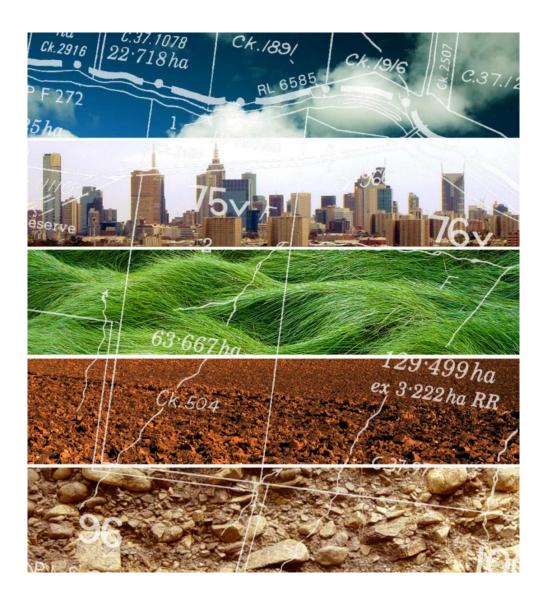
Proposed Echuca Riverfront Development

Historic Archaeological Assessment



Final Report for the Shire of Campaspe

Author: David Rhodes

21st March 2018

Contents

1.0 Introduction	4
2.0 Proposed Development and Potential Impacts	4
2.1 Demolition	4
2.2 Construction of Paths, Access Road and Stairs	5
2.3 Other Works	6
2.4 Potential Impacts	7
3.0 Environmental Conditions	8
4.0 Relevant Statutory Legislation	9
4.1 Statutory Legislation - Victoria	9
4.2 Statutory Legislation - NSW	9
5.0 History of the Study Area	11
6.0 Previous Studies	14
6.1 Heritage Registrations	14
6.2 Previous Archaeological Assessments	
7.0 History and Previous Archaeology: discussion and summary	16
8.0 Archaeological Survey	17
8.1 Field Methods and Ground Visibility	17
8.2 Survey Results	17
9.0 Assessment of Potential Impacts and Conclusions	19
10.0 Management Recommendations	20
10.0 Management Recommendations Bibliography	22

Maps

Map 1: Study area location	.25
Map 2: Study area, existing conditions	
Map 3: Development Plan with main areas of excavation marked up	
Map 4: Development Plan overlaid on aerial	.28
Map 5: Geology of the study area	
Map 6: Overlay of Parish Plan c. 1855 on current aerial image (1855 Parish Plan – State Library of	
Victoria)	.30
Map 7: Overlay of 1926 parish plan on current aerial image showing location of morgue (1926 Parish P	'lan
- State Library of Victoria)	
Map 8: 1960 aerial image of the study area (State Library of Victoria)	.32

Figures

Figure 1: 1857 map showing the location of Hopwood's punt, the tollhouse/morgue and the second	
punt across the Campaspe River (Echuca Historical Society)	34

Plates

Plate 1:	Study area and west bank of the Murray River, facing west	36
Plate 2:	Study area facing south along the crest of the natural embankment and Watson Street	36
Plate 3:	Alignment of proposed new access road at the south end of the study area, facing east	37
Plate 4:	Concrete pavilion, containing changing rooms and kiosk facing west	37
Plate 5:	Facing south along car parking and recreational space on the lower floodplain	38
Plate 6:	Looking south along the existing car park on the alluvial plain. Note the height of fill against t	he
red gum	trunk in the background.	38
Plate 7:	Punt and pontoon bridge over the Murray River (Nettleton c. 1870)	39

Plate 8: Punt and pontoon bridge over the Murray River (undated photo)
Plate 9: Postcard showing the swimming pontoon probably c. 1920's (National Library of Australia)40
Plate 10: Postcard c.1945 looking south along the river bank towards the pontoon (State Library of
Victoria)
Plate 11: Looking north along the riverbank adjoining the pontoon, prior to construction of the pavilion.
The edge of one of the older change rooms is visible on the left (State Library of Victoria)41
Plate 12: View looking south-west showing the pontoon, pavilion and concrete steps c. 1950 (State
Library of Victoria)
Plate 13: Rear wall of pavilion facing south
Plate 14: Southern half of pavilion building (rear) facing east
Plate 15: Concrete lamp post on the north side of pavilion entrance at Watson Street
Plate 16: Concrete lamp post on the south side of pavilion entrance at Watson Street
Plate 17: Alignment of the new access road at the north end of the study area, facing north44
Plate 18: General location of the tracks from Hopwood's punt and pontoon bridge, facing west
Plate 19: Historical interpretation sign with punt cable
Plate 20: Stump with mooring cable on the east bank of the river
Appendix 1: HV Survey Notification

1.0 Introduction

The Shire of Campaspe has requested Heritage Insight to prepare a historic heritage assessment of approximately 1.4ha of land between Watson Street Echuca, the west bank of the Murray River and the Echuca Wharf Precinct to the south (see Map 1 and Plates 1-6). At present, the area is currently used for recreational purposes, but the Shire of Campaspe is proposing to redevelop the area as part of the Echuca Riverfront Redevelopment Project.

A section of the study area against the west bank of the Murray River is in NSW. This report is intended for distribution to statutory authorities in NSW and Victoria.

The study area encompasses the Victorian landing site of Henry Hopwood's punt and also contains concrete walled changing rooms and a kiosk which were constructed during the 1940's. The latter serviced an enclosed pool on the banks of the river, but are now disused. It is proposed to redevelop the existing structure as part of the works. Paddle Steamers and houseboats are moored on the west bank of the Murray River. There are several mature red gums within the study area, but little remaining understorey vegetation. The existing conditions within the study area are shown in Map 2.

The purpose of the assessment was to carry out a desktop review and field survey to determine the locations of any known or potential heritage places within the study area. It was also intended to assess the impacts of a proposed future development and to provide recommendations for the management of any heritage places identified during the assessment.

2.0 Proposed Development and Potential Impacts

There are a range of works proposed for the area within the proposed development, including the removal of existing park furniture, removal of some existing stairs and paths, removal of concrete kerb and channel, removal of timber retaining walls and fences, removal and relocation of historic light pools associated with a former pool pavilion and removal of five existing trees. New construction works include new roads, paths, recreational facilities and viewing/interpretation platforms, installation of services, construction of ephemeral wetlands and the reconstruction and extension of the former kiosk and change rooms. These are described in more detail below. A plan of the proposed development and areas of excavation is included as Map 3. An overlay of the development plan over a current air photo is shown in Map 4. Some of the main areas where works will occur are shown in Plates 2-6.

2.1 Demolition

(i) Removal of approximately 7 flights of stairs (concrete and timber) and concrete bridge crossing to the old pool pavilion. Excavation of approximately 600mm into disturbed soil will be required to remove the bridge footings.

(ii) Removal of existing park furniture – seats and tables. Negligible excavation.

(iii) Removal of concrete kerb and channel next to road entrance to existing picnic area (south end). Negligible excavation.

(iv) Removal of timber retaining walls in front of embankment at south end. Excavation into embankment of 300mm required – this is likely into soil disturbed when the retaining wall was originally constructed.

(v) Removal of existing post and rail fence at north end. No excavation - fence to be lifted out.

(vi) Removal of existing road pavement, pavement, kerb and channel and bollards on Watson Street. Negligible excavation.

(vii) Removal of lightpoles, relocate concrete heritage light poles associated with the old pool pavilion.

(viii) Excavation of up to 600mm around footings of lightpoles (into soil disturbed when light poles were originally installed) and excavation of existing cables.

(ix) Five existing trees to be removed. Trees to be cut at base of trunk, grind trunks and branches.

2.2 Construction of Paths, Access Road and Stairs

(a) Paths and Roads

(i) New charcoal coloured concrete pavement with sawcuts along length of embankment parallel with Watson Street and on the west side of the study area – approx. 169m in length. Excavation will be minimal, approximately 300mm into disturbed soil adjacent to Watson Street.

(ii) 'Kiosk plaza' approximately 115m² abutting path behind pavilion. Approximately 300mm excavation into disturbed soil between Watson Street and the embankment behind the pavilion.

(iii) A new bitumen service road at north end 68m in length culminating in a turning circle 12m in diameter. The construction of the road will require a cut of up to 1m into the embankment near Watsons Road. The centre section of the road will be built on fill. A cut of approximately 500mm at the end of the road will be required to construct the turning circle near the front of the pavilion. The turning circle will be built in an area that was previously concreted with steps in front of the pavilion.

(iv) Sand coloured concrete pavement with sawcuts – these paths will generally be built at an existing level with no more than 300mm cut:

- 1 path extending c. 83m from N end of AA to open area in front of Kiosk.
- 2nd path extending N-S approximately 72m from south side of open area in front of pavilion.
- 3rd loop path extending from in front (east of) pavilion, up crest of slope and then north to the south side of the former pavilion. The section of the path extending up the embankment (approximately 30m) will require a cut of up to 600mm.
- 4th path extending `9m past the path described above and at right angles to it, to connect with the street kerb,
- 5th Circular path in front (east) of pavilion 104m in length.
- 5th path extending 41m from base of slope near sawmill to crest of slope above river.

(v) Granitic sand path extending along bank behind river bank retaining wall, 171 m. The path will be built up or run along the top of the retaining wall.

(vi) Remove existing bitumen and car parking on east side of Watson St at south end of AA and replace with charcoal covered concrete pavement with sawcuts. Maximum of 300mm excavation into existing road surface only will occur.

(vii) Remove kerb on east side of Watson Street and install angled car parks with bitumen surfaces. Maximum of 300mm excavation into existing road surface only will occur.

(viii) A new access road is to be constructed at the south end of the activity area approximately 48m in length x 5.14m width, running at right angles to Watson St. It will be surfaced with bitumen. Most of the road will be constructed on fill and will be at the same level as the river at it's east end and the same level as Watson Street near its north end. However, a cut of 900mm into the embankment will be required near the intersection of the present access road and Watson Street. The cut will be made to square the new road to Watson Street. It appears that this cut may be made on or near the site of an existing storm water drain.

(b) Stairs

Concrete stairs 21m in length at north end of the activity area. These follow the existing profile of the bank, but may require a cut of up to 600mm.

Concrete stairs 9.30m in length between interpretation shelter on embankment and Viewing Platform No. 3 above the riverbank. These require concrete footings up to 1.2m deep which will be sunk into the embankment at the south end of the activity area. This is part of the disturbed riverbank near the former morgue, sawmill and road to Hopwood's punt.

2.3 Other Works

(i) Excavation of cut behind (on west side of) existing pavilion approximately 1m back into the natural bank of the river to facilitate an extension to the building. This will be up to 4m deep near Watson Street.

(ii) Viewing Platform 1 approx 6.32 x 2.13m above bollards/retaining wall and east of pavilion. Approximately 500mm excavation under edge beam of platform away from river bank retaining wall.

(iii) Viewing Platform 2 approx 5.78 x 2.80m above existing bank of river behind/above bollards. To be constructed on fill.

(iv) Viewing Platform 3 approx. 8.19 x 7.80m at end of new access road above existing bank of river and at south end of sand-coloured concrete pavement. To be constructed on fill.

(v) Gravel plaza approximately 771m² on existing lower carpark in south half of activity area. This will generally be higher than the existing level. Maximum excavation required would be 300mm into existing car park and fill.

(vi) Northern Swale approximately 32m in length x 3m wide in front (east) of turning circle and bitumen access road. Possibly following existing stormwater.

(vii) North central swale – approx.. 26 x 1.4m. There will be some 300mm in the centre of the swale. Generally the area around the swale is to be built up.

(viii) South central swale – approx.. 11x4m. There will be up to 1500mm excavation in the centre of the swale.

(ix) Ephemeral wetland 15m x 6m. This is generally built up at the edge of the existing batter. A new retaining wall will be built at the toe of the batter. There will be up to 500mm excavation for the wall at the toe of the batter. There will be a 'recharge trench' under the pathway which will be 1600mm below the finished level.

(x) There will be new native grassland and embankment planting in addition to wetland vegetation over the swales and areas of lawn above the embankment and in front of the pavilion.

(xi) There will be two picnic shelters approximately 7 x 11m and 11 x 9m constructed either side of the new access road at the south end of the site. These will require 300mm excavation/fill for an underlying slab and 1m depth for posts. The posts may be in disturbed soil, but the depth of disturbance is not known.

2.4 Potential Impacts

The project would have the potential to impact historic heritage if it were present. In particular excavation works for the concrete stairs and new road at the northern end of the site, cuts into the natural embankment behind the pavilion, a path and new access road at the southern end of the site and the excavation of swales and recharge trenches could impact on historic cultural heritage. This report assesses the likelihood that one or more of the activities connected with the proposed development would impact on a historic place or site.

3.0 Environmental Conditions

The study area is situated on the west bank of the Murray River and is made up of a higher embankment on the western boundary and a lower flat adjacent to the river. The embankment is the edge of the Shepparton Formation (see Map 4 and Plate 2), which comprises Pleistocene floodplain deposits of clay, sand, silt and gravel (Geological Survey of Victoria, 2001). The alluvial flat is part of the present floodplain of the Murray River, formed on Quaternary Alluvium (Geological Survey of Victoria 2001, see Map 5 and Plates 5-6). The alluvial soils have a shallow A Horizon that is a grey-brown loam, brownishgrey light clay with brown, brownish grey or dark grey clay B Horizon (Skene & Harford 1964: 24, 30). The upper 20cm of surface soil is usually well structured, but there are variants with a more poorly structured surface soil (Skene & Harford, 1964: 30).

A geotechnical assessment of the site prepared in 2016, broadly characterised the soil profile as concrete or sandy gravel fill to depths of 100-120mm, overlying silty clay with some layers of clayey silty sand which continue to the bore terminations at 4 - 5 metres (Geotechnical Testing Services, 2016: 5 and Appendix 2).

Vegetation in the study area would have once comprised Grassy Riverine Forest (EVC 106), which occurs on the floodplain of major rivers, in a slightly elevated position where floods are infrequent, on deposited silts and sands, forming fertile alluvial soils. River Red Gum forest to 25 m tall with a groundlayer dominated by graminoids. Occasional tall shrubs are present (NatureKit Interactive Map Accessed 21/12/2017). There are some large and mature red gums in the study area which may pre-date European occupation of the region, but the majority are regenerated. Most of the understorey vegetation in the area has been cleared.

4.0 Relevant Statutory Legislation

4.1 Statutory Legislation - Victoria

The study area lies partly within Victoria and partly within NSW and consequently the heritage legislation of both states is relevant. The border between Victoria and NSW is shown on Map 4.

Heritage Act 1995 (Vic)

All historic archaeological sites in Victoria are protected by the Victorian *Heritage Act (1995)*, irrespective of whether these sites are listed on the Victorian Heritage Inventory or the Victorian Heritage Register. A Consent from the Executive Director of Heritage Victoria is required to disturb or destroy historic archaeological sites, places, buildings or structures listed on the Victorian Heritage Inventory.

A Permit from the Executive Director of Heritage Victoria is required to modify, disturb or destroy historic archaeological sites, places, buildings or structures listed on the Victorian Heritage Register. Permit applications must be approved by the Heritage Council.

Fees apply for the issue of Consents and Permits and a conservation bond is required for artefacts from a historic archaeological site. Heritage Victoria may also require a Conservation Bond for any conservation treatment of artefacts which are recovered from a development site.

The issue of a Permit or Consent is not automatic and will be subject to furnishing of adequate supporting documentation.

Planning and Environment Act 1987

An objective of the Planning and Environment Act 1987 (PE Act), is "to conserve and enhance those buildings, areas or other places which are of scientific, architectural or historical interest or otherwise of special cultural value" (Planning and Environment Act, 1987 4(1) (d)). The PE Act provides for the creation of planning schemes which are statutory documents that set out objectives, policies and provisions relating to, among other things, the conservation of heritage places. Clause 15.03 of the State Planning Policy Framework provides for the conservation of places of heritage significance. Clause 21.04 of the Local Planning Policy Framework (Shire of Campaspe) sets out a strategy for conservation of places of heritage significance including the implementation of a Heritage Overlay. The Heritage Overlay identifies Heritage Precincts, structures, places, vegetation and other features which are protected by the Campaspe Planning Scheme. The Heritage Overlay establishes controls for modification of these places.

Planning approval from the Shire of Campaspe would be required if the works impact on a place listed in the Heritage Overlay.

4.2 Statutory Legislation - NSW

Heritage Act 1977

The Heritage Act 1977 provides statutory protection for a place, building, work, relic, moveable object or precinct of State significance and historic shipwrecks and archaeological sites. Under Section 156 of the

Heritage Act it is an offence to fail to comply with any restrictions of the Heritage Act or a Direction of the Minister or the Heritage Council relating to Aboriginal heritage. It is also an offence to conduct an excavation of an archaeological site or harm a shipwreck without first obtaining a required permit (Division 9). A part of the study area on the west bank of the Murray River is within the Moama Historic Precinct and is listed on the NSW Heritage Register (Item 00600).

Under Section 58 of the *Heritage Act 1977*, approval of the Heritage Council is required in respect of the doing or carrying out of an Act, matter or thing referred to in Section 57(1), including demolition work, alterations, additions or new construction work, unless an exemption is in place.

Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 makes provision for Heritage Places to be protected within a Local Environment Plan (LEP). Under Section 92 of the Act, a local planning authority may not refuse planning approval on the basis of Heritage, if a Consent or Permit for the works has already been obtained under the Heritage Act 1977.

There are controls placed on buildings and precincts by the Local Environmental Plan (LEP) of the Shire of Murray in NSW. Part of the west bank of the river within the study area is within the Moama Historic Precinct, which is listed on Schedule 5 of the Shire of Murray LEP as a heritage conservation area of State Significance in NSW (Item C1).

5.0 History of the Study Area

Initial European occupation of the land around Echuca and Moama was associated with the overland cattle routes between Victoria and NSW. Hawdon and Bonney first drove stock through Echuca in 1838, in the area around Radcliffe Street and then crossed the Campaspe River near the existing Rotary Park (Coulson, 1995: 4).

The early settlement of Echuca and Moama stems largely from the rivalry between John Maiden and Henry Hopwood. In 1842, John Maiden was the superintendent of Perricoota Station on the NSW side of the Murray River, and, taking advantage of the traffic to meat and wool markets in Melbourne, constructed a punt across the Murray River, in the present-day town of Moama (Coulson, 1995:20-21). Maiden's punt was located well to the east of the present-day existing road bridge. In 1846, he constructed the Junction Inn at Moama, which was situated near the punt (Coulson, 1995:20-21).

Henry Hopwood arrived on the Murray River in 1849, and initially attempted to establish a bush inn on the Tattalia Run (Coulson, 1995: 31). This initial venture failed, and in 1852, he obtained a licence for the portion of the Wharparilla Run in Victoria, on the Junction of the Murray and Campaspe Rivers (Coulson, 1995: 35). Between 1854 and 1857 Hopwood established a punt, inn, two stores, two smiths, a doctor and a bakery to cater for travellers and residents (Coulson, 1995: 35). He subsequently constructed a pontoon and the still extant Bridge Hotel, on the corner of Hopwood Place in Echuca (Coulson, 1995: 38).

The location of Hopwood's original punt, hotel and associated buildings are shown on two early maps of Echuca, one dating from 1855 and the second dating from 1857 (Figure 1 and Map 6). The landing sites of the punt and pontoon bridge were situated in the south of the study area, adjoining what is now the Echuca Wharf Precinct. It has been possible to georeference the 1855 map using allotment and street boundaries to show the approximate location of Hopwood's punt (Map 6). On this map, it can be seen that there is a bend in the Murray River, which carried the river further east of the study area at this point. The 1855 map places the punt some 28m north-east of the existing river bank; the track leading from the punt to the embankment also appears to be depicted in a cut into the riverbank. This track also seems to be situated slightly south of the present access road to the carpark, but slightly north of the Echuca Wharf precinct. The higher embankment shown on the map (marking the edge of the Shepparton Formation) is in the same position as at present.

The track from Hopwood's punt led to a second crossing of the Campaspe River and then onto presentday Warren Street, as can be seen in Figure 1.

A clearer picture of the location of the punt and Hopwood's later pontoon bridge can be gauged from comparing historic images from c. 1870-1880 (Plates 7-8) with a 1926 parish plan (Map 7). The photographs show the punt, pontoon bridge, Hopwood's Inn and a building on the bank between the two tracks leading from the punt and pontoon. The latter is most likely the toll house, which after 1881 was used as a morgue, following closure of the punt (McAlister & Rhodes, 2013: 5). The punt ran across the river from the present-day boat slip in NSW to the riverbank in Victoria, which at that time was approximately 21m north-east of the current bank. The track from the punt was cut in a straight line through the embankment (Map 6, Plates 7-8) and across the north side of the toll house/morgue, while the track from the pontoon bridge was cut through the embankment past the south side of the tollhouse/morgue (Map 7, Plates 7-8). The existing access road to the study area is close to the alignment of the punt track. The track from the pontoon bridge would have crossed through the site of the former Evans Brothers sawmill, built c. 1920 (Rhodes & McAlister, 2013: 5). Approximately 600mm of fill was

found at this site during archaeological monitoring works in 2013 (Rhodes & McAlister, 2013: 12), showing that the height of the river bank has been raised across the sites of the pontoon track and tollhouse/morgue. An excavation on the site of the tollhouse/morgue located a post hole and remains of a timber post under c. 600mm of fill. The latter appear to be associated with the toll house (Wilby, 2011: 2-3).

The probable alignments of the punt and pontoon tracks across the contemporary river bank are illustrated in Plate 18. The track from Hovell's punt likely crossed near the river bank near the current mooring for the paddle steamer Canberra, while the track from the pontoon bridge was further south and traversed the current Echuca Wharf Precinct. Both tracks likely ran along the east side of the existing visitor interpretation centre and to the site of the original Echuca Wharf. However, the wharf was not constructed until a slightly later date in the 1860's (Lovell, 2007). Along with the river trade, the use of the punt and pontoon bridge would have declined after construction of the cross-border railway bridge c. 1877 (Lovell, 2007).

The only other significant structure in the study area is the concrete swimming pavilion. A swimming club was formed in Echuca during 1911 (Riverine Herald, 4th November 1911) and a newspaper article from 1912 refers to a fete and races held by the swimming club at the 'punt gangway' (Bendigo Independent, 1st March, 1912), which implies a location near Hopwood's punt. During 1926, a pontoon to act as a swimming enclosure was constructed at the slipway opposite (The Age, 15th November, 1926) and presumably towed into place at the north end of the study area. An early photo of the pontoon is shown in Plate 9. The image is dated to 1910, but this is possibly in error, since the pontoon shown in Plate 9 is the same structure as that shown in later images.

A cottage at Torrumbarry was purchased by the Echuca Swimming Club for the use of a caretaker during 1927 (The Age, 2nd November, 1927). The intention was to move the cottage to a location near the pontoon. The cottage along with changing rooms, appear to have been erected on the river bank behind (west of) the pontoon. Both the cottage and change rooms are visible in a 1945 postcard showing a view along the riverbank, looking south towards the pontoon (Plate 10).

The existing concrete pavilion in the study area was constructed around 1948; an article from the Riverine Herald (30th July, 1948) describes it as a "..modern concrete building.." which is 106 ft (33.22m) long by 19ft (5.79m) in width which contains dressing sheds. Other features of the building described are a kiosk and toilets on the flat roof, which was fenced so it could double as a grandstand (Riverine Herald, 30th July, 1948). Concrete steps leading down to the river were constructed in front of the pavilion. The Riverine Herald article also stated that a club house would be constructed next to the grandstand, but it is not known if the latter was built.

Two images show the pontoon before and after the pavilion was constructed (Plates 11 - 12). Prior to construction, the river bank sloped down towards the pontoon and was largely unmodified (Plate X). One of the older changing rooms is visible near the left side of the image included as Plate 11. After construction of the pavilion, the riverbank had been cut back to allow construction of the concrete steps (Plate 12). The pavilion appears to be aligned with the river bank and appears closer to the bank than at present. South of the pavilion, the river bank appears to curve further east than at present, which is consistent with the river alignment shown on historical maps (Maps 6-7). By 1960, however, the same section of river bank seems to have been straightened (Map 8), probably in connection with bank stabilisation works.

Since 1960, there have been further bank stabilisation works carried out. The area in front (east) of the pavilion has been filled to extend the bank some 14-15m north-east of the pavilion and the steeply sloping river bank to the north (Map 2, Plate 4). As a result, the existing river bank is no longer aligned with the pavilion and the concrete stairs have either been filled over or removed. The entire river flat behind the original bank has been straightened and filled, modifying it considerably from its original form. Many of the red gums around the existing car park and visible in the c.1950 image (Plate 12) appear to have been retained, however.

6.0 Previous Studies

6.1 Heritage Registrations

A search was conducted of the following heritage registries for the purposed of this historic due diligence assessment:

- National Heritage List;
- Victorian Heritage Register and Inventory;
- NSW Heritage Register and Inventory;
- Register of the National Trust;
- Shire of Campaspe Heritage Overlay; and
- Shire of Murray Local Environment Plan (LEP) Schedule 5.

There were no previously registered heritage sites or places on the Victorian Heritage Inventory or the Victorian Heritage Register within the study area. The Echuca Wharves, adjoining the south boundary of the study area, are included on the National Heritage List (Place ID 105777). The wharves are also listed on the Victorian Heritage Register (H2168) and the Shire of Campaspe Heritage Overlay (HO 7). The Echuca North Residential Precinct extends to the west side of Watson Street, but does not include the study area. The Register of the National Trust lists the Echuca Historic Area (B2186), but the extent of the registration is not defined.

There were no previously registered heritage sites or places in the NSW Heritage Inventory. There were no shipwrecks listed within the study area. The Moama Historic Precinct is listed on the NSW Heritage Register (Item 00600) and the Shire of Murray LEP (Part 2 of Schedule 5 Item C1) as a cultural landscape. It extends from the east bank of the Murray River and eastwards to the Cobb Highway and on to the small portion of the study area within NSW, specifically the west bank of the Murray River.

6.2 Previous Archaeological Assessments

There have been no previous archaeological assessments which have included the study area, but there have been several to the south in the Port of Echuca precinct. The most comprehensive review of the history of the Echuca wharf and associated structures is the Conservation Management Plan produced by Lovell Chen (2007), but this does not extend to the current study area.

There have been previous archaeological assessments of the Echuca Wharf. There have been two surveys of the former Echuca Wet Dock, located to the south of the existing wharf. A survey by Coroneos (1991) located piles, timber sheeting and a range of artefacts in a spoil pile dredged from the dock. However, the assessment concluded that considerable damage to remains of the original structure had been caused by works carried out by the Port of Melbourne Authority during 1987 (Coroneos, 1991: 17-18). A later survey of the wet dock site south of the wharf (Rhodes, 2010¹) found piles associated with an earlier wharf and traces of timber sheeting around the wet dock, but no additional features. The wet dock itself was largely removed. Remains of piles and timber sheeting associated with the pre-1945 wharf were found on the river bank during a survey of the Echuca Wharf immediately to the north of the wet dock in 2010 (Rhodes, 2010²: 9).

Cosmos Archaeology have conducted two test excavations within the Evans Sawmill area (Lewczak 2011). Two preliminary excavation reports have been released, but the final excavation report was not

available at the time of writing. One report deals with a test excavation of the former slab hut and store site at the Port of Echuca (Lewczak 2011). The second deals with an excavation on the site of the former Toll House and Morgue (Wilby 2011).

An 8m x 2 metre trench was excavated on the site of the toll house/morgue, exposing two layers of crushed gravel up to 30cm in depth; the latter are interpreted as a recent gravel layer laid in the 1990's, overlying an earlier layer of gravel possibly associated with levelling of the area during the operation of the Evans Brothers saw mill (Wilby, 2011: 2). These in turn overlay a layer of black and/or burnt silty clay deposit some 25-30cm thick, which contained numerous timber off cuts and sandstock brick fragments that are likely associated with the operation of the Evans Brothers sawmill (Wilby, 2011: 2). These overlay an orange-brown compact clay that was interpreted as natural soil. One square post hole measuring 17 x 15cm cut into the natural clay soil was found near the base of the deposit, containing the remains of a timber post (Wilby, 2011: 3). The post hole was situated on the predicted alignment of the SW wall of the toll house and had not been cut through subsequent layers of fill, suggesting that it was part of an earlier structure, rather than a recent intrusion (Wilby, 2011: 2-3).

A second excavation was conducted in the north eastern corner of the Port of Echuca precinct on the site of a slab hut and store (Wilby, 2011). Excavation of this area revealed layers of fill, comprised of milled timber offcuts associated with the 1960's sawmill, overlying a thin layer of charcoal possibly associated with the fire which destroyed the Evans Brothers Mill (Wilby, 2011: 1-2). Two postholes associated with the Evans Brothers Mill containing charcoal and burnt timber were found at the base of this layer. A layer of quartz gravel and sandstock brick fragments was found underlying the charcoal and alternate layers of fill continuing to a depth of 0.5m and overlying natural brown clay (Wilby, 2011: 2). An area paved with sandstock bricks was found at a depth of 0.3m on the west side of the excavation area, but this is interpreted as recent paving using recycled bricks, as it is situated above the burnt charcoal layer likely associated with the Evans Brothers Mill (Wilby, 2011: 3).

Archaeological monitoring was carried out during 2013, at the site of the Evan Brothers sawmill in the Port of Echuca precinct, during the construction of a new visitor interpretation facility (McAlister & Rhodes, 2013). A total of twelve archaeological features associated with the sawmill were defined, which included postholes and red gum upright posts, red gum bearers preserved in section, concrete machine mounts, railway sleepers associated with a branch line to the mill and red gum logs associated with a log haul on the banks of the Murray River (McAlister & Rhodes, 2013: 12,15). All of these features were situated outside and south of the current study area. No significant deposits of historic artefacts were defined during the monitoring.

A second archaeological survey of a road alignment for the new Echuca-Moama bridge was carried out near the northern boundary of the current study area (Rhodes, 2015). This survey did not located any historic sites or places along the section of the road alignment that was situated to the north of the study area.

A conservation management plan for the Echuca Wharf Precinct did not identify any historic places, sites or potential archaeological deposits to the north of the precinct and within the study area (Lovell Chen 2000).

7.0 History and Previous Archaeology: discussion and summary

The main historic feature with which the study area is associated is the site of Henry Hopwood's punt and pontoon bridge, the main crossing point of the Murray River prior to the construction of the rail bridge between 1876 - 1878. However, the punt and bridge appear to have been further east of and outside the study area on an eastward bend of the river. The banks of the river were later straightened, removing the low alluvial flat by the river bank at which the punt was docked. The track linking the punt to the Echuca Wharf Precinct and Warren Street appears to have crossed the embankment just to the south of the study area (see Map 6 and Figure 1). A track linking the Pontoon Bridge to Echuca and the wharves appears to have been situated south of and outside the study area.

The other main use of the study area has been recreational. The river near the study area appears to have been the site of swimming races during the early years of the twentieth century. A pontoon swimming pool was constructed adjacent to the west bank of the river during 1926. There were change rooms and a caretakers hut situated on the alluvial flat west of the pontoon. These were replaced around 1948 by the existing brick change rooms and kiosk pavilion. Concrete steps leading to the pontoon were also constructed at this time; the steps were later removed or buried under fill on the river bank.

There are underground services including stormwater drains, sewage, water and electricity on both the alluvial flat and western embankment adjoining Watson Street. Construction of the latter, particularly sewage and stormwater, would have required fairly significant excavation. Over and above the historical land use within the study area, these would have caused considerable ground disturbance. Timber sheeting has been installed along the riverbank to help stabilise the embankment; in other locations, the slope below the Watson Street embankment has been cut away and railway sleepers installed to help stabilise the slope.

The modification of the study area during the 20th Century, means that it is highly unlikely that any archaeological features associated with Hopwood's punt will survive within the study area.

8.0 Archaeological Survey

8.1 Field Methods and Ground Visibility

An archaeological survey of the study area was carried out on 13/12/2017 by David Rhodes; the fieldwork was conducted in association with a Cultural Heritage Management Plan assessment and two representatives from the Yorta Yorta Nations, Ashleigh Miller and Michael Clark also participated in the fieldwork. The entire study area was systematically surveyed with particular attention paid to works areas. The development plan was inserted as a layer in the GPS job file, enabling specific areas where deep excavation would be carried out to be identified. Prior to commencing the fieldwork, a survey notification was lodged with Heritage Victoria (Appendix 1).

Ground visibility varied considerably; under the existing picnic facilities, it was nearly zero due to heavy grass cover. Among the existing car park, on the east side of the pavilion and along sections of informal tracks at the northern end, ground visibility was nearly 100%. It is unlikely that poor visibility on the alluvial flat would have affected the survey results in any case, since the entire area appears to have been filled (see below).

It is evident that the lower alluvial flat has been levelled, probably within the past c. 40 years, by the introduction of fill across the land surface. Soil levels around the base of mature red gum trunks have been increased, providing some evidence of this (Plate 6). As noted earlier, the geotechnical report states that there is some 25 - 30 cm of fill across the lower terrace. It is possible that the fill could mask any underlying historical features, but this is also considered unlikely. One of the main features that may exist are the concrete steps leading to the former pontoon, if they were not removed.

8.2 Survey Results

No historic archaeological sites or potential archaeological deposits were identified in the fieldwork, either in Victoria or NSW.

There is considerable ground disturbance across the study area. The slope behind (west of) the pavilion has been cut back to enable construction of the latter (Plate 13). It is likely that soil excavated during construction was also thrown back over the slope. The external walls and roof of the pavilion appear to be in good condition as is the rear access path leading to the top storey of the structure (Plates 4 and 13-14). Original concrete lamp posts flanking the entrance to the roof top pathway are in good condition (Plates 15 - 16) and will be retained and relocated during works for the modernisation of the new pavilion.

An existing informal walking track which will form the new entrance at the north end of the site, was also inspected closely. The walking track is north of the pavilion and crosses the bank and escarpment on the east side of Watson Street (Plate 17). No archaeological features were noted.

The general area around the track between Hopwood's punt and Warren Street was also inspected closely. This track was situated on the north side of the existing access road (see Maps 6-7 and Plate 18). The track from Hopwood's punt crossed the river bank near the north (right) side of this image, roughly aligned with the mooring for the *Canberra*, on the north (right) side of the image in Plate 18. However, the original track itself has been both excavated and filled within the study area. Wooden signs nailed to gum trees, mark the general location of Hopwood's punt and there is a piece of the steel cable along which the punt moved attached to one of the signs (Plate 19).

A dead stump of a mature eucalypt with a steel cable tie attached was found on the river bank at this location (Plate 20). It is more likely that the cable and tree trunk were used as a mooring for paddle steamers. The cable is more modern and a smaller diameter, than the example of the cable used for Hopwood's punt (see Plate 19). The mooring stump itself is some 40m west of the original river bank.

9.0 Assessment of Potential Impacts and Conclusions

It is considered unlikely that the works will impact on any historic archaeological sites. Although the study area is situated close to the Echuca Wharf precinct and was the landing site of Hopwood's punt and pontoon bridge, it is highly unlikely that any features associated with the latter are extant.

The landing site for Hopwood's punt and pontoon bridge appear to have been situated in what is now the channel of the Murray River and some 40m east of the river bank. The area crossed by the track connecting the punt to the site of the Echuca Wharf and to High Street and Warren Street has since been filled. The connecting track was also near the route of the existing access road, which has been excavated in the past to install sewage and stormwater drains. The river bank at the south end of the study area has been straightened within the past c. 50 years, probably during erosion stabilisation works. There has been timber sheeting installed along the bank and fill has been added behind the sheeting.

The track from the pontoon bridge would have been situated to the south of the former tollhouse/morgue and within the Echuca Wharf Precinct. Fragmentary remains of the tollhouse/morgue were excavated within the Echuca Wharf Precinct during 2011.

Only one other known historical feature was found within the study area. These were the pontoon baths and associated structures on the river bank. Originally there appear to have been two separate change rooms and a caretakers hut erected behind the pontoon. These were removed during the 1940's and replaced by the existing concrete pavilion. There were concrete stairs leading to the pontoon in front of the pavilion and on the river bank. These stairs have either been removed or covered over with fill behind timber sheeting on the river bank.

Given the level of disturbance to the river bank and the fact that there appear to be few other historical features within the study area, it is considered highly unlikely that any structural features or associated artefacts will be found. This is the case in both the NSW and Victorian sides of the study area. The proposed excavation sites (see Map 3) do not occur at the sites of any known historical features. Reconstruction of the pavilion to provide a modern facility will not impact on any features or on a structure on the Campaspe Heritage Overlay, the Victorian Heritage Inventory or the Victorian Heritage Register.

It is the conclusion of this study that the works are highly unlikely to impact on historic heritage. In NSW the riverbank has been heavily modified. The alignment of the bank has changed between the nineteenth century and 2018 and the landing site of Hopwood's Punt and the associated road cutting has been removed. The bank has been straightened and part of the stairs and associated swimming pontoon, which would have been in NSW, have either been filled over or removed. The original bank has been filled and stabilised with timber sheeting along the edge of the study area. The wharves and moorings in NSW are not part of this project. The project does not impact on the Echuca Wharf Precinct.

The study found that works are also unlike to impact on Historic Heritage in Victoria and that there is a low risk of impacting on an archaeological site, again because of the amount of previous excavation and filling which has taken place within the study area.

There is no requirement for further heritage assessment prior to commencement of works for the project. Approval may be required for works on the portion of land which is within NSW, under Section 58 of the NSW *Heritage Act 1977*, unless an exemption is in place.

10.0 Management Recommendations

Recommendation 1

Although it is considered unlikely, there must be provision in the works specification or environmental management plan for the project that contains a process for reporting the discovery of any suspected historical features, particularly any which may be associated with the wharf or the punt. This is contained below.

(a) If suspected historic features are discovered during any excavation works, work should cease immediately in the area where the discovery has been made. Examples of historic features that may be found include:

- Buried timber posts, bearers or obvious post holes, most likely to be in association with metal objects, including bolts, spikes and nails; and
- Buried deposits of artefacts, including ceramics, bottle glass and metal. These may either be present as a layer in the soil horizon, in a distinct sub-surface feature such as a pit or mixed through the soil.

Structural features or artefact deposits are most likely to be present below the fill on the floodplain, which geotechnical testing suggests is some 25cm in depth.

(b) The contractors conducting the works should appoint a qualified historical archaeologist to be available to either inspect or comment on works. If any such features are found, the contractor should immediately contact the archaeologist to report the discovery.

(c) It will be useful for the contractor to provide as much information on what has been found to the archaeologist. Photos of the features located should be provided, with a suitable scale in the photographs. Depending on the size of the objects, a small scale such as pen or a larger scale such as a stadia rod or range pole would be useful.

(d) If the archaeologist does not consider the features to be a historic artefact(s) or structure(s) then work may recommence at the location immediately.

(e) If the archaeologist considers that the features are likely part of a historic archaeological site, the area where they were found must be securely fenced with temporary webbing. The archaeologist must arrange to visit the site as soon as possible, confirm the identification of the features and thoroughly record them. The archaeologist should produce a brief report on the features and provide the contractor or Council on the best method of management. The preferred treatment of any features located is to leave them *in situ* on the site, if this is at all possible.

(f) If the historic features must be removed by excavation, it will be necessary for the contractor or Council to apply to Heritage Victoria for a Consent to Disturb an archaeological site. In NSW, the contractor will be required to apply to the NSW Office of Environment and Heritage (OEH) for a Permit pursuant to Section 58 of the *Heritage Act 1977*, unless an exemption or existing Permit is in place. The Consent application must be accompanied by a full report on the feature and contain recommendations for its management, which may include excavation. As much detail as possible must be provided by the

archaeologist, in order to expedite the Consent application in a timely manner. No work must take place in the area where the feature was found, before receiving the relevant Consent. There may be a requirement for further excavation or a watching brief as a condition of the Consent.

(g) If further works to excavate or monitor the removal of a historic feature are required, the archaeologist conducting the works must provide a full and detailed report on the results of this further work, which complies with Heritage Victoria standards in Victoria or OEH standards in NSW.

Bibliography

Maps

Department of Environment, Land, Water and Planning 2017 Naturekit Interactive Map.

Geological Survey of Victoria 2001. 1:250 000 Geological Map Series Bendigo SJ 55-1 Edition 3

State Aerial Survey, Victoria & Adastra Airways & Victoria 1945. Photo-map of Victoria 778A4, Echuca, Melbourne, Dept. of Crown Lands and Survey.

Surveyor General's Office, 1855. Township of Echuca on the Murray and Campaspe rivers Lithographed by R. Meikle. Melbourne

Department of Crown Lands and Survey 1926 Town and part of Borough of Echuca, Parishes of Echuca North and Wharparilla, Counties of Rodney and Gunbower. Photo-lithographed by W. J. Butson. Melbourne.

Photos

Anonymous c. 1945 Murray River Showing Swimming Area, Echuca, Vic. Miniature Postcard. State Library of Victoria.

Creelman & Bent ca. 1860-1870 The Punt at Echuca. Albumen Print. State Library of Victoria.

Nettleton, Charles ca. 1870-1880 Echuca, Punt on the Murray 156 Miles N. from Melbourne. State Library of Victoria.

Rose Stereograph Company, c.1920-1954 The Bathing Pool, Murray River, Echuca. Postcard. State Library of Victoria.

Rose Stereograph Company, c. 1920-1954 Swimming Pool and Children's Pontoon, Echuca. Postcard. State Library of Victoria.

Valentine Publishing Co. c. 1910, Swimming pontoon on the Murray River, Echuca, Victoria. State Library of Victoria.

Published Works

Clark, Vincent 2001 Echuca Wet Dock Cultural Heritage Study: Report to the Shire of Campaspe. Dr Vincent A Clark & Associates Pty Ltd, Woodend.

Coroneos, Cosmos 1991 The Proposed Development of Wet and Dry Dock Facilities Adjacent to Echuca Wharf by the City of Echuca, Victoria. An Assessment of the Impact on the Archaeological Resource. Report Prepared for the City of Echuca. Cosmos Coroneos, Albert Park.

Coulson, Helen (1995) Echuca-Moama on the Murray. Hyland House, South Melbourne.

Geotechnical Testing Services 2016 Kiosk and Waterfront Redevelopment, Echuca. Geotechnical Investigation for Shire of Campaspe.

Lovell Chen 2007 Echuca Wharf Echuca Conservation Management Plan. Report prepared for the Shire of Campaspe.

McAlister, Renee and David Rhodes 2013 Archaeological Monitoring of Works at the Port of Echuca. Report to the Shire of Campaspe. Heritage Insight, Melbourne.

Priestley, Susan (1965) Echuca, A Centenary History. The Jacaranda Press Pty Ltd, Queensland.

Rhodes, David 2010¹ Echuca Wet Dock Area Due Diligence Aboriginal Archaeological Assessment. Report to the Shire of Campaspe. Heritage Insight, Melbourne.

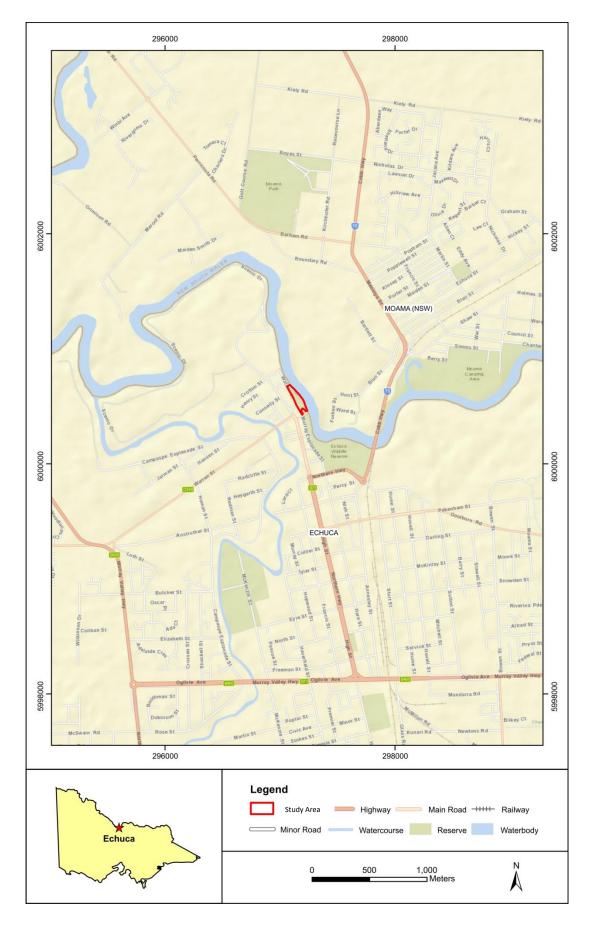
Rhodes, David 2010² Echuca Wharf Due Diligence Aboriginal Archaeological Assessment. Report to the Shire of Campaspe.

Rhodes, David 2015 Echuca-Moama Bridge EES: Historic Heritage Impact Assessment. Report to VicRoads. Heritage Insight, Melbourne.

Skene, J.K.M & L.B. Harford 1964. Soils and Land Use in the Rochester and Echuca Districts, Victoria. *Technical Bulletin No. 17, Department of Agriculture, Victoria.*

Wilby, C., 2011. Test Excavation of the former Toll House and Morgue at Port of Echuca, Maroubra: Cosmos Archaeology Pty Ltd.

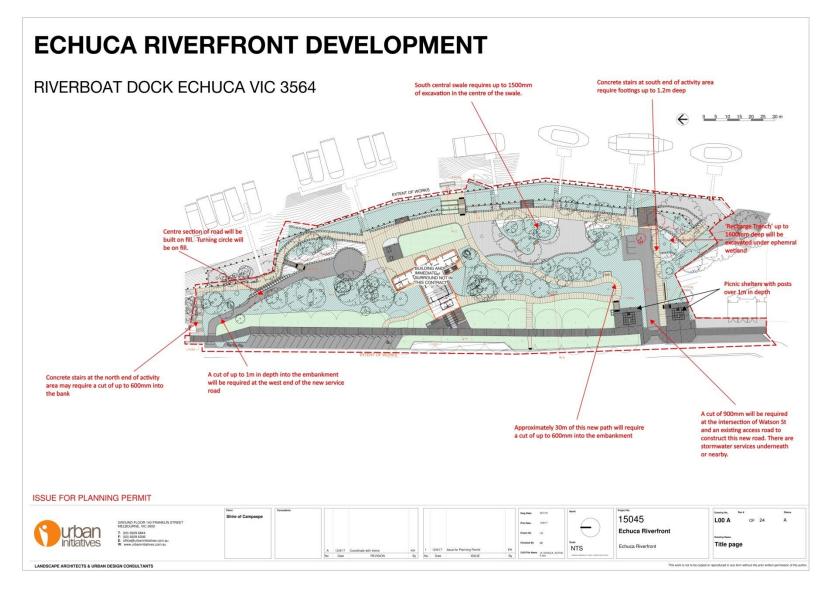
Maps



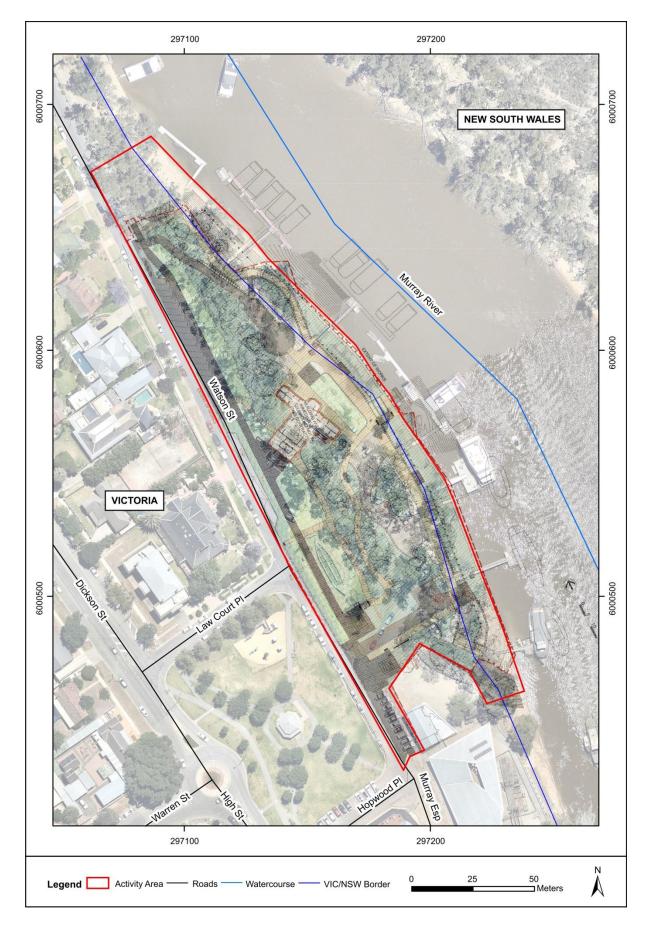
Map 1: Study area location



Map 2: Study area, existing conditions

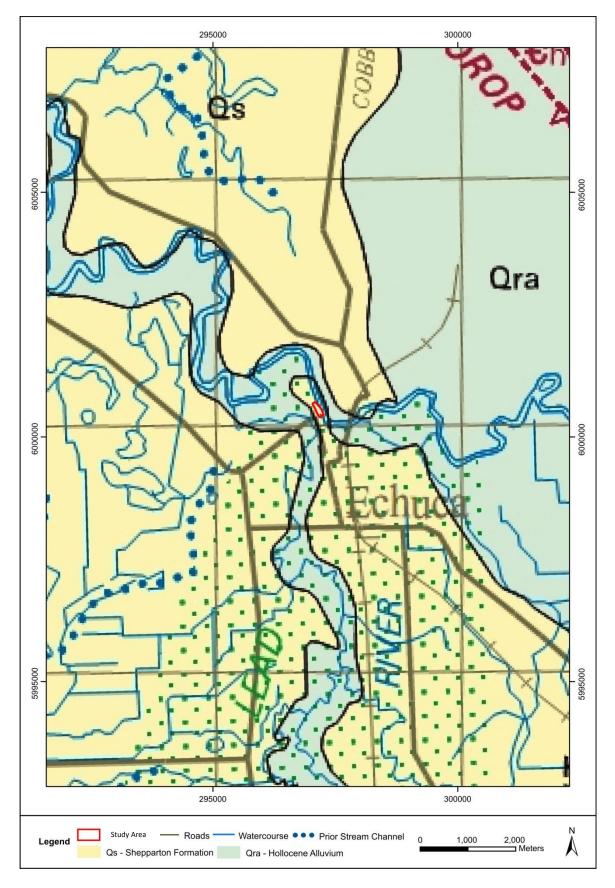


Map 3: Development Plan with main areas of excavation marked up

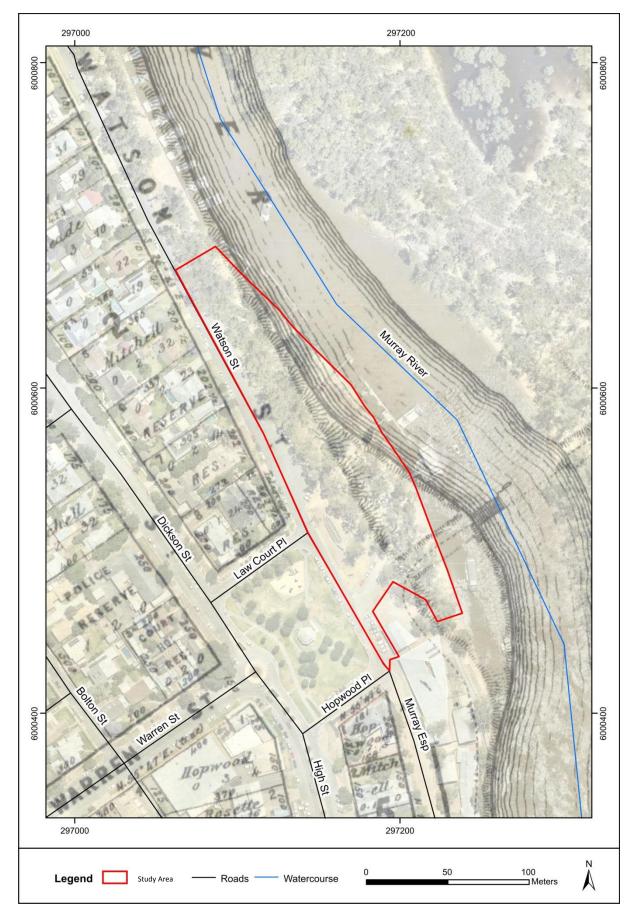


Map 4: Development Plan overlaid on aerial

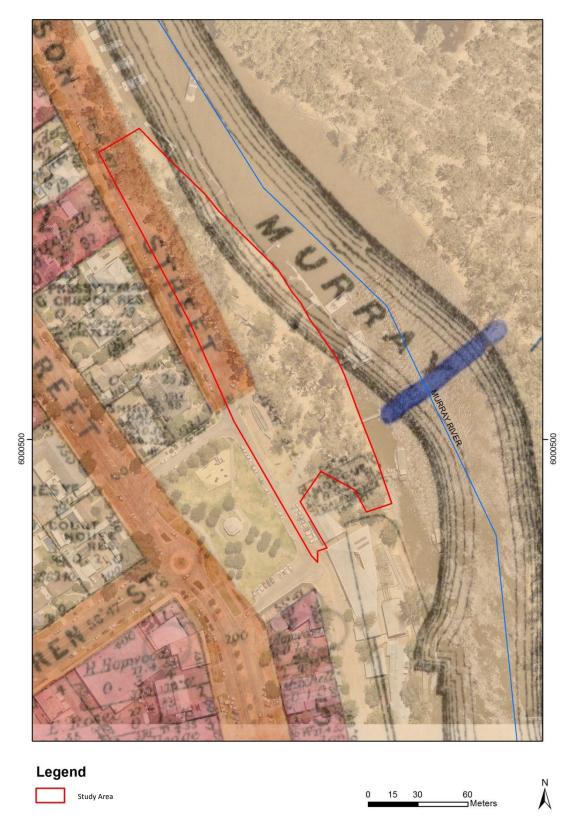
Document Set ID: 2461130 Version: 1, Version Date: 24/09/2018

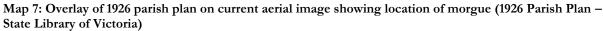


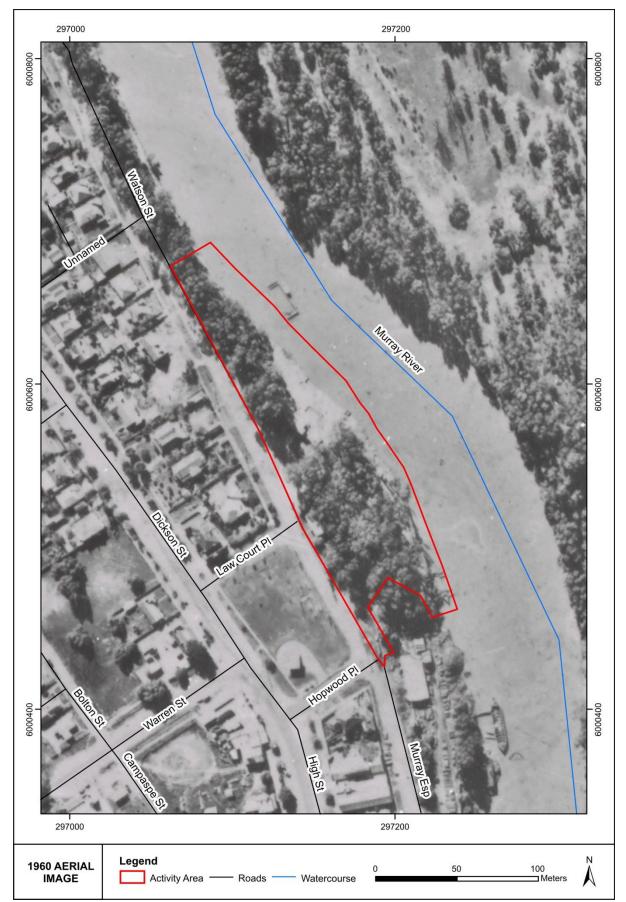
Map 5: Geology of the study area



Map 6: Overlay of Parish Plan c. 1855 on current aerial image (1855 Parish Plan - State Library of Victoria)







Map 8: 1960 aerial image of the study area (State Library of Victoria)

Figures

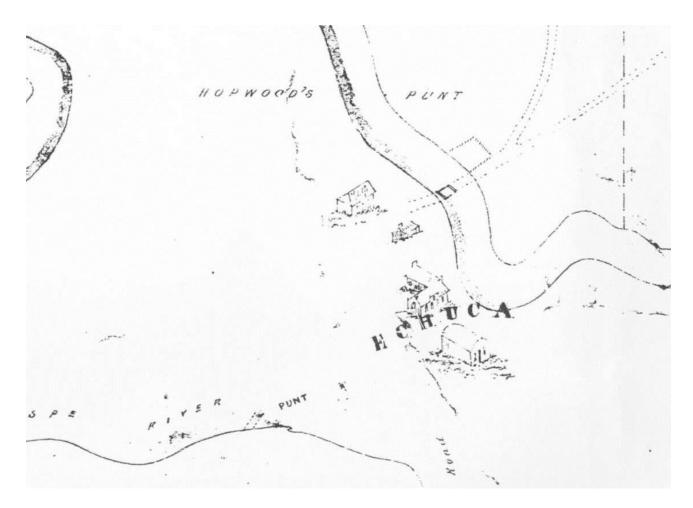


Figure 1: 1857 map showing the location of Hopwood's punt, the tollhouse/morgue and the second punt across the Campaspe River (Echuca Historical Society)

Plates



Plate 1: Study area and west bank of the Murray River, facing west



Plate 2: Study area facing south along the crest of the natural embankment and Watson Street



Plate 3: Alignment of proposed new access road at the south end of the study area, facing east.



Plate 4: Concrete pavilion, containing changing rooms and kiosk facing west.



Plate 5: Facing south along car parking and recreational space on the lower floodplain



Plate 6: Looking south along the existing car park on the alluvial plain. Note the height of fill against the red gum trunk in the background.



Plate 7: Punt and pontoon bridge over the Murray River (Nettleton c. 1870)



Plate 8: Punt and pontoon bridge over the Murray River (undated photo)



Plate 9: Postcard showing the swimming pontoon probably c. 1920's (National Library of Australia)



Plate 10: Postcard c.1945 looking south along the river bank towards the pontoon (State Library of Victoria)



THE ROSE SERIES P. 2404

THE BATHING POOL, MURRAY RIVER, ECHUCA, VIC.

Plate 11: Looking north along the riverbank adjoining the pontoon, prior to construction of the pavilion. The edge of one of the older change rooms is visible on the left (State Library of Victoria)



SWIMMING POOL & CHILDRENS' PONTOON, ECHUCA, VIC. THE ROSE SERIES P. 12265

Plate 12: View looking south-west showing the pontoon, pavilion and concrete steps c. 1950 (State Library of Victoria)



Plate 13: Rear wall of pavilion facing south.



Plate 14: Southern half of pavilion building (rear) facing east.



Plate 15: Concrete lamp post on the north side of pavilion entrance at Watson Street.



Plate 16: Concrete lamp post on the south side of pavilion entrance at Watson Street.



Plate 17: Alignment of the new access road at the north end of the study area, facing north.



Plate 18: General location of the tracks from Hopwood's punt and pontoon bridge, facing west.

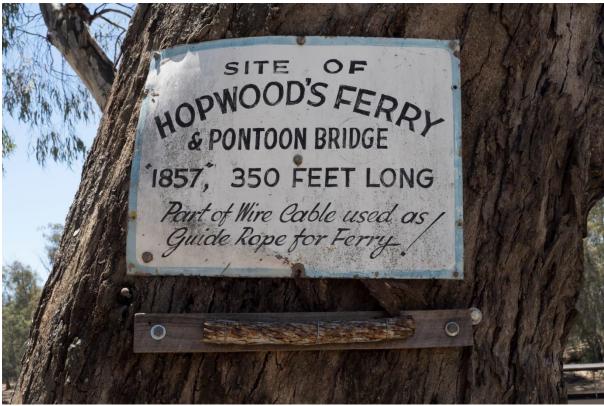


Plate 19: Historical interpretation sign with punt cable.



Plate 20: Stump with mooring cable on the east bank of the river

Appendix 1: HV Survey Notification



Archaeological Survey Notification

Pursuant to Section 131(1) of the *Heritage Act* 1995, this form must be completed in full and submitted to Heritage Victoria prior to conducting an archaeological survey. Please note that approval to access the survey area must be arranged by the applicant.

1. Applicant details

Name: ...David RhodesEmail address: ...davidrhodes@heritageinsight.comCompany: ...Heritage Insight Pty LtdPostal address: ...53 Stubbs Street, KensingtonPostcode...3031Telephone (business hours): ...9376 6569Mobile: ...0417 366 972Commissioning agent: ...Shire of CampaspeReason for survey: ...Proposed riverfront redevelopment at Echuca

2. Survey location

A map clearly identifying the survey area must be attached to this form. For larger, or linear, surveys more than one map may be required. If surveying the seabed, attach a chart clearly identifying the survey area and location.

Location name: ... Watson Street, Echuca (see attached map)

Address:

.....

Mapsheet number (1:100,000): ...7825

Mapsheet name (1:100,000): ... Echuca

3. Survey dates

It is intended that the survey will be conducted between the following dates:

From:13/12/2017...... To: ...13/12/2017

Diffe

Applicant's signature:12/12/2017.....

This form must be lodged with Heritage Victoria's Archaeology Team at: <u>Archaeology.admin@dtpli.vic.gov.au</u> Heritage Victoria GPO Box 2392 Melbourne Vic 3000

..... Date:

APPENDIX C:

Specialist Aboriginal Cultural Heritage Assessment report

Development Application: Echuca Riverfront Redevelopment Project – Port of Echuca, Watson Street, Echuca