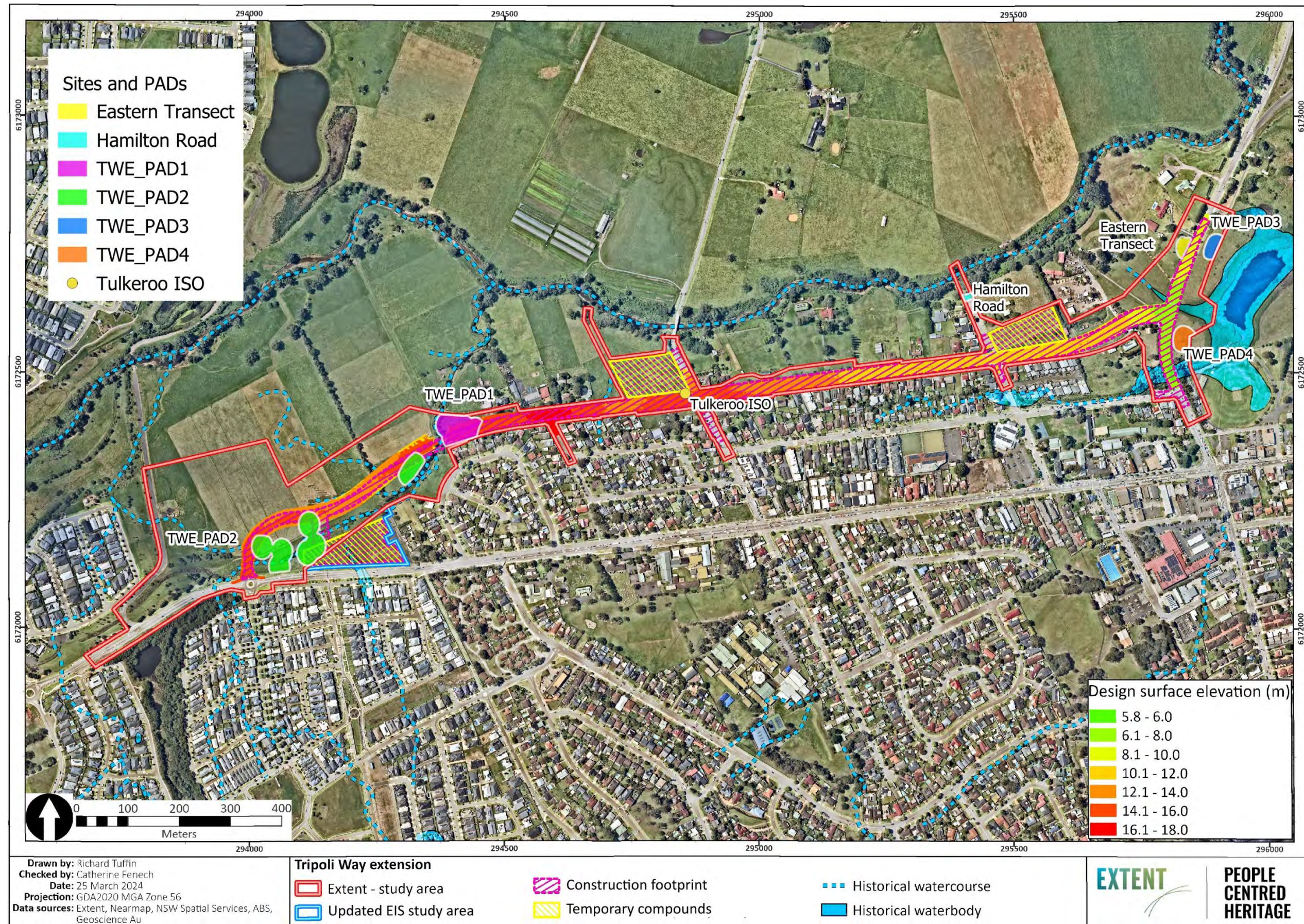


Figure 86. Area of proposed impacts in relation to areas of identified archaeology.

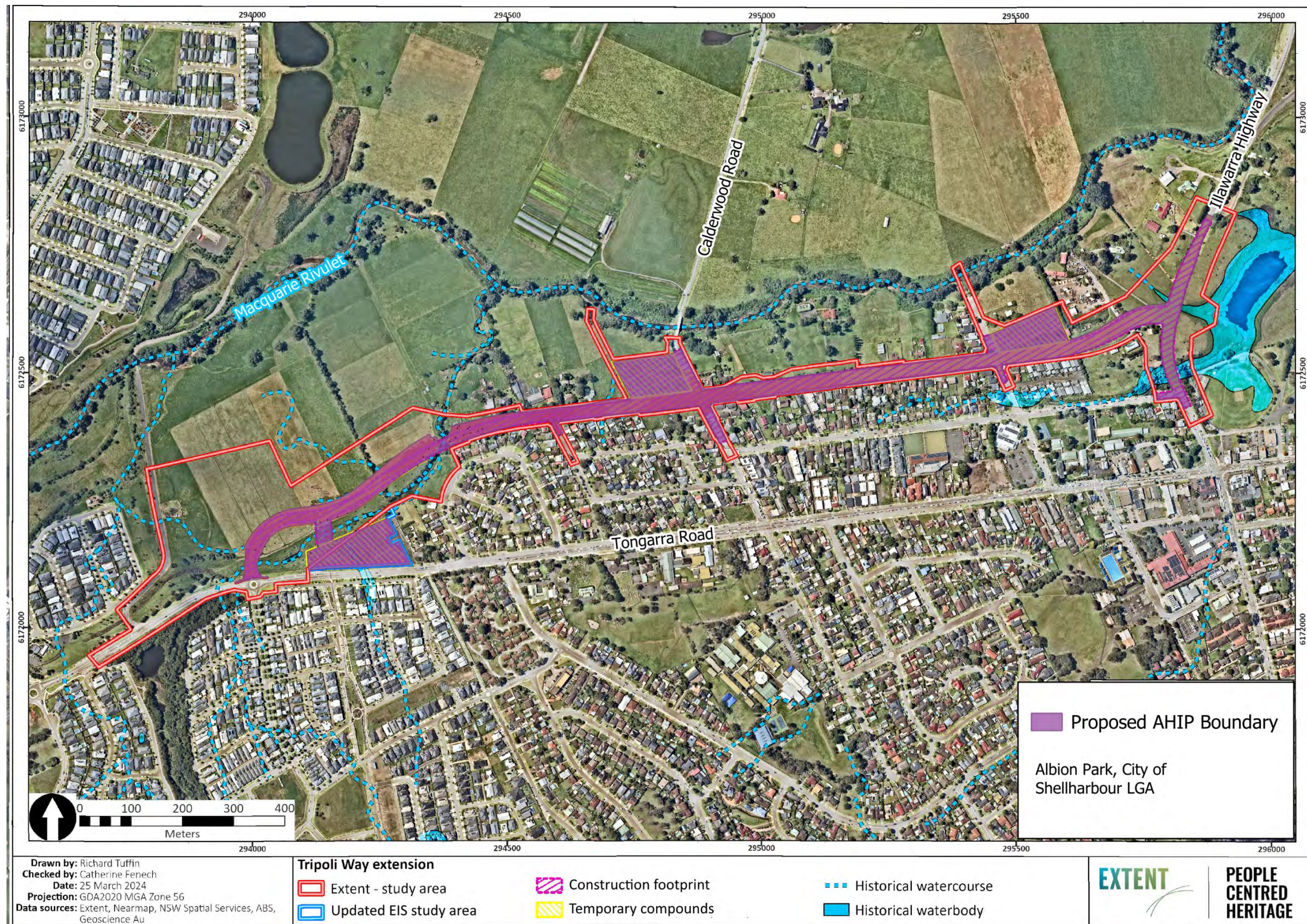


Figure 87. Proposed AHIP application area.

14. MANAGEMENT AND MITIGATION STRATEGY

14.1. Guiding principles

Where possible, cultural heritage should be conserved and protected in situ. However, where conservation is not practical, measures should be implemented to mitigate against the loss of archaeological value, where appropriate. These mitigation measures are based on the assessed significance of the site against the proposed impacts.

No impacts to Hamilton Road or PADs TWE_PAD3 and TWE_PAD4 are anticipated.

Impacts are proposed to TWE_PAD1 (AHIMS ID 52-5-1123), TWE_PAD2 (AHIMS ID 52-5-1122), the Eastern Transect (AHIMS ID 52-5-1130), and Tulkeroo ISO (AHIMS ID 52-5-0961). These sites have all been determined to hold low scientific significance and no further conservation or impact mitigation actions are considered warranted. General feedback from the Illawarra LALC recommending salvage excavation as mitigation where impacts cannot be avoided has been noted, however, the overall results of the assessment indicate that the impacted areas retain low research potential and that the areas of impact are partial. Community collection of potential surface artefacts has been recommended.

14.2. Aboriginal Heritage Impact Permit

Several areas of Aboriginal archaeology, primarily subsurface artefacts and artefact scatters have been identified across the study area. As outlined above, the significance impact for the sites subject to impact is overall low.

Would not warrant salvage as a mitigation measure as it would not add additional information. For community collection of any surface artefacts prior to works. Recognise a general request from the ILALC for salvage excavation where harm cannot be avoided, however the overall results would not warrant this.

An Aboriginal Heritage Impact Permit (AHIP) is therefore required to authorise harm to the known, registered AHIMS sites. Within the study area, the sites subject to harm comprise:

- TWE_PAD1 (AHIMS ID 52-5-1123);
- TWE_PAD2 (AHIMS ID 52-5-1122);
- TWE Eastern Transect (AHIMS ID 52-5-1130); and
- Tulkeroo ISO (AHIMS ID 52-5-0961).

An AHIP is also required to relocate the 44 Aboriginal cultural artefacts collected during the test excavation program. Appendix E.2 outlines potential options for artefact reburial and long term management.

The test excavation program has also indicated that there is the low potential for additional Aboriginal archaeology in the form of background scatters to be present across the study area. Finally, An AHIP will be required to authorise harm to these unidentified artefacts in the proposed AHIP footprint. This excludes the extents of TWE_PAD3 and TWE_PAD4 which continue to hold archaeological potential and must be further investigated prior to any harm.

14.3. Unexpected finds

Any unexpected Aboriginal objects identified within the study area remain protected under the National Parks and Wildlife Act. If unexpected Aboriginal objects are uncovered during construction, and impact to these objects is not permitted under an AHIP, work should cease and a qualified archaeologist and Heritage NSW must be informed to determine whether further Aboriginal heritage assessment or permit approvals are required.

Note: It is an offence to harm Aboriginal objects without an Aboriginal Heritage Impact Permit (AHIP) approval from Heritage NSW. Work must not recommence at the location of the discovery site until any necessary permits under the National Parks and Wildlife Act have been approved by Heritage NSW and all permit conditions have been completed.

14.4. Discovery of human remains

If any human remains, or suspected human remains, are identified during development, all works must cease, and the NSW Police and Heritage NSW be notified for further advice.

NSW Police will determine if the suspected human remains are human and if they represent a crime scene. If the human remains are determined to represent a criminal act, the NSW Police will direct proceedings, including deciding when works may continue.

If NSW Police determine that the suspected human remains are human and are Aboriginal Ancestral Remains, or non-Aboriginal Ancestral Remains, Heritage NSW will be responsible for determining the next course of action. All activities from that point will be directed by Heritage NSW, and project works cannot proceed in the area of the find until Heritage NSW determines that it is appropriate to do so.

15. CONCLUSIONS

15.1. Key findings

- The test excavation program investigated TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton Road.
- The investigation revealed Aboriginal archaeological remains across TWE_PAD1, TWE_PAD2, the Eastern Transect, and Hamilton comprise low-density background scatters.
- One isolated surface artefact, Tulkeroo ISO: ground edge axe (AHIMS ID 52-5-0961), was previously identified in the area and is concluded as having been imported to the site with a deposit of introduced gravels.
- All the identified artefacts and assemblages, and their wider sites, were assessed as having low scientific value due to the limited assemblage which restricted detailed analysis and information that could contribute substantially to the understanding of Aboriginal archaeology and cultural heritage in the region.
- The study area was determined to have low aesthetic and historical significance, but community consultation acknowledged the social important of the continued occupation of the wider Illawarra area and use of its resources over many generations.
- No archaeological investigations of TWE_PAD3 and TWE_PAD4 were carried out as they would not be impacted by the proposed development. These two areas still hold archaeological potential and unknown significance.
- Based on the provided design, three identified Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, the TWE Eastern Transect and one site would be fully impacted: Tulkeroo ISO: ground edge axe.

15.2. Recommendations

The following recommendations are made based on the identified potential for Aboriginal heritage impact and the statutory requirements of the *Code of Practice* (DECCW 2010b):

1. Where possible, impacts to identified Aboriginal sites should be avoided.
2. An AHIP is required to authorise harm to the Aboriginal sites located within the study area. These sites cannot be impacted until an approved AHIP has been obtained, and all impacts must conform with the AHIP conditions.
3. If the proposed project design changes during the course of the project and this results in changes to the anticipated impacts to TWE_PAD3 and TWE_PAD4 or any other Aboriginal site, further archaeological assessment must be undertaken prior to harm.

4. If changes are made to the proposed works which result in impact to locations outside of the current study area, further archaeological investigation and survey may be required.
5. No surface artefacts were identified during this archaeological investigation. However, a surface artefact had previously been identified. For this, and if any were to be identified in the future, Aboriginal representatives must be given an opportunity to collect them prior to the commencement of construction works. A methodology for this is included in Appendix E.1.
6. An appropriate Keeping Place or reburial site must be determined for permanent storage of the Aboriginal objects collected during the test excavation program. The permanent storage location must be chosen in consultation with the RAPs. A proposed methodology is included in Appendix E.2.
7. If unexpected Aboriginal objects are uncovered during construction, and impact to these objects is not permitted under the AHIP, work must cease and a qualified archaeologist and Heritage NSW must be informed to determine whether further Aboriginal heritage assessment or permit approvals are required.
8. If suspected human remains are located during any stage of the proposed works, work must stop immediately, and the NSW police and Heritage NSW must be notified.

16. REFERENCES

AMBS. 2006. Aboriginal Cultural Heritage Assessment of the Larkin's Lane Subdivision, Yallah. Unpublished report prepared for Wollongong City Council.

Andrefsky Jr, W. 1994. 'Raw-material availability and the organization of technology.' *American Antiquity* 59 (1): 21–34.

Archaeological and Heritage Management Solutions (AHMS). 2015. South West Growth Centre. Preliminary Aboriginal and Historical Heritage – Gap Analysis. Unpublished report prepared for Department of Planning & Environment.

Artefact Heritage. 2017. 140-142 Calderwood Road Albion Park Aboriginal Cultural Heritage Assessment Report. Unpublished report prepared for C & P Tate.

Artefact Heritage. 2019. Mamre Road, Kemps Creek. Aboriginal and non-Aboriginal heritage assessment. Unpublished report prepared for Mirvac.

Attenbrow, V. 2002. *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*. Sydney: University of New South Wales Press Ltd.

Attenbrow, V. 2005. 'Book review: Paleo-Environmental Change and the Persistence of Human Occupation in South Western Australian Forests, by Joe Dortch, 2004'. *Archaeology in Oceania*. Vol. 40:2 (77-78).

Attenbrow, V. 2010. *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*. Second Edition. Sydney: University of New South Wales Press Ltd.

Australia. 2019. High Voltage Transition Line REF Investigations, Tullimbar, NSW: Aboriginal Cultural Heritage Assessment. Unpublished report prepared for Cardno.

Australia ICOMOS. 2013. *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*. Burwood, Vic.: Australia ICOMOS.

Australian Stratigraphic Units (AUSD). 2019. Stratigraphy and rock type, Permian Sedimentary rocks. Accessed 11 February 2024. <<https://www.bioregionalassessments.gov.au/assessments/11-context-statement-sydney-basin-bioregion/1132-stratigraphy-and-rock-type>>.

Biosis. 2014. Vista Park, Wongawilli Master Plan: Archaeological Report. Unpublished report prepared for Cardno and RW Sheargold.

Biosis. 2021. Aboriginal Cultural Heritage Due Diligence Assessment: Tripoli Way Bypass. Unpublished report prepared for Cardino.

Bowler JM, Johnston H, Olley JM, Prescott JR, Roberts RG, Shawcross W, Spooner NA. 2003. New ages for Human occupation and climactic change at Lake Mungo, Australia. *Nature*. Vol. 421(6925): 837-40.

Brayshaw McDonald Pty Ltd (Brayshaw McDonald). 1992. 'Archaeological Survey of the proposed 33kV transmission line between Bringelly and Rossmore, NSW'. Unpublished report prepared for EDAW (Australia) Pty Ltd.

Brayshaw McDonald. 1994. Liverpool Rural Lands Study. Aboriginal Archaeology: Prediction and Management. Unpublished report prepared for Liverpool Council through Don Fox Planning.

Caley, G. 1801. *A Tour 20-23 October of 1801. George Caley's Journals*. Vol. 2. Mitchell Library, State Library of NSW, FM4/2568.

Capell, A. 1970. 'Aboriginal languages in the south central coast, New South Wales: Fresh discoveries'. *Oceania*. Vol. 41: 20-27.

Collins, D. 1798. *An Account of the English Colony in New South Wales: with remarks on the dispositions, customs, manners &c. of the native inhabitants of that country. To which are added, some particulars of New Zealand; compiled, by permission, from the Mss. of Lieutenant-Governor King*. Volume I. London: T. Cadell Jun. and W. Davies in the Strand.

Commonwealth of Australia (Commonwealth). 2016. *Western Sydney Airport. Environmental Impact Statement. Volume 2a. Stage 1 Development*. Canberra: Department of Infrastructure and Regional Development.

Cunningham, P. 1827. *Two Years in New South Wales: A Series of Letters, Comprising Sketches of the Actual State of Society in that Colony, of Its Peculiar Advantages to Emigrants, of Its Topography, Natural History, &c. &c.* Volume II. London: Henry Colburn.

Dallas, M and K Sullivan. Archaeological Survey of West Dapto Stage 1 Release Area. Unpublished report prepared for Wollongong City Council.

Davis, J. King Mickey Johnson the most photographed man in nineteenth century Illawarra: Did Richard Henery Holden (1864-1939) really click the shutter on Kiama's most famous photograph?. Unpublished report PDF.

Department of Agriculture, Water and the Environment, Australian Government (DAWE). n.d. Australia's bioregion framework. Accessed 01 July 2020. <<https://www.environment.gov.au/land/nrs/science/ibra/australias-bioregion-framework>>

Department of Primary Industries, NSW (DPI). n.d. 'Hawkesbury Nepean catchment'. Accessed 02 July 2020.

<<https://www.dpi.nsw.gov.au/fishing/habitat/your-catchment/hawkesbury-nepean>>

DEC (Department of Environment and Conservation, NSW). 2004. *Aboriginal Women's Heritage: Wollongong*. Accessed 10 February 2024.

<<https://www.environment.nsw.gov.au/resources/cultureheritage/AboriginalWomensHeritageWollongong.pdf>>

DECCW (Department of Environment, Climate Change and Water, NSW). 2010a. *Aboriginal cultural heritage consultation requirements for proponents 2010*. Sydney: NSW Department of Environment, Climate Change and Water.

DECCW. 2010b. Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. Sydney: NSW Department of Environment, Climate Change and Water.

Dominic Steele Consulting Archaeology (Dominic Steele). 1999. Archaeological Survey Report. For Land Between Luddenham & Mamre Roads. Luddenham, New South Wales. Unpublished report prepared for Camelot Grange.

Dominic Steele. 2001. Archaeological Research Design for three sites (# 45-6-1772, 1774 & 1777) within land between Luddenham & Mamre Roads. Luddenham, New South Wales. Unpublished report prepared for the Twin Creeks Estate development.

Dominic Steele. 2004. Aboriginal Heritage Conservation Action Plan. Application for a S90 Heritage Impact permit Consent with Salvage & Collection. Twin Creeks Estate, Luddenham Road. Luddenham, New South Wales. Unpublished report prepared for the Twin Creeks Estate development.

Dominic Steele. 2007. Aboriginal Archaeological Excavation & Monitoring Report. Twin Creeks Estate, Luddenham Road, Luddenham. Salvage Excavation Completed in Bush Land Conservation Zones F and G and Works Completed in Surrounding Areas Adjoining the Conservation Zone in the Twin Creeks Residential Estate (2004 to 2006). Unpublished report prepared for Luddenham Management Pty Ltd.

Donaldson, M., L. Bursill & M. Jacobs. 2015. *A History of Aboriginal Illawarra Volume 1: Before Colonization*. Wollongong: Dharawal Publications Australia.

Eades, D. 1976. *The Dharawal and Dhurga Languages of the New South Wales South Coast*. Canberra: Australian Institute of Aboriginal Studies.

EMM Consulting Pty Ltd (EMM). 2020. Mamre Road Precinct Aboriginal Heritage Study. Unpublished report prepared for the Department of Planning, Industry and Environment.

Fist, R. 2017. 'Minnamurra River massacre tip of iceberg: Aboriginal elder.' *Illawarra Mercury*, 14 July 2017.

Flenniken, JJ and JP White. 1985. 'Australian flaked stone tools: A technological perspective.' *Records Of The Australian Museum* 36 (3): 131–151.

Geoscience Australia and Australian Stratigraphy Commission (GAASC). 2017. 'Australian Stratigraphic Units Database'. Accessed 01 July 2020. <<https://asud.ga.gov.au>>

GML Heritage. 2015. Dapto Land Review. Unpublished report prepared for Stockland.

Haglund, L. 1978. Archaeological survey of an area considered for Second Airport, Southwestern zone. Unpublished report prepared for the State Pollution Control Commission.

Hassell, JS. 1902. *In old Australia: records and reminiscences from 1794*. Brisbane: R.S. Hews and Co.

Hiscock, P. 2002. 'Quantifying the size of artefact assemblages.' *Journal Of Archaeological Science* 29 251–258.

Hiscock, P. and V. Attenbrow. 2005. Australia's Eastern Regional Sequence revisited: Technology and Change at Capertee 3. British Archaeological Reports International Series 1397, Archaeopress, Oxford.

Hiscock, P. 2008. *Archaeology of Ancient Australia*. Abingdon: Routledge.

HNCMA. 2007. *Hawkesbury Nepean River Health Strategy*. Volume 2. Sydney: Hawkesbury Nepean Catchment Management Authority.

Holdaway, S and N Stern. 2004. *A Record in Stone*. Melbourne, Vic: Museum Victoria and Aboriginal Studies Press.

Kayandel Archaeological Services. 2008. *Archaeological Test Excavations: Tullimbar Village Development: PADs 1, 2 and 4*. Unpublished report prepared for The Milton Group.

Keating, C. 1996. *On the Frontier: A Social History of Liverpool*. Sydney: Hale & Iremonger.

Kiama Library (KL). 2022. History. *European Colonization*. Accessed 19 April 2022. <<https://library.kiama.nsw.gov.au/History/First-Nations-Kiama#section-2>>

Kiama Library. 2022. History. *First Nations Communities in the Illawarra*. Accessed 19 April 2022. <<https://library.kiama.nsw.gov.au/History/First-Nations-Kiama>>

Kiama Municipal Council. 2024. *Minamurra Massacre*. Accessed 11 February 2022. <<https://www.kiama.nsw.gov.au/Events/Minnamurra-Massacre#:~:text=Kiama%20Council%2C%20each%20year%2C%20lowers,which%20were%20never%20publicly%20acknowledged.>>

Kohen, J. 1986. Prehistoric Settlement in the Western Cumberland Plain: Resources, Environment, Technology. Unpublished PhD Thesis, School of Earth Sciences, Macquarie University.

Kohen, J. 1991. *An archaeological survey at Lot 2 Elizabeth Drive, Kemps Creek*. Unpublished report prepared for Pacific Waste Management. (PDF).

Kohen, J and R Lampert. 1987. 'Hunters and Fishers in the Sydney Region'. In DJ Mulvaney and JP White, *Australians to 1788*. Broadway, NSW: Fairfax, Syme & Weldon Associates, p. 343-366.

Liston, C. 1988. 'The Tharawal and Gandangara in Colonial Campbelltown, New South Wales, 1788-1830'. *Aboriginal History*. Vol. 12(1): 49-62.

McDonald, J. 1997. *Interim Heritage Management Report: ADI Site St Marys*. Volume 1. Unpublished report prepared for Lend Lease-ADI Joint Venture. (PDF).

McDonald, J. 2008. Dreamtime Superhighway: An Analysis of Sydney Basin Rock Art and Prehistoric Information Exchange. *Terra Australis* 27. Canberra: Australian National University Press.

Murray, R, and K White. 1988. *Dharug and Dungaree: The History of Penrith and St Marys to 1860*. North Melbourne: Hargreen Publishing Company in conjunction with the Council of the City of Penrith.

National Library of Australia. *Earliest known portrait of King Mickey Johnson*, La Perouse, NSW, ca. 187. Richard Henry Holden. ID 7012489. Accessed 22 April 2022. <<https://catalogue.nla.gov.au/catalog/7012489.>>

National Portrait Gallery. 2018. People. *Mickey Johnson 1834-1906*. Accessed 22 April 2022. <<https://www.portrait.gov.au/people/mickey-johnson-1834>>

National Portrait Gallery (NPG). 2022. Portraits. *Mickey Johnson, c.1896 unknown artist gelatin silver photograph on paper*. Accessed 22 April 2022. <<https://www.portrait.gov.au/portraits/2010.109/mickey-johnson>>

New South Wales Legislative Council. 1845. *Report from the Select Committee on the Condition of the Aboriginies*. Printed by W.W. Davies, Government Printing Office, Bent Street, Sydney.

NPWS. 2003. The Bioregions of New South Wales: their biodiversity, conservation and history. Sydney: NSW National Parks and Wildlife Service.

OEH. 2011. Guide to Investigating, Assessing and Reporting of Aboriginal Cultural Heritage in New South Wales: Part 6 National Parks and Wildlife Act 1974. Sydney: NSW Office of Environment and Heritage. (PDF).

OEH. 2019. *Soil Landscapes of Central and Eastern NSW, version 2*. Sydney: NSW Office of Environment and Heritage.

OEH. 2023. Illawarra Escarpment Stat Conservation Area Plan of Management. NSW National Parks and Wildlife Services. (PDF)

Organ, M. 1993. 'Illawarra and South Coast Aboriginies 1770-1900'. Report for the *Australian Institute of Aboriginal and Trees Strait Islander Studies*. (PDF). Accessed 20 April 2022. <https://www.academia.edu/2799178/Illawarra_and_South_Coast_Aborigines_1770_1900>

Organ, M., & C. Speechley. 1997. 'Illawarra Aboriginies' in Hagan JS and Wells, A (eds), *A History of Wollongong*. University of Wollongong Press. (PDF).

Pargeter, J, P de la Pena and MI Eren. 2018. 'Assessing raw material's role in bipolar and freehand miniaturised flake shape, technological structure, and fragmentation rates.' In *Archaeological And Anthropological Sciences* 11 (4): 1866–9557. Accessed 22 April 2022. <<https://doi.org/10.1007/s12520-018-0647-1>>.

Past Traces Heritage Consultants. 2019. Aboriginal Cultural Heritage Due Diligence Assessment LOT 1 DP 106991 14 Hamilton Road Albion Park NSW. Unpublished report prepared for Landteam.

Robinson, K. 1953. 'Population and Land Use in the Sydney District: 1788-1820.' *The New Zealand Geographer*. Vol. 9(2): 144-160.

Sefton, C. 1984. *Archaeological Survey of West Dapto Stage 1 Release Area*. Unpublished report prepared for Wollongong City Council.

Severinghaus, J, and E Brook. 1999. 'Abrupt Climate Change at the End of the Last Glacial Period Inferred from Trapped Air in Polar Ice'. *Science*. Vol. 286 (5441): 930–934.

Shawcross, W. 1998. *Archaeological excavations at Mungo*. Vol. 33(3):183-200.

Shellharbour City Council (SCC). 2019. *Lake Illawarra Coastal Management Program (2019-2029)*. Produced by BMP for SCC. Draft report (PDF).

Shellharbour City Museum (SCM). 2018. *Mickey and Rosie Johnston*. Accessed 19 April 2022. <<https://museum.shellharbour.nsw.gov.au/mickey-rosie-johnston/>>

Shott, M. 1994. 'Size and Form in the Analysis of Flake Debris: Review and Recent Approaches.' *Journal Of Archaeological Method And Theory* 1 (1): 69–110.

Stockton, E. and W. Holland. 1974. 'Cultural sites and their environment in the Blue Mountains'. *Archaeology and Physical Anthropology in Oceania*. Vol. 9(1): 36-65.

Troy, J. 1990. *Australian Aboriginal Contact with the English Language in New South Wales: 1788 to 1845. Pacific Linguistics. Series B – 103*. Canberra: Department of Linguistics, Research School of Pacific Studies, the Australian National University.

Way, A. 2018. 'Event-Based Analysis: Identifying and Sequencing Prehistoric Activities in Buried Palimpsests, an Example from Lake George, Australia.' PhD Thesis. University of Sydney.

White, B., and J. McDonald. 2010. 'Lithic Artefact Distribution in The Rouse Hill Development Area, Cumberland Plain, New South Wales.' *Australian Archaeology*. June issue.

17. ABBREVIATIONS

ACHAR Aboriginal cultural heritage assessment report

AHIMS Aboriginal Heritage Information Management System

AHIP Aboriginal Heritage Impact Permit

AHMS Archaeological and Heritage Management Solutions

ATER Archaeological Test Excavation Report

BP Before present (AD 1950)

CHL Commonwealth Heritage List

CRM Cultural resource management

DA Development Application

DCP Development control plan

DECCW Department of Environment, Climate Change and Water (now DPIE)

DP Deposited plan

DPC Department of Premier and Cabinet (NSW)

DPIE Department of Planning, Industry and Environment (formerly OEH)

EPI Environmental planning instruments

ERS Eastern Regional Sequence

GPS Global Positioning System

IF Isolated Find

JMCHM Jo McDonald Cultural Heritage Management Pty Ltd

ka Abbreviation for thousands of years ago (e.g., 1 ka equals 1,000 years ago)

LALC Local Aboriginal Land Council

LEP Local environmental plan

LGA	Local government area
LGM	Last Glacial Maximum
Ma	million years ago
NHL	National Heritage List
NPW Act	National Parks and Wildlife Act 1974 (NSW)
NTSCorp	Native Title Service Corporation
OEH	Office of Environment and Heritage (formerly DECCW, now Heritage NSW-DPC)
PAD	Potential archaeological deposit
RAP	Registered Aboriginal party
RTK	Real-Time Kinematic
REP	Regional environmental plan
SEPP	State environment planning policy
SU	Survey Unit
TP	Test pit
WHL	World Heritage List

18. GLOSSARY

Aboriginal cultural heritage assessment report (ACHAR)	A document developed to assess the archaeological and cultural values of an area, generally required as part of an environmental assessment (EA).
<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i>	Guidelines developed by DECCW to guide formal Aboriginal community consultation undertaken as part of an Aboriginal cultural heritage assessment report (ACHAR).
<i>Aboriginal Heritage Impact Permit (AHIP)</i>	The statutory instrument that the Director General of the Department of Planning, Industry and Environment (DPIE) issues under section 90 of the <i>National Parks and Wildlife Act 1974</i> (NSW) to allow the investigation (when not in accordance with certain guidelines), impact and/or destruction of Aboriginal objects. AHIPs are not required where project approval under the state-significant provisions of Part 4 (Division 4.1) of the <i>Environmental Planning and Assessment Act 1979</i> (NSW).
Aboriginal object	A statutory term defined under the <i>National Parks and Wildlife Act 1974</i> (NSW) as 'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'.
<i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i>	Guidelines developed by DECCW (2010) to inform the structure, practice and content of any archaeological investigations undertaken as part of an Aboriginal cultural heritage assessment report (ACHAR).
Department of Environment, Climate Change and Water (DECCW)	Now known as the Department of Planning, Industry and Environment (DPIE), Department of Premier and Cabinet.
<i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales</i>	Guidelines developed by DECCW, outlining the first stage of a two-stage process in determining whether Aboriginal objects and/or areas of archaeological interest are present within a study area. The findings of a due diligence assessment may lead to the development of an Aboriginal cultural heritage assessment report.
<i>Environmental Planning and Assessment Act 1979 (NSW)</i>	Statutory instrument that provides planning controls and requirements for environmental assessment in the development approval process. The Act is administered by the Department of Planning and Environment.

Aboriginal cultural heritage assessment report (ACHAR)	A document developed to assess the archaeological and cultural values of an area, generally required as part of an environmental assessment (EA).
<i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i>	Guidelines developed by OEH to inform the structure and content of an Aboriginal cultural heritage assessment report (ACHAR).
Isolated find	An isolated find is usually considered a single artefact or stone tool, but can relate to any product of prehistoric Aboriginal societies. The term 'object' is used in the Aboriginal cultural heritage assessment report (ACHAR), to reflect the definitions of Aboriginal stone tools or other products in the <i>National Parks and Wildlife Act 1974 (NSW)</i> .
<i>National Parks and Wildlife Act 1974 (NSW)</i>	The primary piece of legislation for the protection of Aboriginal cultural heritage in New South Wales. Part 6 of this Act outlines the protection afforded to and offences relating to disturbance of Aboriginal objects. The Act is administered by DPIE
Department of Planning, Industry and Environment (DPIE)	The DPIE is responsible for managing the Aboriginal Heritage (and other) provisions of the <i>National Parks and Wildlife Act 1974</i> .
Potential archaeological deposit (PAD)	An area assessed as having the potential to contain Aboriginal objects. PADs are commonly identified on the basis of landform types, surface expressions of Aboriginal objects, surrounding archaeological material, disturbance, and a range of other factors. While not defined in the <i>National Parks and Wildlife Act 1974 (NSW)</i> , PADs are generally considered to retain Aboriginal objects and are therefore protected and managed in accordance with that Act.
Proponent	A corporate entity, government agency or an individual in the private sector which proposes to undertake a development project.

APPENDIX A. ARCHAEOLOGICAL CONTEXT AND AHIMS INFORMATION

A.1. Site type information

Aboriginal sites

Aboriginal sites are classified in several ways. At the most basic level, sites are recorded as 'closed sites' or 'open sites'. Closed sites are associated with rock shelters, and include other evidence of Aboriginal occupation that may be present, such as accumulated cultural deposit within the shelter ('potential archaeological deposit' or PAD), faunal remains (animal bone or shell), and rock art on the shelter walls (paintings or engravings). Open sites are broadly defined and encompass all other types of Aboriginal sites identified where there is no rock shelter.

The most common types of open sites found in NSW include artefacts, which can occur almost anywhere in the landscape, grinding grooves, rock art across formations, culturally modified trees, and shell deposits (middens) (OEH 2012, 7-10). The presence or absence of stone artefacts is often a defining factor, although it is worth pointing out that almost any site is likely to have at least some associated artefacts, as discard or loss of this most ubiquitous and practically indestructible marker of Aboriginal archaeology is likely to have occurred anywhere that Aboriginal people stopped or gathered for any length of time.

Any one site (or group of linked sites described as a 'site complex') can contain several different site features. For example, a shelter may have art on the walls, artefacts on the floor surface or outside the shelter, and be predicted to contain faunal remains and further artefacts in the accumulated deposit inside.

A description of terms used to describe different Aboriginal site features in NSW is provided in Table AD-1. Other features or types of Aboriginal cultural sites that do not necessarily leave physical evidence may exist or have once existed in the landscape as well; however, such sites have not been recorded previously which reflects the archaeological focus of past studies and the loss of traditional knowledge of such places in this area. Similarly, there may be places of contemporary significance to Aboriginal people in the study area and this will require consultation with the Aboriginal community to identify such places.

Table 18. Aboriginal site feature definitions

Site feature	Definition
Artefact	Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Aboriginal people.
Potential archaeological deposit (PAD)	An area where Aboriginal objects may occur below the ground surface. The term 'potential archaeological deposit' was first applied in Sydney regional archaeology in the 1980s, and referred to rock shelters that were large enough and with enough accumulated deposit to allow archaeologists to presume that subsurface cultural material was highly likely to be present. Since then, it has come to include open sites where the same prediction can be made.
Modified tree (carved or scarred)	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc., or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
Stone quarry	Usually, a source of good quality stone which is quarried and used to produce stone tools
Burial	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked, e.g. in caves, marked by stone cairns, in sand areas, along creek banks etc.

Source: OEH (2012, 8-10).

Stone artefacts

Aboriginal stone artefacts are important sources of archaeological information because stone is preserved for long periods of time whereas organic materials such as bone, shell, wood and plant fibres often decay. Stone artefacts provide valuable information about technology, economy, cultural change through time and settlement patterning. Stone has also been used for 'relative' dating of sites where direct methods such as radiocarbon dating cannot be applied.

A technological sequence for stone artefacts for the region was first described in the late 1940s by Fred McCarthy and has since been refined over time by Hiscock and Attenbrow (2005) into the 'Eastern Regional Sequence':

- Capertian—Distinguished by large uniface pebble tools, core tools, horse-hoof cores, scrapers and hammerstones. Backed artefacts occasionally present. Generally, dates to before 5,000 years BP.
- Early Bondaian—Aspects of the Capertian assemblage continue but backed artefacts and ground-edged artefacts increase. Artefacts during this period were predominantly made from fine-grained siliceous stone such as silcrete and tuff. Generally dated from 5,000 BP to 2,800 BP.

- Middle Bondaian—Characterised by backed artefacts, particularly Bondi Points and ground-edged artefacts. Artefacts made from siliceous materials; however, quartz becomes more frequent. Generally dated from 2,800 BP to 1,600 BP.
- Late Bondaian—Characterised by bipolar technology, eloueras, ground-edged artefacts, and bone and shell artefacts. Bondi points are virtually absent, and artefacts are predominantly made from Quartz. Generally dated from 1,600 BP to European contact.

Preservation of the archaeological record

The following observations can be made about the nature and preservation of the archaeological record across the Illawarra subregion:

- Archaeological material is often found in areas of sub-surface exposure, such as those caused by erosion.
- Outcrops of former back-barrier swamps on open ocean beach face are common in the Illawarra, increasing sub-surface exposure by coastal erosion.
- Surface evidence (or the absence of surface evidence) does not necessarily indicate the potential, nature or density of sub-surface material. Extensive excavations have shown that areas with no surface evidence often contain sub-surface deposits buried beneath current ground surfaces (e.g. Kohen et al. 1984).
- Due to the limitations of surface surveys, test excavation is often required to establish the nature and density of archaeological material.
- Aboriginal cultural material is more likely to survive in areas that contain remnant portions of the pre-European soil profile, in contrast to landforms that have been impacted by historical or recent disturbances.
- The potential for survival of any archaeological sites will largely depend on the degree of past disturbance.
- Past disturbance to the soil profile can be due to European activity such as clearing, ploughing, grazing, and urban development and/or due to environmental factors such as flooding events, erosion and colluvial movement. These activities may disturb, erode or remove the natural soil profile completely.
- Aboriginal stone artefacts are more likely to survive because stone is preserved for long periods of time whereas organic materials such as bone, shell, wood and plant fibres decay.

A major impact of more than 200 years of post-contact settlement on Aboriginal sites would have been the destruction of carved and scarred trees, which would have been removed as part of clearing for agricultural activities and the construction of infrastructure such as buildings and roads. However, there is some potential for culturally modified trees to survive in areas where there are stands of remnant native vegetation.

A.2. AHIMS search

A copy of the results from the search for Aboriginal sites on AHIMS in the study area is provided in the following pages.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : tripoli

Client Service ID : 702136

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0434	Tullimbah PAD1	GDA	56	293704	6171840	Open site	Destroyed	Potential Archaeological Deposit (PAD) : -, Artefact : -		102212,10339 0
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd,Mr.Matthew Kelleher,Kelleher Nightingale							
52-5-0590	CP-IF-04	GDA	56	294309	6173147	Open site	Valid	Artefact : 1	2299,2338,3054,3118	
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							
52-5-0937	TULLIMBAR REF 2	GDA	56	294428	6171211	Open site	Valid	Artefact : 1		104253
	<u>Contact</u>	<u>Recorders</u>	Mr.Miles Robson,Austral Archaeology - Wollongong							
52-5-0842	Tullimbar PAD5 Cloned	GDA	56	294560	6171025	Open site	Valid	Potential Archaeological Deposit (PAD) : -		104375,10437 6
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes							
52-5-0765	Yallah to Oak Flats IF 3	GDA	56	297780	6171630	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Artefact - Cultural Heritage Management - Pyrmont,Ms.Alyce Howard							
52-5-0634	CP-S-08	GDA	56	293085	6173831	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							
52-5-0942	YRPAD4	GDA	56	293222	6171155	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Lyn O'Brien,Past Traces Pty Ltd							
52-5-0431	Tullimbar PAD 3	GDA	56	294000	6171200	Open site	Valid	Potential Archaeological Deposit (PAD) : -, Artefact : -		102212,10437 5,104376,1048 05
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd,Navin Officer Heritage Consultants Pty Ltd							
52-5-0439	Tullimbah Village PAD2	AGD	56	294050	6171800	Open site	Destroyed	Potential Archaeological Deposit (PAD) : -		102212,10339 0
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd							
52-5-0591	CP-IF-05	GDA	56	294292	6173109	Open site	Valid	Artefact : 1	2338,3054,3118	
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool,Mr.Matthew Kelleher,Kelleher Nightingale							
52-5-0701	CP-IF-05A	GDA	56	294292	6173109	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							
52-5-0961	Tulkeroo ISO	GDA	56	294856	6172459	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Biosis Pty Ltd - Wollongong,Mrs.Samantha Keats							
52-5-0848	YTOF AS 9	GDA	56	295082	6173605	Open site	Partially Destroyed	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		103838
	<u>Contact</u>	<u>Recorders</u>	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Management - Pyrmont							

Report generated by AHIMS Web Service on 21/07/2022 for Hannah Morris for the following area at Lat, Long From : -34.5904, 150.7352 - Lat, Long To : -34.5551, 150.797. Number of Aboriginal sites and Aboriginal objects found is 62

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : tripoli

Client Service ID : 702136

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0792	YTOF IF 4	GDA	56	296421	6172006	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Artefact - Cultural Heritage Management - Pyrmont,Ms.Alyce Howard							<u>Permits</u>
52-5-0789	YTOF AS 5	GDA	56	296501	6172002	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma							<u>Permits</u>
52-5-0822	Yallah to Oak Flats PAD 9 (YTOF PAD 9)	GDA	56	296585	6171721	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Josh Symons							<u>Permits</u>
52-5-0824	Yallah to Oak Flats PAD 3 (YTOF PAD 3)	GDA	56	297020	6172180	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Josh Symons							<u>Permits</u>
52-5-0834	Calderwood 01	GDA	56	292309	6172542	Open site	Valid	Artefact : 1		103727,103728
	<u>Contact</u>	<u>Recorders</u>	Eco Logical Australia Pty Ltd - Sydney - Individual users,Ms.Sheahan Bestel							<u>Permits</u>
52-5-0639	CP-S-13	GDA	56	292868	6173817	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							<u>Permits</u>
52-5-0887	Calderwood Road IF 2	GDA	56	292884	6173112	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Kelleher Nightingale Consulting Pty Ltd,Ms.Kristen Taylor							<u>Permits</u>
52-5-0597	CP-IF-13	GDA	56	293281	6173372	Open site	Partially Destroyed	Artefact : 1		103727,103728
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool,Kelleher Nightingale Consulting Pty Ltd,Ms							<u>Permits</u> 4092
52-5-0627	CP-S-01	GDA	56	293437	6171863	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>	Mr.Leigh Bate							<u>Permits</u>
52-5-0522	HC1, Tullimbah	AGD	56	294391	6170922	Open site	Valid	Artefact : 5		102212
	<u>Contact</u> Searle	<u>Recorders</u>	Doctor.Julie Dibden							<u>Permits</u>
52-5-0757	YTOF IF 1	GDA	56	296837	6172068	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Doctor.Samantha Gibbins							<u>Permits</u>
52-5-0595	CP-IF-11	GDA	56	292460	6172557	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							<u>Permits</u>
52-5-0629	CP-S-03	GDA	56	293509	6172509	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>	Mr.Leigh Bate							<u>Permits</u>
52-5-0589	CP-IF-03	GDA	56	293587	6172587	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Austral Archaeology Pty Ltd - Liverpool							<u>Permits</u>
52-5-0632	CP-S-06/CP-PAD-02	GDA	56	293943	6173438	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : -, Artefact : 2		103727,103728,103940
	<u>Contact</u>	<u>Recorders</u>	Kelleher Nightingale Consulting Pty Ltd,Mr.Leigh Bate,Ms.Cristany Milicich,Mr.Matt							<u>Permits</u> 4298,4755

Report generated by AHIMS Web Service on 21/07/2022 for Hannah Morris for the following area at Lat, Long From : -34.5904, 150.7352 - Lat, Long To : -34.5551, 150.797. Number of Aboriginal sites and Aboriginal objects found is 62

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0844	Tullimbar Artefact Return Location	GDA	56	294476	6171114	Open site	Valid	Artefact : -		
	Contact	Recorders				Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes				Permits
52-5-0966	Calderwood Area 2	GDA	56	294943	6173816	Open site	Valid	Artefact : -		
	Contact	Recorders				Austral Archaeology - Wollongong,Miss.Pauline Ramsey				Permits
52-5-0967	Calderwood Area 1	GDA	56	295020	6173890	Open site	Valid	Artefact : -		
	Contact	Recorders				Austral Archaeology - Wollongong,Miss.Pauline Ramsey				Permits
52-5-0787	YTOF AS 3	GDA	56	297341	6171087	Open site	Valid	Artefact : -		
	Contact	Recorders				Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma				Permits
52-5-0635	CP-S-09/CP-PAD-03	GDA	56	292297	6173439	Open site	Valid	Artefact : 1		
	Contact	Recorders				Austral Archaeology Pty Ltd - Liverpool				Permits
52-5-0599	CP-IF-15	GDA	56	292473	6173647	Open site	Valid	Artefact : 1		
	Contact	Recorders				Austral Archaeology Pty Ltd - Liverpool				Permits
52-5-0888	Calderwood Road IF 1	GDA	56	292662	6173452	Open site	Valid	Artefact : -		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor				Permits
52-5-0594	CP-IF-08	GDA	56	292979	6172557	Open site	Valid	Artefact : 1		103727,103728
	Contact	Recorders				Austral Archaeology Pty Ltd - Liverpool			4419	
52-5-0868	North Macquarie Road PAD 1	GDA	56	293335	6172650	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor			4933	
52-5-0940	YRPAD1	GDA	56	293590	6171388	Open site	Valid	Potential Archaeological Deposit (PAD) : -		104450,104451
	Contact	Recorders				Ms.Lyn O'Brien,Past Traces Pty Ltd			4734	
52-5-0628	CP-S-02	GDA	56	294386	6173411	Open site	Valid	Artefact : 6		
	Contact	Recorders				Mr.Leigh Bate				Permits
52-5-0965	Calderwood Area 3	GDA	56	294621	6174005	Open site	Valid	Artefact : -		
	Contact	Recorders				Austral Archaeology - Wollongong,Miss.Pauline Ramsey				Permits
52-5-0829	RPS AP 1	GDA	56	295579	6170316	Open site	Not a Site	Artefact : 1		103873
	Contact	Recorders				RPS Australia East Pty Ltd - York Street Sydney				Permits
52-5-0793	YTOF AS 8	GDA	56	297390	6170953	Open site	Valid	Artefact : -		
	Contact	Recorders				Artefact - Cultural Heritage Management - Pyrmont,Ms.Alyce Howard				Permits
52-5-0598	CP-IF-14	GDA	56	292464	6173549	Open site	Valid	Artefact : 1		
	Contact	Recorders				Austral Archaeology Pty Ltd - Liverpool				Permits
52-5-0601	CP-IF-10	GDA	56	292558	6172658	Open site	Valid	Artefact : 1		
	Contact	Recorders				Austral Archaeology Pty Ltd - Liverpool				Permits
52-5-0637	CP-S-11/CP-PAD-04	GDA	56	292616	6173723	Open site	Valid	Artefact : 1		

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0638	CP-S-12	GDA	56	292959	6173461	Open site	Valid	Artefact : 1		103727,103728
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0935	CSF AS 2	GDA	56	294239	6173593	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0964	Calderwood Area 4	GDA	56	294761	6173601	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0764	Yallah to Oak Flats IF 2	GDA	56	297764	6171595	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0600	CP-IF-16	GDA	56	292257	6173960	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0604	CP-PAD-01	GDA	56	292796	6172718	Open site	Valid	Artefact : 1		103727,103728
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0631	CP-S-05	GDA	56	292955	6172691	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0941	YRPAD3	GDA	56	293531	6171289	Open site	Valid	Potential Archaeological Deposit (PAD) : -		104450,104451
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	4734	
52-5-0633	CP-S-07	GDA	56	293700	6173386	Open site	Valid	Artefact : 3		103727,103728
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	4092	
52-5-0934	CSF AS 1	GDA	56	294256	6173469	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	4755	
52-5-0658	CP IF 05	GDA	56	294292	6173109	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0441	HC2 and PAD3	GDA	56	294454	6171230	Open site	Partially Destroyed	Artefact : 5, Potential Archaeological Deposit (PAD) : -		102212,104253
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	4453,4625	
52-5-0936	TULLIMBAR REF 1	GDA	56	294760	6170632	Open site	Valid	Artefact : 1		104375,104376
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	4543	
52-5-0788	YTOF AS 4	GDA	56	296856	6172009	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-5-0596	CP-IF-12	GDA	56	292686	6172441	Open site	Valid	Artefact : 1		103727,103728
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : tripoli

Client Service ID : 702136

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status **</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
52-5-0593	CP-IF-07	GDA	56	292892	6172396	Open site	Valid	Artefact : 1		103727,103728
	<u>Contact</u>									
52-5-0440	Tullimbah Village PAD4	GDA	56	294404	6171090	Open site	Destroyed	Potential Archaeological Deposit (PAD) : -, Artefact : -	<u>Permits</u> 4419	102212,103390,104325,104326,104375,104376
	<u>Contact</u>									
	T Russell	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd,Biosis Pty Ltd - Wollongong,Mrs.Samant <u>Permits</u> 2338,3054,3118,4542,4543							

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 21/07/2022 for Hannah Morris for the following area at Lat, Long From : -34.5904, 150.7352 - Lat, Long To : -34.5551, 150.797. Number of Aboriginal sites and Aboriginal objects found is 62

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

A.3. Individual site cards

AHIMS site ID: 52-5-1123

Date recorded: 08-02-2024

Site Location Information

Site name: Tripoli Way Extension PAD1

Easting: 294422

Northing: 6172389

Coordinates must be in GDA94 (MGA)

Horizontal Accuracy (m):

2

Zone: 56

Differential GPS

Recorder Information

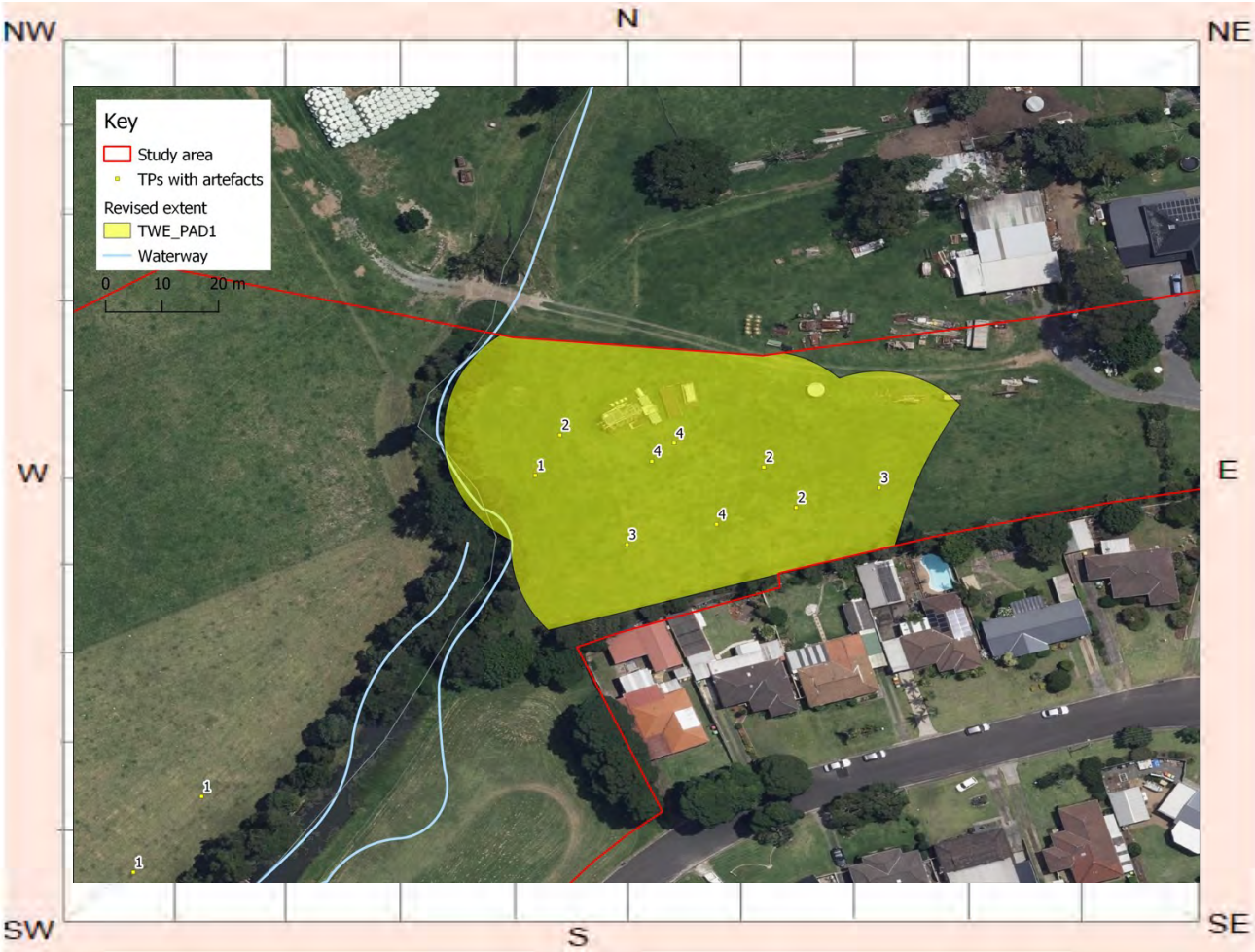
(The person responsible for the completion and submission of this form)

Title	Surname	First name
Ms.	Fenech	Catherine
Organisation:	Extent Heritage	
Address:	24 Pearce Street	
Phone:	0477752175	E-mail: cfenech@extent.com.au

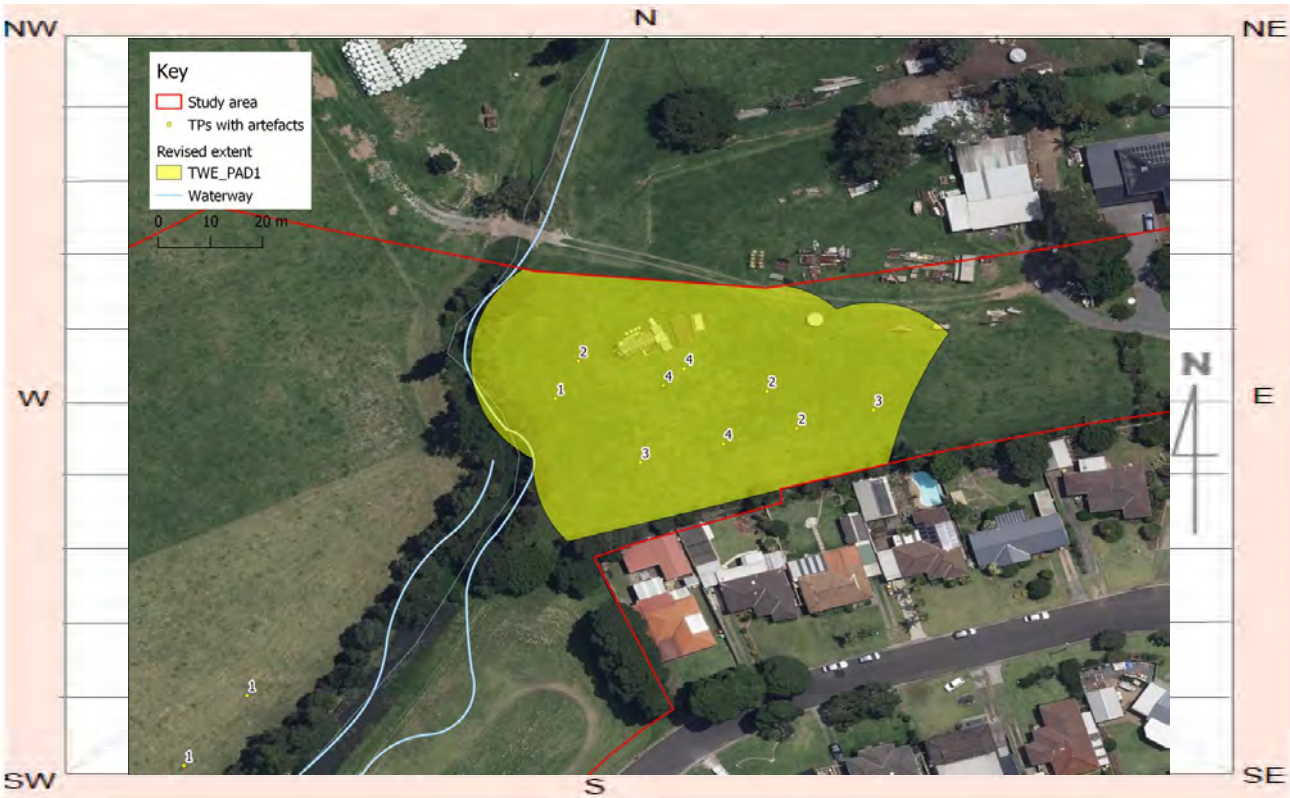
Site Context Information

Land Form Pattern:	Undulating Plain	Land Use:	Pastoral/Grazing
Land Form Unit:	Plain	Vegetation:	Cleared
Distance to Water (m):	40	Primary Report:	Tripoli Way Extension ACHAR Extent Heritage Pty Ltd 2024
How to get to the site:	travel along the Illawarra Highway to Calderwood Road. take a left onto Moles Street. Stay on Moles Street until you reach The Expressway. the site is located within private land to the west of The Expressway.		
Other site information:	cleared agricultural land actively used in cattle rotation		

Site location map



Site plan



Site contents information

open/closed site:

Site condition:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1.	Artefact	24	111	65				

Feature condition:

Description:

cleared plain adjacent to the Hazelton Creek. slightly undulating to the west.

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.								

Feature condition:

Description:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
3.								

Feature condition:

Description:

Features:

4.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

Description:

Features:

5.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

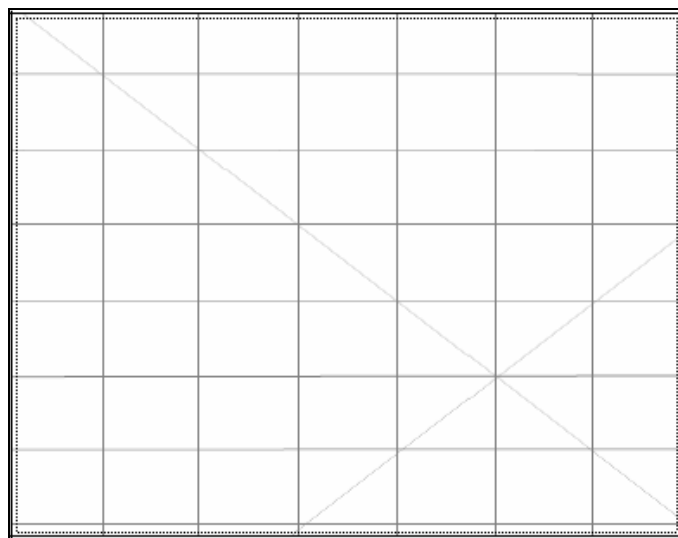
Description:

Site photographs

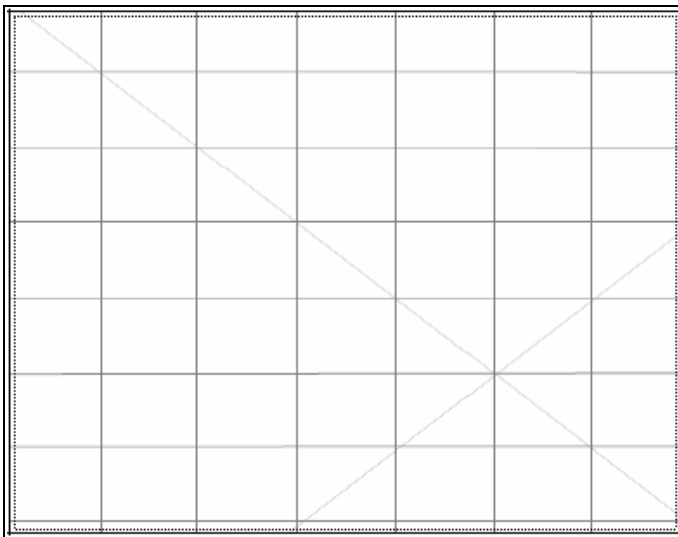


Description:

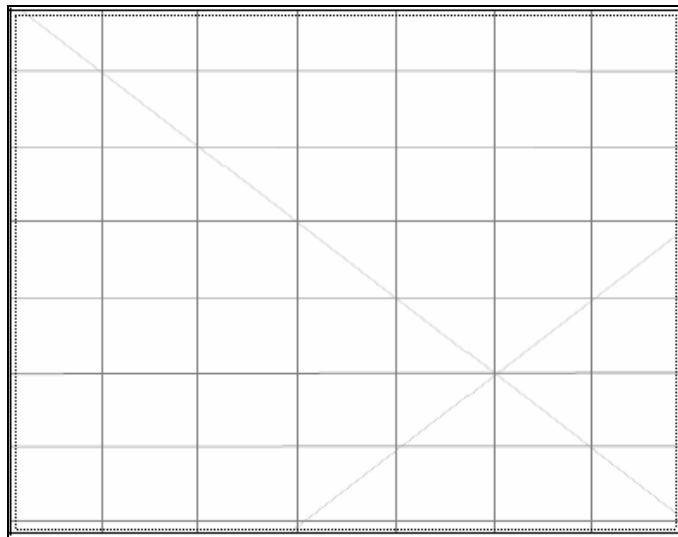
open area looking west across PAD 1



Description:



Description:



Description:

Site restrictions

Do you want to

Restrict this site?:

☐

Restriction type:

Gender

General

Location

N/A

☐☐

Why is this site restricted?:

Further information contact

Title

Surname

First name

Ms.

Fenech

Catherine

Organisation:

Address:

203 Hawker Street Quirindi

Phone:

0477752175

E-mail:

cfenech@extent.com.au

Site interpretation and community statement

heavily disturbed site, archaeological test excavation reveled densities associated with background scatter.

AHIMS site ID: 52-5-1122

Date recorded: 08-02-2024

Site Location Information

Site name: Tripoli Way Extension PAD2

Easting: 294272

Northing: 6172282

Coordinates must be in GDA94 (MGA)

Horizontal Accuracy (m):

3

Zone: 56

Differential GPS

Recorder Information

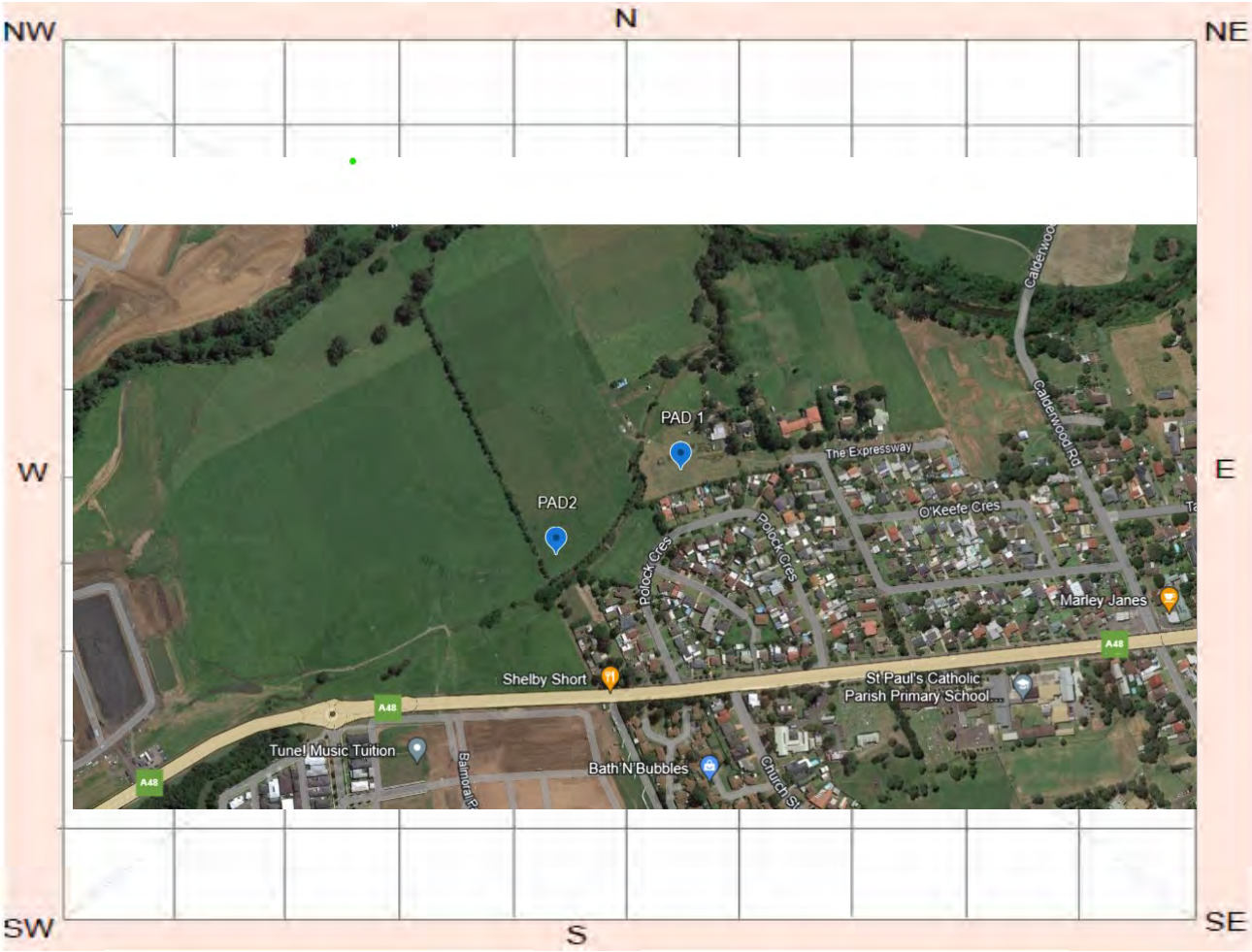
(The person responsible for the completion and submission of this form)

Title	Surname	First name
Ms.	Fenech	Catherine
Organisation:	Extent Heritage	
Address:	24 Pearce Street	
Phone:	0477752175	E-mail: cfenech@extent.com.au

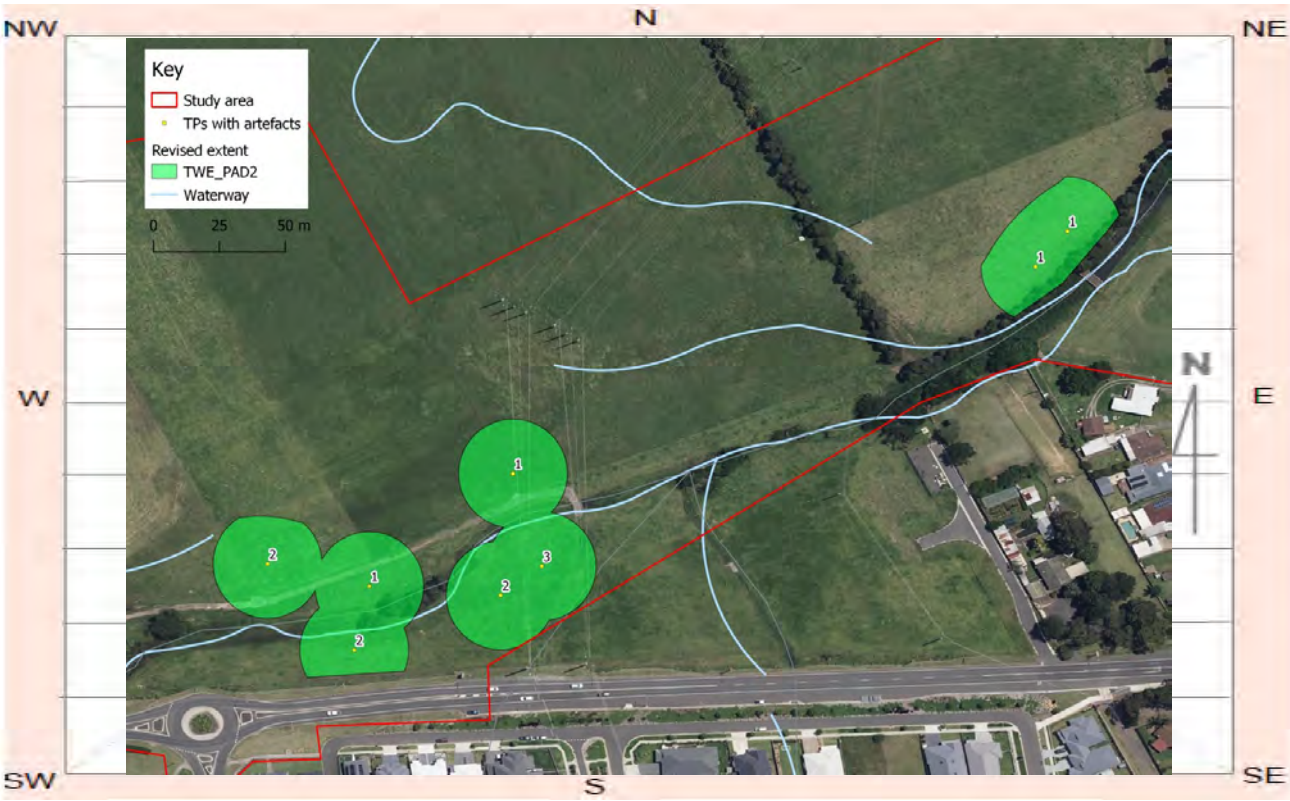
Site Context Information

Land Form Pattern:	Floodplain	Land Use:	Pastoral/Grazing
Land Form Unit:	Plain	Vegetation:	Cleared
Distance to Water (m):	30	Primary Report:	Tripoli Way Extension ACHAR. Extent Heritage Pty Ltd. 2024
How to get to the site:	travel along the Illawarra Highway, access private property by gate aprox 120m from the roundabout between Broughton Ave and Illawarra Highway.		
Other site information:	cleared agricultural land actively used in cattle rotation		

Site location map



Site plan



Site contents information

open/closed site:

Site condition:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1.	Artefact	13	435	95				

Feature condition:

Description:

cleared plain adjacent to the Hazelton Creek. slightly undulating.

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.								

Feature condition:

Description:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
3.								

Feature condition:

Description:

Features:

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

4.

Feature condition:

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Features:

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

5.

Feature condition:

Description:

Scarred Trees

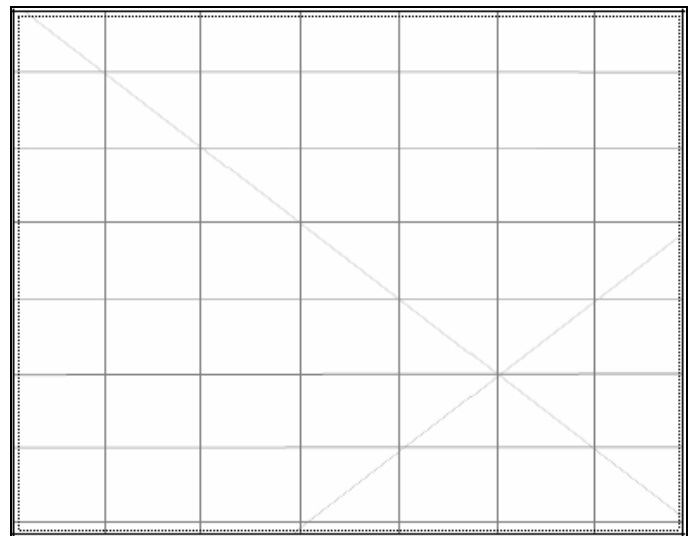
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Site photographs



Description:

overview of study area looking north



Description:

Description:

Description:

Site restrictions

Do you want to

Restrict this site?:

☐

Restriction type:

Gender

N/A

General

☐

Location

☐

Why is this site restricted?:

Further information contact

Title

Surname

First name

Ms.

Fenech

Catherine

Organisation:

Extent Heritage

Address:

24 Pearce Street

Phone:

0477752175

E-mail:

cfenech@extent.com.au

Site interpretation and community statement

heavily disturbed site, archaeological test excavation revealed densities associated with background scatter.

AHIMS site ID: 52-5-1120

Date recorded: 08-02-2024

Site Location Information

Site name: Tripoli Way Extension PAD3

Easting: 295921

Northing: 6172771

Coordinates must be in GDA94 (MGA)

Horizontal Accuracy (m):

3

Zone: 56

Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title	Surname	First name
Ms.	Fenech	Catherine
Organisation:	Extent Heritage	
Address:	24 Pearce Street	
Phone:	0477752175	E-mail: cfenech@extent.com.au

Site Context Information

Land Form Pattern:	Floodplain	Land Use:	Pastoral/Grazing
Land Form Unit:	Lagoon	Vegetation:	Grasslands
Distance to Water (m):	50	Primary Report:	Tripoli Way Extension ACHAR. Extent Heritage Pty Ltd. 2024

How to get to the site: access vial Illawarra highway just before the M1 turn off

Other site information:

-

Site location map



Site plan



Site contents information

open/closed site:

Site condition:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1.	Potential Archaeological Deposit		50	50				
Feature condition:		Erosion						

Description:

remnant terrace along lagoon

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.								
Feature condition:								

Description:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
3.								
Feature condition:								

Description:

Features:

4.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

Description:

Features:

5.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

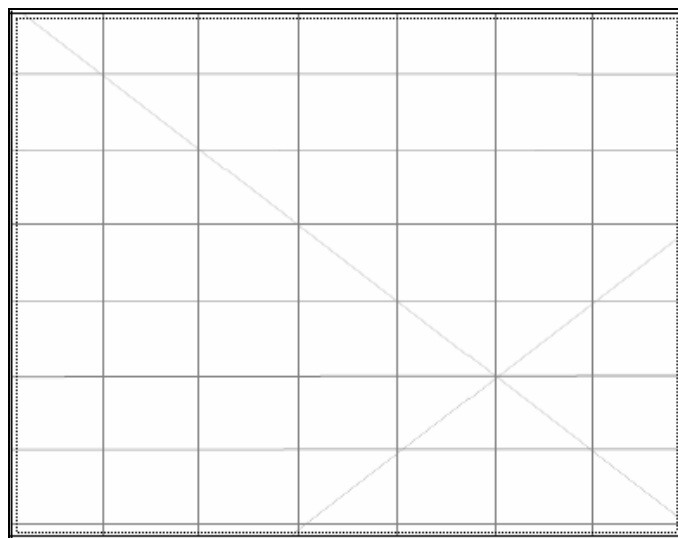
Description:

Site photographs



Description:

lagoon looking east



Description:

Description:

Description:

Site restrictions

Do you want to

Restrict this site?:

☐

Restriction type:

Gender

General

Location

N/A

☐☐

Why is this site restricted?:

Further information contact

Title

Surname

First name

Ms.

Fenech

Catherine

Organisation:

Extent Heritage

Address:

24 Pearce Street

Phone:

0477752175

E-mail:

cfenech@extent.com.au

Site interpretation and community statement

AHIMS site ID: 52-5-1119

Date recorded: 08-02-2024

Site Location Information

Site name: Tripoli Way Extension PAD4

Easting: 295862

Northing: 6172574

Coordinates must be in GDA94 (MGA)

Horizontal Accuracy (m):

3

Zone: 56

Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title	Surname	First name
Ms.	Fenech	Catherine
Organisation:	Extent Heritage	
Address:	24 Pearce Street	
Phone:	0477752175	E-mail: cfenech@extent.com.au

Site Context Information

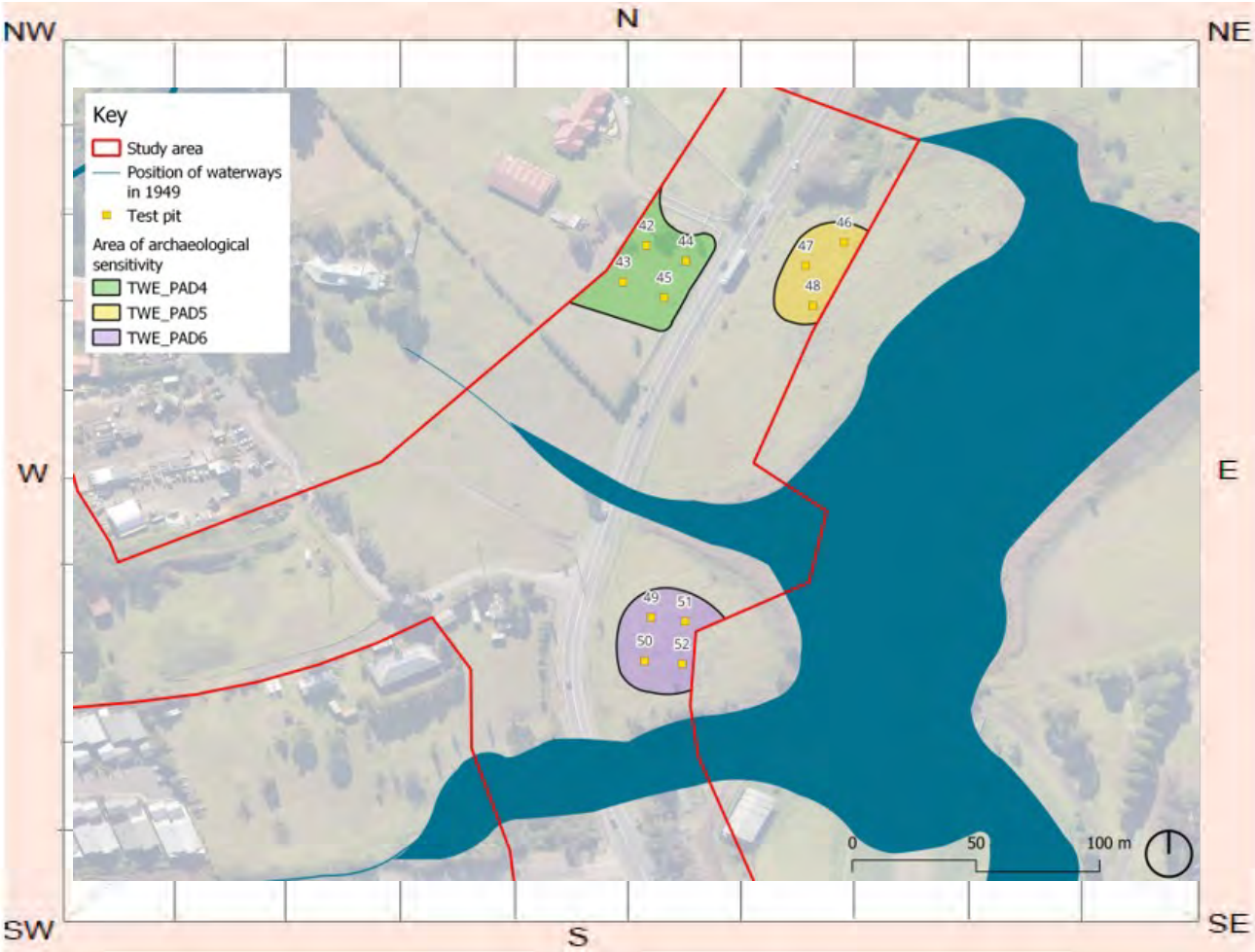
Land Form Pattern:	Floodplain	Land Use:	Pastoral/Grazing
Land Form Unit:	Lagoon	Vegetation:	Grasslands
Distance to Water (m):	50	Primary Report:	Tripoli Way Extension ACHAR. Extent Heritage Pty Ltd. 2024

How to get to the site: access via Illawarra highway just before the M1 turn off

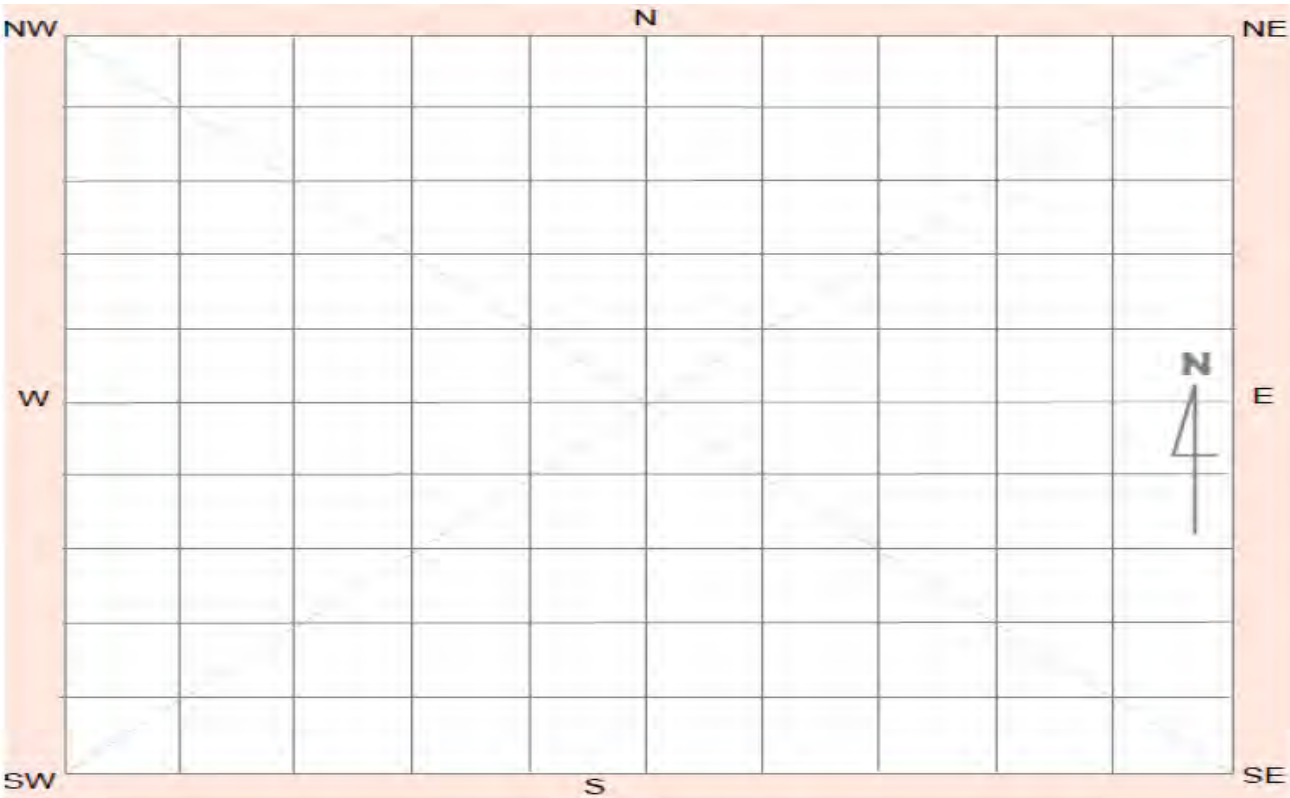
Other site information:

-

Site location map



Site plan



Site contents information

open/closed site:

Site condition:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1.	Potential Archaeological Deposit		50	50				

Feature condition:

Description:

remnant terrace along lagoon

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.								

Feature condition:

Description:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
3.								

Feature condition:

Description:

Features:

4.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

Description:

Features:

5.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Feature condition:

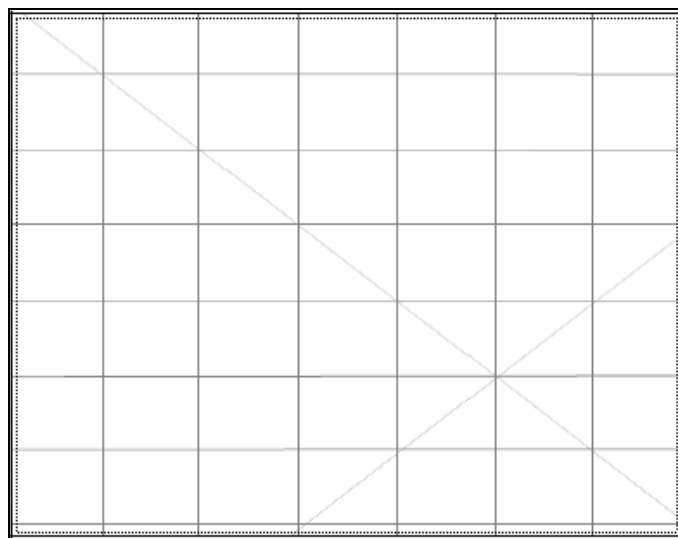
Description:

Site photographs



Description:

potential terrace looking north



Description:

Description:

Description:

Site restrictions

Do you want to

Restrict this site?:

☐

Restriction type:

Gender

General

Location

N/A

☐☐

Why is this site restricted?:

Further information contact

Title

Surname

First name

Ms.

Fenech

Catherine

Organisation:

Extent Heritage

Address:

24 Pearce Street

Phone:

0477752175

E-mail:

cfenech@extent.com.au

Site interpretation and community statement

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 52-5-0961

Date recorded: 17-06-2020

Site Location Information

Site name: Tulkeroo ISO

Easting: 294856 Northing: 6172459 Coordinates must be in GDA (MGA)

Horizontal Accuracy (m): 5

Zone: 56 Location method: Non-Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title Surname First name

Mrs. Keats Samantha

Organisation: Biosis Pty Ltd

Address: 30 Wentworth Street, Port Kembla NSW 2505

Phone: 0242011061 E-mail: ahims@biosis.com.au

Site Context Information

Land Form Pattern: Undulating Plain Land Use: Pastoral/Grazing

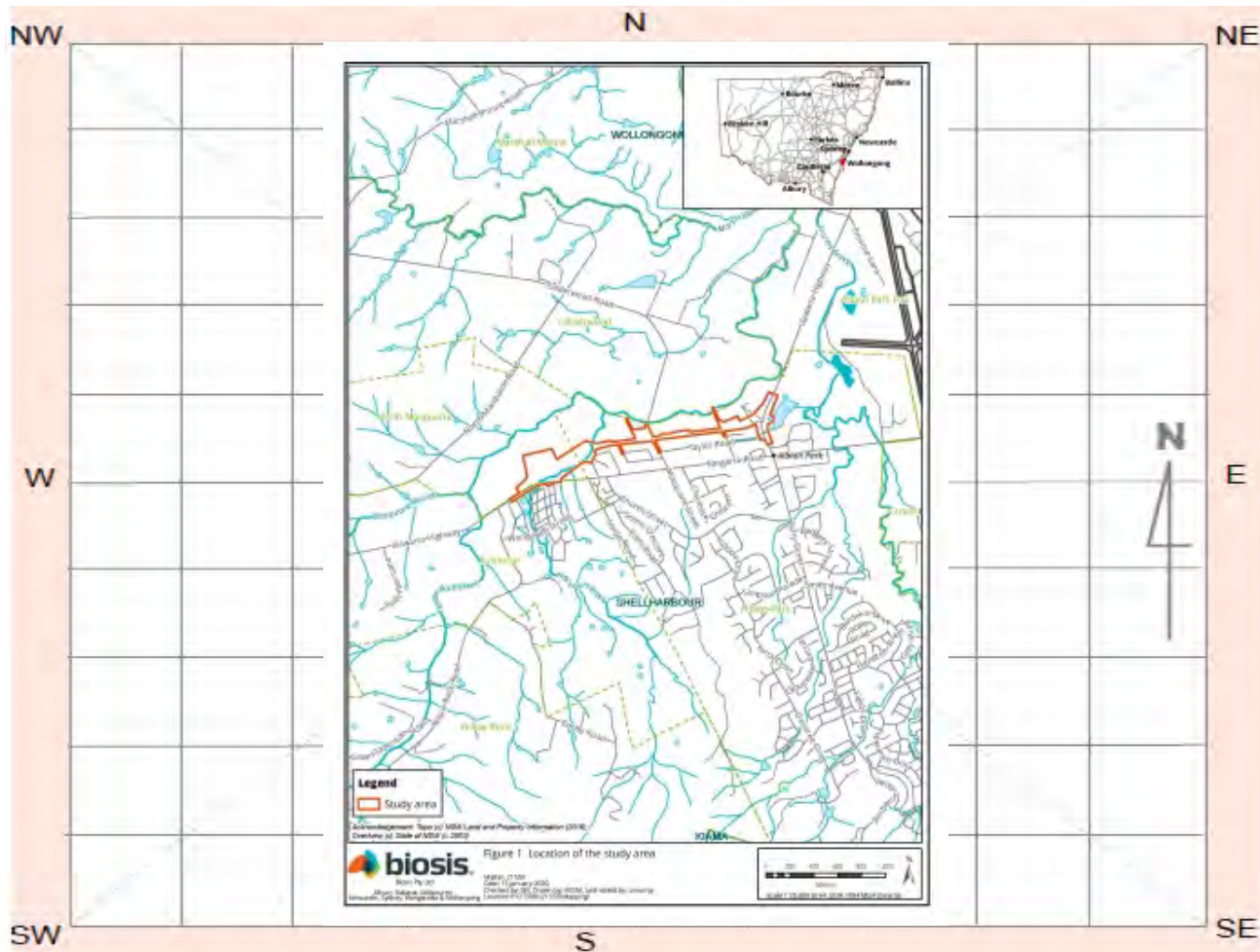
Land Form Unit: Terrace Vegetation: Cleared

Distance to Water (m): 130 Primary Report: Aboriginal Due Diligence Assessment: Tripoli Way Bypass

How to get to the site: The study area is located within the suburb of Albion Park at Tulkeroo and Albion Park Butter Factory (Former) located at 23 Calderwood Road, Albion Park.

Other site information:

Site location map



Site contents information

open/closed site:

Site condition:

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1. Artefact	1	1	1				

Description:

Tulkeroo ISO consists of a basalt ground edge axe. It measured 148.24 millimetres long by 84.77 millimetres wide by 40.67 millimetres deep and had evidence of flaking or use as a hammerstone on one side.

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.							

Description:

Features:

3.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Features:

4.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Features:

5.

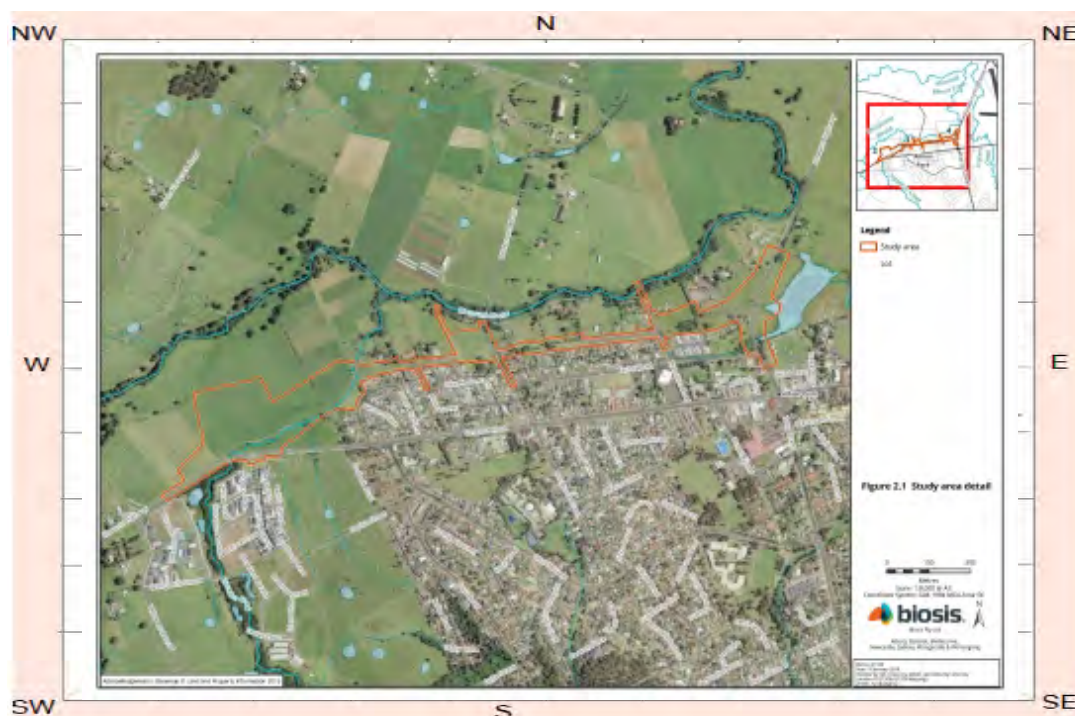
Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Other Site Info:

Site plan



Site photographs



Description:	Ground edge axe, Tulkeroo ISO, recorded during the survey
--------------	---

Description:



Description: Opposite side of Tulkeroo ISO showing evidence of flaking or use as a hammerstone

A blank sheet of graph paper featuring a uniform grid of squares. The grid consists of 10 columns and 8 rows. Two diagonal lines intersect at the center of the grid, forming an 'X' shape. The entire grid is enclosed within a double-line border.

Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type:

Gender	General	Location
--------	---------	----------

11

General

11

Location

7

Why is this site restricted?:

--

Further information contact

Title

Surname

First name

Organisation:

--

Address:

--

Phone:

E-mail:

AHIMS site ID: 52-5-1130

Date recorded: 02-05-2024

Site Location Information

Site name: TWE Eastern Transect

Easting: 295840

Northing: 6172743

Coordinates must be in GDA94 (MGA)

Horizontal Accuracy (m):

3

Zone: 56

Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title

Surname

First name

Ms.

Rebekah

Hawkins

Organisation: Extent Heritage

Address: 3/73 Union street Pyrmont 2010 NSW

Phone: 0295554000

E-mail: RHawkins@extent.com.au

Site Context Information

Land Form
Pattern: Rolling Hills

Land Use: Pastoral/Grazing

Land Form
Unit: Ridge

Vegetation: Cleared

Distance to
Water (m): 250

Primary
Report: Tripoli Way Extension ACHAR Extent Heritage Pty Ltd
2024.

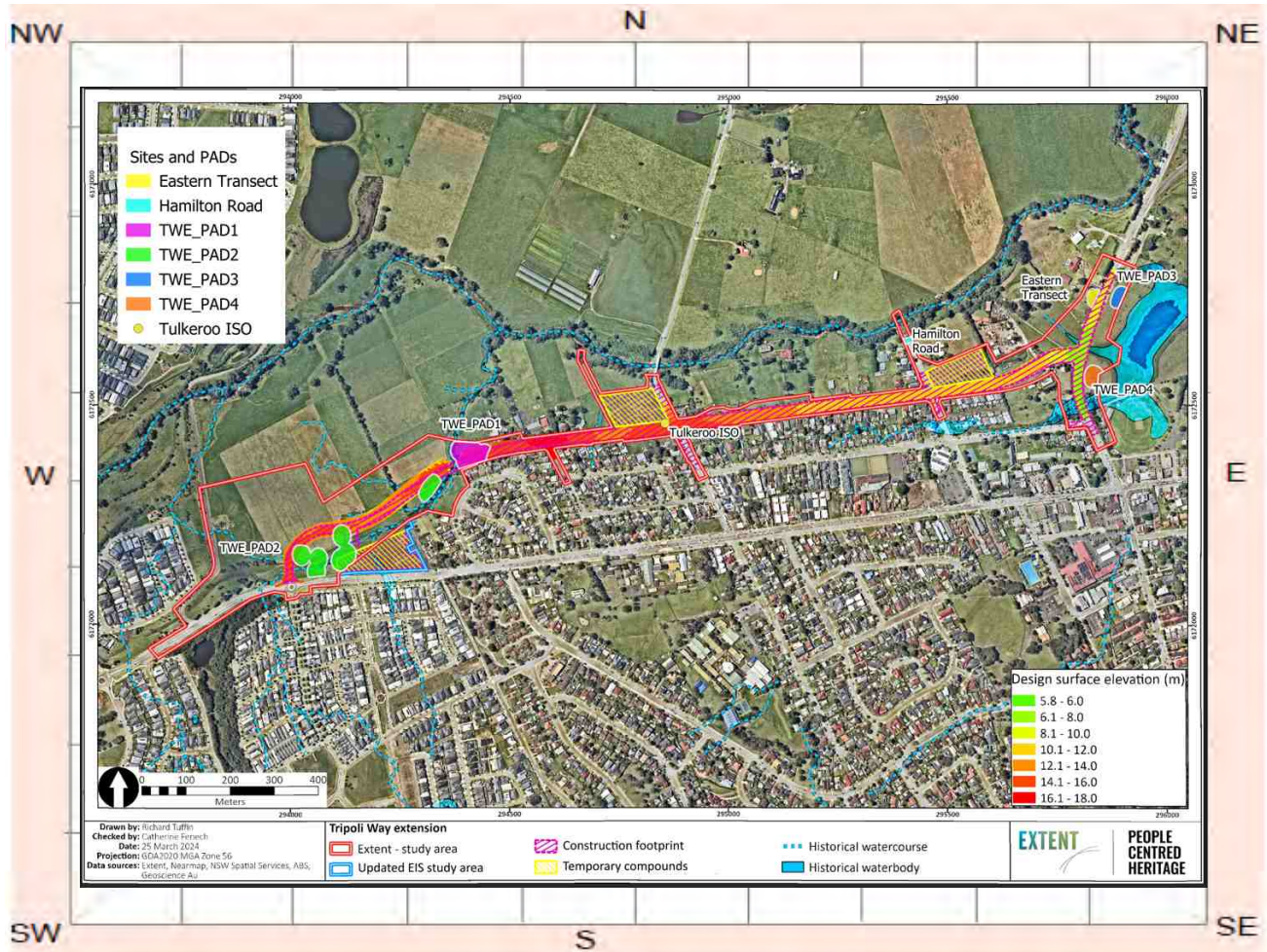
How to get
to the site:

Access via Illawarra Highway just before M1 turn off

Other site
information:

-

Site location map



Site plan



Site contents information

open/closed site:

Site condition:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1.	Artefact	2	40	20				

Feature condition:

Description:

Four test pits were excavated on a small, elevated ridge between two gullies overlooking the lagoon in the eastern portion of the study area. Likely material not in situ and instead moved downhill by rain and erosional processes, or impacted by landscaping undertaken by the residential landowners of the property. 1 x IMT distal flake, 1 x quartzite priximal flake

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2.								

Feature condition:

Description:

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees			
					Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
3.								

Feature condition:

Description:

Features:

4.

Feature condition:

Description:

Features:

5.

Feature condition:

Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species

Site photographs



Description: View of the Eastern transect, facing northwest.



Description: Eastern transect looking south along Illawarra Highway.

Description:

Description:

Site restrictions

Do you want to

Restrict this site?:

☐

Restriction type:

Gender

General

Location

N/A

☐☐

Why is this site restricted?:

Further information contact

Title

Surname

First name

Organisation:

Address:

Phone:

E-mail:

Site interpretation and community statement

APPENDIX B. CONSULTATION RECORD



B.1. Aboriginal consultation log

Pre-Notification

Agency	Contact	Type	Date	Description	Extent contact
Pre-Notification	Incoming				
Heritage NSW	Greater Sydney Aboriginal Cultural Heritage	Email	20/12/2022	Requested details of any Aboriginal organisations or individuals who may be interested in the project.	Catherine Fenech
Local Aboriginal Land Council	General Manager	Email	20/12/2022	Requested details of any Aboriginal organisations or individuals who may be interested in the project. (Nowra LALC 20/12/22, Illawarra 23/12/22).	Catherine Fenech
Greater Sydney Local Land Services	General Manager	Email			
Shellharbour City Council	General Manager	Email			
NTSCorp	General Manager	Email			
National Native Title Tribunal	General Manager	Email	20/12/2022	Requested details of any Aboriginal organisations or individuals who may be interested in the project. Submitted request for search of Tribunal Registers.	Catherine Fenech
Office of the Registrar Aboriginal Land Rights Act 1983	The Office of the Registrar	Email			
Pre-Notification	Incoming				
Heritage NSW	Barry Gunther	Email	21/12/2022	Attached list of known Aboriginal Stakeholders for the proposed development of the Tripoli Way Extension.	Hannah Morris
Office of the Registrar Aboriginal Land Rights Act 1983	Brendan Smith	Email	22/12/2022	A search of the Register of Aboriginal Owners shows there are currently no registered aboriginal owners in the project area. ORALRA indicated that the study area is within both the Nowra LALC and the Illawarra LALC, and suggested with contact both parties (this has been done- 23/12/22).	Catherine Fenech
Illawarra LALC	Donna Hiscox	Email	16/01/2023	The ILALC is unable to provide the name of any Aboriginal individuals and/or communities who may hold cultural knowledge for the area relevant to determine the significance of Aboriginal objects and/or places for this project.	Catherine Fenech
NTS Corp	Maggie Laing	Email	20/12/2022	NTSCORP requests to register the Applicant for the South Coast People's (SCP) native title application, on behalf of the SCP, as knowledge holders for this project and a party to be notified and involved throughout the assessment process. The SCP are the registered native title claimants for this region, contactable via their legal representatives Sandy Chalmers and Alex Read at information@ntscorp.com.au . Please send all correspondence to this address only .	Catherine Fenech

Agency	Contact	Type	Date	Description	Extent contact
				Can you confirm if and when Aboriginal knowledge holders are intended to be involved in field surveys, test excavations or any form of cultural heritage monitoring. It is the Applicant's position that such work should be undertaken by people who are members of the SCP native title application, as the relevant native title claimants and custodians of the cultural sites and artefacts in the area considered by this project. Following confirmation of the above, the Applicant will provide nominations for Aboriginal knowledge holders to be engaged on behalf of the SCP.	
ORALA	The Office of the Registrar	Email	22/12/2022	Recommends that we contact Illawarra LALC and Nowra LALC for consultation.	Catherine Fenech
Nowra Local Aboriginal Land Council	Emily	Email	1/2/2023	Apologies for delay, forwarding to board.	Catherine Fenech
DRNSW Local Land Service	Sharon Madden	Email	8/2/2023	Catchment Management Authorities are listed in Section 4.1.2 (g) of the Aboriginal cultural heritage consultation requirements for proponents 2010, under Part 6, National Parks and Wildlife Act 1974 as a source of information to obtain the "names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places". We understand that with the loss of Catchment Management Authorities in NSW such requests are likely to be forwarded to Local Land Services. South East Local Land Services is a partner with many Aboriginal communities in the region on natural resource management (NRM) projects. We are not, however, the primary source for contacting or managing contact lists for Aboriginal communities or persons that may inform or provide comment on planning issues. Currently we do not coordinate or administer any Aboriginal reference group for our region. Please direct your enquiry to Heritage NSW via the central mailbox heritagemailbox@environment.nsw.gov.au	Catherine Fenech

Agency	Contact	Type	Date	Description	Extent contact
Nowra Local Aboriginal Land Council	Jason Groves	Phone Call	15/2/2023	Jason informed us that the Nowra LALC was outside the study area boundary. I informed him that on the of the statutory bodies we contacted as part of Stage 1 Prenotification told us we should include the LALC. Jason says he would like to nominate Jason Davison to correspond on behalf of the LALC and that the LALC would still like to be involved in the project. He expressed that they are keen to undertake site work and have the names of a number of officers we can request for any works. They will send an email with Jasons' details soon.	

Newspaper Advertisement

Notice published in Illawarra Mercury	Illawarra Mercury	Newspaper	01/02/2023	Requested details of any Aboriginal organisations or individuals who may be interested in the project to register interest by 16 February 2023. See text in appendix.	Monica Popplestone Clare Fitzpatrick
---------------------------------------	-------------------	-----------	------------	---	---

Notifications

Outgoing

Badu (Murrin Clan/Peoples)	Karia Lea Bond	Email	25/01/2023	Emailed notification letter asking for registrations of interest by 10 February 2023	Clare Fitzpatrick
Barraby Cultural Services	Lee Field				
Bellambi Indigenous Corporation Gandangara Traditional Owners	Kim Moran				
Biamanga (Murrin Clan/Peoples)	Seli Storer				
Bilinga (Murrin Clan/Peoples)	Simalene Carriage				
Freeman & Marx	Clive Freeman				
Coomaditchie United Aboriginal Corporation	Lorraine Brown				
Cullendulla (Murrin Clan/Peoples)	Corey Smith				
Darryl Caines	Darryl Caines				
Darug Land Observations	Jamie and Anna Workman				
Dharug (Murrin Clan/Peoples)	Andrew Bond				
Duncan Falk Consultancy	Duncan Falk				
Eora Heritage Group	Joanne Butler				

Agency	Contact	Type	Date	Description	Extent contact
Gadhu Dreaming	Gordon Campbell				
Gary Caines	Gary Caines				
Goobah Development PTY LTD (Murrin Clan/Peoples)	Basil Smith				
Gumaraa	Jodie Edwards				
Gundungurra Tribal Technical Services	Sam Wickman				
Gunjeewong Cultural Heritage Aboriginal Corporation	Shayne Dickson				
Guntawang Aboriginal Resources Incorporated	Wendy Morgan				
Gunyu (Murrin Clan/Peoples)	Kylie Ann Bell				
Guunamaa Dreamin Sites and Surveying	Richard Campbell				
Illawarra Aboriginal Corporation	Rhonda Cruse				
Illawarra Local Aboriginal Land Council	Paul Knight				
James Davis	James Davis				
Jerringong (Murrin Clan/Peoples)	Joanne Anne Stewart				
Jerrinja Local Aboriginal Land Council	Alfred Wellington				
Kamilaroi Yankuntjatjara Working Group	Phil Khan				
Karrial (Murrin Clan/Peoples)	Karrial Johnson				
Konanggo Aboriginal Cultural Heritage Services	Robert Young				
Kullila Site Consultants and Koori Site Management	Paul Charles				
Lyndsay Urquhart	Lyndsay Urquhart				
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell				
Mura Indigenous Corporation (icn:8991)	Phillip Carroll				
Murra Bidgee Mullangari Aboriginal Corporation	Darleen and Ryan Johnson				
Murramarang (Murrin Clan/Peoples)	Roxanne Smith				
Murrumbul (Murrin Clan/Peoples)	Mark Henry				
Nundagurri (Murrin Clan/Peoples)	Newton Carriage				
Pemulwuy (Murrin Clan/Peoples)	Pemulwuy Johnson				

Agency	Contact	Type	Date	Description	Extent contact
RAW Cultural Healing	Raymond Weatherall				
Raymond Timbery	Raymond Timbery				
South Coast NSW Aboriginal Elders	Owen Carriage				
Thoorga Nura	John Carriage				
Three Ducks Dreaming Surveying and Consulting	Leonard Wright				
Tungai Tonghi	Troy Tungai				
Walbunja (Murrin Clan/Peoples)	Hika Te Kowhai				
Walgalu (Murrin Clan/Peoples)	Ronald Stewart				
Warra Bingi Nunda Gurri	Nathanial Kennedy				
Wingikara (Murrin Clan/Peoples)	Hayley Bell				
Woronora Plateau Gundungara Elders Council	Kayla Williamson				
Wullung (Murrin Clan/Peoples)	Lee-Roy James Boota				
Yerramurra (Murrin Clan/Peoples) and Taste of Tradition Native Aboriginal Corporation	Robert Parson				
Ken Foster	Ken Foster	Letter	25/01/2023	Posted notification letter asking for registrations of interest by 10 February 2023	Clare Fitzpatrick
Korewal Elouera Jerrungurah Tribal Elders Council	Uncle Rueben Brown				
La Perouse Botany Bay Corporation	Yvonne Simms				
Minnamunnung	Aaron Broad				
NIAC					
Norma Simms	Norma Simms				
Raymond Garbutt	Raymond Garbutt				
South West Rocks Aboriginal Corporation	William Moran				
The Wadi Wadi Coomaditchie Aboriginal Corporation					
The Wodi Wodi Elders Corporation	Rosina Davis				
Yurrandaali	Bo Field				
Yurwang Gundana Consultancy Cultural Heritage Services	Dean and Merekai Bell				

Agency	Contact	Type	Date	Description	Extent contact
Kullila Site Consultants and Koori Site Management	Paul Charles	Letter	30/01/2023	Posted notification letter asking for registrations of interest by 10 February 2023 after emails were bounced back.	Clare Fitzpatrick
Mura Indigenous Corporation	Phillip Carroll				
Three Ducks Dreaming Surveying and Consulting	Leonard Wright				
Notifications	Incoming				
Darug Land Observations	Jamie Workman and Anna Workman	Email	25/01/2023	Automatic reply that the email was unable to be sent. Called both provided numbers – both numbers were disconnected.	Clare Fitzpatrick
Kullila Site Consultants and Koori Site Management	Paul Charles	Email	25/01/2023	Automatic reply that the email was unable to be sent. Re-sent letter via post.	Clare Fitzpatrick
Mura Indigenous Corporation	Phillip Carroll	Email	25/01/2023	Automatic reply that the email was unable to be sent. Re-sent letter via post.	Clare Fitzpatrick
Three Ducks Dreaming Surveying and Consulting	Leonard Wright	Email	25/01/2023	Automatic reply that the email was unable to be sent. Re-sent letter via post.	Clare Fitzpatrick
Freeman & Marx	Clive Freeman	Email	25/01/2023	Registered interest in the project	Clare Fitzpatrick
Gumaraa Aboriginal Experience Pty Ltd	Richard Campbell	Email	26/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork.	Clare Fitzpatrick
James Davis (Wodi Wodi Traditional Owner)	James Davis	Email	27/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork.	Clare Fitzpatrick
			06/02/2023	Jamie called Hannah Morris while standing on the Tripoli Road site to discuss the project. He provided cultural knowledge about the site and his family history of connection to the area. - His grandparents have lived in the area and belong to the Wadi Wadi group. His family has been part of the Elders Corporation, Land Council (his Grandfather and he worked for the LALC), and other community organisations. [REDACTED] - Jamie has been doing this for 25 years.	

Agency	Contact	Type	Date	Description	Extent contact
				• His nan is a local woman of importance, she is included in in the book, Koori Woman from the Illawarra. • His aunty and grandmother were raised on the Coomaditchi Mission. They used to collect fresh water long neck turtle eggs. There were hundreds of them at the lagoon. When the carp was released it killed all of them. • His aunty told him about a fresh water spring where you lifted a rock and filled up jugs. • Hill 60 was a big camp where the Kooris lived until WWII when they were moved to camps and missions. Spoke of significant sites excavated in the area including the KNC excavations of Tullawood Road, and the Boral sand mine where over 10,000 artefacts were identified.	
				• The Macquarie Rivulet is the largest fresh water source in the area. It is very sandy next to the creek. The fresh water supports mussels, oysters, crab, brim, mullets, eel, turtle, bass. Jamie fished growing up but over time more housing and spills means that the lake started to be like a big drain from everyone's houses and drains etc. All the shell fish are poisoned and you cant eat near Dapto and Berkley. "Years ago it was a lot cleaner". Closer to the mouth of the river where the water is constantly blowing in and out it is safer o eat the fish and shellfish. • The area is where the fresh and salt water meet. "The tide comes up and pushes the salt water up but it can't push the salt u too far so there is still [access to] fresh [drinking] water.' • The Saltwater people came down from the mountains to access food and water like at the Rivulet.	

Agency	Contact	Type	Date	Description	Extent contact
				- Recent developments have changed the vegetation. There used to be forest that extended along the Lake, so people would come down from the mountains to get nuts and berries. Now there are only small pockets of the bush left. Like at Bass Point, the bush land is protected, classed as endangered. "We had the best of everything." - Lake Illawarra is important because it kept us alive. It was a fish market.	
Kamilaroi Yankuntjatjara Working Group	Phil Khan	Email	27/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork as well as attending any meetings.	Clare Fitzpatrick
Thoorganura	John Carriage	Email	27/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork as well as attending any meetings.	Clare Fitzpatrick
Tungai Tonghi	Troy Tungai	Email	31/01/2023	Registered interest in the project	Clare Fitzpatrick
Illawarra Local Aboriginal Land Council	Aara Welz	Email	31/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork as well as attending any meetings.	Clare Fitzpatrick
South Coast People via NTSCorp	Sandy Chalmers	Email	31/01/2023	Registered interest in the project and expressed interested in undertaking fieldwork as well as attending any meetings. "It is the Applicant's position that such work should be undertaken by people who are members of the South Coast People's native title application, as the relevant native title claimants and custodians of the cultural sites and artefacts in the area considered by this project."	Clare Fitzpatrick
Gunjeewong Cultural Heritage Aboriginal Corporation	Shayne Dickson	Email	31/01/2023	Registered interest in the project	Clare Fitzpatrick
Coomaditchie	Kirsty	Email	03/02/2023	Registered interest. Confirmed details are allowed to be provided to the LALC	Hannah Morris
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson	Email	9/02/2023	Registered interest in the project.	Clare Fitzpatrick
Woronora Plateau Gundungara Elders Council	Kayla Williamson	Email	10/02/2023	Registered interest in the project.	Clare Fitzpatrick
	on behalf of Peoples' Indigenous Corporation	Email	11/02/2023	Please register an interest in my name as contact person for PIC ICN#7949 ("Peoples' Indigenous Corporation" with an ORIC #). Consultations on meetings, fieldwork and reporting is requested.	Hannah Morris

Agency	Contact	Type	Date	Description	Extent contact
NIAC		Letter	14/02/2023	Return to sender	Clare Fitzpatrick
Minnamunnung	Aaron Broad	Letter	14/02/2023	Return to sender	Clare Fitzpatrick
The Wadi Wadi Coomaditchie Aboriginal Corporation		Letter	21/02/2023	Return to sender	Clare Fitzpatrick
Presentation of Project and Confirmation of Registration		Outgoing			
Freeman & Marx	Clive Freeman	Email	15/02/2023	Emailed presentation of project letter acknowledging their registration and reiterating an outline of the project.	Clare Fitzpatrick
Gumaraa Aboriginal Experience Pty Ltd	Richard Campbell				
James Davis (Wodi Wodi Traditional Owner)	James Davis				
Kamilaroi Yankuntjatjara Working Group	Phil Khan				
Thoorganura	John Carriage				
Tungai Tonghi	Troy Tungai				
Illawarra Local Aboriginal Land Council	Aara Welz				
South Coast People via NTSCorp	Sandy Chalmers				
Gunjeewong Cultural Heritage Aboriginal Corporation	Shayne Dickson				
Coomaditchie	Lorraine Brown				
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson				
Gary Caines	Gary Caines on behalf of Peoples' Indigenous Corporation				
Woronora Plateau Gundungara Elders Council	Kayla Williamson	Email	23/05/2023	Emailed presentation of project letter.	Hannah Morris
Nowra Local Aboriginal Land Council					

Agency	Contact	Type	Date	Description	Extent contact
Presentation of Project and Confirmation of Registration		Incoming			
Illawarra Local Aboriginal Land Council	Aara Welz	Email	15/02/2023	Replied to presentation of project and confirmation of registration email and letter.	Clare Fitzpatrick
Gumaraa Aboriginal Experience Pty Ltd	Richard Campbell				
Tungai Tonghi	Troy Tungai				
Kamilaroi Yankuntjatjara Working Group	Phil Khan		16/02/2023		
Archaeological survey		Outgoing			
All RAPs		Email	28/06/2023	Archaeological survey methodology submitted to all RAPs.	Catherine Fenech
Archaeological survey		Incoming			
Coomaditchie		Email	28/06/2023	Note that Coomaditchie will not be checking emails regularly due to a NADOC event.	Catherine Fenech
Test excavation methodology		Outgoing			
All RAPs		Email	20/09/2023	Draft test excavation methodology sent to RAPs.	Catherine Fenech
Test excavation methodology		Incoming			
██████████	██████████	Phone call	12/10/2023	asked for further details concerning the Due Diligence and any surveys that have been undertaken. Details were sent via email once clarified with Hannah Morris.	Catherine Fenech
		Phone Call	02/11/2023	called on 31/11/23. Catherine Fenech returned the call on 02/11/2023. Hannah Morris followed up with additional information on 06/11/2023.	Catherine Fenech
				Gary requested clarification on the role of the RAP. Hannah outlined the community consultation process.	
				Requested a PDF copy of the Biosis DD report. This report was then sent.	
				Requested information about fieldwork currently being undertaken by Extent Heritage for this project. Hannah clarified that Extent Heritage was <u>not</u> currently undertaking any fieldwork and that this must be confused with a different consultancy and different project being undertaken in the area. Hannah confirmed that works could	

Agency	Contact	Type	Date	Description	Extent contact
Illawarra Local Aboriginal Land Council	Aara Welz	Email	18/10/2023	not be being undertaken as we did not have full access to the properties yet.	Hannah Morris
				The LALC wanted to discuss the test excavation methodology. The following points were raised: The areas that overlapped the Macquarie Rivulet and why there was no excavations within a 50m buffer of the waterway. Hannah and Aara went through each area and Hannah outlined there was ground disturbance. The one area where less ground disturbance was identified was at the cul-de-sac end of Hamilton Road. Hannah and Aara agreed that there should be an additional 5 test pits added to the program for RAPs to be placed at locations decided upon by the RAPs during fieldwork, and perhaps this was an appropriate location. Hannah agreed this would be a good solution that will be explicitly presented to RAPs during the fieldwork program. The note of the additional 5 test pits has been added to the methodology. An additional note is that the location of changed or new test pits must be appropriately managed to navigate access to land by the landowners.	
Tungai Tonghi	Troy Tungai	Phone call	05/12/2023	Troy called to enquire about fieldwork opportunities. Clare informed him excavations started yesterday (4/12/2023). Troy was keen to be involved in any further fieldwork as part of this project or any future work in the area that Extent undertakes.	Clare Fitzpatrick
Post-test excavation update		Outgoing			
All RAPs	All RAPs	Email	23/01/2024	Information regarding the final location of TPs for the Phases 1-3 test excavation program and location and density of artefacts. Seeking <u>cultural or interpretive information</u> RAPs would like to add to the ACHAR regarding these findings (or more generally related to place and history etc), any <u>recommendations or conclusions</u> , and any <u>thoughts on reburial or housing of the artefacts</u> collected during the excavations	Hannah Morris
Post-test excavation update		Incoming			
Gumaraa	Richard Campbell	Email	23/01/2024	Thanked Extent Heritage for the update.	Hannah Morris
Kamilaroi Yankuntjatjara Working Group	Phil Khan	Email	23/01/2024	Thanks Extent Heritage for the Post Excavation Summary and have 'no further comments to add to the report.'	Hannah Morris

Agency	Contact	Type	Date	Description	Extent contact
				‘Regarding long-term management of the artefacts, we recommend reburial.’	
Illawarra LALC	Kayla Williams	Email	05/02/2024	‘WPGEC suggest the location for the reburial of artefacts should be in a safe place and as close to where they were unearthed if possible. In addition we are happy to review the interpretive information that may be displayed as part of this project noting that Tullimbar was a very powerful warrior of this area with strong linkages to the Macquarie rivulet and floodplains which was a source of food and water for the Wodi Wodi people.’	Hannah Morris
Final ACHAR		Outgoing			
All RAPs		Email	14/02/2024	Final ACHAR, ATER, Lithic report sent to RAPs for review by 14 March 2024	Catherine Fenech
		Email	23/02/2024	Appendices 8 and 9 sent	Hannah Morris
Incoming					
Illawarra LALC	Aara Welz	Email	14/02/2024	We will review and provide comment on this by the 14 March.	
Clive Freeman	Clive Freeman	Phone	23/02/2024	Clive called to discuss the project. Hannah sent him a summary and discussed it with him. He had no further comments.	Hannah Morris
Illawarra LALC	Aara Welz	Phone	6/3/2024	Phoned to check up on any feedback, Aara confirmed she is planning to discuss with Uncle Peter on Thursday, and will be in touch around the 14 th .	Catherine Fenech
Wodi Wodi Traditional Owner	James Davies	Phone	6/3/2024	Called and left a message	Catherine Fenech
Woronora Plateau Gundungara Elders Council	Kayla Wiliamson	Phone	6/3/2024	Spoke to Kayla, she reiterated her response from post ex, I have resent her the ACHAR for further comment by 14 th . ‘WPGEC suggest the location for the reburial of artefacts should be in a safe place and as close to where they were unearthed if possible. In addition we are happy to review the interpretive information that may be displayed as part of this project noting that Tullimbar was a very powerful warrior of this area with strong linkages to the Macquarie rivulet and	Catherine Fenech

Agency	Contact	Type	Date	Description	Extent contact
Woronora Plateau Gundungara Elders Council	Kayla Wiliamson	Email	7/3/2024	floodplains which was a source of food and water for the Wodi Wodi people. Woronora Plateau Gundungara Elders Council don't have any further comments or recommendations than the ones made previously.	Catherine Fenech
Final ACHAR – reissue mapping update		Outgoing			
All RAPS		Email	28/3/2024	Final ACHAR report sent to RAPS for review by 25 April 2024	Catherine Fenech
Final ACHAR – reissue mapping update		Incoming			
Illawarra LALC	Aara Welz	Email	16/04/2024	“Thank you for providing the Draft Aboriginal Cultural Heritage Assessment (DACHA) to the Illawarra Local Aboriginal Land Council (ILALC) for review and comment. ILALC understands that Shellharbour City Council proposes development on approximately 5.7 hectares of land to extend the existing road of Tripoli Way. This extension would traverse and extend the existing Tripoli Way and the Expressway alignment running parallel and north of Tom Thumb Road/Illawarra Highway. Extend Heritage has been engaged by Shellharbour City Council to prepare a DACHA to identify any Aboriginal objects, places, or cultural heritage values within the study area. The results of the Aboriginal test pit program will inform the development of a master plan for the Tripoli Way extension. ILALC has reviewed the proposed recommendations and is in support of these. Specifically, ILALC endorses recommendation 1 and urges the council to employ sensitive design solutions to ensure that all Aboriginal objects and sites are avoided by the proposed development. ILALC supports the notion that if conservation is not deemed feasible, salvage excavations would be necessary to mitigate the adverse impacts of the proposed development on Aboriginal cultural heritage. ILALC requests that the methodology for any such salvage excavations be provided to ILALC for review and comment before finalization. Finally, and a minor edit ... On page i, it is suggested that 'three Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, the	Catherine Fenech

Agency	Contact	Type	Date	Description	Extent contact
				Eastern Transect and Hamilton Road, and one site would be fully impacted: Tuleroo ISO: Ground edge axe' – can you please amend this to read correctly. Please do not hesitate to contact me should you require any additional information or clarification.” Catherine replied on 24 April 2024 to seek clarification on specific site, location or portion that was recommended for salvage and explained surface collection would be recommended.	

B.2. List of identified Aboriginal stakeholders

64 organisations and individuals were identified as potential stakeholders associated with the study area:

- Badu (Murrin Clan/Peoples)
- Barraby Cultural Services
- Bellambi Indigenous Corporation
Gandangara Traditional Owners
- Biamanga (Murrin Clan/Peoples)
- Bilinga (Murrin Clan/Peoples)
- Clive Freeman
- Coomaditchie United Aboriginal
Corporation
- Cullendulla (Murrin Clan/Peoples)
- Darryl Caines
- Darug Land Observations
- Dharug (Murrin Clan/Peoples)
- Duncan Falk Consultancy
- Eora Heritage Group
- Gadhu Dreaming
- Gary Caines
- Goobah Development PTY LTD
(Murrin Clan/Peoples)
- Gumaraa
- Gundungurra Tribal Technical
Services
- Gunjeewong Cultural Heritage
Aboriginal Corporation
- Kullila Site Consultants and Koori Site
Management
- La Prouse Botany Bay Corporation
- Lyndsay Urquhart
- Minnamunnung
- Munyunga (Murrin Clan/Peoples)
- Mura Indigenous Corporation
(icn:8991)
- Murra Bidgee Mullangari Aboriginal
Corporation
- Murramarang (Murrin Clan/Peoples)
- Murrumbul (Murrin Clan/Peoples)
- NIAC
- Norma Simms
- Nundagurri (Murrin Clan/Peoples)
- Pemulwuy (Murrin Clan/Peoples)
- Raymond Garbutt
- Raymond Timbery
- South Coast NSW Aboriginal Elders
- South West Rocks Aboriginal
Corporation
- The Wadi Wadi Coomaditchie
Aboriginal Corporation
- The Wodi Wodi Elders Corporation



- Guntawang Aboriginal Resources Incorporated
- Gunyuu (Murrin Clan/Peoples)
- Guunamaa Dreamin Sites and Surveying
- Illawarra Aboriginal Corporation
- Illawarra Local Aboriginal Land Council
- James Davis
- Jerringong (Murrin Clan/Peoples)
- Jerrinja Local Aboriginal Land Council
- Kamilaroi Yankuntjatjara Working Group
- Karrial (Murrin Clan/Peoples)
- Ken Foster
- Konanggo Aboriginal Cultural Heritage Services
- Korewal Elouera Jerrungurah Tribal Elders Council
- Thoorga Nura
- Three Ducks Dreaming Surveying and Consulting
- Tungai Tonghi
- Walbunja (Murrin Clan/Peoples)
- Walgalu (Murrin Clan/Peoples)
- Warra Bingi Nunda Gurri
- Wingikara (Murrin Clan/Peoples)
- Woronora Plateau Gundungara Elders Council
- Wullung (Murrin Clan/Peoples)
- Yerramurra (Murrin Clan/Peoples) and Taste of Tradition Native Aboriginal Corporation
- Yurrandaali
- Yurwang Gundana Consultancy Cultural Heritage Services
- RAW Cultural Healing



B.3. List of registered Aboriginal parties

Registrations of interest were received from the following 14 Aboriginal parties:

- Freeman & Marx
- Gumaraa Aboriginal Experience Pty Ltd
- Wodi Wodi Traditional Owner
- Kamilaroi Yankuntjatjara Working Group
- Thoorganura
- Tungai Tonghi
- Illawarra Local Aboriginal Land Council
- South Coast People
- Gunjeewong Cultural Heritage Aboriginal Corporation
- Nowra Local Aboriginal Land Council
- Coomaditchie United Aboriginal Corporation
- Murra Bidgee Mullangari Aboriginal Corporation
- Gary Caines on behalf of Peoples' Indigenous Corporation
- Woronora Plateau Gundungara Elders Council



B.4. Pre-notification documentation sent and received

20 December 2022

Attention:

Heritage New South Wales
heritagemailbox@environment.nsw.gov.au
6/10 Valentine Ave
Parramatta NSW 2150

Re: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE)

To Whom It May Concern,

Extent Heritage Pty Ltd has been engaged by the Shellharbour City Council (the proponent) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) in advance of proposed development of the Tripoli Way Extension (the study area). The development is located along the Illawarra Highway and Tongarra Road, north of Albion Park (Figure 1).

The study area is located in **City of Shellharbour Local Government Area**, and comprises all or part of the following land parcels:

LOT: 2 DP: 1250747	LOT: 7 DP: 225240
LOT: 1178 DP: 1202087	LOT: 1 DP: 1251688
LOT: 68 DP: 253407	LOT: 0 SP: 104542
LOT: 1 DP: 559819	LOT: 3 DP: 605111
LOT: 2 DP: 736092	LOT: 1 DP: 38838
LOT: 11 DP: 1205733	LOT: 15 DP: 248001
LOT: 12 DP: 1205733	LOT: 1 DP: 1069961
LOT: 0 SP: 88106	LOT: 1 DP: 1119325
LOT: 0 SP: 47846	LOT: 4 DP: 714125
LOT: 1 DP: 628732	LOT: 1 DP: 714125
LOT: 10 DP: 536561	LOT: 2 DP: 714125
LOT: 24 DP: 1138317	LOT: 3 DP: 714125
LOT: 2 DP: 220429	LOT: 10 DP: 1151689
LOT: B DP: 38838	LOT: 31 DP: 1237947
LOT: 23 DP: 1138317	LOT: 25 DP: 1237947
LOT: 220 DP: 1138309	LOT: 26 DP: 1237947
LOT: 21 DP: 1107336	LOT: 61 / DP30476
LOT: 0 SP: 94622	LOT: 1179 / DP20287
LOT: 1 DP: 225240	LOT: 33 / DP253407
LOT: 2 DP: 225240	LOT: 32 / DP253407
LOT: 3 DP: 225240	LOT: 31 / DP253407
LOT: 4 DP: 225240	LOT: 30 / DP253407
LOT: 5 DP: 225240	LOT: 24 / DP30705
LOT: 6 DP: 225240	LOT: 25 / DP30705

LOT: 26 / DP30705
LOT: 27 / DP30705
LOT: 28 / DP30705
LOT: 29 / DP30705
LOT: 34 / DP30705
LOT: 25 / DP225240
LOT: 24 / DP225240
LOT: 22 / DP225240
LOT: 21 / DP225240
LOT: 20 / DP225240

LOT: 19 / DP225240
LOT: 18 / DP225240
LOT: 102 / DP547372
LOT: 101 / DP547372
LOT: 14 / DP225240
LOT: 13 / DP225240
LOT: 12 / DP225240
LOT: 11 / DP225240
LOT: 2 / DP38838

The proposed development would help to alleviate traffic impacts through Albion Park Township. It would involve construction works associated with infrastructure (roads, footpaths, stormwater, etc.), bulk earthworks, environmental controls, and landscaping.

The contact details for the proponent are:

Arvin De Mesa (Managing Projects, Acting)
Shellharbour City Council
76 Cygnet Avenue
Shellharbour City Centre, NSW
arvin.demesa@shellharbour.nsw.gov.au

In accordance with the Heritage NSW's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, I am writing to you to seek information on relevant Aboriginal individuals and/or communities that you are aware of who may hold cultural knowledge for the area relevant to determining the significance of Aboriginal objects and/or places. It would be appreciated if you could provide this information to the Sydney address below or by email to hmorris@extent.com.au.

Attn: Hannah Morris
Extent Heritage
3/73 Union Street
Pyrmont NSW 2009

Please do not hesitate to contact me on (02) 9555 4000 if you have any queries or concerns.

Yours sincerely,



Hannah Morris
Senior Heritage Advisor | Extent Heritage



Figure 1. The study area for the proposed Tripoli Way Extension, Shellharbour NSW.

Our reference: Doc22/1133084

Hannah Morris
Extent Heritage
3/73 Union Street
Pymont NSW 2009

21/12/2022

Dear Hanna,

**WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECCW ABORIGINAL
CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010**

Subject: Tripoli Way Extension.

Thank you for your correspondence dated 20 December 2022 to Heritage NSW (Department of Planning and Environment) regarding the above project.

Attached is a list of known Aboriginal Stakeholders for the proposed development at the **Shellharbour** Local Government Area that Heritage NSW considers likely to have an interest in the activity. -

Please note this list is not necessarily an exhaustive list of all interested Aboriginal Stakeholders.

Receipt of this list does not remove the requirement of a proponent/ consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (April 2010).

Under Section 4.1.6. of the Consultation Requirements, you must also provide a copy of the names of each Aboriginal person who registered an interest to the relevant Heritage NSW office and Local Aboriginal Land Council (LALC) within 28 days from the closing date for registering an interest.

Please note that the contact details in the list provided by Heritage NSW may be out of date as it relies on Aboriginal stakeholders advising Heritage NSW when their details need changing. If individuals/companies undertaking consultation are aware that any groups contact details are out of date, or letters are returned unopened, please contact either the relevant stakeholder group (if you know their more current details) and/or Heritage NSW. AHIP applicants should make a note of any group they are unable to contact as part of their consultation record.

If you have any questions about this advice, please email:
heritagemailbox@environment.nsw.gov.au or contact (02) 9873 8500.

Yours sincerely



Barry Gunther, Aboriginal Senior Assessment Officer
Environment and Heritage – Heritage NSW
Department of Planning and Environment
Aboriginal Heritage Regulation Branch – South Heritage NSW

Attachment A:

Registered Aboriginal Interests DPE Aboriginal Stakeholders List for the **Shellharbour** Local Government Area.

Catherine Fenech

From: CS Connect Service Centre <cspconnect@service-now.com>
Sent: Tuesday, 20 December 2022 12:36 PM
To: Catherine Fenech
Subject: FIN0814390 - NSW Department of Planning, Industry and Environment
Attachments: ext000035-xmasfooter_v01_adf66a8d-d92f-44c8-8424-082cb8bf8067.png; insta_72d5bd6c-88fc-49dd-9a4e-2e9dabd277bd.png; Greater Sydney Local Land Services.pdf; fb_c9b35d6d-b51a-4401-83b5-c35ad670f034.png; link_940bb0a5-bfd2-460b-8472-3cf689245259.png



Hi,

This is to let you know ticket FIN0814390 has been opened for you.

Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension



The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Catherine Fenech

From: Brendan Smith <brendan.smith167@oralra.nsw.gov.au>
Sent: Thursday, 22 December 2022 3:48 PM
To: Catherine Fenech; Hannah Morris
Subject: RE: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension
Attachments: 20221222_AO SEARCH - ACHA - proposed Tripoli Way Extension development, west of Shellharbour, NSW_Extent_Nowra + Illawarra LALC FINAL.pdf

OFFICIAL

Dear Hannah and Catherine,

Please find attached the response from the Office of the Registrar, ALRA to your email of 20 December 2022, regarding the proposed the Tripoli Way Extension works, Illawarra Highway, west of Shellharbour, NSW.

If you have any further questions, please respond by return email.

Kind regards and best wishes,

Brendan

Brendan Smith

Senior Project Officer, Aboriginal Owners
Office of the Registrar, Aboriginal Land Rights Act 1983

Premier and Cabinet

T (02) 8575 1160 **M** 0439 454 485 **E** brendan.smith167@oralra.nsw.gov.au
www.oralra.nsw.gov.au

PO Box 787
PARRAMATTA NSW 2124
Working days Monday to Friday, 9:00 am – 5:00 pm



I acknowledge the traditional custodians of the land and pay respects to Elders past and present. I also acknowledge all the Aboriginal and Torres Strait Islander staff working with NSW Government at this time.

The Office of the Registrar stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to supporting the return of land to Aboriginal people as compensation for past dispossession; and to support self-determination through participation and representation in the land council network.

Please consider the environment before printing this email.

From: Catherine Fenech <cfenech@extent.com.au>
Sent: Tuesday, 20 December 2022 12:38 PM
To: Admin Officer <cor0826adminofficer@aboriginalaffairs.nsw.gov.au>
Subject: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension

To Whom it May Concern,

Please find attached a formal request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE). The study area is located within the City of Shellharbour Local Government Area, and Nowra Local Aboriginal Land Council, further details are provided in the attached document.

Thank you,

Catherine Fenech

Catherine Fenech
Heritage Advisor - Archaeology
T 02 9555 4000 M
cfenech@extent.com.au
extent.com.au

Connect with us on:



OFFICIAL

OFFICIAL

22 December 2022

By email: hmorris@extent.com.au

Hannah Morris
Extent Heritage
3/73 Union Street
PYRMONT NSW 2009

Dear Hannah and Catherine,

Aboriginal Cultural Heritage Assessment – proposed Tripoli Way Extension, Illawarra Highway, west of Shellharbour, NSW: request for list of potential Aboriginal stakeholders

We refer to your letter and email to this Office, dated 20 December 2022, requesting contact information for Aboriginal organisations, stakeholders and/or people who may have cultural knowledge relevant to the proposed Tripoli Way Extension works, Illawarra Highway, west of Shellharbour, NSW (multiple Lots and DPs), as part of an Aboriginal Cultural Heritage Assessment (ACHA).

Under Section 170 of the *Aboriginal Land Rights Act 1983* (NSW), the Office of the Registrar is required to maintain the Register of Aboriginal Owners (RAO) for New South Wales. A search of the RAO has shown that there are currently no registered Aboriginal Owners in the project area.

In your letter, you have referred to Nowra Local Aboriginal Land Council. However, a large amount of the area of the proposed development (most Lots and DPs) are also clearly within the boundaries for Illawarra Local Aboriginal Land Council. We suggest you contact both Nowra and Illawarra LALCs (contact details provided below), as they may wish to participate or contribute.

Yours sincerely



Brendan Smith
Senior Project Officer
Office of the Registrar, Aboriginal Land Rights Act 1983

Nowra Local Aboriginal Land Council
PO Box 2049
BOMADERRY NSW 2541
Ph: 02 4423 3163
Email: nowralalc@bigpond.com.au

Illawarra Local Aboriginal Land Council
3 Ellen Street,
Wollongong NSW 2500
Ph: (02) 4226 3338
Email: admin@ilalc.org.au

From: admin@ilalc.org.au on behalf of Heritage Services <heritage@ilalc.org.au>
Sent: Monday, 16 January 2023 12:47 PM
To: Hannah Morris
Cc: Aara Welz; Catherine Fenech
Subject: Re: informa on on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment for the Tripoli Way Extension

Importance: Low

Good a. ernoon Hannah and Catherine,

Thank you for your email and request for informa on in rela on to the proposed development of the Tripoli Way Extension at Albion Park.

Please note in your email you state the study area is located within the Nowra Local Aboriginal Land Council when in fact it is situated within the Illawarra Local Aboriginal Land Council area.

The ILALC is unable to provide the names of any Aboriginal individuals and/or communities who may hold cultural knowledge for the area relevant to determine the significance of Aboriginal objects and/or places for this project.

For future correspondence in rela on to this and all other Culture and Heritage ma ers please note the ILALC has a dedicated email address as follows:

heritage@ilalc.org.au

Kind regards,

Donna Hiscox
Illawarra Local Aboriginal Land Council
Level 2, 38 Young Street
Wollongong DC NSW 2500
Telephone: 4226 3338

Postal address:
PO Box 1306
Wollongong NSW 2500

Hours of Work:

Mon - Thurs 10am - 2pm

Please contact [Aara Welz](#) outside these hours:



On Wed, 4 Jan 2023 at 16:22, Administra on Officer <admin@ilalc.org.au> wrote:

Donna Hiscox
Administra on Officer
Illawarra Local Aboriginal Land Council
Level 2, 38 - 40 Young Street
Wollongong NSW 2500

Postal address: PO Box 1306,
Wollongong DC NSW 2500

Ph: 02 4226 3338

Hours of Work: Monday to Thursday 10.00am to 2.00pm

If outside of these days or mes please c ontact: stuart.laidlaw@ilalc.org.au

----- Forwarded message -----

From: **Catherine Fenech** <cfenech@extent.com.au>

Date: Fri, Dec 23, 2022 at 9:51 AM

Subject: information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment for the Tripoli Way Extension

To: admin@ilalc.org.au <admin@ilalc.org.au>

To Whom it May Concern,

Please find attached a formal request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE). The study area is located within the City of Shellharbour Local Government Area, and Nowra Local Aboriginal Land Council, further details are provided in the attached document.

Thank you,
Catherine Fenech

Catherine Fenech
Heritage Advisor - Archaeology
T 02 9555 4000 M
cfenech@extent.com.au
extent.com.au

Connect with us on:



EXTENT

Merry Christmas

This year we will be closed from the
24 December 2022 and reopening on
Tuesday 3 January 2023.

**PEOPLE
CENTRED
HERITAGE**

Catherine Fenech

From: Maggie Laing <MLaing@ntscorp.com.au>
Sent: Thursday, 12 January 2023 3:18 PM
To: Catherine Fenech
Cc: Conor Wakefield; Sandy Chalmers; Alexander Read
Subject: South Coast - ACHA - Tripoli Way Extension - 20 December 2022
Attachments: NTSCorp.pdf

Dear Catherine,

Thank you for providing the attached notice.

NTSCORP requests that you register the Applicant for the South Coast People's native title application, on behalf of the South Coast People, as knowledge holders for this project and a party to be notified and involved throughout the assessment process.

The South Coast People are the registered native title claimants for this region and are contactable via their legal representatives Sandy Chalmers and Alex Read at information@ntscorp.com.au. Please send all correspondence to this address **only**.

In relation to the project notified, please can you confirm if and when Aboriginal knowledge holders are intended to be involved in field surveys, test excavations or any form of cultural heritage monitoring. It is the Applicant's position that such work should be undertaken by people who are members of the South Coast People's native title application, as the relevant native title claimants and custodians of the cultural sites and artefacts in the area considered by this project.

Following confirmation of the above, the Applicant will provide nominations for Aboriginal knowledge holders to be engaged on behalf of the South Coast People.

Kind regards,

Maggie Laing | Paralegal



NTSCORP proudly acknowledge that our office is situated on the country of the Gadigal People of the Dharug Nation. We also acknowledge and pay our respect to their Elders past and present.

t 61 2 9310 3188 | f 61 2 9310 4177

e mlaing@ntscorp.com.au | w www.ntscorp.com.au

Level 1, 44-70 Rosehill Street, Redfern, NSW 2016 Australia

NTSCORP is committed to supporting local Aboriginal businesses where possible through the purchase of goods and services.

Caution: This message is intended only for the addressee. It is confidential and may be legally privileged. If you are not the intended recipient, any disclosure, copying, or distribution is prohibited and may be unlawful. By opening any attachment, you agree that NTSCORP Limited (NTSCORP) will not be liable for any loss resulting from viruses or other defects. Any views in this message are those of the individual sender, except where the sender expressly and with authority, states them to be the views of NTSCORP.

Please consider the environment before printing this email

From: Catherine Fenech <cfenech@extent.com.au>

Sent: Tuesday, 20 December 2022 12:37 PM

To: Info <information@ntscorp.com.au>

Subject: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension

You don't often get email from cfenech@extent.com.au. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom it May Concern,

Please find attached a formal request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE). The study area is located within the City of Shellharbour Local Government Area, and Nowra Local Aboriginal Land Council, further details are provided in the attached document.

Thank you,

Catherine Fenech

Catherine Fenech
Heritage Advisor - Archaeology
T 02 9555 4000 M
cfenech@extent.com.au
extent.com.au

Connect with us on:



EXTENT

Merry Christmas

This year we will be closed from the
24 December 2022 and reopening on
Tuesday 3 January 2023.

Catherine Fenech

From: Nowra Lalc Admin <admin@nowralalc.au>
Sent: Wednesday, 1 February 2023 2:55 PM
To: Catherine Fenech
Cc: Hannah Morris
Subject: RE: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension

Afternoon Catherine

Apologies for the late reply, we are currently short staffed and without a CEO at the moment.

I will forward this t the Board and respond accordingly.

Kind Regards

Emily

From: Catherine Fenech <cfenech@extent.com.au>
Sent: Wednesday, 1 February 2023 2:37 PM
To: Nowra Lalc Admin <admin@nowralalc.au>
Cc: Hannah Morris <hmorris@extent.com.au>
Subject: Request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment: Tripoli Way Extension

Hello,

This is a follow up email concerning the formal request for information on Aboriginal Stakeholders for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE) originally sent out December 20th 2022.

The study area is located within the City of Shellharbour Local Government Area, and Nowra Local Aboriginal Land Council, further details are provided in the attached document.

Thank you,

Catherine Fenech

Catherine Fenech
Heritage Advisor - Archaeology
T 02 9555 4000 M
cfenech@extent.com.au
extent.com.au

Connect with us on:



EXTENT



Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

PEOPLE CENTRED HERITAGE

Catherine Fenech

From: LLS Enquiry SouthEast Mailbox <enquiry.southeast@lls.nsw.gov.au>
Sent: Wednesday, 8 February 2023 11:54 AM
To: Catherine Fenech
Subject: Aboriginal Cultural Heritage Consultation
Attachments: DOC22 384070 FIN0814390 - Greater Sydney Local Land Services.pdf; Aboriginal cultural heritage consultation.pdf

To Whom It May Concern,

Catchment Management Authorities are listed in Section 4.1.2 (g) of the Aboriginal cultural heritage consultation requirements for proponents 2010, under Part 6, National Parks and Wildlife Act 1974 as a source of information to obtain the “names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places”. We understand that with the loss of Catchment Management Authorities in NSW such requests are likely to be forwarded to Local Land Services.

South East Local Land Services is a partner with many Aboriginal communities in the region on natural resource management (NRM) projects. We are not, however, the primary source for contacting or managing contact lists for Aboriginal communities or persons that may inform or provide comment on planning issues. Currently we do not coordinate or administer any Aboriginal reference group for our region.

Please direct your enquiry to Heritage NSW via the central mailbox heritagemailbox@environment.nsw.gov.au

Kind regards,

Sharon Madden

Customer & Administration Officer
DRNSW Local Land Services Agency | South East

Local Land Services

T 1300 795 299

E enquiry.southeast@lls.nsw.gov.au

lls.nsw.gov.au

13 Schofields Lane (PO Box 63) BERRY, NSW, 2535



How would you rate my service today?



Your opinion is valuable and will help us improve our service

B.5. Newspaper advertisement

Tripoli Way Extensions

Notice of Aboriginal Cultural Heritage Investigation and Invitation to Register Interest in the Project: Tripoli Way Extension. The project is located along the Illawarra Highway and Tongarra Road, north of Albion Park, 2527.

On behalf of Shellharbour City Council, Extent Heritage Pty Ltd is undertaking Aboriginal cultural heritage investigations for a proposed road extension to Tripoli Way. The proposed development aims to alleviate traffic impacts through the Albion Park township. It comprises construction works associated with infrastructure (roads, footpaths, stormwater, etc.), bulk earthworks, environmental controls, and landscaping.

The Proponent, Shellharbour City Council (76 Cygnet Avenue, Shellharbour City Centre) can be contacted via Arvin De Mesa (

arvin.demesa@shellharbour.nsw.gov.au

).

Aboriginal individuals and organisations who hold cultural knowledge relevant to the significance of Aboriginal objects and/or places in the area, and who wish to be involved in the consultation process, are invited to register. This process will inform the investigations and support any subsequent approvals.

Please register prior to 16 February 2023 by contacting Hannah Morris (02 9555 400/

hmorris@extent.com.au

/Extent Heritage, 3/73 Union Street, Pyrmont NSW 2009).

B.6. Notification documentation sent and registrations received

25 January 2023

Attention: [REDACTED]

Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest – Registration of interest for Aboriginal Cultural Heritage Assessment of the proposed development of the Tripoli Way Extension (TWE)

Dear [REDACTED]

In accordance with the NSW Department of Planning, Industry and Environment's (DPIE) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, I am writing to notify you that Extent Heritage Pty Ltd has been engaged by City of Shellharbour Council (the proponent) to undertake an Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park, hereafter the 'study area' (Figure 1).

Three Potential Archaeological Deposits (PADs) were identified during a preliminary due diligence assessment of the study area. These PADs require further investigation through the form of test excavations. As a result, an ACHAR is required to develop a strategy for investigation. Through the community consultation process, we are also seeking cultural knowledge of the study area to assist with the identification of tangible and intangible heritage values.

The Study Area is within the Shellharbour Local Government Area. The proposed development would help to alleviate traffic impacts through Albion Park Township. It would involve construction works associated with infrastructure (roads, footpaths, stormwater, etc.), bulk earthworks, environmental controls, and landscaping.

The proponent's contact details are:

Michelle Wang
Landscape Architect
City of Parramatta Council
Phone: 02 8906 8339
mwang@cityofparramatta.nsw.gov.au

Extent Heritage will be undertaking the ACHAR in accordance with the relevant DPIE *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* guidelines. An important part

of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We are inviting registrations from Aboriginal individuals and/or organisations, who may hold relevant cultural knowledge for determining the Aboriginal cultural heritage of the area and any associated significance, and who wish to be involved in the community consultation process. If you or your organisation is interested in being part of the consultation process, please provide a registration of interest to:

Hannah Morris
Extent Heritage
3/73 Union Street
Pyrmont, NSW 2009
Phone: 02 9555 4000
hmorris@extent.com.au

Registrations are requested by **10 February 2023**.

To assist us with communicating project information effectively, it would be appreciated if you could include the following information in your registration of interest:

1. A clear identification of the organisation registering an interest in the project. Please provide all relevant details of your organisation, including physical address/location, contact details, relevant personnel, etc;
2. Your preferred method of communication with Extent Heritage and the proponent during consultation for this project, including a nominated contact person and their contact details;
3. Comment on the level of consultation/project involvement you require (Do you wish to attend any meetings or fieldwork? Do you simply want a copy of the final report?);
4. If you wish to be involved in any meetings or fieldwork, please ensure we have current copies of your public liability, workers compensation and professional indemnity (if available) insurances.

As part of the consultation process, we are obliged to provide the contact details of organisations and individuals who register an interest to DPIE and the Illawarra Local Aboriginal Land Council, unless instructed otherwise. Please advise us if you do not wish this to occur.

Please also consider the following, but note that these issues can also be discussed over the course of the project:

1. Guidance on the protocols, sensitivity, use and/or distribution of any cultural information that you provide to Extent Heritage/the proponent as part of this project;

2. Identification of any Aboriginal objects or places of cultural significance that you are aware of within or in the vicinity of the study area.

Please don't hesitate to contact me on (02) 9555 4000 if you have any queries or concerns.

Kind regards,



Hannah Morris
Heritage Advisor | Extent Heritage



Figure 1. The Study Area highlighted in orange.

From: [Clive Freeman](#)
To: [Clare Fitzpatrick](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Wednesday, 25 January 2023 5:06:38 PM

Hi team,

I represent 2 rap family groups through freeman and Marx.

Myself and the Christian family group.

Please accept this email as registration for the above mentioned project.

If you require anything further please let me know.

Kind regards

Clive Freeman
Managing Director Freeman&marx PtyLtd

Sent from my iPhone

On 25 Jan 2023, at 1:38 pm, Clare Fitzpatrick <cfitzpatrick@extent.com.au> wrote:

Dear Clive,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,
Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M

From: [Richard Campbell](#)
To: [Consultation](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Thursday, 26 January 2023 8:05:40 PM
Attachments: [image004.png](#)
[image001.png](#)
[image003.png](#)
[image002.png](#)

Hi we would
Love to put eoi for this project please and be consaulted on the process of feildworknalso

Kindest regards

Richard campbell
Gumaraa

On Wed, 25 Jan 2023 at 1:52 pm, Consultation <consultation@extent.com.au> wrote:

Dear Jodie,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,

Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:





Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

**PEOPLE
CENTRED
HERITAGE**

--

Director
Gumaraa Aboriginal Experience Pty Ltd

M: 0432645912 M: 0487406782

E: info@gumaraa.com.au

W: www.gumaraa.com.au

I acknowledge with respect our Elders past, present and those of the future. All traditional custodians, our lore, our culture, and the land, water and air, where I live, work and travel.

Copyright statement for Gumaraa Aboriginal Experience Pty Ltd

Gumaraa Aboriginal Experience Pty Ltd ('Gumaraa' or 'we' or 'us' or 'our') hereby reserve all rights and privilege in relation to the program, material and contents of the these documents and artworks in part or in whole ('our material')

No part of our material may be reproduced in part or in whole without the prior written express consent from the copyright holders Gumaraa Aboriginal Experience Pty Ltd

All and any rights, ownership and opportunity to our material is hereby reserved and for our sole benefit including but not limited to all rights it holds in relation to and she went to the copyright act 1968 (CTH).

We do not accept any responsibility what so ever for any damage, directly or indirectly, all lose of freelance materials submitted for reproduction in relation to this material or artwork.

The information contained in our material are true and correct to the best of our knowledge and beliefs, all recommendations are made without any guarantee on the part of Gumaraa.

From: [James Davis](#)
To: [Consultation](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Friday, 27 January 2023 8:10:11 AM
Attachments: [Work Bio.pdf](#)
[James Davis Public Liability 2022-23.pdf](#)
[James Davis Workers Compensation 2022-23.pdf](#)
[image001.png](#)
[image004.png](#)
[image002.png](#)
[image003.png](#)

Good Morning Hannah

The Proposed Tripoli Way Extension at Albion Park is located on Wodi Wodi Country. As a RAP and Wodi Wodi Traditional Owner could you please register me for consultation and any fieldwork that may be carried out. Please find attached my details and insurances. Hope to hear from you soon.

Thanks

James Davis
Wodi Wodi Traditional Owner



From: Consultation <consultation@extent.com.au>
Sent: Wednesday, 25 January 2023 1:57 PM
To: jvdcorp@hotmail.com <jvdcorp@hotmail.com>
Cc: Hannah Morris <hmmorris@extent.com.au>
Subject: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Dear James,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmmorris@extent.com.au.

Kind regards,
Clare

Clare Fitzpatrick

Research Assistant

T 02 9555 4000 M

cfitzpatrick@extent.com.au

extent.com.au

Connect with us on:



Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

**PEOPLE
CENTRED
HERITAGE**

From: Maggie Laing <MLaing@ntscorp.com.au>

Sent: Thursday, 12 January 2023 3:18 PM

To: Catherine Fenech <cfenech@extent.com.au>

Cc: Conor Wakefield <cwakefield@ntscorp.com.au>; Sandy Chalmers <schalmers@ntscorp.com.au>; Alexander Read <ARead@ntscorp.com.au>

Subject: South Coast - ACHA - Tripoli Way Extension - 20 December 2022

Dear Catherine,

Thank you for providing the attached notice.

NTSCORP requests that you register the Applicant for the South Coast People's native title application, on behalf of the South Coast People, as knowledge holders for this project and a party to be notified and involved throughout the assessment process.

The South Coast People are the registered native title claimants for this region and are contactable via their legal representatives Sandy Chalmers and Alex Read at information@ntscorp.com.au. Please send all correspondence to this address **only**.

In relation to the project notified, please can you confirm if and when Aboriginal knowledge holders are intended to be involved in field surveys, test excavations or any form of cultural heritage monitoring. It is the Applicant's position that such work should be undertaken by people who are members of the South Coast People's native title application, as the relevant native title claimants and custodians of the cultural sites and artefacts in the area considered by this project.

Following confirmation of the above, the Applicant will provide nominations for Aboriginal knowledge holders to be engaged on behalf of the South Coast People.

Kind regards,

Maggie Laing | Paralegal



NTSCORP proudly acknowledge that our office is situated on the country of the Gadigal People of the Dharug Nation. We also acknowledge and pay our respect to their Elders past and present.

t 61 2 9310 3188 | **f** 61 2 9310 4177

e mlaing@ntscorp.com.au | **w** www.ntscorp.com.au

Level 1, 44-70 Rosehill Street, Redfern, NSW 2016 Australia

NTSCORP is committed to supporting local
Aboriginal businesses where possible through
the purchase of goods and services.

Hannah Morris

From: Coomaditchie <coomaditchie@gmail.com>
Sent: Friday, 3 February 2023 2:42 PM
To: Hannah Morris
Subject: RE: Registration of interest - Tripoli Way

Yes that is fine

Kristy



Coomaditchie United Aboriginal Corporation
PO Box 160
Warrawong 2502
42747477

<https://www.coomaditchie.org.au/>

We acknowledge the traditional owners and custodians of the land we work on as the first people of this country.



<https://www.facebook.com/coomaditchie/>

Please note our new preferred email address is coomaditchie@gmail.com

From: Hannah Morris <hmmorris@extent.com.au>
Sent: Friday, 3 February 2023 12:34 PM
To: Coomaditchie <coomaditchie@gmail.com>
Subject: RE: Registration of interest - Tripoli Way

Hi Kirsty,

That's great. Thank you very much. Can you confirm whether you are ok with your details, comments etc. being provided to the Land Council?

Thanks so much and I look forward to working with you,
Hannah

Hannah Morris
Senior Heritage Advisor

T 02 9555 4000 M
hmmorris@extent.com.au
extent.com.au

Connect with us on:





PEOP
CENTR
HERITA

Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their connection to land, waters and culture. We pay our respects to their Elders, past, present and en

From: Coomaditchie <coomaditchie@gmail.com>
Sent: Friday, 3 February 2023 12:31 PM
To: Hannah Morris <hmorris@extent.com.au>
Subject: Registration of interest - Tripoli Way

Hi

We would like to register our interest for Tripoli Way Extension community consultation.
Is there anything further you need from us?

Kind regards
Kristy



Coomaditchie United Aboriginal Corporation
PO Box 160
Warrawong 2502
42747477

<https://www.coomaditchie.org.au/>

We acknowledge the traditional owners and custodians of the land we work on as the first people of this country.



<https://www.facebook.com/coomaditchie/>

Please note our new preferred email address is coomaditchie@gmail.com

From: [Phil Khan](#)
To: [Consultation](#)
Subject: RE: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Friday, 27 January 2023 1:40:06 PM
Attachments: [2245CE348CE340AC944A8C7A91C080CE.png](#)
[B6C32E78CB844CE497351EDDF6FE6032.png](#)
[E10FF3A8AE224304AE7A65F9E63CB740.png](#)
[EB95186F1D9847E6A017BB60B05E016F.png](#)
[Icare 2023.pdf](#)
[Public Liability cover 2022 to 2023.pdf](#)

Hi Clare,

Thank you for informing us that **Extent Heritage** will be involved in an Aboriginal Cultural Heritage Assessment at **Tripoli Way Extension** & that you are inviting Aboriginal organisations to register, if they wish too be involved in the community consultation process.

As a senior Aboriginal person for the past 50yrs, I actively participate in the protection of the Aboriginal Cultural Heritage throughout the Sydney Basin, & particularly throughout Western Sydney, on behalf of Kamilaroi Yankuntjatjara Working Group I wish to provide to you my organisation's registration of interest.

I wish to be involved & participate in all levels of consultation/project involvement. I wish to attend all meetings, participate in available field work & receive a copy of the report.

[REDACTED]

Our RAPS have up to 15yrs Cultural Heritage experience in – field work which involves manual excavation (digging), sieving, identifying artefacts, setting up transits, setting up equipment, packing equipment, site surveys & attending meetings.

Should you wish me to provide further information, please do not hesitate to contact me on

[REDACTED]

Kind Regards
Phil Khan - Director



Sent from [Mail](#) for Windows 10

From: [Consultation](#)

Sent: Wednesday, 25 January 2023 2:04 PM

To: philipkhan.acn@live.com.au

Cc: [Hannah Morris](#)

Subject: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Dear Phil,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,
Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:



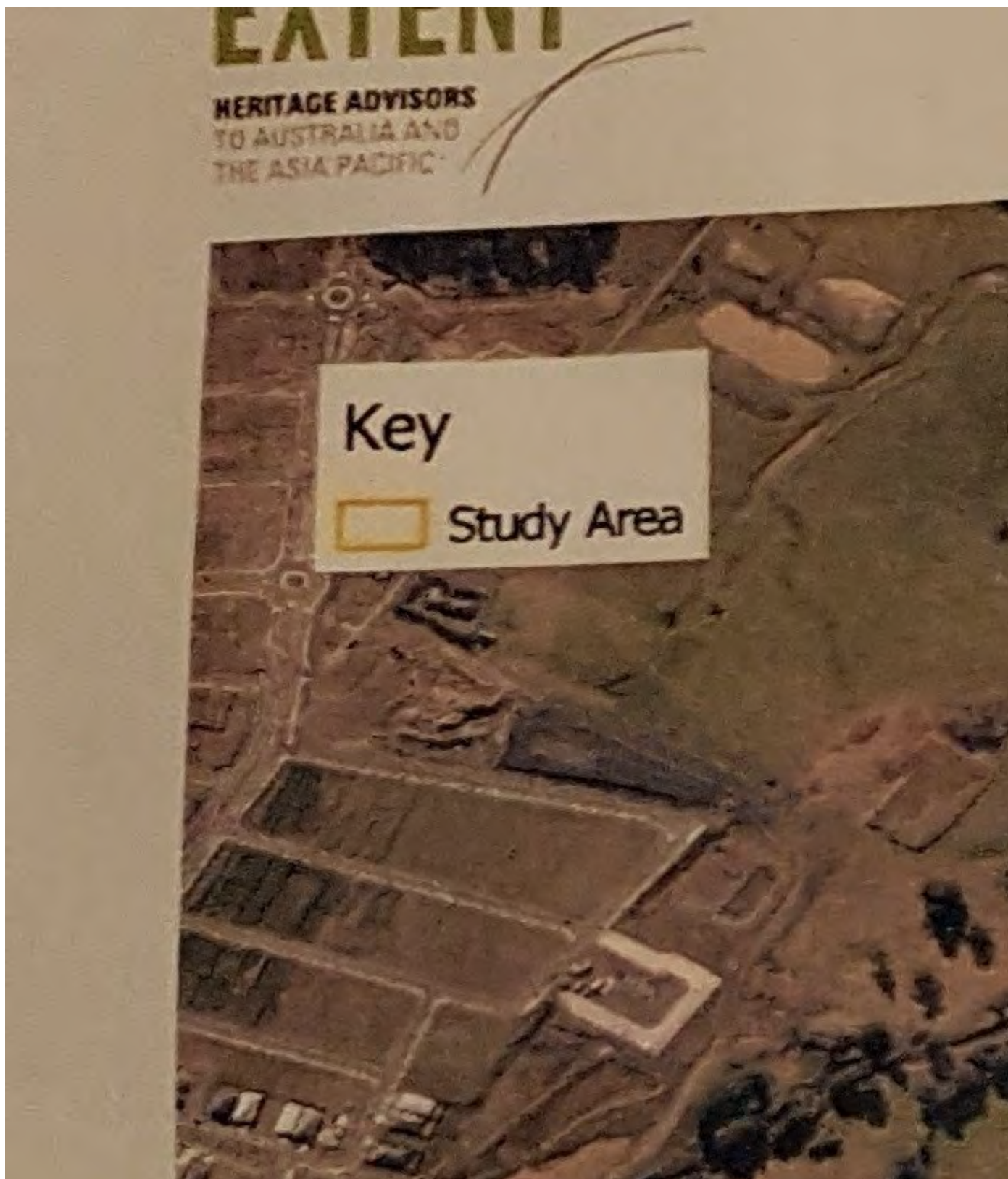
Sydney | Melbourne | Brisbane | Hobart
extent.com.au

**PEOPLE
CENTRED
HERITAGE**

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

Hannah Morris

From: [REDACTED]
Sent: Saturday, 11 February 2023 1:33 AM
To: Hannah Morris
Cc: mwang@cityofparramatta.nsw.gov.au
Subject: Registration interests for ACHA ot TWE
Attachments: [REDACTED]



Dear Hannah,

Can you Please register an interest in my name

My email and postal addresses are preferred comms methods, however SMS contact suffices most urgencies. Consultations on meetings, fieldwork and reportings is requested.

From: [Thoorga Thoorga](#)
To: [Consultation](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Friday, 27 January 2023 9:12:38 PM
Attachments: [image002.png](#)
[image004.png](#)
[image003.png](#)
[image001.png](#)
[lcare_2023.pdf](#)
[Youi_2023.pdf](#)

Good evening Hannah,

Can you please register Thoorganura's interest in this project.
The preferred method of communication by phone or email.
I would like to participate in any meetings and or fieldwork if available.
I have attached insurance certificates as requested.
If you require any further information please let me know.

Regards
John

On Wed, 25 Jan 2023 at 2:19 pm, Consultation <consultation@extent.com.au> wrote:

Dear John,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,

Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au
Connect with us on:

From: [Troy Tungai](#)
To: [Consultation](#)
Cc: [Hannah Morris](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Tuesday, 31 January 2023 11:50:49 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hi Hannah

Thanks for your email yes I would like to put my exsppression of interest in for this upcoming project thanks troytungai

Get [Outlook for Android](#)

From: Consultation <consultation@extent.com.au>
Sent: Wednesday, January 25, 2023 2:21:20 PM
To: troytungai72@outlook.com <troytungai72@outlook.com>
Cc: Hannah Morris <hmaris@extent.com.au>
Subject: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Dear Troy,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmaris@extent.com.au.

Kind regards,
Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:



From: admin@ilalc.org.au on behalf of [Heritage Services](#)
To: [Consultation](#)
Cc: [Aara Welz](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Tuesday, 31 January 2023 10:57:37 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[Workers Compensation CoC.pdf](#)
[Public Liability CoC.pdf](#)

Good morning Clare,

Thank you for your email regarding Tripoli Way, Albion Park.

Please note Paul Knight no longer works at the Illawarra Local Aboriginal Land Council. The CEO is Adell Hyslop who has been working here since April 2022.

Please register the ILALC's interest in the Tripoli Way, Albion Park project.

1. ILALC's contact is:
Culture and Heritage Manager - Aara Welz
Physical Address - PO Box 1306, Wollongong DC NSW 2500
Email Address - heritage@ilalc.org.au
2. Preferred method of communication is via email on the above email address;
3. ILALC wishes to have full involvement in the project;
4. Insurance documentation attached for fieldwork involvement;

If you require any further information please do not hesitate to contact me, noting my hours of work on the signature line of this email.

Kind regards,

Donna Hiscox
Illawarra Local Aboriginal Land Council

Level 2, 38 Young Street

Wollongong DC NSW 2500

Telephone: 4226 3338

Postal address:
PO Box 1306
Wollongong NSW 2500

Hours of Work:

Monday - Thursday 10am - 2pm

Please note I do not work Friday's

Please contact [Aara Welz](#) outside these hours:



On Wed, 25 Jan 2023 at 13:56, Consultation <consultation@extent.com.au> wrote:

Dear Paul,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,

Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:



Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

**PEOPLE
CENTRED
HERITAGE**

From: [Shayne Dickson](#)
To: [Consultation](#)
Subject: RE: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Tuesday, 31 January 2023 2:52:12 PM
Attachments: [5F9E01C5CF76413DB555976B74501606.png](#)
[AE1EE5C946664C93A7546C9B8359D83E.png](#)
[21D7B3EC183E4B808741A2DD35CB3BBF.png](#)
[2B8CC22781A94F71BB1523476750848E.png](#)

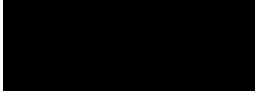
Good afternoon,

Thank you for the invitation

Could you please register Gunjeewong for the above project mentioned.

Kind Regards

Ngunnawal, Dunghutti, Yuin



First Nation

I pay respect to the Traditional Custodians of this Land past and present emerging

From: [Consultation](#)
Sent: Wednesday, 25 January 2023 1:53 PM
To: gunjeewongculturalheritage21@hotmail.com
Cc: [Hannah Morris](#)
Subject: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Dear Shayne,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,
Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au
Connect with us on:

From: [Darleen Johnson](#)
To: [Consultation](#)
Subject: Re: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Thursday, 9 February 2023 3:15:32 PM
Attachments: [image004.png](#)
[image003.png](#)
[image002.png](#)
[image001.png](#)

Hi Hannah,
Please register our company for the above project, we have done many projects in and around the project area and have been doing aboriginal cultural heritage projects for over 26 years.
Kind regards



On Wednesday, 25 January 2023 at 02:12:02 pm AEDT, Consultation <consultation@extent.com.au> wrote:

Dear Darleen and Ryan,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,

Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:



**PEOPLE
CENTRED
HERITAGE**

From: [Hannah Morris](#)
To: [Clare Fitzpatrick](#)
Subject: FW: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046
Date: Wednesday, 15 February 2023 4:55:42 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[fb_exh_2b20bf25-064b-4a67-b387-47b0936f49df.png](#)
[lk_exh_5d468521-82f2-4fa6-8c00-9200727b6e02.png](#)
[insta_exh_9f0f1cb1-8dce-40d0-a13e-05c17b62da8e.png](#)
[standard/footer_7f5c5593-5abf-4ef1-a3bd-b228938bea9e.png](#)
[Public Liability.pdf](#)
[Workers Compensation.pdf](#)
[WPGEC CV.pdf](#)

Hi again,
Can you please log this and send the notification letter from today?
Thanks,

Hannah Morris
Senior Heritage Advisor

T 02 9555 4000 M D 02 7258 6052

hmorris@extent.com.au

extent.com.au

Connect with us on:



Sydney | Melbourne | Brisbane | Hobart
extent.com.au

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

**PEOPLE
CENTRED
HERITAGE**

From: Kayla Williamson [REDACTED] >
Sent: Friday, 10 February 2023 10:00 AM
To: Hannah Morris <hmorris@extent.com.au>
Subject: Fwd: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Hi Hannah

We are traditional owners of the Illawarra. We hold a cultural interest in the proposed area. Our physical address is [REDACTED] have attached our CV which list some of the projects we have been involved in. We recently conducted a regional Survey with GML Heritage and Lendlease of Calderwood, Albion Park and Tullimbar areas.

The best contact person is myself Kayla Williamson. We would prefer to be contacted via email or phone.

The best email address is [REDACTED] The best contact number is [REDACTED].

WPGEC would like to be involved in all aspects of consultation.

Please find attached our current workers compensation and public liability.

Kind regards
Kayla Williamson
[REDACTED]

From: Consultation <consultation@extent.com.au>

Sent: Wednesday, 25 January 2023 2:24 PM

To: kayla_87@hotmail.com <kayla_87@hotmail.com>

Cc: Hannah Morris <hmorris@extent.com.au>

Subject: Notice of Aboriginal Cultural Heritage Investigations and Invitation for Registrations of Interest - Proposed Tripoli Way Extension ACHAR 0222046

Dear Kayla,

Extent Heritage has been engaged by City of Shellharbour Council to undertake a preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) for a proposed development along Tripoli Way in Albion Park. An important part of the assessment will be Aboriginal community consultation that aims to identify the Aboriginal cultural heritage within the study area, including the cultural values and places of importance to the Aboriginal community.

We have been in contact with State and local government bodies to identify Aboriginal individuals and/or organisations that may hold knowledge of this area and/or have an interest in this region. They have provided a list that includes your details. Therefore, please find a letter attached outlining further information on the project and seeking your interest in being involved. If you wish to register an interest in the project, please provide a response by **10 February 2023** by either replying to this email or contacting Hannah Morris at hmorris@extent.com.au.

Kind regards,

Clare

Clare Fitzpatrick
Research Assistant
T 02 9555 4000 M
cfitzpatrick@extent.com.au
extent.com.au

Connect with us on:



EXTENT



Sydney | Melbourne | Brisbane | Hobart
extent.com.au

**PEOPLE
CENTRED
HERITAGE**

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders, past, present and emerging.

B.7. Presentation of information and assessment methodology—sent and received

26 June 2023



Attention: 

Tripoli Way Extension – Proposed Aboriginal Cultural Heritage Assessment Report Methodology

Dear 

Thank you for your registration of interest in the Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed Tripoli Way Extension located in Albion Park, within the Shellharbour Local Government Area (**Figure 1**). Your interest in the project has been formally registered in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

Attached is the proposed methodology for the project. The methodology includes an archaeological survey, as well as cultural values mapping.

If you have any questions, please do not hesitate to contact me on (02) 9555 4000, or by email at hmorris@extent.com.au

Kind regards,



Hannah Morris

Senior Heritage Advisor | Extent Heritage

Contact Details

This letter has been prepared by Extent Heritage Pty Ltd (Extent Heritage) on behalf of Western Parkland City Authority Trust (the proponent). The proponent's contact details are:

Arvin De Mesa (Managing Projects, Acting)
Shellharbour City Council
76 Cygnet Avenue
Shellharbour City Centre, NSW
arvin.demesa@shellharbour.nsw.gov.au

Background

Shellharbour City Council propose to undertake development on approximately 5.7 ha of land to extend the existing road of Tripoli Way (Error! Reference source not found.) (hereafter, referred to as the 'study area'). This extension would traverse and extend the existing Tripoli Way road and The Expressway alignment running parallel and to the north of Tongarra Road/Illawarra Highway. The project encompasses the full length and surrounding area of the existing Tripoli Way and continues east to link into Terry Street/Illawarra Highway and west to link into Tongarra Road/Illawarra Highway at the intersection of Broughton Avenue. The project aims to alleviate traffic impacts through the Albion Park Township which are anticipated to increase as a result of predicted traffic growth along Tongarra Road, both from background traffic and current and future land development in the local area from townships including Calderwood, Tullimbar, and Albion Park.

Sites in the vicinity of the study area are dominated by low-density artefact scatters and/or isolated finds, and potential archaeological deposits (PADs). A list of the Aboriginal sites in and immediately adjacent to the study area is presented in **Table 1**, and a map of the sites is shown in **Figure 2**. One AHIMS site – an isolated artefact – has been recorded within the study area (AHIMS ID 52-5-0961). Two additional sites, a PAD (AHIMS ID 52-5-0439) and an artefact and PAD site (AHIMS ID 52-5-0434) are located to the southwest of the study area, along the Hazelton River.

Biosis has previously undertaken an archaeological survey which covers the area proposed for this re-survey. Three PADs were identified (**Figure 3**).

Table 1. Archaeological sites in and within 200 metres of the development area.

AHIMS Site ID.	Site Name	Recorder	Site Feature	Inside study area?
52-5-0961	Tulkeroo ISO	Biosis Pty Ltd - Wollongong, Mrs. Samantha Keats	Artefact(s)	Yes
52-5-0439	Tullimbah Village PAD2	Navin Officer Heritage Consultants Pty Ltd	PAD	No

52-5-0434	Tullimbah PAD1	Navin Officer Heritage Consultants Pty Ltd	Artefact(s) and PAD	No
-----------	----------------	--	---------------------	----

As part of the present development, Extent Heritage has been engaged to facilitate the Aboriginal heritage process, and will be synthesising the existing assessments in the area and preparing an ACHAR in accordance with current Heritage NSW guidelines. The ACHAR will assess the potential impact of any future development, and will develop relevant management and mitigation measures to be incorporated into the eventual Project Approval.

Proposed Assessment Methodology

In order for the project to progress, an Aboriginal Cultural Heritage Assessment Report (ACHAR) needs to be prepared in accordance with the Heritage NSW guidelines:

- ♦ *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011);
- ♦ *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010);
- ♦ *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010)

Development of the ACHAR will involve a cultural values assessment, archaeological survey, and subsequent reporting. We currently anticipate that the ACHAR should be completed by December 2023.

The survey ACHAR will include the following tasks:

- ♦ Aboriginal community consultation;
- ♦ Archaeological survey;
- ♦ Preparation of the ACHAR, which incorporates Aboriginal consultation and cultural values mapping, outlines the findings of the archaeological survey, and makes recommendations for the future management of Aboriginal heritage sites and/or objects that may be present within the proposed study area; and
- ♦ If sites are identified, submissions of site recordings for registration on Heritage NSW's AHIMS database.

Further details regarding the cultural values assessment and archaeological survey are provided below. These would be undertaken in conjunction with representatives of the Registered Aboriginal Parties (RAPs) based on selective commercial engagements determined by the client.

Archaeological Survey Methodology

We propose to undertake an archaeological survey in accordance with the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). It will aim to identify any visible Aboriginal objects (material traces and evidence of Aboriginal land), to inspect any important or significant locations identified during the cultural values assessment, and to assess prior disturbance levels. The investigation will also assess the extent to which past land-uses may have affected the sub-surface archaeological potential within areas of identified archaeological sensitivity.

Biosis has previously undertaken an archaeological survey which covers the area proposed for this re-survey. Three PADs were identified (**Figure 3**). Due to significant ground disturbance, such as initial vegetation removal and construction of roads and residential developments, the remainder of the study area was determined to hold low archaeological potential.

To verify these results and provide an updated analysis, Extent Heritage would re-survey the study area. Due to a majority of the study area being under private ownership, the survey would be constrained to the western portion of the study area and public roads (**Figure 5-Figure 6**).

The survey strategy will include:

- ◆ Pedestrian survey of five properties (Figure 3), with a focus along waterways;
- ◆ Visit to the three identified PADs;
- ◆ Identification of AHIMS ID 52-5-0961, the isolated artefact within PAD 2 (this is believed to be in the possession of the landowner);
- ◆ Vehicular inspection of public access roads;
- ◆ Visual inspection of properties that are unable to be accessed for pedestrian survey to determine archaeological potential and necessity of further pedestrian survey;
- ◆ Inspection throughout accessible land to identify any stands of mature/old growth native trees and areas of ground surface visibility;
- ◆ Inspection of a sample of the landforms that will potentially be impacted;
- ◆ A proportionate emphasis on those landforms deemed to have archaeological potential;
- ◆ Pedestrian survey of pre-determined transects;
- ◆ Taking representative photographs of survey units and landforms where informative;
- ◆ Recording landform and general soil information for each survey unit;
- ◆ Recording the land surface and vegetation conditions encountered during the survey (accounting as appropriate for things like vegetation, rock outcrops, coarse fragments, etc.), and how these impact on the visibility of objects;
- ◆ Recording any Aboriginal objects observed during the survey;
- ◆ Recording any historical archaeological features observed during the survey; and
- ◆ Recording of spatial information suitable for mapping according to Code requirements and the calculation of survey coverage.

The archaeological survey is designed to sample the study area in a systematic manner by targeting areas of ground surface visibility and including a representative sample of all landforms. Any areas of ground exposure will be examined for archaeological evidence such as stone artefacts and charcoal. Ground surfaces and cut-and-fill features will also be examined to determine the degree of soil disturbance, erosion and potential for subsurface archaeological deposits and/or features. The survey is also aimed at complementing a cultural values assessment, outlined below.

Cultural values assessment methodology

We also propose to undertake a cultural values assessment which will seek to gather information on the Aboriginal heritage and stories connected to the study area. It will focus on stories and traditions that relate to the landscape and other intangible aspects of the area's Aboriginal heritage. This assessment will provide critical information relating to values across all time periods and will be an important part of the ACHAR process. The cultural values assessment will focus primarily on the study area. However, discussion will not be limited to this locale as themes will likely relate to broader areas rather than a specific place.

The cultural values assessment will include:

- ◆ An ethnohistorical review to identify features (past or present) that are likely to be associated with cultural values relevant to Aboriginal settlement and use of the region up to the present;
- ◆ Identification of important individuals or groups of people associated with the area;
- ◆ Recording of values according to the themes/stories identified from background research, amended and updated as appropriate through consultation;
- ◆ Recommendations on suitable methods through which cultural values, themes and places could be interpreted;
- ◆ Information on how places in the study area connect as part of a wider cultural landscape;
- ◆ Collation of this material in a briefing document which will include indicative mapping that identifies former and current areas, features and landforms that are anticipated as likely to be connected with Aboriginal cultural values.

Timeframes

Extent Heritage proposes the following indicative timeframes for the project:

- ◆ Distribution of this document to Registered Aboriginal Parties: **late June 2023.**
- ◆ End of review period for the proposed methodology: **Mid July 2023.**
- ◆ Field survey to be undertaken: **Mid July 2023.**
- ◆ Test excavations: **Mid August 2023.**

- ◆ Distribution of draft ACHAR to Registered Aboriginal Parties for review: **Mid October 2023.**

Information Sought

Extent Heritage would appreciate your feedback on the methodology proposed above for the investigation and assessment of the study area.

In returning your answers, please include the following where appropriate:

- ◆ Any protocols that you would like adopted during the project;
- ◆ Identification of any Aboriginal objects of cultural significance and/or importance that you are aware of within the activity area, and how you wish them to be dealt with during the project;
- ◆ Identification of any places of cultural significance and/or importance that you are aware of within the activity area, and how you wish them to be dealt with during the project;
- ◆ Guidance on the protocols, sensitivity, use and/or distribution of any cultural information that you provide to Extent Heritage;
- ◆ Whether you require any further information prior to Extent Heritage proceeding with the project.

We also direct you to Extent Heritage's policy and procedures on Aboriginal engagement, which will be provided with this document. It is important that you understand that Extent Heritage will compile and forward information for review by the proponent, but we do not decide who will be involved in fieldwork in any paid capacity.

If you would like to arrange for any elders or other community members to be able to visit the site during the work, please let us know.



Figure 1. Study area

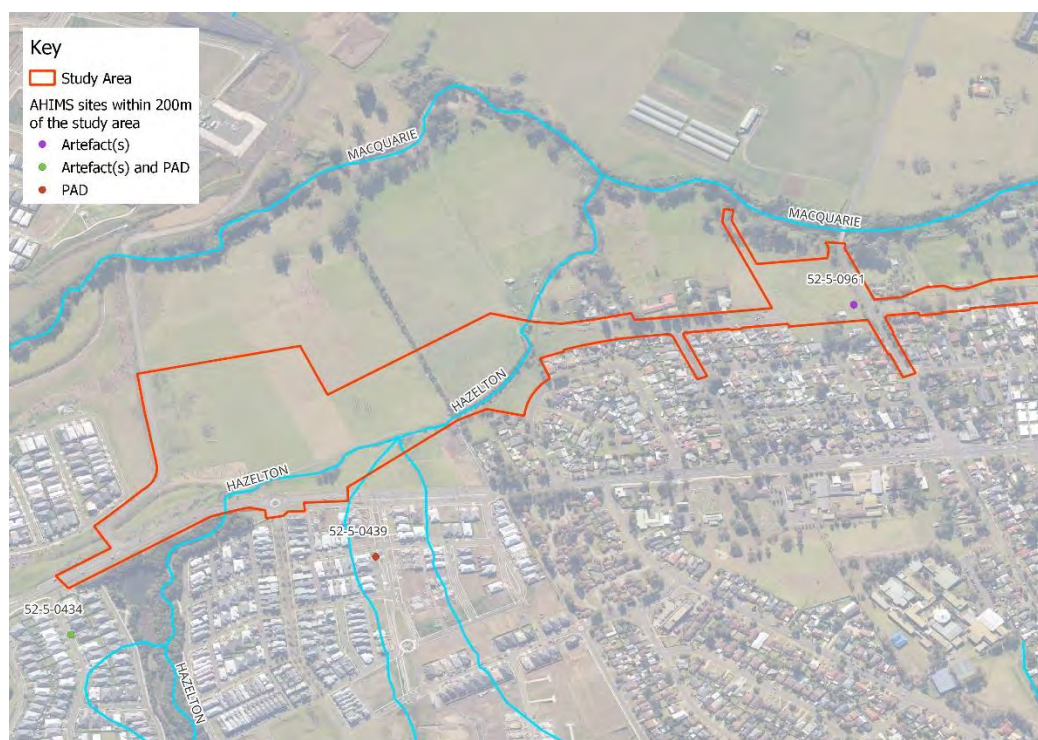


Figure 2. Registered Aboriginal sites in and within 200m of the study area.



Figure 3. Existing assessment of archaeological potential.

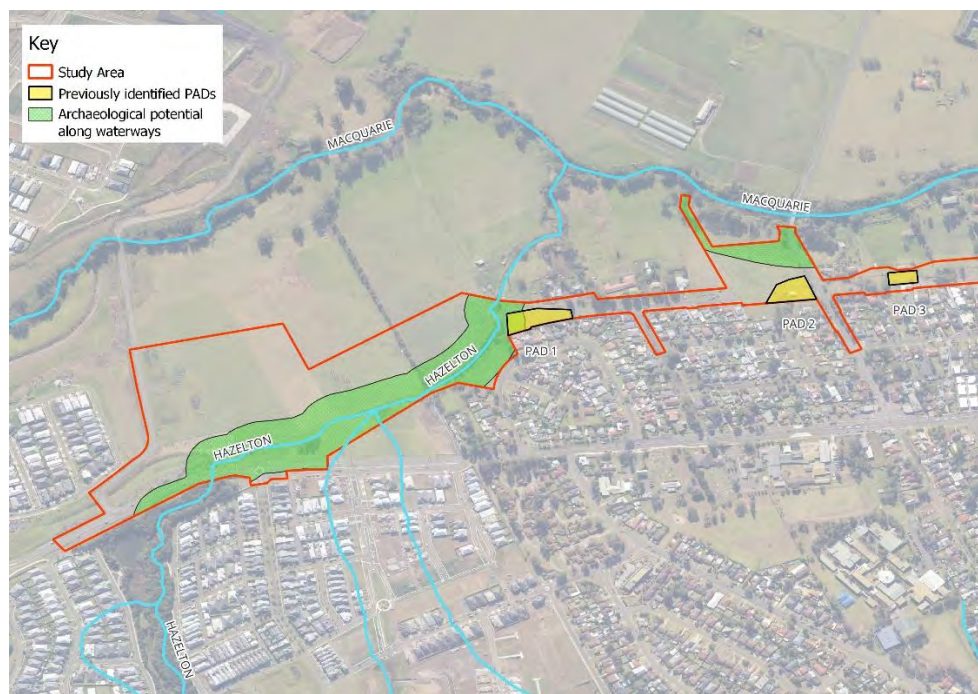


Figure 4. Areas of archaeological potential based on Cumberland Plain predictive model. To be reassessed during survey.



Figure 5. Areas accessible for site survey – western portion of study area.



Figure 6. Areas accessible for site survey – eastern portion of study area.

Catherine Fenech

From: Consultation <consultation@extent.com.au>
Sent: Wednesday, 20 September 2023 1:34 PM
Subject: Tripoli Way Extension Methodology Draft for Review
Attachments: Tripoli Way Test Excavation Methodology Draft.pdf

Good afternoon,

I hope you're having a lovely week,

Please find attached the draft test excavation methodology for Tripoli Way Extension for your review.

If you could please provide comments or other feedback by the **18th of October**, that would be greatly appreciated.

If you wish to receive any further project details, or have any other questions or comments please contact our team at consultation@extent.com.au.

Thank you for your time,

Catherine

Catherine Fenech

From: Richard Campbell And Lisa Bazzano <info@gumaraa.com.au>
Sent: Wednesday, 20 September 2023 1:48 PM
To: Consultation
Subject: Re: Tripoli Way Extension Methodology Draft for Review

Thank you Catherine.. will do!

Kind regards,

Gumaraa

Richard Campbell Lisa Bazzano
Ph:0487406782 Ph:0432645912
Eml: info@gumaraa.com.au

Copyright statement for Gumaraa Aboriginal Experience Pty Ltd

Gumaraa Aboriginal Experience Pty Ltd ('Gumaraa' or 'we' or 'us' or 'our') hereby reserve all rights and privilege in relation to the program, material and contents of the these documents and artworks in part or in whole ('our material')

No part of our material may be reproduced in part or in whole without the prior written express consent from the copyright holders Gumaraa Aboriginal Experience Pty Ltd

All and any rights, ownership and opportunity to our material is hereby reserved and for our sole benefit including but not limited to all rights it holds in relation to and she went to the copyright act 1968 (CTH).

We do not accept any responsibility what so ever for any damage, directly or indirectly, all lose of freelance materials submitted for reproduction in relation to this material or artwork.

The information contained in our material are true and correct to the best of our knowledge and beliefs, all recommendations are made without any guarantee on the part of Gumaraa.

On 20 Sep 2023, at 1:35 pm, Consultation <consultation@extent.com.au> wrote:

Good afternoon,

I hope you're having a lovely week,

Please find attached the draft test excavation methodology for Tripoli Way Extension for your review.

If you could please provide comments or other feedback by the **18th of October**, that would be greatly appreciated.

If you wish to receive any further project details, or have any other questions or comments please contact our team at consultation@extent.com.au.

Thank you for your time,

Catherine

<Tripoli Way Test Excavation Methodology Draft.pdf>

B.8. Report review—feedback received

Catherine Fenech

From: Kayla Williamson <kayla_87_@hotmail.com>
Sent: Thursday, 7 March 2024 8:24 PM
To: Consultation
Subject: Re: Tripoli Way Extension Final ACHAR, ATER and Lithic Report for your review

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from kayla_87_@hotmail.com. [Learn why this is important](#)

Hi Catherine,

Woronora Plateau Gundungara Elders Council don't have any further comments or recommendations than the ones made previously.

Regards
Kayla

From: Consultation <consultation@extent.com.au>
Sent: Wednesday, March 6, 2024 2:44:13 PM
To: Kayla Williamson <Kayla_87_@hotmail.com>
Subject: FW: Tripoli Way Extension Final ACHAR, ATER and Lithic Report for your review

Good afternoon Kayla,

Thank you for your time on the phone this afternoon,
Please see the link below for the Tripoli Way Extension ACHAR for review.

Please use this link <https://we.tl/t-GCMAR0fMV2> to download the following reports for your final review and for you to provide feedback or comments, should you wish to do so.

- Final ACHAR (Aboriginal Cultural Heritage Archaeological Report)
- Final ATER (Archaeological Test Excavation Report)
- Lithic Report

We understand that these documents are quite large, so to summarise the key points we have also attached a short overview document for your reference.

If you wish to provide any feedback or comments you can do so by replying to this email or using the contact details below at your earliest convenience or by **14th March 2024**.

It would be greatly appreciated if you are able to provide any aesthetic, social, cultural or historical values associated with the site that you would like to see included in the final report.
Please also feel free to contact us at any time with any questions or to discuss this project.

Many thanks,
Catherine

Catherine Fenech

From: Richard Campbell <info@gumaraa.com.au>
Sent: Thursday, 28 March 2024 3:02 PM
To: Consultation
Subject: Re: Tripoli Way Extension Final ACHAR for your review

You don't often get email from info@gumaraa.com.au. [Learn why this is important](#)

Thank you for the update Catherine, I'll have a look..

Have a lovely Easter!

Kind regards,

Gumaraa

Richard Campbell Lisa Bazzano
Ph:0487406782 Ph:0432645912
Eml: info@gumaraa.com.au

Copyright statement for Gumaraa Aboriginal Experience Pty Ltd
Gumaraa Aboriginal Experience Pty Ltd ('Gumaraa' or 'we' or 'us' or 'our') hereby reserve all rights and privilege in relation to the program, material and contents of the these documents and artworks in part or in whole ('our material')
No part of our material may be reproduced in part or in whole without the prior written express consent from the copyright holders Gumaraa Aboriginal Experience Pty Ltd
All and any rights, ownership and opportunity to our material is hereby reserved and for our sole benefit including but not limited to all rights it holds in relation to and she went to the copyright act 1968 (CTH).
We do not accept any responsibility what so ever for any damage, directly or indirectly, all lose of freelance materials submitted for reproduction in relation to this material or artwork.
The information contained in our material are true and correct to the best of our knowledge and beliefs, all recommendations are made without any guarantee on the part of Gumaraa.

On 28 Mar 2024, at 1:01 pm, Consultation <consultation@extent.com.au> wrote:

Good afternoon,

I hope you and your family are well,

Thank you for your recent review of the Tripoli Way Extension Aboriginal Cultural Heritage Archaeological Report.

During the review period, we were provided with some updated plans which added some minor impacts consisting of a temporary compound along Tongarra Road. The proposed impacts for the temporary compound are restricted to 150mm (15cm) in depth and are located within the farmed land which was concluded to have likely been subjected to disturbance from ploughing and construction associated with the development of Tongarra Road itself.

In order to capture this additional impact in our reporting we have updated the ACHAR and reviewed our recommendations to ensure they address the proposed impacts.

In light of this update, please find at the link below the final version of the ACHAR. We appreciate this is a lengthy document and so would like to draw your attention to the sections impacted by this update, primarily Section 1 (pg. 3) and Section 13 (pg. 109-114).

Link: <https://we.tl/t-ROtA8KUD7G>

It would be greatly appreciated if you could provide any questions or feedback as soon as possible. The review period will be open until 25 April 2024.

Thank you for your understanding and please do not hesitate to call Extent if you have any questions, myself or my colleague Oliver will be able to answer any of your questions,

Many thanks and happy Easter,
Catherine

From: Consultation <consultation@extent.com.au>

Sent: Wednesday, February 14, 2024 2:24 PM

Subject: Tripoli Way Extension Final ACHAR, ATER and Lithic Report for your review

Good Afternoon,

I hope you and your families are well,

I am reaching out to provide you with a final copy of the Tripoli Way Extension ACHAR for your review.

Please use this link <https://we.tl/t-GCMAR0fMV2> to download the following reports for your final review and for you to provide feedback or comments, should you wish to do so.

1. Final ACHAR (Aboriginal Cultural Heritage Archaeological Report)
2. Final ATER (Archaeological Test Excavation Report)
3. Lithic Report

We understand that these documents are quite large, so to summarise the key points we have also attached a short overview document for your reference.

If you wish to provide any feedback or comments you can do so by replying to this email or using the contact details below at your earliest convenience or by **14th March 2024**.

It would be greatly appreciated if you are able to provide any aesthetic, social, cultural or historical values associated with the site that you would like to see included in the final report.
Please also feel free to contact us at any time with any questions or to discuss this project.

Many thanks,
Catherine

<Overview Document.pdf>

Catherine Fenech

From: admin@ilalc.org.au on behalf of Heritage Services <heritage@ilalc.org.au>
Sent: Tuesday, 16 April 2024 4:32 PM
To: Consultation
Subject: Re: Tripoli Way Extension Final ACHAR for your review

Hi Catherine,

Thank you for providing the Draft Aboriginal Cultural Heritage Assessment (DACHA) to the Illawarra Local Aboriginal Land Council (ILALC) for review and comment.

ILALC understands that Shellharbour City Council proposes development on approximately 5.7 hectares of land to extend the existing road of Tripoli Way. This extension would traverse and extend the existing Tripoli Way and the Expressway alignment running parallel and north of Tom Thumb Road/Illawarra Highway. Extend Heritage has been engaged by Shellharbour City Council to prepare a DACHA to identify any Aboriginal objects, places, or cultural heritage values within the study area. The results of the Aboriginal test pit program will inform the development of a master plan for the Tripoli Way extension.

ILALC has reviewed the proposed recommendations and is in support of these. Specifically, ILALC endorses recommendation 1 and urges the council to employ sensitive design solutions to ensure that all Aboriginal objects and sites are avoided by the proposed development.

ILALC supports the notion that if conservation is not deemed feasible, salvage excavations would be necessary to mitigate the adverse impacts of the proposed development on Aboriginal cultural heritage. ILALC requests that the methodology for any such salvage excavations be provided to ILALC for review and comment before finalization.

Finally, and a minor edit ... On page i, it is suggested that 'three Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, the Eastern Transect and Hamilton Road, and one site would be fully impacted: Tuleroo ISO: Ground edge axe' – can you please amend this to read correctly.

Please do not hesitate to contact me should you require any additional information or clarification.

Kind regards,

Aara

Illawarra Local Aboriginal Land Council

Level 2, 38 Young Street

Wollongong DC NSW 2500

Telephone: 4226 3338

Postal address:
PO Box 1306
Wollongong NSW 2500



On Thu, 28 Mar 2024 at 13:01, Consultation <consultation@extent.com.au> wrote:

Good afternoon,

I hope you and your family are well,

Thank you for your recent review of the Tripoli Way Extension Aboriginal Cultural Heritage Archaeological Report.

During the review period, we were provided with some updated plans which added some minor impacts consisting of a temporary compound along Tongarra Road. The proposed impacts for the temporary compound are restricted to 150mm (15cm) in depth and are located within the farmed land which was concluded to have likely been subjected to disturbance from ploughing and construction associated with the development of Tongarra Road itself.

In order to capture this additional impact in our reporting we have updated the ACHAR and reviewed our recommendations to ensure they address the proposed impacts.

In light of this update, please find at the link below the final version of the ACHAR. We appreciate this is a lengthy document and so would like to draw your attention to the sections impacted by this update, primarily Section 1 (pg. 3) and Section 13 (pg. 109-114).

Link: <https://we.tl/t-ROtA8KUD7G>

It would be greatly appreciated if you could provide any questions or feedback as soon as possible. The review period will be open until 25 April 2024.

Thank you for your understanding and please do not hesitate to call Extent if you have any questions, myself or my colleague Oliver will be able to answer any of your questions,

Many thanks and happy Easter,

Catherine

From: Consultation <consultation@extent.com.au>

Sent: Wednesday, February 14, 2024 2:24 PM

Subject: Tripoli Way Extension Final ACHAR, ATER and Lithic Report for your review

Good Afternoon,

I hope you and your families are well,

I am reaching out to provide you with a final copy of the Tripoli Way Extension ACHAR for your review.

Please use this link <https://we.tl/t-GCMAR0fMV2> to download the following reports for your final review and for you to provide feedback or comments, should you wish to do so.

- Final ACHAR (Aboriginal Cultural Heritage Archaeological Report)
- Final ATER (Archaeological Test Excavation Report)
- Lithic Report

We understand that these documents are quite large, so to summarise the key points we have also attached a short overview document for your reference.

If you wish to provide any feedback or comments you can do so by replying to this email or using the contact details below at your earliest convenience or by **14th March 2024**.

It would be greatly appreciated if you are able to provide any aesthetic, social, cultural or historical values associated with the site that you would like to see included in the final report.

Please also feel free to contact us at any time with any questions or to discuss this project.

Many thanks,

Catherine

From: [Consultation](#)
To: [Heritage Services](#)
Subject: RE: Tripoli Way Extension Final ACHAR for your review
Date: Wednesday, 24 April 2024 12:10:58 PM

Hi Aara,

Thank you for your review of the Draft Aboriginal Cultural Heritage Assessment for Tripoli Way Extension, and your support of the proposed recommendations.

We understand that ILALC endorses sensitive design solutions to ensure all Aboriginal objects and sites are avoided by the proposed development, and that if conservation is not deemed feasible, salvage excavations would be necessary to mitigate the adverse impacts.

In regards to your recommendation for salvage, is there a specific Aboriginal site, location or portion of the study area you would like to see salvaged? Any additional details would help inform our recommendations. In particular with reference to the Tuleroo ISO. As the ACHAR states Tuleroo ISO: Ground edge axe will be fully impacted, however as an isolated artefact it may be more cost and time effective to do a surface collection rather than carrying out subsurface salvage excavations.

Thank you for your feedback regarding page i, this has now been corrected to read: *four Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, the Eastern Transect and Hamilton Road. One site would be fully impacted: Tuleroo ISO: Ground edge axe.*

As always, I am happy to discuss any of the above,
Please feel free to contact me should you have any concerns,
Many Thanks
Catherine

From: admin@ilalc.org.au <admin@ilalc.org.au> **On Behalf Of** Heritage Services
Sent: Tuesday, April 16, 2024 4:32 PM
To: Consultation <consultation@extent.com.au>
Subject: Re: Tripoli Way Extension Final ACHAR for your review

Hi Catherine,

Thank you for providing the Draft Aboriginal Cultural Heritage Assessment (DACHA) to the Illawarra Local Aboriginal Land Council (ILALC) for review and comment.

ILALC understands that Shellharbour City Council proposes development on approximately 5.7 hectares of land to extend the existing road of Tripoli Way. This extension would traverse and extend the existing Tripoli Way and the Expressway alignment running parallel and north of Tom Thumb Road/Illawarra Highway. Extend Heritage has been engaged by Shellharbour City Council to prepare a DACHA to identify any Aboriginal objects, places, or cultural heritage values within the study area. The results of the Aboriginal test pit program will inform the development of a master plan for the Tripoli Way extension.

ILALC has reviewed the proposed recommendations and is in support of these. Specifically, ILALC endorses recommendation 1 and urges the council to employ sensitive design solutions to

ensure that all Aboriginal objects and sites are avoided by the proposed development.

ILALC supports the notion that if conservation is not deemed feasible, salvage excavations would be necessary to mitigate the adverse impacts of the proposed development on Aboriginal cultural heritage. ILALC requests that the methodology for any such salvage excavations be provided to ILALC for review and comment before finalization.

Finally, and a minor edit ... On page i, it is suggested that 'three Aboriginal sites will be partially impacted by the proposed development: TWE_PAD1, TWE_PAD2, the Eastern Transect and Hamilton Road, and one site would be fully impacted: Tuleroo ISO: Ground edge axe' – can you please amend this to read correctly.

Please do not hesitate to contact me should you require any additional information or clarification.

Kind regards,

Aara

Illawarra Local Aboriginal Land Council
Level 2, 38 Young Street
Wollongong DC NSW 2500
Telephone: 4226 3338

Postal address:

PO Box 1306

Wollongong NSW 2500



On Thu, 28 Mar 2024 at 13:01, Consultation <consultation@extent.com.au> wrote:

Good afternoon,

I hope you and your family are well,

Thank you for your recent review of the Tripoli Way Extension Aboriginal Cultural Heritage Archaeological Report.

During the review period, we were provided with some updated plans which added some minor impacts consisting of a temporary compound along Tongarra Road. The proposed

impacts for the temporary compound are restricted to 150mm (15cm) in depth and are located within the farmed land which was concluded to have likely been subjected to disturbance from ploughing and construction associated with the development of Tongarra Road itself.

In order to capture this additional impact in our reporting we have updated the ACHAR and reviewed our recommendations to ensure they address the proposed impacts. In light of this update, please find at the link below the final version of the ACHAR. We appreciate this is a lengthy document and so would like to draw your attention to the sections impacted by this update, primarily Section 1 (pg. 3) and Section 13 (pg. 109-114).

Link: <https://we.tl/t-ROtA8KUD7G>

It would be greatly appreciated if you could provide any questions or feedback as soon as possible. The review period will be open until 25 April 2024.

Thank you for your understanding and please do not hesitate to call Extent if you have any questions, myself or my colleague Oliver will be able to answer any of your questions,

Many thanks and happy Easter,
Catherine

From: Consultation <consultation@extent.com.au>

Sent: Wednesday, February 14, 2024 2:24 PM

Subject: Tripoli Way Extension Final ACHAR, ATER and Lithic Report for your review

Good Afternoon,

I hope you and your families are well,

I am reaching out to provide you with a final copy of the Tripoli Way Extension ACHAR for your review.

Please use this link <https://we.tl/t-GCMAR0fMV2> to download the following reports for your final review and for you to provide feedback or comments, should you wish to do so.

- Final ACHAR (Aboriginal Cultural Heritage Archaeological Report)
- Final ATER (Archaeological Test Excavation Report)
- Lithic Report

We understand that these documents are quite large, so to summarise the key points we have also attached a short overview document for your reference.

If you wish to provide any feedback or comments you can do so by replying to this email or using the contact details below at your earliest convenience or by **14th March 2024**.

It would be greatly appreciated if you are able to provide any aesthetic, social, cultural or historical values associated with the site that you would like to see included in the final report.

Please also feel free to contact us at any time with any questions or to discuss this project.

Many thanks,
Catherine