

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
1	30/11/2023	Sarah-Jane Zammit	Josh Symons and Jenny Winnett	21/12/23	Draft
2	12/01/2024	Katrina Stankowski	Scott MacArthur	12/01/2024	Draft V2
3	18/07/24	Sarah-Jane Zammit	Josh Symons	19/07/24	Final Draft
4	10/09/2024	Scott Macarthur	Jenny Winnett	19/09/2024	Final

Proposal name:	New Richmond Bridge and Traffic Improvements Stage 2
Author:	Monika Sakal, Jonny Love, Johnny Sokalik, Stephanie Moore, Sarah-Jane Zammit
Proposal manager:	Sarah-Jane Zammit, Katrina Stankowski
Proposal number:	230634
Name of organisation:	Artefact Heritage and Environment and Environment
Document version:	Final

© Artefact Heritage and Environment

This document is and shall remain the property of Artefact Heritage and Environment. This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of the Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Disclaimer: Artefact Heritage and Environment has completed this document in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the document content or for any purpose other than that for which it was intended.



EXECUTIVE SUMMARY

Transport for NSW (Transport) proposes to upgrade Bells Line of Road / Kurrajong Road between Crooked Lane, North Richmond and Old Kurrajong Road, Richmond and construct a new bypass south of Richmond town centre. This is known as New Richmond Bridge and traffic improvements – Stage 2 (the proposal). The new route between Richmond and North Richmond would provide a minimum five per cent annual exceedance probability (AEP) flood resilience. The proposal is about 50 kilometres north-west of the Sydney Central Business District (CBD) and about 33 kilometres north-west of Parramatta. It is in the Hawkesbury City Council local government area (LGA).

The proposal would be delivered in two stages, known as Stage 2A and Stage 2B. Should this REF be determined, and the already committed funding by the Australian Government and NSW Government released, Stage 2A would be constructed. This is expected to be complete by 2029. While the REF has assumed that Stage 2B would be delivered by 2039, this would be subject to additional funding approval.

Stage 2A of the proposal includes a new four-lane bridge over the Hawkesbury River about 30 metres downstream of the existing Richmond Bridge, widening of Bells Line of Road through North Richmond to provide two lanes in each direction between the new bridge and the Terrace Road / Grose Vale Road intersection and a new bypass to the south of the Richmond town centre. The bypass would extend about 1.7 kilometres across the floodplain between the Kurrajong Road / Old Kurrajong Road intersection and Castlereagh Road / Inalls Lane / Southee Road intersection. Stage 2A of the proposal would also provide an active transport corridor between North Richmond and Richmond. This would include a new shared path on the southern side of Kurrajong Road between Old Kurrajong Road and Chapel Street and the conversion of the existing Richmond Bridge into an active transport connection across the Hawkesbury River.

Stage 2B of the proposal includes widening of Bells Line of Road between the Terrace Road / Grose Vale Road intersection and west of Charles Street and at its intersection with Crooked Lane. The bypass would also be extended 1.3 kilometres east from Castlereagh Road to Londonderry Road and would be a new road alignment to the south of Southee Road. Southee Road would connect to the bypass opposite Valder Place. The Londonderry Road / bypass / Vines Drive intersection would also be upgraded.

The study area is located within the Hawkesbury Local Council encompasses the proposal area (construction footprint). Artefact has included a 250m buffer around the study area to assess the potential impacts from the construction (including to views) of heritage items which fall within the study area and those in the vicinity. Within this 250m buffer of the study area, there are a number of heritage items including State significant 'Hobartville' (SHR #00035), 'Bowman House' (SHR #00468), Mountain View (SHR #00044) and a number of locally significant items listed on Schedule 5 of the *Hawkesbury Local Environmental Plan 2012*. Additionally, the Hawkesbury River Bridge, which is a listed s170 item, is located within the study area.

Artefact Heritage and Environment have been engaged by Aurecon Australia Pty Ltd to undertake a Statement of Heritage Impact as part of the requirements for the Review of Environmental Factors for the proposal approval.

Overview of findings

This Statement of Heritage Impact has made the following conclusions:

It is noted that the proposed works will encroach on the heritage curtilages of three identified
heritage items for this proposal. The proposed works do not seek to alter any of the existing
gazetted heritage curtilages, all curtilages will remain unchanged

Summary of heritage impacts within SHR and LEP curtilages and within the vicinity in the buffer zone

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
Avenue of trees east and west side of street	Chapel Street, Richmond	HLEP 2012 I18	Minor adverse	Minor adverse	Within the study area
Bowman House	368-370 Windsor Street, Richmond	SHR No. 00468 HLEP 2012 I00468 RNE Place ID. 3198	Neutral	Neutral	60m north of the study area, within 250m heritage buffer
Buildings, outbuildings, grounds, trees (of Bowman House)	f 49-51 Bosworth Street, Richmond	SHR No. 00753	Neutral	Neutral	200m southeast of the study area, within 250m heritage buffer
The cottage	313-315 Windsor Street, Richmond	HLEP 2012 I124	Neutral	Neutral	190m northeast of the study area, within 250m heritage buffer
Eltham	317 Windsor Street, Richmond	HLEP 2012 I125	Neutral	Neutral	175m northeast of the study area, within 250m heritage buffer
Former house	190 March Street, Richmond	HLEP 2012 I72	Neutral	Negligible	Adjacent east of the study area, within 250m heritage buffer
Former police station and residence	39 Bells Line of Road, North Richmond	HLEP 2012 I406	Neutral	Neutral	Adjacent southwest of the study area, within 250m heritage buffer
Hawkesbury River (Road) Bridge	Kurrajong Road, North Richmond	TAHE S170 RNE Place ID. 15946	Negligible	Moderate adverse	Within the study area
Hobartville, including outbuildings	Kurrajong Road, Richmond 36-86 Inalls Lane, Richmond	SHR No. 00035 RNE Place ID. 3133 NSW NTHR No. 7920	Negligible to temporary minor adverse	Negligible to moderate adverse	Within the study area
Grounds and landscaping surrounding 'Hobartville'	25-29 Bosworth Street, Richmond	HLEP 2012 I00035 & I14	Neutral	Minor adverse	Within the study area

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
House	35 Bosworth Street, Richmond	d HLEP 2012 I3	Neutral	Neutral	160m east of the study area, within 250m heritage buffer
House	9 Chapel Street, Richmond	HLEP 2012 I17	Neutral	Neutral	160m east of the study area, within 250m heritage buffer
House	32 Inalls Lane, Richmond	HLEP 2012 I41	Neutral	Neutral	170m north of the study area, within 250m heritage buffer
House	335 Windsor Street, Richmond	HLEP 2012 I126	Neutral	Neutral	Within the study area
House	337 Windsor Street, Richmond	HLEP 2012 I127	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	339 Windsor Street, Richmond	HLEP 2012 I128	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	91 Bells Line of Road, North Richmond	HLEP 2012 I410	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	101A Bells Line of Road, North Richmond	HLEP 2012 I493	Neutral	Negligible	Adjacent southwest of the study area, within 250m heritage buffer
House	15 Grose Vale Road, North Richmond	HLEP 2012 I495	Neutral	Neutral	Adjacent to the west of the study area, within 250m heritage buffer
Inew cottage	7 Chapel Street, Richmond	HLEP 2012 I16	Neutral	Neutral	140m southwest of the study area, within 250m heritage buffer

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
McMahon Homestead	26 Drift Road, Richmond	HLEP 2012 I82	Neutral	Minor adverse	185m north of the study area, within 250m heritage buffer
Mountain View	22 Inalls Lane, Richmond	SHR No. 00044 HLEP 2012 100044 RNE Place ID. 3134	Neutral	Minor adverse	Adjacent to the north of the study area, within 250m heritage buffer
Seventh Day Adventist Church	54 Bells Line of Road, North Richmond	HLEP 2012 I407	Neutral	Negligible	Adjacent to the north of the study area, within 250m heritage buffer
St Peter's Anglican Church Group	384 Windsor Street, Richmond 347, 347A and 349 Windsor Street, Richmond	SHR No. 02023 HLEP 2012 I134 & I129 RNE Place ID. 3184 NSW NTHR No. 4234, 9954, 9955 & 9958	Neutral	Neutral	58m north of the study area, within 250m heritage buffer
St Phillip's Anglican Church and Cemetery	151 Bells Line of Road, North Richmond	HLEP 2012 I408	Neutral	Neutral	Adjacent west of the study area, within 250m heritage buffer
Sunnyside (former O'Dea's dairy)	21 Pitt Lane, North Richmond	HLEP 2012 I413	Neutral	Neutral	190m southwest from the study area, within 250m heritage buffer

Cumulative Impacts

The overall proposal has been assessed as having **minor adverse** cumulative heritage impacts.

Summary of heritage listings and associated archaeological potential

Item Name	Archaeological potential/ significance	Archaeological Impact
Hobartville including outbuildings #00035 (SHR)	Nil-Low/Local	Neutral
Mountain View #00034 (SHR)	Nil-Low/Local	Neutral
House #I410 (LEP)	Nil-Low/Local	Neutral
House #I41 (LEP)	Nil-Low/Local	Neutral
Seventh Day Adventist Church #I407 (LEP)	Nil-Low/Local	Neutral
St Peters Anglican Church #I134 (LEP)	Nil-Low/Local	Neutral
Avenue of trees east and west side #I18 (LEP)	Nil-Moderate/Local/State	Minor Adverse
Hawkesbury River Bridge TAHE S170 RNE Place ID. 15946	Nil-Low/Local	Neutral

Summary of archaeological significance and impact outside listed heritage curtilages

Location	Archaeological potential/ significance	Archaeological Impact
Compounds north of the Hawksbury River	Nil-Low	Neutral-Minor adverse
Road corridor north of the Hawksbury River	Nil-Moderate	Neutral-Minor adverse
Original wharf punt and North Richmond timber Bridge	Nil-Low (extant)	Neutral
Compounds South of the Hawksbury River	Nil-Low	Neutral-Minor adverse
Road corridor south of the Hawksbury River	Nil-Moderate	Neutral-Minor adverse
Kurrajong Road shared path	Nil-Low	Neutral-Minor adverse

Approval pathway

The proposal will be undertaken under Part 5 of the *Environmental Planning and Assessment Act 1979*. A Review of Environmental Factors (REF) is required for the proposal and this Statement of Heritage Impact will form part of the suite of documents that support the REF.

While the concept design stage of this proposal will be undertaken as a REF, this report has identified that there is potential for listed heritage items and archaeological resources (works and 'relics') to be

subject to physical impacts as a result of the proposal. Therefore, future detailed design would require the following additional approvals depending on the heritage item affected. Future detailed design would require a separate Statement of Heritage Impact to be prepared for the proposed works to the heritage item, which would assess the significance of the item, its significant fabric or archaeological remains, and whether the proposed works would impact the heritage item:

Summary of approval pathways

Approval pathway	Description	Applies to
	Major works (or standard) approvals under section 60 of the <i>Heritage Act 1977</i> would need to be obtained from Heritage NSW prior to works commencing within	Hobartville including outbuildings #00035 (SHR)
Section 60 approval	SHR listed items. The application would need to be accompanied by the SoHI being prepared for the proposal. Where there is potential to impact significant archaeological resources, the application must be accompanied by an Archaeological Research Design and Excavation Methodology (see below).	Mountain View #00034 (SHR). This would be required if proposed noise mitigation strategies would have the potential to impact significant fabric or where any works within the SHR curtilage does not fall under
Archaeological Methodology and Research Design and archaeological approvals	A project wide ARDEM should be prepared to guide archaeological management during the construction phase of the project. The ARDEM would be prepared based on the 100% design and would clarify approval pathways for relics.	A Project Area wide ARDEM is recommended
	It is anticipated that the majority of works could be undertaken in accordance with Section 139 exceptions, given the majority of archaeological potential within the study area relates to 'works'. There is minimal potential for relics to be identified.	Works likely to proceed under s139 exceptions.
Section 65 modifications and amended scope	Any modifications, including minor corrections, clarifications, amendments, or additional works beyond the scope of those works assessed in the SoHI report would require further heritage assessment. If they are deemed necessary following the s60 approval, the client must apply for a Modification of Approval to Heritage NSW.	Hobartville including outbuildings #00035 (SHR)
Consultation with Hawkesbury City Council	The removal of the singular mature English Plane tree would cause minor adverse physical and visual impacts, which would trigger clause 2.11.2 of the TISEPP and TfNSW would have to consult with the Hawkesbury City Council, refer to Section 2.6	Avenue of trees east and west side #I18 (LEP)

Site specific recommendations and mitigation measures

Consideration should be given to the following recommendations:

 All relevant construction staff, contractors and subcontractors must be made aware of their statutory obligations for heritage under the NSW Heritage Act 1977 and best practice as outlined in The Burra Charter (Australia ICOMOS 2013) to ensure no archaeological remains or heritage fabric are impacted during the proposed works without appropriate mitigation measures in place. This will be implemented through a heritage induction carried out prior to works commencing and throughout the works program.

- Where proposed works are to terminate along the edge of heritage curtilages and not encroach, great care is to be taken to ensure all staff and contractors are aware of these curtilages and their exact boundaries as defined under Schedule 5 of the Hawkesbury LEP 2012 and the SHR to ensure the curtilages are protected and would not harm the significant fabric within the curtilages
- Detailed design should further consider the avoidance of the removal of the singular mature
 English Plane tree on the northwest corner of Kurrajong Road and Chapel Street, as it is a locally
 significant tree that contributes to the Avenue of trees east and west side of street (LEP I18)
 heritage item, the retainment of this tree would mitigate the minor adverse physical and visual
 impacts
- Although the tree plantings siding Hobartville (SHR No. 00035) (LEP I14) both to the north east along Kurrajong Road and to the south west along Inalls Lane are not located within the heritage curtilages, it is recommended that where possible removed trees should be reinstated like for like upon the completion of the works.
- Due to the structural stability of the buildings on the Mountain View property (SHR No. 00044) (LEP I00044), and the proximity of the property to the Study Area and proposed works, the Noise and Vibration Impact assessment recommended that the property undergo Level 1 noise treatments. The physical and visual impacts of these noise treatments must be assessed as part of a separate Statement of Heritage Impact which analyses the significant heritage fabric of the buildings and provides an assessment of the potential impact to this fabric as a result of the installation of the noise treatments. This Statement of Heritage Impact should guide whether the proposed noise treatments would satisfy the threshold for Standard Exemption 3 (Alterations to Non-Significant fabric) or require that a Section 60 application is lodged.
- The Noise and Vibration Impact Assessment has identified that several heritage items or areas are within the minimum working distance for heritage items (ie. 40m), with the potential for cosmetic damage. It is recommended that the potential impacts to heritage items as a result of vibration and settlement is reviewed and assessed as part of the detailed design phase for each heritage item which has been identified in the Noise and Vibration Impact Assessment as falling within the minimum working distance.
- Where possible, during the detailed design phase, impacts to heritage items should be further reduced
- As the cumulative heritage impact assessment has found the results of the proposed works to be
 of minor impacts the proposed works would trigger clause 2.11.1 of the TISEPP and Transport
 would have to consult with the Hawkesbury City Council, the consultation has indicatively been
 planned for late 2024
- A suitably qualified and experienced maritime archaeologist should be engaged to provide heritage advice when considering construction methodology within the Hawkesbury River near the original punt wharf and timber remains of Richmond Bridge

- TfNSW heritage specialists should provide heritage advice for the further design development and any heritage interpretation features for the Hawkesbury River Bridge active transport conversion
- Should design changes impact on heritage items, a suitably qualified and experienced heritage
 consultant should be engaged to prepare an updated heritage report as necessary. The heritage
 report should include considerations of measures to minimise visual impacts
- A suitably qualified and experienced heritage consultant should be engaged to undertake a
 photographic archival recording (PAR) in key area of key views, the PAR the recording must be in
 accordance with the *Photographic Recording of Heritage Items using Film or Digital Capture*(NSW Heritage Division, 2006), a digital copy of the PAR should be provided to Heritage NSW
 and Transport.
 - The PAR should address the proposed works at Hobartville (SHR No. 00035) and the existing Hawkesbury River Bridge, as these works have been assessed as resulting in moderate adverse impacts
- Consideration should be given to implementing a Heritage Interpretation Strategy as part of the
 proposal, to interpret the heritage and history of the existing Hawkesbury River Bridge, to
 document and depict all the uses the Hawkesbury River Bridge has undergone and its most
 recent change of use for active transport, interpretive measures could involve interpretive
 signage, panels or displays
- The post and mesh fence along the north eastern curtilage of Hobartville at Kurrajong Road should be replaced once the road has been built to ensure the security of the heritage item and make good the removal of the existing fence
- A site wide ARDEM should be prepared to guide management under Section 139 exceptions, given the low likelihood of identifying relics within the study area. The ARDEM should be prepared in response to the 100% detailed design.
- The Section 139 exceptions should be managed alongside the *TfNSW Unexpected Heritage Items Procedure* (2024), which is to be implemented during all excavation work not subject to direct archaeological supervision.

CONTENTS

1.0	In	troduction	1
1.	1	Proposal background	1
1.3	2	Study area	2
1.3	3	Authorship	5
1.	4	Limitations	5
2.0	Le	egislative Context	6
2.	1	Overview	6
2.	2	Identification of heritage listed items	6
2.	3	Environment Protection and Biodiversity Conservation Act 1999	6
	2.3.1	UNESCO World Heritage List	7
	2.3.2	Commonwealth Heritage List	7
	2.3.3	National Heritage List	7
2.	4	Heritage Act 1977	7
	2.4.1	State Heritage Register	8
	2.4.2	Archaeological relics and works	8
	2.4.3	Conservation Management Plans	9
	2.4.4	Section 170 registers	9
2.	5	Environmental Planning and Assessment Act 1979 (NSW)	9
	2.5.1	Hawkesbury Local Environmental Plan 2012	
	2.5.2	Development Control Plan	10
2.	6	State Environmental Planning Policy (Transport and Infrastructure) (TISEPP) 2021	
2.	7	Non-Statutory Considerations	
	2.7.1	S	
	2.7.2	,	
2.	8	Summary of heritage listings	12
3.0	H	storical background	17
3.	1	Aboriginal histories	17
3.	2	Early European settlement	
3.	3	Richmond, a Macquarie Town	18
	3.3.1	Land grants and settlement within and adjacent to the study area	23
3.	4	North Richmond	31
	3.4.2	St Phillip's Anglican Church and Cemetery	31
3.	5	The great stock routes and the Hawkesbury River Bridge	32
	3.5.1	Bells Line of Road	32
	3.5.2	The River Inns	32
	3.5.3	The Hawkesbury River crossings	36

3.5.4	The Richmond to Kurrajong Railway and 'The Depot'	42
3.5.5	Old Kurrajong Road and Bells Line of Road in the twentieth century	43
3.5.6	Southee Road	44
3.6	Modern development	44
4.0 Ph	ysical Context	51
4.1	Site Inspection	51
4.1.1	Overall Site Context	51
4.1.2	Road corridor north of Hawkesbury River	51
4.1.3	Compounds north of the Hawkesbury River	53
4.1.4	Hawkesbury River Bridge and Road corridor south of the Hawkesbury River	55
4.1.5	Compounds south of the Hawkesbury River	57
4.1.6	Shared path along Kurrajong Road	59
5.0 Sig	gnificance Assessment	61
5.1	Methodology	61
5.2 I	Existing heritage assessments	62
5.2.1	Hobartville, including outbuildings (SHR No. 00035)	62
5.2.2	Mountain View (SHR No. 00044)	66
5.2.3	Avenue of trees east and west side of street (LEP I18)	67
5.2.4	Hawkesbury River Bridge (TfNSW s170)	69
6.0 Ar	chaeological Assessment	72
6.1 I	ntroduction	72
6.2	Archaeological potential	72
6.2.1	Land use summary	72
6.2.2	Previous ground disturbance	73
6.2.3	Relevant archaeological assessments and investigations	74
6.2.4	Assessment of historical archaeological potential	80
6.2.5	Summary of archaeological potential	83
6.3	Archaeological significance	86
6.3.1	Assessment against the NSW heritage assessment guidelines	87
6.3.2	Statement of archaeological significance	90
6.4	Summary of historical archaeological potential and significance	92
7.0 Th	e Proposed Works	93
7.1	The proposed works	93
7.1.1	The proposal	93
7.1.2	Proposal justification	98
8.0 He	ritage Impact Assessment	99
	Overview	
811	Physical heritage impacts – Stage 2A	100

	8.1.2	Physical heritage impacts – Stage 2B	103
	8.1.3	Physical heritage impacts – Ancillary Facilities	103
	8.1.4	Visual heritage impacts – Stage 2A	104
	8.1.5	Visual heritage impacts – Stage 2B	106
	8.1.6	Visual heritage impacts – Ancillary facilities	107
	8.1.7	Cumulative impacts	108
	8.1.8	Summary of impacts to heritage items	109
	8.1.9	Archaeological impacts	111
	8.1.10	Summary of archaeological impacts within SHR and LEP curtilages	114
8	.2 H	leritage considerations for the proposal	115
8	.3 A	ssessment against relevant policies	115
	8.3.1	Hobartville Conservation Management Plan policies	115
8	.4 S	Statement of heritage impact	117
9.0	Coi	nclusion	118
9	.1 C	Conclusion	118
9	.2 A	pproval pathway	122
9	.3 S	Site specific recommendations and mitigation measures	123
10	n Pot	forences	126

FIGURES

Figure 1: Location of the study area indicated by red boundary. (Source: Artefact, 2024)	3
Figure 2: Location of the study area indicated by red boundary. (Source: Artefact, 2024)	4
Figure 3: Heritage items within the Study Area and the 250 m heritage buffer	15
Figure 4: Detail of heritage map in Richmond	16
Figure 5: C.1811 map of the Town of Richmond and the location of the early nineteenth century unl structure indicated by the grey arrow(Source: Mitchell Library).	
Figure 6: 1898 Town of Richmond and Enfield (North Richmond)	21
Figure 7: 1899 sketch map of Richmond and the location of the church indicated by the grey arrow (Source: Mitchell Library)	22
Figure 8: Mountain View, Richmond (Source: Office of Environment and Heritage, 2019)	24
Figure 9: Hobartville, Richmond (Source: Max Dupain, 1963 via NSW Art Gallery)	25
Figure 10: Hobartville (SHR No. 00035) and grounds (Source: M. Nichols, 1996)	26
Figure 11: 1860s Parish of Ham map (Source: Historic Records Lands Viewer)	27
Figure 12: 1881 Parish of Currency map (Source: Historic Records Lands Viewer)	28
Figure 13: 1893 Parish of Ham map (Source: Historic Records Lands Viewer)	29
Figure 14: 1925 Parish of Currency map (Source: Historic Records Lands Viewer)	30
Figure 15: St Phillip's Anglican Church and Cemetery (Source: Artefact, 2023)	32
Figure 16: 1927 Crown Plan with the indicative location of the Pack Horse Inn indicated by the blac rectangle (Source: Historical Land Records Viewer)	
Figure 17: The North Richmond Hotel with the Woolpack (Travellers Rest) Inn identified by the red	
Figure 18: 1963 image of The Woolpack (Travellers Rest) Inn along Bells Line of Road	35
Figure 19: The timber bridge crossing the Hawkesbury River at Richmond (NSW Government, 189	7)36
Figure 20: Richmond Bridge Crossing in 1900 with Old Kurrajong Road indicated by the red arrow (Source: Museums of History New South Wales)	37
Figure 21: Richmond Bridge Crossing with the Woolpack Inn indicated by the red arrow and Bells L Road indicated by the orange arrow (Source: State Library New South Wales)	
Figure 22: 1904 Clarenden Encampment Map with Bells Line of Road indicated by the black arrow, Richmond Bridge indicated by the orange arrow, and Kurrajong Road indicated by the grey arrow (Source: State Library New South Wales)	
Figure 23: Current Richmond Bridge linking Richmond to North Richmond (left) and former (right) (Source: KCHS)	39
Figure 24: The Richmond Bridge following the original road alignment of Old Kurrajong Road as indicated by the red arrow (Source: HCC Library Collection)	40
Figure 25: Richmond Bridge with train (Source: Hawkesbury City Council Library)	41
Figure 26: The Depot with a cart travelling along the sidings (Source: Light Railways)	41
Figure 27: 1927 Windsor Map with the location of the 'Stone Crusher' indicated by the black arrow (Source: Historical Land Records Viewer)	45

Figure 28: 1937 plan showing the location of 'The Depot' and the Kurrajong railway line (Light Railway)	• ,
Figure 29: 1938 plan of 'The Depot' and plant overlaid on 1947 aerial imagery of the area (Source: Railways)	Light
Figure 30: Bells Line of Road as a dirt road in 1946 (Source: 210256, NSW State Library)	48
Figure 31: Kurrajong Road looking towards the Hawkesbury River Bridge from Richmond (Source: KCHS)	48
Figure 32: 1947 Historic Aerial Photo (Source: Historical Imagery Viewer)	49
Figure 33: 1955 Historic Aerial Photo (Source: Historical Imagery Viewer)	49
Figure 34: 1961 Historic Aerial Photo (Source: Historical Imagery Viewer)	50
Figure 35: 1975 Historic Aerial Photo (Source: Historical Imagery Viewer)	50
Figure 36: NW View of Bells Line of Road / Crooked Lane intersection	52
Figure 37: SE View of Bells Line of Road / Crooked Lane intersection	52
Figure 38: SE Pedestrian footbridge over Redbank Creek next to Bells Line of Road	52
Figure 39: SE Bells Line of Road	52
Figure 40: SE View of Bells Line of Road	52
Figure 41: W View of Terrace Road 200m east of Bells Line of Road	52
Figure 42: E View of Beaumont Avenue	52
Figure 43: NW View along Hawkesbury River Bridge with proposed compound area on either side on north bank	
Figure 44: E View from Hawkesbury River Bridge to Hawkesbury River	53
Figure 45: W View from Hawkesbury River Bridge to Hawkesbury River	53
Figure 46: NW View of proposed compound area from Terrace Road (Lot 120 of DP 1133879)	53
Figure 47: NE View of Terrace Road and proposed compound area (Lot 120 of DP 1133879)	53
Figure 48: W View of commercial area to the west of the proposed compound area (Lot 120 of DP 1133879)	54
Figure 49: NW View of proposed compound area with Terrace Road and commercial area to the re (Lot 120 of DP 1133879)	
Figure 50: E View of proposed compound area (Lot 120 of DP 1133879)	54
Figure 51: NW View of proposed compound area (Lot 120 of DP 1133879)	54
Figure 52: N View of park east of Bells Line of Road, proposed compound area	54
Figure 53: E View of park east Bells Line of Road, proposed compound area	54
Figure 54: SW View of park east of Bells Line of Road, proposed compound area	54
Figure 55: NW View of park east of Bells Line of Road, proposed compound area	54
Figure 56: W View of park west of Bells Line of Road, proposed compound area	55
Figure 57: E View of park west of Bells Line of Road, proposed compound area	55
Figure 58: NW View of the park proposed compound area, with Bells Line of Road to the right	55

proposed compound areaproposed compound area	
Figure 60: SE View of the park west of Bells Line of Road, looking towards the Hawkesbury River E	-
Figure 61: E View towards the proposed new bridge	
Figure 62: W View of Intersection of Kurrajong Road and Old Kurrajong Road	56
Figure 63: SE View of Colo Soccer Club with greenfield paddocks behind	56
Figure 64: N View of Paddock SE of Colo Soccer Club from Inalls Lane	56
Figure 65: SE View of Inalls Lane adjacent to paddocks near Colo Soccer Club	56
Figure 66:NW View of Inalls Lane, Hobartville (SHR No. 00035) to the right	56
Figure 67: NW view of Castlereagh Road (across) intersection with Inalls Lane (behind) and Souther (front)	
Figure 68: S View of Southee Road heading towards Londonderry Rd intersection	57
Figure 69: S View of Southee Road and Londonderry Road intersection at Western Sydney Universeucalypt plantings	•
Figure 70: SW View of Southee Road (right) and Londonderry Road (across) intersection, Western Sydney University in the distance	
Figure 71: SE View of the compound area on the southeast bank of the river to the left of the dense cover (Lot 34 of DP 1118821)	
Figure 72: N View of compound area east of Bells Line of Road at Kurrajong Road intersection (Lot DP 1118821)	
Figure 73: NW View of the compound area with Bells Line of Road behind (Lot 34 of DP 1118821).	58
Figure 74: N View of compound area (right behind the tree cover) adjacent to the Colo Soccer Club 1 of DP 742541)	•
Figure 75: W View of the compound area (behind the tree cover) at the intersection of Kurrajong Roand Bells Line of Road (Lot 1 of DP 742541)	
Figure 76: NW View of Inalls Lane with compound areas (Lot 1 of DP 743909)	58
Figure 77: Mountain View (left) with Inalls Lane to right	59
Figure 78: View of lowlands from Mountain View	59
Figure 79: NW View of Inalls Lane with compound areas to the left (Lot 1 of DP 743909)	59
Figure 80: NW View of compound area with pond in view (Lot 10 of DP 1293174)	59
Figure 81: W View of compound area from Southee Rd (Lot 10 of DP 1293174)	59
Figure 82: E View of Old Kurrajong Road from the Kurrajong Road intersection	60
Figure 83: SW View of Kurrajong Road	60
Figure 84: SE View of Kurrajong Road, Hobartville to the right	60
Figure 85: NW View of Kurrajong Road at from Chapel Street intersection	60
Figure 86: Hobartville from the study area at Kurrajong Road (Source: Artefact, 2023)	62
Figure 87: Map of significant views from Hobartville (SHR No. 00035), red arrow indicates the locat	ion of

Figure 88: Image of partial view of View 2 as identified in previous figure (Artefact, 2023)65
Figure 89: View of 'Durham Bowes' the house at Mountain View (Source: Artefact, 2024)66
Figure 90: S View of Avenue of trees east and west side of the street from Chapel Street (Source: Artefact, 2023)
Figure 91: S View of Hawkesbury River Bridge (Source: Artefact, 2023)69
Figure 92: Identified archaeological potential approximately 500 metres from the study area (Source: Hobartville CMP, 2004)
Figure 93: FR Davidson's survey 1831 showcasing unknown structure (in red) on Chapel Street (Source: Edward Higginbotham & Associates 1997)77
Figure 94: Richmond archaeological management plan (Source: Edward Higginbotham & Associates 1997)78
Figure 95: Richmond archaeological management plan (Source: Edward Higginbotham & Associates 1997)79
Figure 96: Bells Line of Road (dirt road) at Redbank Creek, North Richmond 1946 (Source: 210256 NSW State Library)81
Figure 97: 1947 aerial image demonstrating potential rail bridges north west of Chapel Street along current Kurrajong Road (Source: Historical Imagery Viewer)82
Figure 98: 1947 aerial image demonstrating potential rail siding southwest of the current Kurrajong Road towards Old Kurrajong Road (Source: Historical Imagery Viewer)83
Figure 99: Map of archaeological potential85
Figure 100: Proposed site plan (Source: Aurecon, 2024)96
Figure 101: Proposed site plan (Source: Aurecon, 2024)

TABLES

Table 1: Results of register searches for the study area and 250m heritage buffer	12
Table 2. NSW heritage assessment criteria	61
Table 3. Heritage significance assessment for Hobartville (SHR No. 00035)	63
Table 4. Heritage significance assessment for Mountain View	67
Table 5. Heritage significance assessment for Avenue of trees east and west side of street	68
Table 6. Heritage significance assessment for Hawkesbury River Bridge	70
Table 7: Grading of archaeological potential	72
Table 8. Land use summary	73
Table 9: Summary of archaeological potential (Biosis and Phillips Marler 2019)	74
Table 10: Historical archaeological potential summary	84
Table 11: Overview of NSW Heritage Office archaeological significance criteria	86
Table 12: Consideration against NSW heritage assessment criteria	87
Table 13: Historical archaeological potential and significance	92
Table 14: Terminology for assessing the magnitude of heritage impact	99
Table 15: Terminology for heritage impact types	100
Table 16: Summary of heritage impacts within SHR and LEP curtilages and within the vicinity in the buffer zone	
Table 17: Summary of Archaeological Impacts	112
Table 18: Summary discussion of potential archaeological impact within SHR and LEP curtilages	114
Table 19: Heritage considerations for the study area (Source: Heritage NSW, 2023)	115
Table 20: Assessment of proposal against Hobartville CMP policies	115
Table 21: Statement of heritage impact for the proposed works	117
Table 22: Summary of heritage impacts within SHR and LEP curtilages and within the vicinity in the buffer zone	
Table 23: Summary of heritage listings and associated archaeological potential	122
Table 24: Summary of approval pathways	122

1.0 INTRODUCTION

1.1 Proposal background

Transport for NSW (Transport) proposes to upgrade Bells Line of Road / Kurrajong Road between Crooked Lane, North Richmond and Old Kurrajong Road, Richmond and construct a new bypass south of Richmond town centre. This is known as New Richmond Bridge and traffic improvements – Stage 2 (the proposal). The new route between Richmond and North Richmond would provide a minimum five per cent annual exceedance probability (AEP) flood resilience (equivalent to the 1 in 20 chance per year flood event). The proposal is about 50 kilometres north-west of the Sydney Central Business District (CBD) and about 33 kilometres north-west of Parramatta. It is in the Hawkesbury City Council local government area (LGA).

The proposal would be delivered in two stages, known as Stage 2A and Stage 2B. Should this REF be determined, and the already committed funding by the Australian Government and NSW Government released, Stage 2A would be constructed. This is expected to be complete by 2029. The timing of Stage 2B would be subject to available funding and Transport will continue to seek funding in upcoming State and Federal budgets to deliver the rest of the upgrades.

Stage 2A of the proposal includes a new four-lane bridge over the Hawkesbury River about 30 metres downstream of the existing Richmond Bridge, widening of Bells Line of Road through North Richmond to provide two lanes in each direction between the new bridge and the Terrace Road / Grose Vale Road intersection and a new bypass to the south of the Richmond town centre. The bypass would extend about 1.7 kilometres across the floodplain between the Kurrajong Road / Old Kurrajong Road intersection and Castlereagh Road / Inalls Lane / Southee Road intersection. Stage 2A of the proposal would also provide an active transport corridor between North Richmond and Richmond. This would include a new shared path on the southern side of Kurrajong Road between Old Kurrajong Road and Chapel Street and the conversion of the existing Richmond Bridge into an active transport connection across the Hawkesbury River.

Stage 2B of the proposal includes widening of Bells Line of Road between the Terrace Road / Grose Vale Road intersection and west of Charles Street and at its intersection with Crooked Lane. The bypass would also be extended 1.3 kilometres east from Castlereagh Road to Londonderry Road and would be a new road alignment to the south of Southee Road. Southee Road would connect to the bypass opposite Valder Place. The Londonderry Road / bypass / Vines Drive intersection would also be upgraded.

The study area is located within the Hawkesbury Local Council encompasses the proposal area (construction footprint). Artefact has included a 250m buffer around the study area to assess the potential impacts from the construction (including to views) of heritage items which fall within the study area and those in the vicinity. Within this 250m buffer of the study area, there are a number of heritage items including the State significant 'Hobartville' (SHR #00035), 'Bowman House' (SHR #00468), Mountain View (SHR #00044) and a number of locally significant items listed on Schedule 5 of the Hawkesbury Local Environmental Plan 2012 (HLEP 2012). Additionally, the Hawkesbury River Bridge, which is a listed s170 item, is located within the study area.

Artefact Heritage and Environment (Artefact) have been engaged by Aurecon Australia Pty Ltd to undertake a Statement of Heritage Impact (SoHI) as part of the requirements for the Review of Environmental Factors.

1.2 Study area

The study area spans across multiple streets and is divided into three sections:

- The road corridor and ancillary facilities north of the Hawkesbury River;
- · The road corridor and ancillary facilities south of the Hawkesbury River; and
- The shared path along Kurrajong Road

The study area comprises the proposed construction footprint including temporary construction site compounds and is depicted in Figure 1 and Figure 2 below. These diagrams identify the areas of the study area which would fall within the Stage 2A and Stage 2B works for the project. The study area travels along Bells Line of Road from west of Redbank Creek. It continues south along Bells Line of Road and turns east onto Terrace Road for approximately 200m. It also covers Beaumont Avenue for approximately 150m. The study area continues south along Bells Line of Road across the Hawkesbury River, about 30-60m downstream of the existing Hawkesbury River Bridge and continues parallel to Bells Line of Road to the east until the Old Kurrajong Road intersection. At the intersection it traverses southwest across greenfield paddocks, until it joins Inalls Lane, crossing Lot 1 of DP 742541, Lot 1 DP 744222, Lot 1 of DP 1089457 and Lot 2 DP 212692. It continues further south along Inalls Lane until it reaches the Castlereagh Road intersection, where it spans east and west along Castlereagh Road for approximately 75m in either direction. The Lane turns into Southee Road after the Castlereagh Road intersection, and the study area follows this south until it reaches approximately 150m past the Londonderry Road intersection onto Vines Drive. At the Bells Line of Road and Old Kurrajong Road intersection it continues southeast onto Kurrajong Road for approximately 450m. At this point the shared path option continues southeast until it reaches the Chapel Street intersection and terminates there.

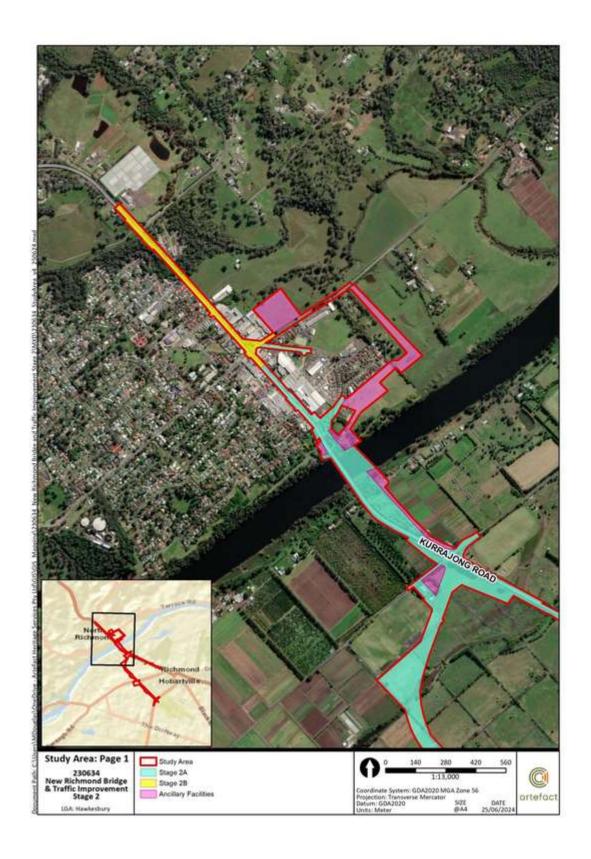


Figure 1: Location of the study area indicated by red boundary. (Source: Artefact, 2024).

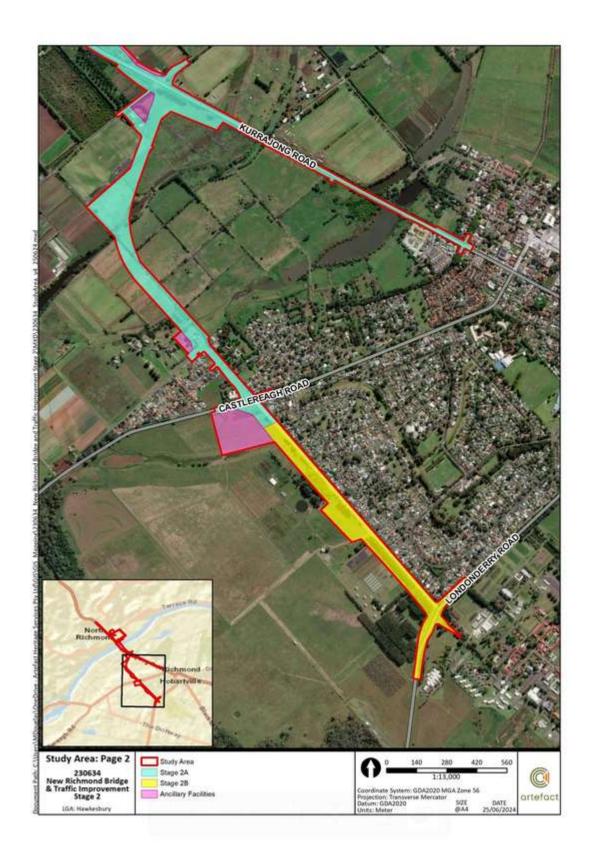


Figure 2: Location of the study area indicated by red boundary. (Source: Artefact, 2024).

1.3 Authorship

This Statement of Heritage Impact (SoHI) has been prepared by Monika Sakal (Heritage Consultant), Johnny Sokalik (Senior Heritage Consultant), Johnny Love (Heritage Consultant), Stephanie Moore (Senior Associate), with Aboriginal History written by Dr Stephen Gapps (Historian). Input and review provided by Sarah-Jane Zammit (Senior Associate), Katrina Stankowski (Principal), Scott Macarthur (Principal), Jenny Winnett (Technical Director), and Josh Symons (Technical Executive), all from Artefact Heritage and Environment.

1.4 Limitations

This report assesses historic heritage values only and does not address Aboriginal cultural heritage. Pedestrian access along parts of the road corridor were inaccessible and have been substituted with Google Street View where necessary.

This report excludes assessment of maritime archaeology. Terrestrial archaeological assessment in this report is based on desktop research and a pedestrian site inspection only. No archaeological excavation or archaeological monitoring has been undertaken during preparation of this report.

2.0 LEGISLATIVE CONTEXT

2.1 Overview

This section discusses the heritage management framework, notably legislative and policy context, applicable to the proposed development and study area.

2.2 Identification of heritage listed items

Heritage listed items were identified through a search of relevant state and federal statutory and non-statutory heritage databases:

- World Heritage List (WHL)
- Commonwealth Heritage List (CHL)
- National Heritage List (NHL)
- State Heritage Register (SHR)
- Section 170 Heritage and Conservation Registers
- NSW State Heritage Inventory database
- Hawkesbury Local Environmental Plan 2012 (HELP 2012)
- Register of the National Estate (RNE)
- National Trust of Australia (NSW) register.

The relevant State and Federal statutory and non-statutory heritage register searches were undertaken on 1 November 2023.

Items listed on these registers have previously been assessed against the heritage assessment guidelines relevant to their peak governing body. Items that are of Commonwealth, National and World heritage significance have been assessed in accordance with the Environmental Protection and Biodiversity Conservation Act 1999 (the EPBC Act). Items of state or local significance have been assessed against the NSW Heritage Assessment guidelines¹, in accordance with the NSW Heritage Act 1977 (the Heritage Act). Assessments of heritage significance as they appear in relevant heritage inventory sheets and documents, are provided in Section 5.0 of this report.

There are several items of legislation that are relevant to the current study area. A summary of the relevant Acts and the potential legislative implications are provided below.

2.3 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) provides a legislative framework for the protection and management of matters of national environmental significance, that is, flora, fauna, ecological communities, and heritage places of national and international importance. Heritage items are protected through their inscription on the World Heritage List, Commonwealth Heritage List, or the National Heritage List. The EPBC Act stipulates that a person who has proposed an action that will, or is likely to, have a significant impact on a World, National or Commonwealth Heritage site must refer the action to the Minister for Environment and Water (hereafter Minister). The Minister will then determine if the action requires approval under the

¹ NSW Department of Environment and Planning 2023. Assessing heritage significance: Guidelines for assessing playes and objects against the Heritage Council of NSW Criteria.



artefact.net.au Page 6

EPBC Act. If approval is required, an environmental assessment would need to be prepared. The Minister would approve or decline the action based on this assessment. A significant impact is defined as "an impact which is important, notable, or of consequence, having regard to its context or intensity." The significance of the action is based on the sensitivity, value and quality of the environment that is to be impacted, and the duration, magnitude and geographic extent of the impact. If the action is to be undertaken in accordance with an accredited management plan, approval is not needed, and the matter does not need to be referred to the Minister.

2.3.1 UNESCO World Heritage List

Administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Heritage List (WHL) is a register of places deemed to have outstanding cultural, historical, scientific, or natural significance at a global level. The purpose of the list is to ensure the preservation of globally significant heritage sites for future generations by promoting the conservation and interpretation of WHL sites. Conservation principles for WHL sites are guided by the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage. The Convention is an international treaty for the preservation of world heritage site that was ratified by Australia in 1974.

There are **no** items listed on the World Heritage List within the study area.

2.3.2 Commonwealth Heritage List

The Commonwealth Heritage List (CHL) has been established to list places of outstanding heritage significance to Australia. Established under the EPBC Act, the CHL comprises natural, Indigenous, and historic heritage places on Commonwealth lands and waters or under Australian Government control.

There are **no** items listed on the Commonwealth Heritage List within the study area.

2.3.3 National Heritage List

The National Heritage List (NHL) has been established to list places of outstanding heritage significance to Australia, including places overseas. There are nine matters of national environmental significance, these include Australia's world heritage properties (as listed on the World Heritage List [WHL]), national heritage places, wetlands of international importance (listed under the Ramsar Convention), migratory species, listed threatened and ecological communities, Commonwealth marine areas, the Great Barrier Reef Marine Park, nuclear actions including uranium mining, and water resources in relation to coal seam gas developments and large coal mining developments.

There are **no** items listed on the National Heritage List within the study area.

2.4 Heritage Act 1977

The NSW *Heritage Act* 1977 (Heritage Act) provides protection for items of 'environmental heritage' in NSW. 'Environmental heritage' includes places, buildings, works, relics, movable objects or precincts considered significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. Items considered to be significant to the State are listed on the SHR and cannot be demolished, altered, moved or damaged, or their significance altered without approval from the Heritage Council of NSW.

2.4.1 State Heritage Register

The SHR was established under Section 22 of the Heritage Act and is a list of places and objects of particular importance to the people of NSW, including archaeological sites. The SHR is administered by Heritage NSW, and includes a diverse range of over 1,500 items, in both private and public ownership. To be listed, an item must be deemed to be of heritage significance for the whole of NSW. For works to an SHR item, a Section 60 application must be prepared for works that are not exempt under Section 57(2) of the Heritage Act. These heritage items can be publicly viewed on the State Heritage Inventory (SHI).

There is **one listed** item on the State Heritage Register within the study area:

Hobartville, including outbuildings (SHR No. 00035)

There are **three listed** items on the State Heritage Register within the vicinity of the study area:

- Mountain View (SHR No. 00044)
- Bowman House (SHR No. 00468), Building, outbuildings, grounds, trees (SHR No. 00753)
- St Peter's Anglican Church Group (SHR No. 02023)

2.4.2 Archaeological relics and works

The Heritage Act also provides protection for 'relics', which includes archaeological material or deposits. Section 4 (1) of the Heritage Act (as amended in 2009) defines a relic as:

- "...any deposit, artefact, object or material evidence that:
- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance"

Sections 139 to 146 of the Heritage Act prevent the excavation or disturbance of land known or likely to contain relics, unless under an excavation permit. Section 139 (1) states:

A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, damaged or destroyed unless the disturbance is carried out in accordance with an excavation permit.

Excavation permits are issued by the Heritage Council of NSW, or its Delegate, under Section 140 of the Heritage Act for relics not listed on the SHR or under Section 60 for impacts within SHR curtilages. An application for an excavation permit under s140 or under s60 must be supported by an Archaeological Research Design (ARD) and Archaeological Assessment prepared in accordance with the Heritage NSW archaeological guidelines. Minor works that would have a minimal impact on archaeological relics may be granted an exception under Section 139 (4) or an exemption under Section 57 (2) of the Heritage Act.

Items identified as 'works' do not trigger approval or reporting obligations under the Heritage Act, unless they are associated with relics. Works generally include:

- Former road surfaces or pavement and kerbing
- Railway infrastructure



- Former water supply (wells, cisterns, drains, pipes) and other service infrastructure, where there are no historical artefacts in association with the item
- Building footings associated with former infrastructure facilities, where there are no historical artefacts in association with the item

2.4.3 Conservation Management Plans

A Conservation Management Plan may be prepared for heritage items. The CMP should identify the state heritage significance of the item, set out policies and strategies for the retention of its significance and be prepared in accordance with the guidelines outlined by the Heritage Council. The following CMP exists for the SHR items in the study area:

Clive Lucas, Stapleton and Partners Pty Ltd, 2004, Hobartville Richmond, NSW CMP

2.4.4 Section 170 registers

Under the Heritage Act all government agencies are required to identify, conserve and manage heritage items in their ownership or control. Section 170 (s170) requires all government agencies to maintain a Heritage and Conservation Register that lists all heritage assets and an assessment of the significance of each asset. They must also ensure that all items inscribed on its list are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the Government on advice of the NSW Heritage Council. These principles serve to protect and conserve the heritage significance of items and are based on NSW heritage legislation and guidelines.

There is **one** s170 listing in the study area:

- Hawkesbury River Bridge
 - The item is owned by TfNSW and is recorded on the SHI as having a s170 listing under the Transport Asset Holding Entity (TAHE) register

2.5 Environmental Planning and Assessment Act 1979 (NSW)

The *Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts are considered prior to land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits.

The EP&A Act also requires that local governments prepare planning instruments (such as Local Environmental Plans and Development Control Plans [DCPs]) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required. The study area falls within the boundary of the Hawkesbury local government area. Schedule 5 of the *Hawkesbury Local Environmental Plan 2012* (HELP 2012) includes a list of items/sites of heritage significance within this LGA.

2.5.1 Hawkesbury Local Environmental Plan 2012

Heritage items listed on the Hawkesbury LEP 2012 are managed in accordance with the provisions of Section 5.10 Heritage Conservation of this LEP. Under Clause 5 of this section of the Hawkesbury LEP 2012.

The following items are within the study area and are listed on Schedule 5 of the Hawkesbury LEP 2012:

- 'Hobartville' (including outbuildings) (LEP 100035)
- Grounds and landscaping surrounding 'Hobartville' (LEP I14)
- Avenue of trees east and west side of street (LEP I18)

The following items are within the heritage buffer zone (250m around the study area) of the study area and are listed on Schedule 5 of the Hawkesbury LEP 2012:

- 'Mountain View' (LEP 100044)
- Seventh Day Adventist Church (I407)
- House (LEP I493)
- House (LEP I410)
- House (LEP I495)
- Former house (LEP I72)
- Former police station and residence (LEP I406)
- Sunnyside (former O'Dea's dairy) (LEP I413)
- House (LEP I41)
- McMahon Homestead (LEP I82)
- St Phillip's Anglican Church and Cemetery (LEP I408)
- St Peter's Anglican Church (LEP I134)
- Anglican church hall and cemetery (LEP I129)
- 'Inew Cottage' (LEP I16)
- House (LEP I17)
- House (LEP I126)
- House (LEP I127)
- House (LEP I128)
- Bowman House (LEP I00468)
- 'Eltham' (LEP I125)
- The cottage (LEP I124)
- House (LEP I3)
- House (LEP I4)

2.5.2 Development Control Plan

The Hawkesbury DCP 2023 is a supporting document that complements the provisions contained within the Hawkesbury LEP 2012 and provides specific design detail in regard to sympathetic development on, or in the vicinity of, items listed on Schedule 5 of the Hawkesbury LEP 2012.

Section 6.7 of Chapter 3 of the Hawkesbury DCP 2023 provides sympathetic considerations for development that is in the vicinity of a heritage listed item. These considerations include ensuring that the character, bulk, scale and height of new development does not unreasonably overshadow a nearby heritage item, that colouring and texture of new materials of a new development is

sympathetic to a heritage item, and that views of a heritage item should not be obscured from the point of view of areas of public domain.

2.6 State Environmental Planning Policy (Transport and Infrastructure)(TISEPP) 2021

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) aims to facilitate the effective delivery of transport and infrastructure across NSW. The Transport and Infrastructure SEPP assists local government, the NSW Government and the communities they support, by simplifying the process for providing essential infrastructure in areas such as education, hospitals, roads and railways, emergency services, water supply and electricity delivery.

Generally, where there is conflict between the provisions of the TISEPP and other environmental planning instruments, the TISEPP prevails. While the TISEPP overrides the controls included in the LEPs and DCPs, the proponent is required to consult with the relevant local councils when development "is likely to have an impact that is not minor or inconsequential on a local heritage item (other than a local heritage item that is also a State heritage item) or a heritage conservation area".

When this is the case, the proponent must not carry out such development until it has (TISEPP 2021 Clause 2.11.2):

- (a) had an assessment of the impact prepared, and
- (b) given written notice of the intention to carry out the development, with a copy of the assessment and a scope of works, to the council for the area in which the heritage item or heritage conservation area (or the relevant part of such an area) is located, and
- (c) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

TISEPP consultation for the updated proposal design and REF is planned for 2024. This consultation is required as the SoHI has concluded that the development is likely to have an impact that is greater than minor on a local heritage item. Refer to Section 8.0 for the heritage impact assessment.

2.7 Non-Statutory Considerations

2.7.1 Register of the National Estate

The RNE is no longer a statutory list; however, it remains available as an archive of heritage items around Australia. The following items are listed on the RNE in the study area:

Hobartville, including outbuildings (Place ID. 3133)

The following items are listed on the RNE within the vicinity of the study area:

- Mountain View (Place ID. 3134)
- Bowman House and Outbuilding (Place ID. 3198)
- St Peter's Anglican Church Group (Place ID. 3184)
- Hawkesbury River Road Bridge (Place ID. 15946)

2.7.2 National Trust of Australia (NSW)

Listing on the NSW National Trust Heritage Register (NSW NTHR) does not impose statutory obligations and is an indication of the heritage significance held by the community for various places.

There is **one** listed item on the National Trust Heritage Register within the study area:

Hobartville, etc (NSW NTHR No. 7920)

The following items are listed on the National Trust Heritage Register NSW within the vicinity of the study area:

- St Peters Anglican Cemetery (NSW NTHR No. 4234)
- St Peters Anglican Church & Cemetery (NSW NTHR No. 9954)
- St Peters Anglican Church Hall (NSW NTHR No. 9955)
- St Peters Anglican Church Rectory (NSW NTHR No. 9958)
- McMahon Homestead
- St Phillip's Anglican Church Graveyard
- Sunnyside
- Inew
- Mountain View / Dight's Farm
- Eltham

2.8 Summary of heritage listings

A 250m heritage buffer has been placed around the study area to capture potential visual impacts to heritage items in the vicinity of the study area.

The 250m heritage buffer around the study area contains multiple State and local heritage items, which are listed on multiple heritage registers, outlined in Table 1. The 250m heritage buffer and curtilages of these items are illustrated in Figure 3.

Table 1: Results of register searches for the study area and 250m heritage buffer

Item	Address	Significance	Listing(s)	Proximity to Study Area
Avenue of trees east and west side of street	Chapel Street, Richmond	Local	HLEP 2012 I18	Within the study area
Bowman House	368-370 Windsor Street, Richmond	State	SHR No. 00468 HLEP 2012 100468 RNE Place ID. 3198	60m north of the study area, within 250m heritage buffer
Buildings, outbuildings, grounds, trees (of Bowman House)	49-51 Bosworth Street, Richmond	State	SHR No. 00753	200m southeast of the study area, within 250m heritage buffer

Item	Address	Significance	Listing(s)	Proximity to Study Area
The cottage	313-315 Windsor Street, Richmond	Local	HLEP 2012 I124	190m northeast of the study area, within 250m heritage buffer
Eltham	317 Windsor Street, Richmond	Local	HLEP 2012 I125 NSW NTHR	175m northeast of the study area, within 250m heritage buffer
Former house	190 March Street, Richmond	Local	HLEP 2012 I72	Adjacent east of the study area, within 250m heritage buffer
Former police station and residence	39 Bells Line of Road, North Richmond	Local	HLEP 2012 I406	Adjacent southwest of the study area, within 250m heritage buffer
Hawkesbury River Bridge	Kurrajong Road, North Richmond	State	TAHE S170 RNE Place ID. 15946	Within the study area
Hobartville, including outbuildings	Kurrajong Road, Richmond 36-86 Inalls Lane, Richmond	State	SHR No. 00035 HLEP 2012 100035 & 114 RNE Place ID. 3133 NSW NTHR No. 7920	
House	25-29 Bosworth Street, Richmond	Local	HLEP 2012 I3	160m east of the study area, within 250m heritage buffer
House	35 Bosworth Street, Richmond	Local	HLEP 2012 I4	160m east of the study area, within 250m heritage buffer
House	9 Chapel Street, Richmond	Local	HLEP 2012 I17	170m north of the study area, within 250m heritage buffer
House	32 Inalls Lane, Richmond	Local	HLEP 2012 I41	Within the study area
House	335 Windsor Street, Richmond	Local	HLEP 2012 I126	130m north of the study area, within 250m heritage buffer
House	337 Windsor Street, Richmond	Local	HLEP 2012 I127	130m north of the study area, within 250m heritage buffer
House	339 Windsor Street, Richmond	Local	HLEP 2012 I128	130m north of the study area, within 250m heritage buffer

ltem	Address	Significance	Listing(s)	Proximity to Study Area
House	91 Bells Line of Road, North Richmond	Local	HLEP 2012 I410	Adjacent southwest of the study area, within 250m heritage buffer
House	101A Bells Line of Road, North Richmond	Local	HLEP 2012 I493	Adjacent to the west of the study area, within 250m heritage buffer
House	15 Grose Vale Road, North Richmond	Local	HLEP 2012 I495	140m southwest of the study area, within 250m heritage buffer
Inew cottage	7 Chapel Street, Richmond	Local	HLEP 2012 I16 NSW NTHR	185m north of the study area, within 250m heritage buffer
McMahon Homestead	26 Drift Road, Richmond	Local	HLEP 2012 I82 NSW NTHR	180m southwest from the study area, within 250m heritage buffer
Mountain View	22 Inalls Lane, Richmond	State	SHR No. 00044 HLEP 2012 100044 RNE Place ID. 3134 NSW NTHR	Adjacent to the north of the study area, within 250m heritage buffer
Seventh Day Adventist Church	54 Bells Line of Road, North Richmond	Local	HLEP 2012 I407	Adjacent to the north of the study area, within 250m heritage buffer
St Peter's Anglican Church Group	384 Windsor Street, Richmond 347, 347A and 349 Windsor Street, Richmond	State	SHR No. 02023 HLEP 2012 I134 & I129 RNE Place ID. 3184 NSW NTHR No. 4234, 9954, 9955 & 9958	58m north of the study area, within 250m heritage buffer
St Phillip's Anglican Church and Cemetery	151 Bells Line of Road, North Richmond	Local	HLEP 2012 I408 NSW NTHR	Adjacent west of the study area, within 250m heritage buffer
Sunnyside (former O'Dea's dairy)	21 Pitt Lane, North Richmond	Local	HLEP 2012 I413 NSW NTHR	190m southwest from the study area, within 250m heritage buffer

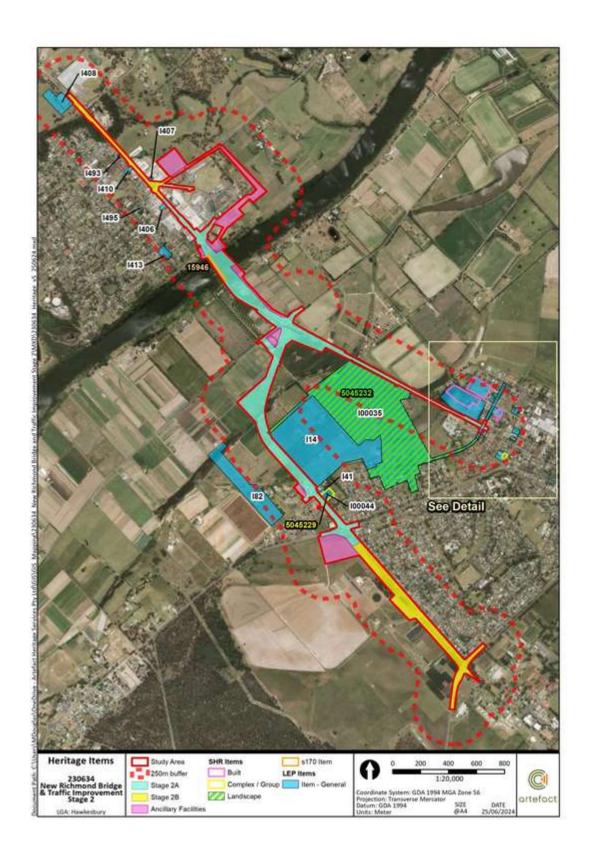


Figure 3: Heritage items within the Study Area and the 250 m heritage buffer



Figure 4: Detail of heritage map in Richmond

3.0 HISTORICAL BACKGROUND

3.1 Aboriginal histories

Many Aboriginal people, like other Indigenous or First Nations people around the world, say they have been living on Country for 'time immemorial' – that they have always been here, and their origins lie in the creation of the land and animals. As Elder Aunty Jenny Munro expresses:

'...from time immemorial, we believe as Aboriginal people, Australia has been here from the first sunrise, our people have been here along with the continent, with the first sunrise. We know our land was given to us by Baiami, we have a sacred duty to protect that land'

Given the devastating impact of violent dispossession and disease upon Aboriginal people in the Sydney region during colonisation, the precise identification of language groups and historical traditional lands or Country for a given area is often difficult today. In the Sydney basin there seems to have been an alignment with inland economies of the rivers, creeks and open forests of the Cumberland Plain, and coastal 'saltwater' focused groups. It is now generally agreed that Darug people lived in the Richmond area, with Darkinjung people to their north.

The Hawkesbury River was known as Dyarubbin by Darug and Darkinjung people. It flows north from present day Marrangorra (now known as Richmond), edging the Sydney basin and the shale-soils of the Cumberland Plain. The fertile river flats nestled on the banks of the Dyarubbin, along with the swamps and tributary rivers, creeks and lagoons that teemed with animals, plants and birds, were certainly an important focus for Darug and Darkinjung people living in the area. Women harvested yams with their guni or ganayi (yam sticks) to lift and shake the yams from the soil. They then cleaned and ground up yams, tubers, rhizomes, as well as berries, nuts and seeds using grinding stones — larger stones that remained in camping places as well as smaller portable ones. Many grindstones are still found today, and many have been collected by non-Aboriginal people in the past.

As more farming lands were wanted by the colonists, the fertile river banks of the Dyarubbin between what were to become Richmond and Windsor were quickly occupied after Charles Williams and James Ruse were sent there in late 1793 and soon reported back on the 'rich black mould [soil] of several feet depth'. Despite the massive death and disruption to Aboriginal lives across Sydney from the disease smallpox in 1789, in 1794 resistance warfare against the colonisers began in earnest along the new settlements on the Dyarubbin (Hawkesbury) River and was to carry on through the 1790s.

While at first there had been no 'interruptions' from the 'natives', as David Collins noted, this soon changed and in April 1794 when some farmers used firearms against Aboriginal people, killing at least one person. Conflict at the Dyarrubin River increased, with two colonists killed and raids, attacks and retaliations common. At one point, settlers gathered 'what arms they could' and 'seven or eight' Darug people were 'killed on the spot' in what was the first recorded massacre of Aboriginal people in the British colony.

This 'constant sort of war' as one colonist described it, continued at the Hawkesbury during the early 1800s until Governor Macquarie ordered the now infamous military campaign across the Sydney region that ended in the Appin Massacre of April 17th, 1816.

In the early 1800s, Aboriginal people who had survived early colonisation continued to live in the Richmond area. Some of them were known to have lived and worked at 'Belmont', Archibald Bell's estate at North Richmond, now the site of the St John of God Hospital. Some continued to live at 'Ham Common', a Common set aside by Governor King in 1805 at east Richmond, as well as on

commons at Wilberforce and Castlereagh. The so-called 'Richmond Tribe' continued to conduct ceremonies including traditional 'contests and fights' into the 1830s. Some of the known people of the 'Richmond Tribe' included Mioram, Wolloboy, Bumba, Gilmaroy and Murrigan.

Today Darug and other Aboriginal people are reclaiming and asserting their heritage. People such as Aunty Edna Watson are creating sculptures and other artwork that responds to the histories of the river. Darug knowledge-holders, artists and educators such as Leanne Watson, Erin Wilkins, Jasmine Symour and Rhiannon Wright have worked with historian Grace Karskens and others to generate the 'Dyarubbin: Mapping Aboriginal history, culture and stories of the Hawkesbury River, New South Wales' project as Aboriginal cultural revival and language revitalisation gather momentum.

3.2 Early European settlement

In 1789, Governor Phillip explored the area. By 1794, the first 22 land grants were made by Lieutenant-Governor Major Francis Grose in the area of Clarendon (formerly known Mulgrave Place), between present-day Richmond and Windsor². In spite of the frequent flooding the area was put to agricultural use and yielded wheat crops that were shipped to Sydney via the Hawkesbury River³. The area was renamed Hawkesbury after the Baron Hawkesbury in 1789⁴. The majority of the first land grants were made in 30-acre portions to emancipists, and free settlers. The NSW Corps were granted larger grants, such as James Blackman's 100-acre land granted in 1802⁵ and Edward Lutterell's (also spelled Luttrell) 400-acre land grant in 1804⁶.

3.3 Richmond, a Macquarie Town

The Hawkesbury region was taken up by small farmers as early as the 1790s, growing wheat and maize and shipping it to Sydney on the Hawkesbury River. By 1794, settlers were granted farms in Windsor along South Creek and the earliest grant in Richmond seems to be 1795.

Some of the earlier grants are listed to Andrew Connelly, John Griffiths, Emanuel Perry and William Laine. Governor Lachlan Macquarie toured the settlement of NSW during 1810. On the 1st of December, Macquarie and his party travelled to Richmond Hill, the "*Kurry Jung Brush*" and Richmond Terrace. He recorded his first visit to the area in his journal on 6 December 1810:

After dinner I christened [sic] the new townships...I gave the name of Windsor to the town intended to be erected in the district of the Green Hills...the township in the Richmond district I have named Richmond...⁷

Macquarie's five towns of the Hawkesbury were named Richmond, Windsor, Wilberforce, Pitt Town, and Castlereagh and were laid out in 1810. The formation of Richmond Town's grid and extent were dominated to the southwest by Lutterell's 'Hobartville' land grant.

Macquarie began planning townships along higher ground above the Hawkesbury River to protect settlements from the frequent flooding. Town land was apportioned by a formula based upon acreage

⁷ 'Lachlan Macquarie Journal Entry', 6 December 1810, Lachlan and Elizabeth Macquarie Archive, https://www.mq.edu.au/macquarie-archive/lema/1810/1810dec.html#dec6.



² Barkley, Jan & Nichols, Michelle, 1960, Hawkesbury 1794-1994: The first two hundred years of the second colonisation.

³ Barkley & Nichols, 1960.

⁴ 'Hobartville, Including Outbuildings'.

⁵ Greaves, Bernard, 1966, *Blackman, James (c.1792-1868)*, Australian Dictionary of Biography. https://adb.anu.edu.au/biography/blackman-james-1790

⁶ 1967, Luttrell, Edward (1756-1824), Australian Dictionary of Biography. https://adb.anu.edu.au/biography/luttrell-edward-2381

New Richmond Bridge and Traffic Improvements Stage 2 Statement of Heritage Impact

held by the landowner in which only those who held land nearby were eligible for town allotments which remained active until the 1830s. ⁸

The foundation of the town and its dwellings were specified to be of brick or weatherboard with walls at least nine feet high, with shingle roofs and brick chimneys. A minimum of two rooms was also specified, both of which had to possess glazed windows with all approval plans needing to be vested with the district constable. By 1841, the census listed 37 stone or brick houses and 66 of timber construction within the Town of Richmond. According to a c.1811 town map of Richmond, an unknown structure appears to have been developed to the southwest of the March Street intersection on the street that is now known as Chapel Street (Figure 5). This early nineteenth century structure is located within the south eastern portion of the study area. The 1898 Town of Richmond map and the 1899 sketch map of Richmond indicate that substantial development had been undertaken within the vicinity of the south eastern portion of the study area including a church (Figure 6 and Figure 7).

¹¹ Ibid.



⁸ Edward Higginbotham & Associates 1997. Archaeological Management Plan, Richmond, NSW, p 5.

⁹ Ibid.

¹⁰ Ibid.

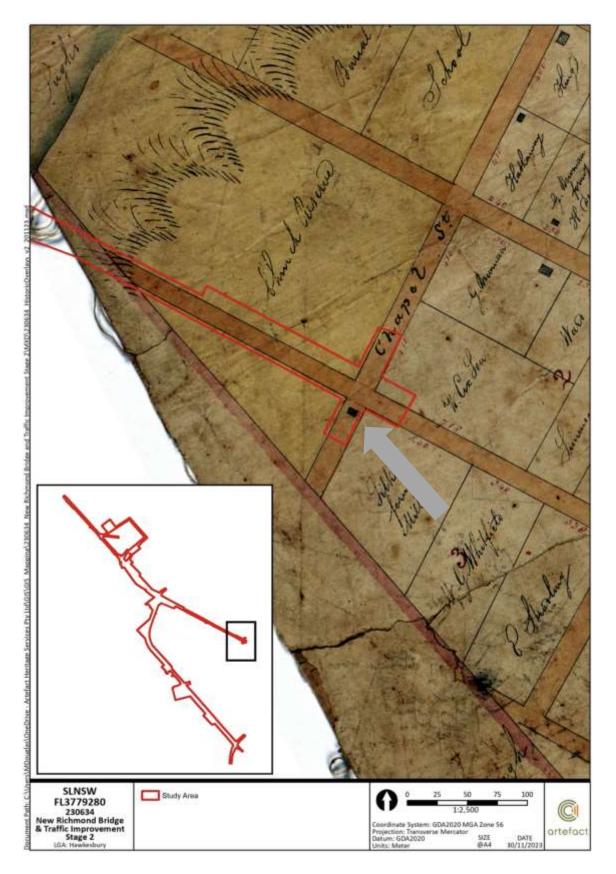


Figure 5: C.1811 map of the Town of Richmond and the location of the early nineteenth century unknown structure indicated by the grey arrow (Source: Mitchell Library).

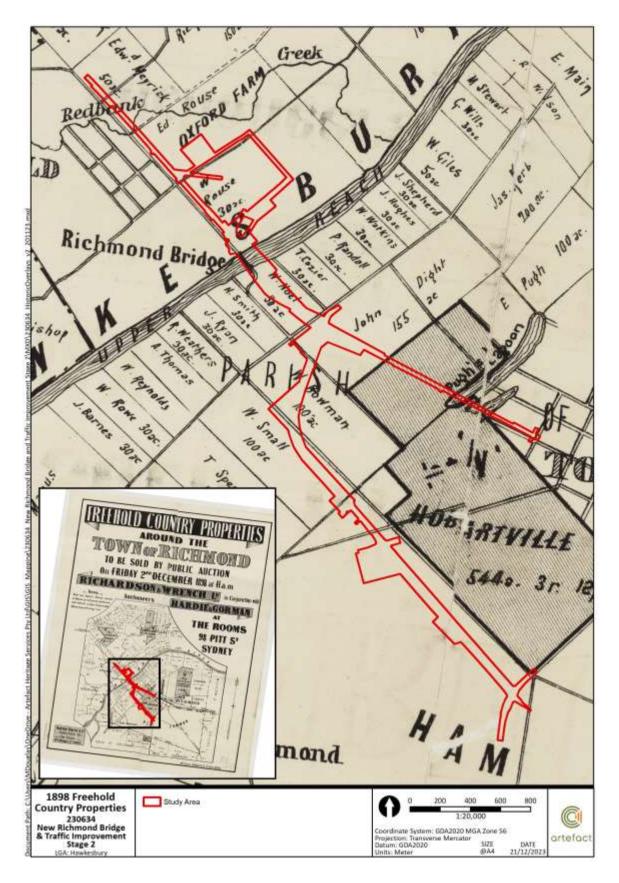


Figure 6: 1898 Town of Richmond and Enfield (North Richmond)

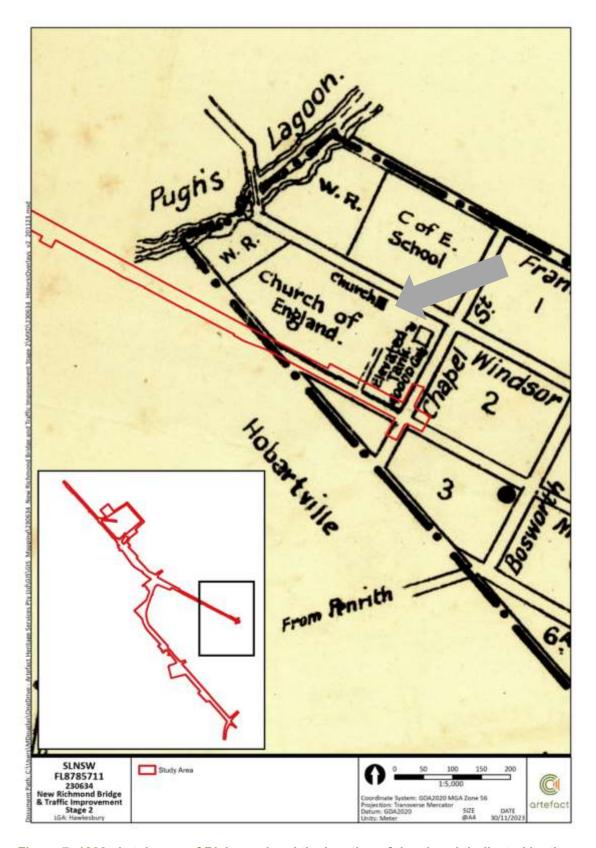


Figure 7: 1899 sketch map of Richmond and the location of the church indicated by the grey arrow (Source: Mitchell Library).

3.3.1 Land grants and settlement within and adjacent to the study area

The study area is located across multiple early land grants. The 1881 Currency parish map (Figure 12) indicates the following land grants:

- William Rouse's 30-acre land grant
- Richard Rouse's 100-acre land grant named 'Oxford Farm'

Richard Rouse was granted his 100 acres in 1802 by Governor Philip Gidley King, Rouse established a farm, the land was utilised for agricultural purposes even after he moved to Paramatta in 1805¹². Although there is no mention of specific structures in the historical records, it is likely that a dwelling and agricultural outbuildings and fencing would have been built for the purposes of habitation and agricultural farm use.

The 1860s Ham Common parish map indicates the following land grants that are within the study area:

- Thomas Crozier's 30-acre land grant
- William Noel's 30-acre land grant
- John Dight's 155-acre land grant
- James Blackman's 100-acre land granted in 1802, which would form part of 'Hobartville'
- William Bowman's 100-acre land grant
- William Small's 100-acre land grant
- Edward Lutterell's 400-acre land grant named 'Hobartville' granted in 1804

These land grants were predominantly used for agricultural purposes.

3.3.1.1 Mountain View

Mountain View is a State listed heritage item (SHR #00044). The study area would terminate at the edge of the property boundary and heritage curtilage and therefore not encroach on the heritage item. The SHR listing outlines the history of the item:

John Dight (1772 - 1837) with his wife Hannah (1781 - 1862) and baby daughter Sarah arrived in the colony on 12 June 1801 as free settlers on board the 'Earl Cornwallis'. They received a grant on 31 March 1802 of 155 acres from Governor King at Mulgrave Place - later called Richmond - the grant to be known as 'Durham Bowes'. This grant was on the eastern bank of the Hawkesbury River, downhill and slightly north of the location of the later Dight's Farm/ today's Mountain View. Richard Rouse and his sons (of Rouse Hill house and farm) had various grants on the opposite, western bank of the Hawkesbury River. Surveyor James Meehan laid out the grants in the area.

The Hawkesbury River was in flood three times during 1806 causing the destruction of the Dight's four roomed brick dwelling on their lowlands grant. This induced them to purchase 9 acres on the highlands to safely accommodate their growing family. It was on the south-west corner of Edward Luttrell's 1804 grant and became known as Dight's Hill.

¹² Marjorie Lenehan, 'Rouse, Richard (1774–1852)', in *Australian Dictionary of Biography* (Australian National University, 1967), https://adb.anu.edu.au/biography/rouse-richard-2612/text3601.



In March 1812 John Dight contracted with Lewis Jones - who together with carpenter James Vincent were described in the Bigge report of 1820 as 'two of the best builders in this part of the colony' to erect a dwelling house of two storeys for the sum of twenty six pounds. This building was next to, but independent of the original dwelling and consisted of one room on each storey. The contract was witnessed by Margaret Catchpole the esteemed convict nurse.¹³



Figure 8: Mountain View, Richmond (Source: Office of Environment and Heritage, 2019)

3.3.1.2 Hobartville

Some portions of the study area are located within Hobartville, refer to Figure 13 where Hobartville is indicated on the parish map. Hobartville comprises the original land grants of James Blackman (1802) and Edward Lutterell (1804). These grants combined formed 500-acres; it was named Hobartville in 1816¹⁴. The properties were used for pastoral purposes. Lutterell's property was advertised as having a house, garden and out offices¹⁵, it was inherited by his son-in-law in 1814, who leased it to lieutenant William Cox Junior¹⁶. It was purchased by Lt. William Cox Junior two years later; William and his wife Elizabeth bore their nine children in the old Lutterell house between 1814 and 1826¹⁷. It was Lt. Cox who added Blackman's land grant to the estate in 1818. Proudfoot notes that Lt. Cox planted:

an avenue of oak trees leading to the house as well as many other varieties along the river banks¹⁸.

The present homestead of Hobartville (SHR No. 00035) was completed in 1828 and attributed to the work of Francis Greenway, a grand two storey sandstock brick mansion, the National Trust (NSW) listing card mentions:

whilst reminiscent of William Cox Jr's childhood home, Clarendon, with its setting looking across the Hawkesbury floodplain, Hobartville displays the opulence

https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045229.

¹⁸ Proudfoot, *Historic Buildings of Windsor and Richmond*.



¹³ SHR, 'Mountain View' (Heritage NSW, n.d.),

¹⁴ Helen Proudfoot, Historic Buildings of Windsor and Richmond (Kenthurst: Kangaroo Press, 1987).

¹⁵ Proudfoot.

¹⁶ 'Hobartville, Including Outbuildings'.

¹⁷ 'Hobartville, Including Outbuildings'.

associated with the modest prosperity of these second-generation Hawkesbury settlers¹⁹.

Andrew Town bought the property in 1877, he established his horse stud and sales²⁰. It became a famous horse stud and brought large crowds for sales. In 1889 the property was passed to William Long and George Hill who then sold it to Percy Reynolds in 1900²¹. The Reynolds family continued to breed horses and Hereford cattle until the 1950s on the property²². In 1931 it was deemed as "the most successful Hereford cattle stud in Australia"²³.

The property was subdivided 250-acres in 1966 into a 1200 home residential development named Hobartville²⁴. By the mid-1970s the property was owned by Mr Bruce Lindsay. The homestead is still in private ownership and the horse stud facilities are leased.



Figure 9: Hobartville, Richmond (Source: Max Dupain, 1963 via NSW Art Gallery).

¹⁹ National Trust of NSW, 'Hobartville', n.d.

²⁰ 'Hobartville, Including Outbuildings'.

²¹ 'Hobartville, Including Outbuildings'.

²² 'Hobartville, Including Outbuildings'.

²³ Pastoral Homes of Australia. (Sydney: Pastoral Review, 1931), http://nla.gov.au/nla.obj-268959005.

²⁴ 'Hobartville, Including Outbuildings'.



Figure 10: Hobartville (SHR No. 00035) and grounds (Source: M. Nichols, 1996)

The 1881s Currency parish map indicates the following additional land grants that are within the study area:

- William Rouse's 30-acre land grant
- Edward Merrick's 30-acre land grant
- Benjamin Urch's 50-acre land grant

3.3.1.3 St Peter's Anglican Church

This church is located north east, adjacent to the study area, the study area passes through land that was resumed for the railway from the original church grounds, refer to Section 3.5.4. St Peter's Anglican Church was surveyed by James Meehan, who surveyed Richmond's burial ground and Captain William Cox fenced it off with post and rail in 1811²⁵. The original cemetery overlooked Pugh's Lagoon and had been consecrated by Samuel Marsden. It was only 25 years later in 1836 that tenderers were called for St Peter's Anglican Church.

²⁵ Helen Proudfoot, *Historic Buildings of Windsor and Richmond* (Kenthurst: Kangaroo Press, 1987).



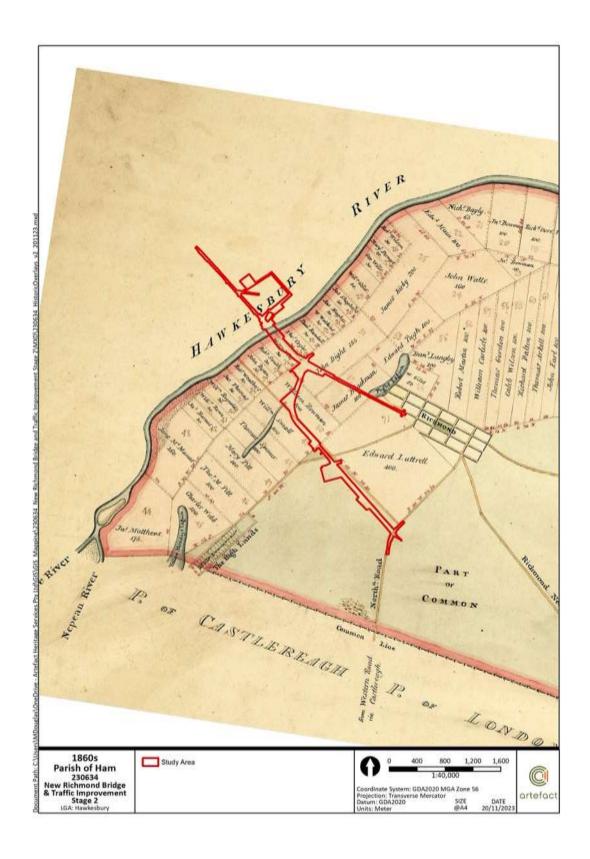


Figure 11: 1860s Parish of Ham map (Source: Historic Records Lands Viewer).

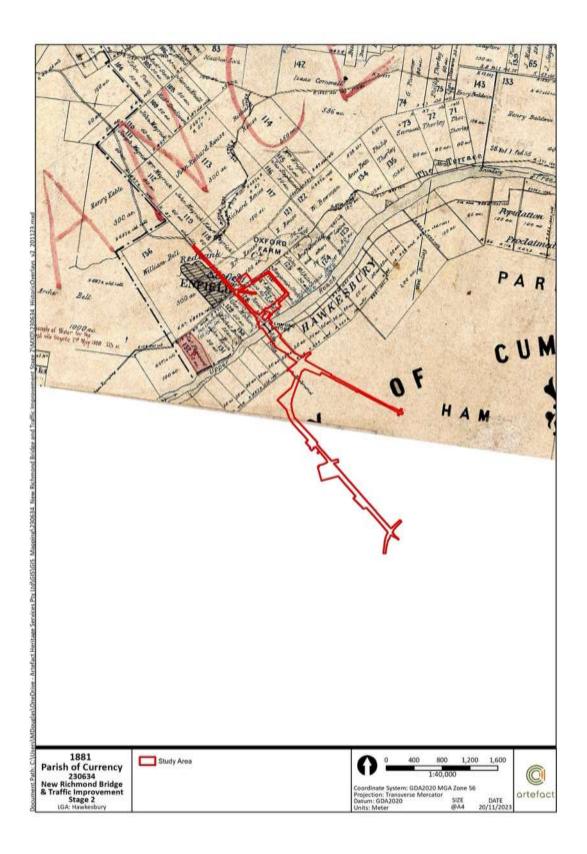


Figure 12: 1881 Parish of Currency map (Source: Historic Records Lands Viewer).

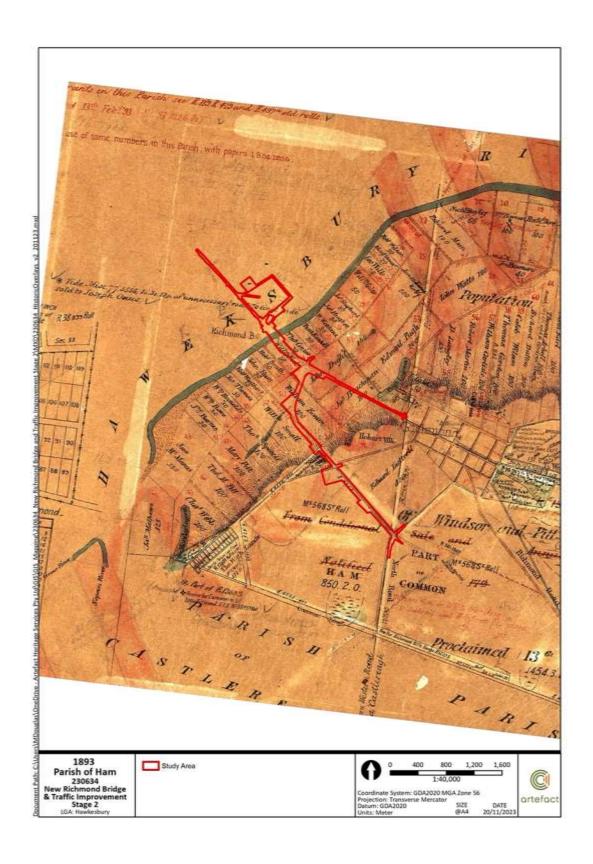


Figure 13: 1893 Parish of Ham map (Source: Historic Records Lands Viewer).

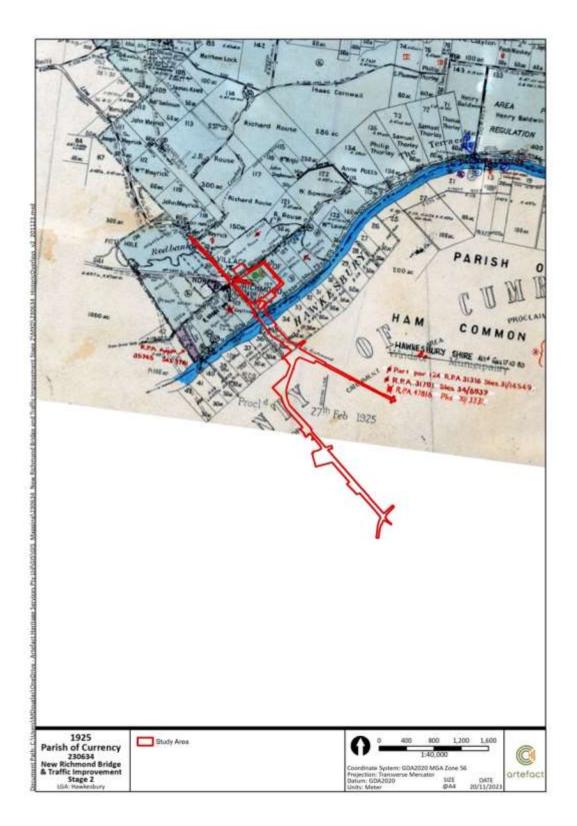


Figure 14: 1925 Parish of Currency map (Source: Historic Records Lands Viewer).

3.4 North Richmond

As depicted in the 1881 Parish Map (Figure 12), North Richmond used to be called Enfield, the name was changed to North Richmond by 1925 (Figure 14) as Enfield was also a suburb closer to Sydney Town. In 1833 John Town opened the Woolpack Inn, which was later renamed to Traveller's Rest in 1847. By 1933 an additional modern hotel was built, it was named North Richmond Hotel by 1940.

3.4.1.1 Hanna Park

The study area is located within Hanna Park. The 1926 Kurrajong railway line ran through North Richmond Park, which was part of the original first 10-acres 3 roods 32 ½ perches of Hanna Park which was dedicated for public recreation and gazetted on the 17 April 1930²⁶, as depicted in the Parish of Currency map (Figure 14). The first 10-acres were bought from Edward Merrick's 30-acre land grant for £547.12²⁷. Half of the cost of the site was provided by the Minister of Lands and the other was provided by the Hawkesbury and Nepean Districts Federation of Progress and Kindred Associations, this association had been formed for the purpose of creating this park²⁸. Mr. R. B. Walker M. L. A. performed the opening ceremony of the park as the Minister of Land was absent²⁹. By 1956 the Kurrajong railway line which ran through the park was removed. In the 1960s the park functioned as a make-shift caravan park for seasonal workers for nearby farms, Cr McMahon supported the need for seasonal workers in the area, however the local residents did not share the same sentiment, complaining about the cleanliness and behaviour of the seasonal workers in the park.³⁰ Currently the park does not house caravans and is a grassy area surrounded by trees and bounded by the Hawkesbury River to its south, Bells Line of Road to its west, and residential development to its north.

3.4.2 St Phillip's Anglican Church and Cemetery

St Phillip's Anglican Church is located at 151 Bells Line of Road, North Richmond on Lot 1 of DP 870269. The earliest headstone at St Phillip's Anglican Church and Cemetery is dated 1864, the cemetery was in use from the c1860s to c1970s with over 300 burials registered³¹. The NSW NTHR listing card includes the following history and description of the heritage item:

The simple rural late Victorian brick church and graveyard reflect the spread of development in the 1880's from the Macquarie Towns west into the foothills of the Blue Mountains. They lie about a mile from the village of North Richmond, immediately besides Bells Line of Road on a hill sloping to the south and opening to a magnificent backdrop of ploughed land and tree'd hills with the Blue Mountains in the background. Headstones all lie west to east in rows running down the slope of the hill. The early section (earliest headstone 1851) with its vertical sandstone headstones provides the immediate impact from the road.³²

³² P Pike and S Collingridge, 'St Phillips Church of England Graveyard' (NSW National Trust, 1980), NSW National Trust Archive.



²⁶ 'NORTH RICHMOND PARK', *Windsor and Richmond Gazette*, 16 August 1929, http://nla.gov.au/nla.news-article85929479.

²⁷ 'NORTH RICHMOND PARK'.

²⁸ 'NORTH RICHMOND PARK'.

²⁹ 'NORTH RICHMOND PARK', *Windsor and Richmond Gazette*, 17 May 1929, http://nla.gov.au/nla.news-article85930728.

³⁰ "Gypsy-Type Camp" in North Richmond Park', *Windsor and Richmond Gazette*, 2 December 1964, http://nla.gov.au/nla.news-article266721674.

³¹ GML Heritage, 'Hawkesbury City Council Cemeteries Strategic Conservation Management Plan Report to Hawkesbury City Council', 2020.

St Phillip's Anglican Church was converted into a private residence and is currently occupied. St Stephen's Anglican Parish of Kurrajong maintains the cemetery.³³



Figure 15: St Phillip's Anglican Church and Cemetery (Source: Artefact, 2023)

3.5 The great stock routes and the Hawkesbury River Bridge

3.5.1 Bells Line of Road

Archibald Bell, son of the wealthy and respected 'estimable colonist' Lieutenant Bell, was a prominent settler in the Hawkesbury region and the town of Richmond. In 1822, Mr Bell marked Bells Line of Road, an alternative stock route from Belmont at Richmond to Bathurst. Mr Bell had marked this road alignment by travelling west over the mountain ridges from Richmond to the Kurrajong Ridge and Mount Tomah. Throughout the 1820s and 1830s, Bells Line of Road had become an established droving stock route for livestock being transported from the Macquarie River Country, Namoi and Mudgee Road region to the Sydney and Homebush markets. For this reason, Bells Line of Road opened the Central West to cattle trade and distribution with greater Sydney.³⁴

The great cattle herds would be accompanied by skilled drovers and assistant stockman as the road alignment was largely an unsurveyed dirt road that traversed the western ridges and mountains. The journey from Macquarie River Country to the Town of Richmond was around 500 kilometres long and a six-week journey. Following this journey, the drover and assistant stockman and their cattle had the option to rest in Richmond at the 'River Inns' including the Woolpack Inn and Packhorse Inn which were located near the North Richmond Hawkesbury River bridge.³⁵

3.5.2 The River Inns

The Pack Horse (P&H) Inn was established as early as the 1830s in the Town of Richmond. The P&H Inn was located to the south of the Hawkesbury River bridge and on Old Kurrajong Road. The inn was constructed on the land granted to William Noel in 1795 which was later purchased by John Dight in 1802 and leased to Thomas Parnell who then licensed the P&H Inn in 1829. The P&H Inn provided shelter, and food and water to drovers before they ferried over the Hawkesbury River with their cattle. The publican for the P&H in the 1850s, Benjamin Richards, used the land as resting paddock for cattle and their drovers who were travelling to the Homebush and Sydney Markets.³⁶

³⁶ The Milestone (2016), Kurrajong – Comleroy Historical Society, The Old Inns of North Richmond – Part 2, Deborah Hallam, The Milestone July – August 2016.



³³ GML Heritage, 'Hawkesbury City Council Cemeteries Strategic Conservation Management Plan Report to Hawkesbury City Council'.

³⁴ The Milestone (2019), Kurrajong – Comleroy Historical Society, Stock Routes through the Kurrajong, Milestone November – December 2019.

³⁵ The Milestone (2019), Kurrajong – Comleroy Historical Society, Stock Routes through the Kurrajong, Milestone November – December 2019.

The Woolpack Inn was established and licenced by John Town in the 1830s in the Town of Richmond. The Woolpack Inn was located on the northern side of the Hawkesbury River and on the western side of Bells Line of Road. An 1863 lease advertisement for the Woolpack Inn noted:³⁷

"Woolpack Inn, North Richmond, containing twelve rooms, kitchen, store above, outbuildings, stock-yards. Garden stocked with choice trees, and about twenty acres of land all securely fenced"

The Woolpack Inn was licensed to Jane Cribb in 1874 and renamed 'The Travellers Rest'. The Travellers Rest Inn had extensive improvements made to the building in the 1920s before it was used as a boarding house for the local community in the 1940s. The Travellers Rest was demolished in the late 1960s and the space was utilised as a car park for the newly developed North Richmond Hotel which was located on the property immediately to the northeast of the old Travellers Rest Inn (Figure 17 and Figure 18).

The Woolpack and Pack Horse Inns were primarily used to provide shelter, rest, and meals to the drovers and the assistant stockman on their journey across the Hawkesbury River bridge and to and from the Sydney and Homebush markets. These shelters became known as the 'River Inns' and were some of the earliest inns developed within the Town of Richmond and along Bells Line of Road and Kurrajong Road in the mid-nineteenth century.³⁸

However, it is noted that both Inns were located outside the study area, along the western and eastern boundaries.

³⁸ The Milestone (2022), Kurrajong – Comleroy Historical Society, The Story of the Richmond Bridge: The First Crossings, The Milestone March – April 2022.



³⁷ The Milestone (2016), Kurrajong – Comleroy Historical Society, The Old Inns of North Richmond – Part 2, Deborah Hallam, The Milestone July – August 2016.

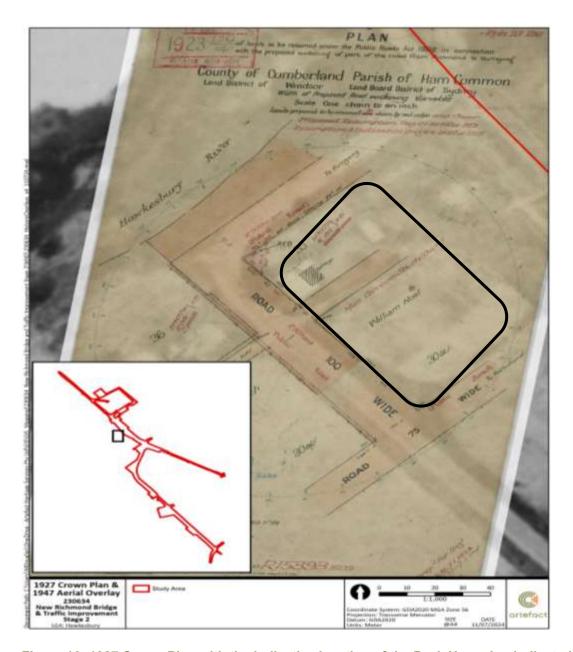


Figure 16: 1927 Crown Plan with the indicative location of the Pack Horse Inn indicated by the black rectangle (Source: Historical Land Records Viewer)



Figure 17: The North Richmond Hotel with the Woolpack (Travellers Rest) Inn identified by the red arrow



Figure 18: 1963 image of The Woolpack (Travellers Rest) Inn along Bells Line of Road

3.5.3 The Hawkesbury River crossings

The Punt and Wharf (1820s-1850s)

The Hawkesbury River crossing was located at North Richmond between the River Inns from the 1820s. The crossing would be used by the drovers and their cattle as they journey through Richmond to the Homebush and Sydney markets. The first iteration of the Hawkesbury River Crossing was the 'punt' and wharf which operated from the 1820s. The punt wharf was used to ferry the drovers and their cattle from Bells Line of Road on the north to Kurrajong Road in the south. The punt was owned by Archibald Bell and operated by his daughter Mrs Faithfull.

The Richmond Bridge Crossing (1850s-1904)

The Richmond Bridge Company (RBC) was formed in 1857 by local businessmen in the Town of Richmond following maintenance difficulties for the punt. The RBC planned to construct a bridge that would replace the punt. Soon after, the punt and wharf were dismantled and all surplus material from the punt and the bridge was auctioned off. The RBC started construction on the bridge in 1858 using timber sourced from the Richmond area. The timber bridge was named the Richmond Bridge Crossing and was completed in 1860, thus connecting Bells Line of Road in the north to Kurrajong Road in the south (Figure 19 and Figure 20). ³⁹ As the drovers and their cattle passed through the Town of Richmond they would take rest at the Woolpack Inn that was located to the north of the Richmond Bridge Crossing (Figure 21 and Figure 22).



Figure 19: The timber bridge crossing the Hawkesbury River at Richmond (NSW Government, 1897)

³⁹ 'The Long and Winding History of Bells Line of Road'.



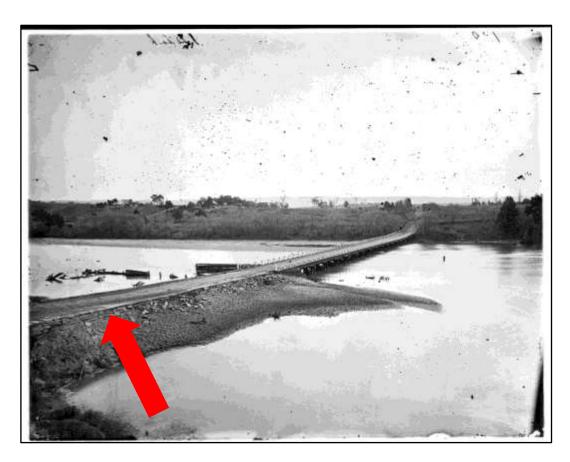


Figure 20: Richmond Bridge Crossing in 1900 with Old Kurrajong Road indicated by the red arrow (Source: Museums of History New South Wales)

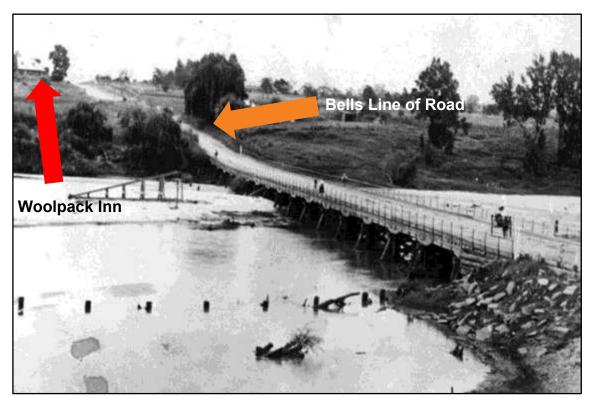


Figure 21: Richmond Bridge Crossing with the Woolpack Inn indicated by the red arrow and Bells Line of Road indicated by the orange arrow (Source: State Library New South Wales)

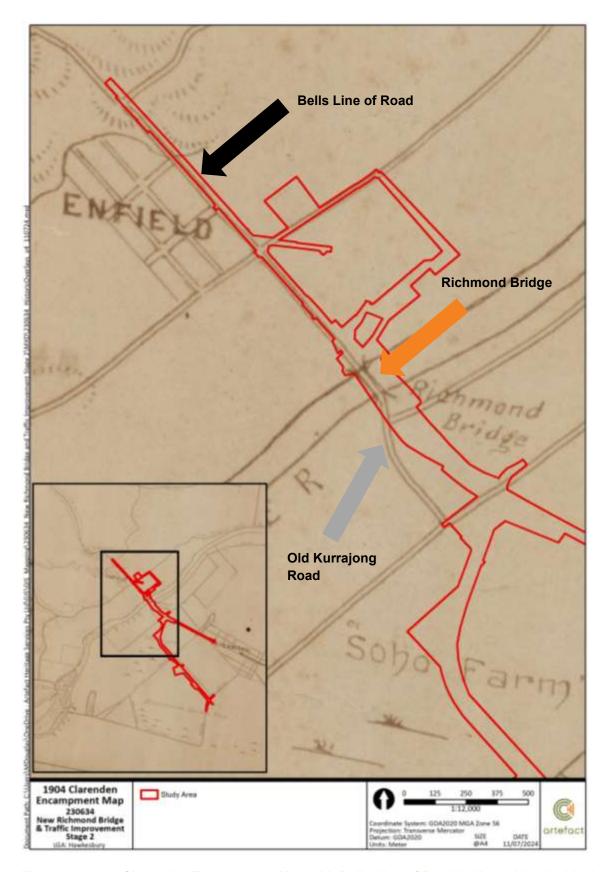


Figure 22: 1904 Clarenden Encampment Map with Bells Line of Road indicated by the black arrow, Richmond Bridge indicated by the orange arrow, and Kurrajong Road indicated by the grey arrow (Source: State Library New South Wales)

The Richmond Bridge (1904)

The Richmond Bridge Crossing suffered damage from repeated flooding, particularly in 1867 and 1870.⁴⁰ In 1871 the restoration of the bridge was requested by the public; the government bought the private bridge in 1876 and restored it.⁴¹ New collapsible railing and a new hardwood deck were also added to bridge as part of restoration works in 1890 following another substantial flood. By 1900 the deck of the bridge was severely damaged and so calls for the construction of a new bridge were made.⁴²

Construction on a new bridge crossing the Hawkesbury River began in 1904 and was completed a year later. This bridge is known as 'The Richmond Bridge', a thirteen span Monier concrete arch structure with a deck 7 metres (m) above the normal river level.⁴³ The new Richmond Bridge was located immediately to the east of the earlier Richmond Bridge Crossing and connected with the original road alignment of Old Kurrajong Road (Figure 23 and Figure 24). The new Richmond Bridge was Australia's largest reinforced concrete arch bridge at the time and remained so for another 25 years.

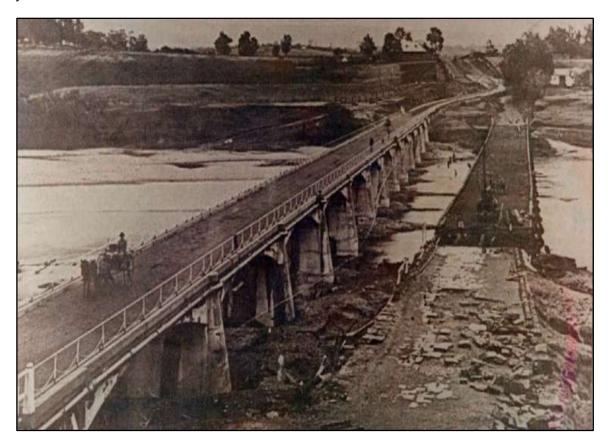


Figure 23: Current Richmond Bridge linking Richmond to North Richmond (left) and former (right) (Source: KCHS).

⁴⁰ 'The Long and Winding History of Bells Line of Road'.

⁴¹ 'The Long and Winding History of Bells Line of Road'.

⁴² 'The Long and Winding History of Bells Line of Road'.

⁴³ 'The Long and Winding History of Bells Line of Road'.

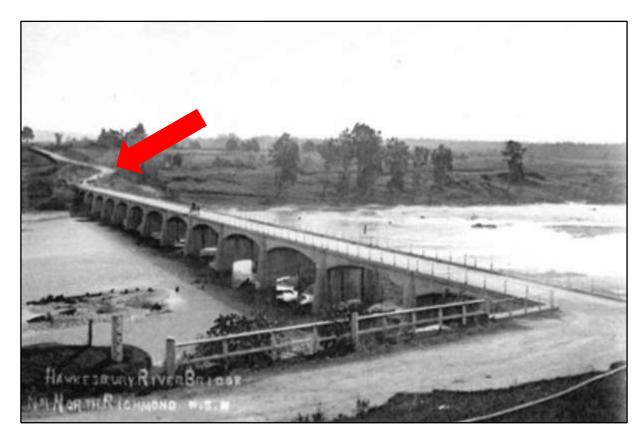


Figure 24: The Richmond Bridge following the original road alignment of Old Kurrajong Road as indicated by the red arrow (Source: HCC Library Collection)

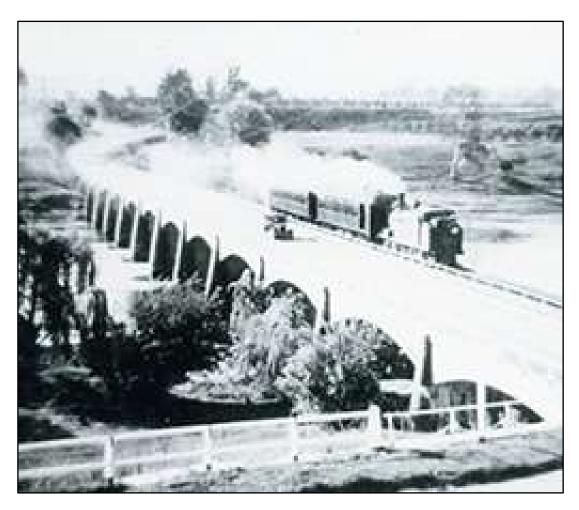


Figure 25: Richmond Bridge with train (Source: Hawkesbury City Council Library).



Figure 26: The Depot with a cart travelling along the sidings (Source: Light Railways)

3.5.4 The Richmond to Kurrajong Railway and 'The Depot'

The railway

A transformative period in the construction of The Richmond Bridge took place in 1926. The Richmond to Kurrajong railway line was to run across The Richmond bridge and the Hawkesbury River from the south and continue north through North Richmond and Kurrajong. Part of this railway line had already been operational since the 1860s. To facilitate this development a third column was attached to each pier to support two steel girders on the northwestern side of the river (Figure 25).⁴⁴ While travelling along the rail line the rail drivers would have to look out for the local livestock as the rail line was unfenced.

A heavy rain event in 1952 caused enough damage to the rail tracks on the bridge that Reginald Winsor (the Commissioner of Railways at the time) decided the line would not re-open.⁴⁵ The railway tracks were replaced by an eastbound lane of vehicular traffic by 1956.

The Richmond to Kurrajong Railway line was shut in 1952 and the tracks were removed by 1956. A brief history of the trainline from Richmond to Kurrajong is outlined below:

The trainline from Richmond to Kurrajong was officially opened in November 1926 and for the next 26 years trains operated a regular passenger and farm freight service up to the foothills.

The Pansy (a two carriage train) travelled across East Market Street then beside Richmond Park along March Street. After the train left the Hawkesbury River Bridge it veered right and then crossed the main road where the Grose Vale Road lights are. The carriages were open and had roll back seats. The line was unfenced and drivers had to keep a lookout for livestock that may have strayed from the local farms. The handful of stations along the line were very basic sidings and platforms. The most elaborate station was the one at Kurrajong Village. In June 1952 flooding rains resulted in the service being suspended. Then more rain resulted in buckled tracks and landslides in the last cutting before Kurrajong. Sadly the line was becoming more unprofitable and the decision was made by the Government to close the service.⁴⁶

A short platform (Phillip Station) was built on the east riverbank (the Richmond side) to allow passengers to alight near to the river. In 1956 the rail line across the bridge was converted to a vehicular traffic lane. Kurrajong Road replaced the train with vehicular traffic.

The Depot

A crushing and screening plant was developed to the southwest of The Richmond Bridge which came to be known as 'The Depot'. This depot was in operation from the 1920s to the 1940s and was connected to the Richmond to Kurrajong Railway line through sidings from the Kurrajong Railway line (Figure 26). Early operations at The Depot consisted of the transportation, screening, and crushing of sand and gravel from a nearby mine. The material would be transported using the aerial railway lines and carts. Structural development at 'The Depot' included garages, offices, storerooms, water tanks, workers huts, and workshops. Plant at 'The Depot' included a conveyor, crushing plant and bins, and

⁴⁶ Discover The Hawkesbury, 'Hawkesbury's Forgotten Rail Line from Richmond to Kurrajong', Discover the HAWKESBURY, 2023, https://www.discoverthehawkesbury.com.au/trending/thepansy.



⁴⁴ 'The Long and Winding History of Bells Line of Road'.

⁴⁵ 'The Long and Winding History of Bells Line of Road'.

a powerhouse with a water tube boiler and an Allen steam engine. The Depot would be often referred to as the 'Stone Crusher' due to the methods practiced at the depot (Figure 27).

The location of 'The Depot' and the alignment of the Richmond to Kurrajong railway relative to the study area is shown in Figure 28. The location of 'The Depot' and its developments and plants in relation to 1947 aerial imagery is shown in Figure 29.

3.5.5 Old Kurrajong Road and Bells Line of Road in the twentieth century

Bells Line of Road

Bells Line of Road was initially primarily used as a stock route in the nineteenth and early twentieth century. However, due to the gold rushes in central western NSW during the later stages of the nineteenth century, the traffic along the road increased with more of the general public using the road daily.⁴⁷ The Department of Public Works managed minor upgrade works along the route in the early twentieth century to enable traffic to travel unhindered from Lithgow to Richmond. For this reason, Bells Line of Road formed a significant road corridor and was formally opened in 1905.

By 1946 Bells Line of Road was still a dirt Road and in need of constant upgrade and maintenance works (Figure 30). The Australian Government poured resources into upgrading various sections of Bells Line of Road in preparation of the Second World War as this road alignment formed a strategic defence route. These upgrades continued from the 1940s until the present, with the former Department of Main Roads, Roads and Traffic Authority and Roads and Maritime Services having all completed improvements to Bells Line of Road, including asphalting, overtaking lanes, safety ramps, and a heavy vehicle checking station.

The alignment of Bells Line of Road continued through North Richmond and the study area from the early nineteenth century until the present.

⁴⁷ 'The Long and Winding History of Bells Line of Road'.



Kurrajong Road

Old Kurrajong Road was also used as a stock route and for the gold rush throughout the nineteenth century, thus forming a significant road corridor and approach to the Richmond Bridge from the south. The Old Kurrajong Road alignment started in the north from the Richmond Bridge before shortly turning to the west and continuing to south sway from the Hawkesbury River. However, a new road alignment was developed in the early twentieth century which continued straight south from the Richmond Bridge consistent with the railway line to Kurrajong.

The newly developed road was named Bells Line of Road in the north before changing to Kurrajong Road in the south. The 1927 Windsor Map shows this newly developed road in alignment with the railway line that continued from Kurrajong to North Richmond (Figure 27). The Richmond to Kurrajong Railway line was shut in 1952 and the tracks were removed by 1956. Following this disuse of the rail line, the local government used the railways southern approach to the Richmond Bridge (Kurrajong Road) to create a wider road alignment.

3.5.6 Southee Road

The 1893 Parish map of Ham Common (Figure 13) depicts a 'Driftway 300 links wide R17103' as being notified on 21 January 1893. It was later renamed to Southee Road after Ethelbert Ambrook Southee (1890-1968), he supported the Old Boys' Union, Australian Institute of Agricultural Sciences and the Royal Agricultural Society of NSW⁴⁸.

3.6 Modern development

From 1947 until the present, the suburbs of Richmond and North Richmond have been subdivided and developed. While the majority of land has retained its agricultural and pastoral function, Richmond Town has sprawled to the southwest. Similarly, North Richmond Town has sprawled to the northeast and southwest (Figure 32 and Figure 33). The developments have mainly consisted of residential dwelling and commercial sites to service the expansion of the town centres.

⁴⁸ Carol Roberts, 'Hawkesbury History: Ethelbert Ambrook Southee, OBE', Hawkesbury Gazette, 6 May 2023, https://www.hawkesburygazette.com.au/story/8184322/hawkesbury-history-ethelbert-ambrook-southee-obe/.



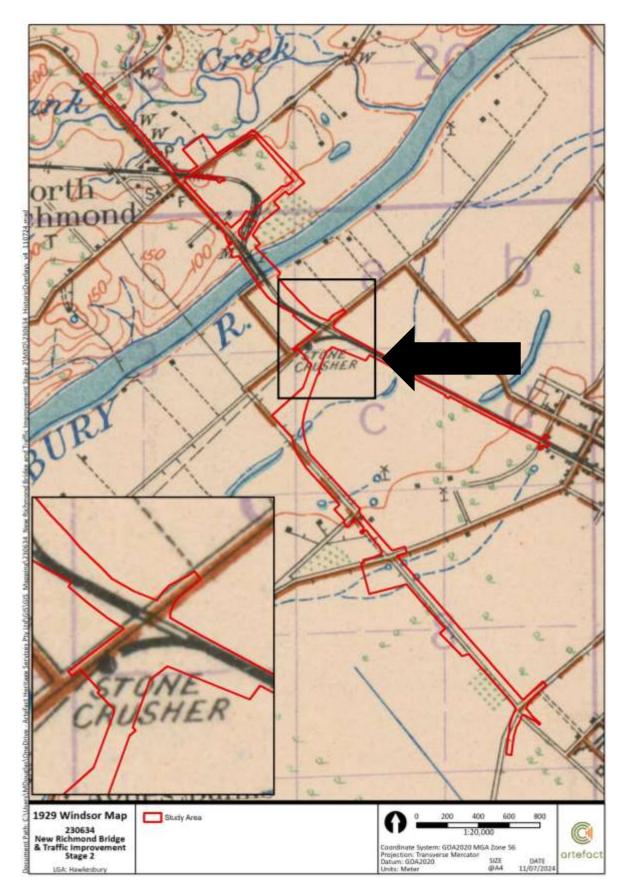


Figure 27: 1927 Windsor Map with the location of the 'Stone Crusher' indicated by the black arrow (Source: Historical Land Records Viewer)

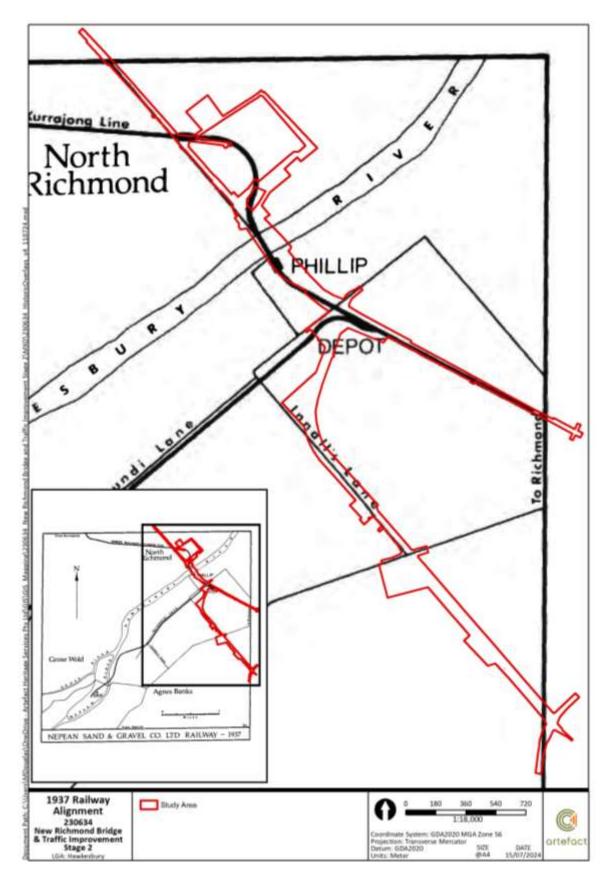


Figure 28: 1937 plan showing the location of 'The Depot' and the Kurrajong railway line (Light Railways)

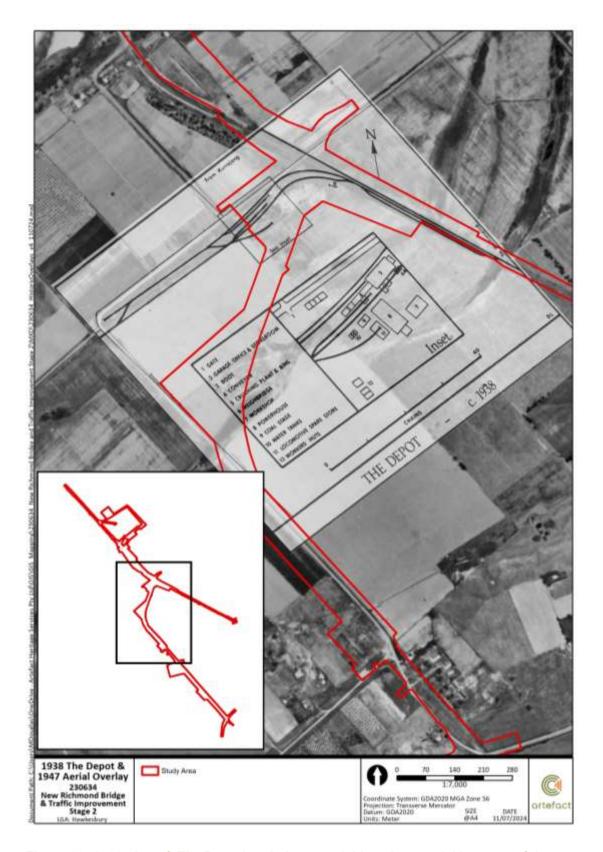


Figure 29: 1938 plan of 'The Depot' and plant overlaid on 1947 aerial imagery of the area (Source: Light Railways)



Figure 30: Bells Line of Road as a dirt road in 1946 (Source: 210256, NSW State Library)



Figure 31: Kurrajong Road looking towards the Hawkesbury River Bridge from Richmond (Source: KCHS)

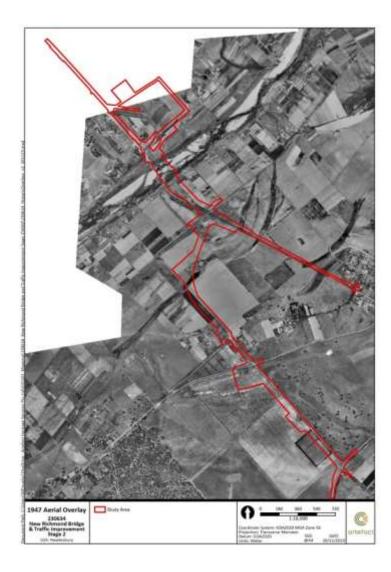


Figure 32: 1947 Historic Aerial Photo (Source: Historical Imagery Viewer).



Figure 33: 1955 Historic Aerial Photo (Source: Historical Imagery Viewer).



Figure 34: 1961 Historic Aerial Photo (Source: Historical Imagery Viewer).



Figure 35: 1975 Historic Aerial Photo (Source: Historical Imagery Viewer).

4.0 PHYSICAL CONTEXT

4.1 Site Inspection

A site inspection was conducted on 30 August 2023 by Monika Sakal (Heritage Consultant) and Johnny Sokalik (Senior Heritage Consultant) of Artefact Heritage and Environment. A second site visit was undertaken to the Mountain View property on 24 April 2024 by Monika Sakal (Heritage Consultant) and Katherine Chalmers (Heritage Consultant). The aim of the site inspections was to inspect the area of proposed impacts, inform a preliminary assessment of archaeological potential, and to identify heritage items and heritage significant fabric at the study area and in the vicinity that may be affected by the proposal. The inspection was undertaken on foot and a photographic record was made; all images used in this section were taken by Artefact Heritage and Environment staff unless referenced otherwise.

4.1.1 Overall Site Context

As this proposal covers a large study area the physical context has been divided into the following sections: road corridor north of the Hawkesbury River, compounds north of the Hawkesbury River, Hawkesbury River Bridge and road corridor south of the Hawkesbury River, compounds south of the Hawkesbury River and shared path along Kurrajong Road.

4.1.2 Road corridor north of Hawkesbury River

The northern portion of the study area is located on Bells Line of Road at the intersection with Crooked Lane. The proposed works at Bells Line of Road and Crooked Lane are about 220m long (Figure 36 and Figure 37). The study area then travels along Bells Line of Road past Redbank Creek and slopes down towards the southeast (Figure 38 to Figure 40). The study area encompasses approximately 200m of Terrace Road (Figure 41) and 150m of Beaumont Avenue (Figure 42). It then continues south along Bells Line of Road across the Hawkesbury River (Figure 43). The road corridor pavement is asphalt.

The road corridor inclines up towards the north, it consists of dual lane traffic through North Richmond, with telegraph poles lining either side of the road and overhead wiring. At the northern end of the study area, the road corridor is lined with dense vegetation to the west side of the road corridor, with no pedestrian path. There is a pedestrian path which is setback and separated from the road on the east side of the road. A pedestrian bridge crosses Redbank Creek further south. South of Redbank Creek, the town centre of North Richmond is present, and the vegetation gives way to more built elements.





Figure 38: SE Pedestrian footbridge over Redbank Creek next to Bells Line of Road



Figure 40: SE View of Bells Line of Road



Figure 42: E View of Beaumont Avenue



Figure 37: SE View of Bells Line of Road / **Crooked Lane intersection**



Figure 39: SE Bells Line of Road



Figure 41: W View of Terrace Road 200m east of Bells Line of Road



Figure 43: NW View along Hawkesbury River Bridge with proposed compound area on either side of the north bank



Figure 44: E View from Hawkesbury River Bridge to Hawkesbury River



Figure 45: W View from Hawkesbury River Bridge to Hawkesbury River

4.1.3 Compounds north of the Hawkesbury River

There are three proposed compound areas located north of the Hawkesbury River. One is located at 94 Terrace Rd, North Richmond in the south-eastern section of Lot 120 of DP 1133879 (Figure 46 to Figure 51). This compound is located on grassy undulating fields, lined with trees on the edges. The fence lining the south side of the compound consists of timber and metal fence posts connected with barbed wire and a metal paddock gate. There were no structures of note identified within this compound area. The other two compound areas are located either side of Bells Line of Road directly adjacent to the north abutment of the Hawkesbury River Bridge. Both of the proposed compound areas either side of Bells Line of Road are public parks, the one to the east of Bells Line of Road (Figure 52 to Figure 55) is relatively flat with neatly trimmed grass. The path that leads to the riverbank slopes down towards the southwest. This compound extends further east into Hanna Park, with access to be provided around the outer edge of the residential and commercial area to Terrace Road. Hanna Park, to the west of Bells Line of Road (Figure 56 to Figure 60) slopes southeast towards the Hawkesbury River, it leads to the pedestrian footpath at the edge of the riverbank. The compound area does not encompass the playground set.



Figure 46: NW View of proposed compound area from Terrace Road (Lot 120 of DP 1133879)



Figure 47: NE View of Terrace Road and proposed compound area (Lot 120 of DP 1133879)



Figure 48: W View of commercial area to the west of the proposed compound area (Lot 120 of DP 1133879)



Figure 49: NW View of proposed compound area with Terrace Road and commercial area to the rear (Lot 120 of DP 1133879)



Figure 50: E View of proposed compound area (Lot 120 of DP 1133879)



Figure 51: NW View of proposed compound area (Lot 120 of DP 1133879)



Figure 52: N View of park east of Bells Line of Figure 53: E View of park east Bells Line of Road, proposed compound area



Road, proposed compound area



Figure 54: SW View of park east of Bells Line Figure 55: NW View of park east of Bells Line of Road, proposed compound area



of Road, proposed compound area



Figure 56: W View of park west of Bells Line of Road, proposed compound area



Figure 57: E View of park west of Bells Line of Road, proposed compound area



Figure 58: NW View of the park proposed compound area, with Bells Line of Road to the right



Figure 59: E View of park west of Bells Line of Road with the Hawkesbury River Bridge to the right rear, proposed compound area



Figure 60: SE View of the park west of Bells Line of Road, looking towards the Hawkesbury River Bridge

4.1.4 Hawkesbury River Bridge and Road corridor south of the Hawkesbury River

The proposed new bridge would cross the Hawkesbury River about 30-60m east of the existing Hawkesbury River Bridge (Figure 61) and the study area would continue parallel to Bells Line of Road to the east until the Old Kurrajong Road intersection (Figure 62). At the intersection, the road corridor travels to the southwest across greenfield paddocks and Colo Soccer Club (Figure 63 and Figure 64), where it would run parallel to the current alignment of Inalls Lane (Figure 65). The bypass at this location would cross: Lot 1 of DP 742541, Lot 1 DP 744222, Lot 1 of DP 1089457 and Lot 2 DP 212692. The bypass continues along Inalls Lane, passing Hobartville (SHR No. 00035) (Figure 66)

until reaching the Castlereagh Road intersection (Figure 67). The study area extends along Castlereagh Road for approximately 75m either way. The study area then follows the alignment of Southee Road, with the road running to the south of Southee Road (Figure 68) along until approximately 150 m past the Londonderry Road intersection (Figure 69 and Figure 70) and then extends into Vines Drive. Western Sydney University and its eucalypt plantings are located within and adjacent to the study area.

The existing roads are asphalt and dual lane. The majority of Inalls Lane does not have a kerb, with the road edge melding into grass along the road pavement, however the eastern end of Inalls Lane (towards Castlereagh Road) has kerbs. Southee Road was observed to have a kerb. Fencing that was observed along Inalls Lane near Hobartville was predominantly timber post fencing however, other typical fencing types in the study area include metal post fencing with barbed wire and mesh.



Figure 61: E View towards the proposed new bridge



Figure 62: W View of Intersection of **Kurrajong Road and Old Kurrajong Road**



Figure 63: SE View of Colo Soccer Club with greenfield paddocks behind



Figure 64: N View of Paddock SE of Colo Soccer Club from Inalls Lane



Figure 65: SE View of Inalls Lane adjacent to Figure 66:NW View of Inalls Lane, Hobartville paddocks near Colo Soccer Club



(SHR No. 00035) to the right



Figure 67: NW view of Castlereagh Road Figure 68: S View of Southee Road heading (across) intersection with Inalls Lane (behind) towards Londonderry Rd intersection and Southee Rd (front)



Figure 69: S View of Southee Road and Londonderry Road intersection at Western Sydney University eucalypt plantings



Figure 70: SW View of Southee Road (right) and Londonderry Road (across) intersection, Western Sydney University in the distance

4.1.5 Compounds south of the Hawkesbury River

There are four proposed compound areas south of the Hawkesbury River.

The first is located adjacent to the southeast riverbank to the east of Bells line of Road at 148 Old Kurrajong Road, Richmond on Lot 34 of DP 1118821 (Figure 71), which extends along the eastern side of the Bells Line of Road at the Kurrajong Road intersection (Figure 72 and Figure 73). It is a relatively flat area that is used for agricultural purposes and has been cleared. The fencing consists of timber post and rail, seemingly recent.

The second compound area is located within the northwest corner of Lot 1 of DP 742541 (Figure 74), adjacent to the Colo Soccer Club. It is edged by dense boundary tree plantings to the northwest and otherwise it has been cleared.

The third compound is located within Lot 1 of DP 743909, which is a residential lot that has been predominantly cleared of trees and is grassy (Figure 76 and Figure 79). It is adjacent to Drift Road.

The fourth compound area south of the Hawkesbury River is located southwest of the Castlereagh Road and Southee Road intersection in land occupied by Western Sydney University. It is located within the northwest corner of Lot 10 DP1293174. The land has been cleared and is grassy, a pond is present with larger tufts of grass growing around it (Figure 80 and Figure 81).



Figure 71: SE View of the compound area on the southeast bank of the river to the left of the dense tree cover (Lot 34 of DP 1118821)



Figure 72: N View of compound area east of Bells Line of Road at Kurrajong Road intersection (Lot 34 of DP 1118821)



Figure 73: NW View of the compound area with Bells Line of Road behind (Lot 34 of DP 1118821)



Figure 74: N View of compound area (right behind the tree cover) adjacent to the Colo Soccer Club (Lot 1 of DP 742541)



Figure 75: W View of the compound area (behind the tree cover) at the intersection of Kurrajong Road and Bells Line of Road (Lot 1 of DP 742541)



Figure 76: NW View of Inalls Lane with compound areas (Lot 1 of DP 743909)



Figure 77: Mountain View (left) with Inalls Lane to right





Figure 79: NW View of Inalls Lane with compound areas to the left (Lot 1 of DP 743909)



Figure 80: NW View of compound area with pond in view (Lot 10 of DP 1293174)



Figure 81: W View of compound area from Southee Rd (Lot 10 of DP 1293174)

4.1.6 Shared path along Kurrajong Road

At the Bells Line of Road and Old Kurrajong Road intersection the study area continues southeast along the alignment of Kurrajong Road for approximately 450m (Figure 82) and then forms a shared path only, (Figure 83-71), until it reaches the Chapel Street intersection (Figure 85). The fencing along the road corridor consists of timber post and railing and also metal fencing. The timber post and railing along 'Hobartville' is recent fabric, as historically the land was resumed from to construct the existing road corridor.





Figure 82: E View of Old Kurrajong Road from Figure 83: SW View of Kurrajong Road the Kurrajong Road intersection



Figure 84: SE View of Kurrajong Road, Hobartville to the right



Figure 85: NW View of Kurrajong Road at from Chapel Street intersection

5.0 SIGNIFICANCE ASSESSMENT

5.1 Methodology

Determining the significance of heritage items or a potential archaeological resource is undertaken by utilising a system of assessment centred on the *Burra Charter* (Australia ICOMOS 2013). The principles of the charter are relevant to the assessment, conservation and management of sites and relics. The assessment of heritage significance is outlined through legislation in the *Heritage Act* and implemented through the *NSW Heritage Manual*, the *Archaeological Assessment Guidelines*⁴⁹, *Assessing Significance for Historical Archaeological Sites and 'Relics.*⁵⁰, *Assessing heritage significance*⁵¹, and Guidelines for preparing a statement of heritage impact⁵².

If an item meets one of the seven heritage criteria and retains the integrity of its key attributes, it can be considered to have heritage significance (see Table 2). The significance of an item or potential archaeological site can then be assessed as being of Local or State significance. If a potential archaeological resource does not reach the local or state significance threshold, then it is not classified as a relic under the *Heritage Act*.

'State heritage significance', in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

'Local heritage significance', in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.⁵³

Table 2. NSW heritage assessment criteria

Criteria	Description
A – Historical Significance	An item is important in the course or pattern of the local area's cultural or natural history.
B – Associative Significance	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.
C – Aesthetic or Technical Significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.
D – Social Significance	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.
E – Research Potential	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.
F – Rarity	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.

⁵³ This section is an extract based on the Heritage Office Assessing Significance for Historical Archaeological Sites and Relics 2009:6.



⁴⁹ NSW Heritage Office 1996, 25-27.

⁵⁰ NSW Heritage Branch 2009.

⁵¹ 'Assessing Heritage Significance' (Department of Planning and Environment, 2023).

⁵² 'Guidelines for Preparing a Statement of Heritage Impact' (Department of Planning and Environment, 2023).

Criteria	Description
G - Representativeness	An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places of cultural or natural environments (or the cultural or natural history of the local area).

5.2 Existing heritage assessments

This section of the SoHI includes the existing heritage assessments of the heritage items that have the potential to be physically or visually impacted by the proposed study area and/or proposed works, which are discussed in Section 8.0 of this report.

5.2.1 Hobartville, including outbuildings (SHR No. 00035)

Hobartville, including outbuildings is listed on multiple heritage registers and databases: SHR No. 00035, HLEP 2012 I00035 & I14, RNE Place ID. 3133, NSW NTHR No. 7920.



Figure 86: Hobartville from the study area at Kurrajong Road (Source: Artefact, 2023)

5.2.1.1 Statement of Significance

The gazetted SHR listing for Hobartville, including outbuildings⁵⁴ has the following statement of significance:

Hobartville is of historic significance at a National level as an intact early colonial homestead group for its association with the Cox family and Francis greenway. Its original grant boundaries determined the extent of the 1810 grid layout of

⁵⁴ 'Hobartville, Including Outbuildings'.



Richmond township and it has links, both historic and physical with St Peter's Anglican Church.

5.2.1.2 Assessment of Significance

The 2004 CMP for Hobartville⁵⁵ has assessed that Hobartville (SHR No. 00035) has heritage significance at the State level for its historic, associative, aesthetic, social, and scientific values and at the local level for its social and research values. The heritage significance assessment in the Table 3 below was provided in the 2004 CMP for Hobartville⁵⁶

Table 3. Heritage significance assessment for Hobartville (SHR No. 00035)

Criteria	Discussion
A) Historical Significance	Hobartville is an outstanding example of an intact colonial homestead complex with the ability to demonstrate early colonial estate planning principles. The intactness of Hobartville's collection of buildings, as well as the retention of much of its original land, and the continuing historical use of the place are exceptional.
B) Associative Significance	The Hobartville estate was acquired by the very prominent Cox family by 1814. When Andrew Town purchased the property in 1877, he already had an established reputation as a horse breeder. Over the next decade, Town cemented the fine reputation of Hobartville as a horse stud in the NSW and international horse racing and breeding world. Many other prominent individuals have been associated with the place subsequently, including Percy Reynolds of Tocal, who developed his Hobartville Hereford line of cattle at the estate. Well-known animals such as Grand Flaneur, Bravo, Patron, Merman, Childe Harold, and the Hereford Starlight are also associated with the place.
C) Aesthetic Significance	The house is the finest extant example of pre-1830 architecture in Australia. Designed as a house in the round, it is the first house in the NSW to make a complete picturesque statement in its siting and design. The landmark qualities of Hobartville, appreciable from a great distance on Kurrajong Road, are an intrinsic aspect of the significance of the place. The expansive views from the estate over the alluvial lowlands to the Blue Mountains in the west are an achievement of 19" century landscape planning which is still highly appealing. Together with the entrance drives lined by mature trees, and the evocative presence of many outbuildings of varying ages, the estate is of outstanding aesthetic significance.
D) Social Significance	Hobartville is held in high community regard both as a historical landmark, and as an outstanding example of colonial architecture. The place is also regarded by the horse racing community for its long-standing reputation as a premier horse stud.
E) Research Potential	Hobartville continues to have the ability to demonstrate historic estate planning and 19 " century landscape conventions. While there is potential for archaeological evidence to add to the current understanding of the place generally, the worker's cottages and intact privy provide rare opportunities to discover information about these building types in the early colonial period.

5.2.1.3 Significant views and vistas

The 2004 CMP for Hobartville⁵⁷ identifies six views and provides the following descriptions:

View 1: Views to the house and surrounding paddocks are possible from a considerable distance. The property, including some outbuildings, are clearly

⁵⁷ Clive Lucas, Stapleton & Partners, 'Hobartville, Richmond, NSW Conservation Management Plan', 2004.



⁵⁵ Clive Lucas, Stapleton & Partners, 'Hobartville, Richmond, NSW Conservation Management Plan', 2004.

⁵⁶ Clive Lucas, Stapleton & Partners, 'Hobartville, Richmond, NSW Conservation Management Plan', 2004.

visible from the Kurrajong Road, and notably from the grounds of the Windsor Polo Club.

View 2: The positioning of the house on the edge of a rise above Pugh's Lagoon affords dramatic, wide-ranging views from the house to the west across the river valley to the Blue Mountains in the distance.

View 3: The historically significant view from the house to St. Peter's Church in Richmond to the east has been overgrown by maturing vegetation, and is interrupted by the presence of a retirement village; however, the spire of the church is visible from the first-floor windows in the house and from parts of the garden. (Likewise, only the top of the Bunya pine marking the Chapel Street gates to the Hobartville homestead is visible from the church today.

View 4: Glimpses of the Hobartville fence and gate are provided along the alienated section of the oak avenue south of William Cox Drive.

View 5: View of the house from the intersection with the carriageway. Some outbuildings in the stables precinct are visible from this position.

View 6: Angled view taking in two sides of the house as first seen when approaching from Richmond via the carriageway. This view is historically the primary aspect for viewing the villa design, but is now obscured by a large bamboo grove.

A notable lack of view between the house and the working buildings of the property is a historical feature typical of the period which still pertains⁵⁸.

⁵⁸ Clive Lucas, Stapleton & Partners.



artefact.net.au Page 64

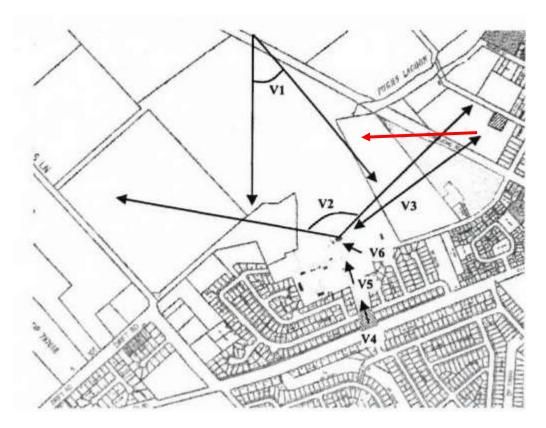


Figure 87: Map of significant views from Hobartville (SHR No. 00035), red arrow indicates the location of the following photo (Source: 2004 Hobartville CMP, with Artefact overlay)



Figure 88: Image of partial view of View 2 as identified in previous figure (Artefact, 2023)

5.2.2 Mountain View (SHR No. 00044)

Mountain View is listed on multiple heritage registers and databases: SHR No. 00044, HLEP 2012 100044, RNE Place ID. 3134.



Figure 89: View of 'Durham Bowes' the house at Mountain View (Source: Artefact, 2024)

5.2.2.1 Statement of Significance

The SHR listing for Mountain View⁵⁹ has the following statement of significance:

The homestead on Dights Hill is a rare survivor, largely dating from the first quarter century of the colony. It is a substantially intact example of early building materials and techniques. It is a harmonious feature of the landscape which provides evidence of having set the example to establish the safe accommodation on the highlands out of reach of the flood waters of the Hawkesbury River. Documentary records and physical evidence support the educational and research potential of Dights Hill and the archaeological resource of an early farm complex. Well documented associations with exploration, pastoralism and prominent historical figures have attracted both local and overseas visitors with an interest in early Australian history to the site. These outstanding factors contribute to the exceptionally high significance of this item of National heritage.

5.2.2.2 Assessment of Significance

Mountain View has heritage significance at the State level for its historic, associative, aesthetic, social, research, rarity, and representative values and at the local level for its social and research

⁵⁹ SHR, 'Mountain View'.: https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045229



values. The SHR listing for Mountain View⁶⁰ provides the following heritage significance assessment, which is presented in Table 4 below.

Table 4. Heritage significance assessment for Mountain View

Criteria	Discussion
A) Historical Significance	The item is historically significant because John Dight was one of the early Colony's most respected free settlers. The establishment of his farm complex on the highlands pre-dated Governor Macquarie's edict of 1810 which required the settlers to provide flood free accommodation for themselves and their stock etc.
B) Associative Significance	The item is significant because of its association with John Dight, one of the colony's most respected free settlers. Dight's example in relocating his homestead to the high ground above the floodplain had a significant influence on later settlement patterns. Dight was a free settler, and for a time, Superintendent of Carpenters at the Commissariat Store in Parramatta during Richard Rouse's absence from that position.
C) Aesthetic Significance	The item is aesthetically significant because of its harmonious relationship with the landscape. Its setting on the flood bank escarpment overlooking the lowland farms is an integral part of an historic landscape.
D) Social Significance	The social significance is demonstrated in the continuing interest of professionals, students and the general public because of the items association with prominent historic figures and the age of the building.
E) Research Potential	The item is a well documented resource of the building materials and techniques from the beginning of the 19th century together with a well documented social history. The existence of the 1812 building contract between John Dight and Lewis Jones which relates to the intact building is exceptional.
F) Rarity	The item is an important survivor from the first quarter of the colony.
G) Representativeness	The item represents a substantial building with a sequential pattern of growth which can be easily interpreted.

5.2.2.3 Significant views and vistas

The SHR listing for Mountain View⁶¹, briefly describes the setting and view of the item:

A well sited homestead on Dight's Hill overlooking the Richmond Lowlands and is an integral part of the historic escarpment.

5.2.3 Avenue of trees east and west side of street (LEP I18)

In 1981 Coupe, Hewitt and Cserhalmi⁶² recommended the Avenue of trees at Chapel Street for a heritage listing, subsequently they were locally listed. These trees lined the Avenue that led to Hobartville (SHR No. 00035). The Avenue of trees are described in the 1986 Richmond NSW townscape study by Time Shellshear:

https://heritagensw.intersearch.com.au/heritagenswjspui/handle/1/9035.



⁶⁰ SHR. 'Mountain View'. https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045229

⁶¹ SHR. 'Mountain View'. https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045229

⁶² Coupe, Hewitt, Cserhalmi, 'Historic Buildings - Richmond', 1981,

Closely planted English Plane Trees, fully matured and provide dense canopy over the road. The common assault on street trees to allow electricity cables to pass over has been avoided by the use of insulated bundled cables. 63



Figure 90: S View of Avenue of trees east and west side of the street from Chapel Street (Source: Artefact, 2023)

5.2.3.1 Statement of Significance

Although Chapel Street is no longer an avenue that leads to Hobartville (SHR No. 00035), the 1986 Richmond NSW townscape study by Time Shellshear provides the following statement of significance for the Avenue of Trees.

The canopy created [by the avenue of trees on Chapel street] greatly enhances the adjoining buildings and make a major impact on the environment.⁶⁴

5.2.3.2 Assessment of Significance

The Avenue of trees has been assessed as having local significance for its associative and aesthetic values, this assessment is presented in the table below:

Table 5. Heritage significance assessment for Avenue of trees east and west side of street

Criteria	iscussion	
A) Historical Significance	The item does not meet the threshold for historic significance.	
B) Associative Significance	The item is significant because of its association with Hobartville, as the trees lined what used to be the Avenue to Hobartville, which is no longer its function, it is now Chapel Street, however the trees are still associated with the State heritage listed historic homestead at Hobartville.	

⁶³ Tim Shellshear, 'Richmond NSW Townscape Study', 1986, https://heritagensw.intersearch.com.au/heritagenswjspui/handle/1/6749.
⁶⁴ Shellshear.



Criteria	Discussion	
C) Aesthetic Significance	The item is aesthetically significant because of overarching canopy and the enhancement and amenity it provides to the residential street.	
D) Social Significance	The item does not meet the threshold for social significance.	
E) Research Potential	The item does not meet the threshold for research potential.	
F) Rarity	The item does not meet the threshold for rarity.	
G) Representativeness	The item does not meet the threshold for representativeness.	

5.2.4 Hawkesbury River Bridge (TfNSW s170)

The Hawkesbury River Bridge is a heritage asset listed on the TfNSW s170 register.

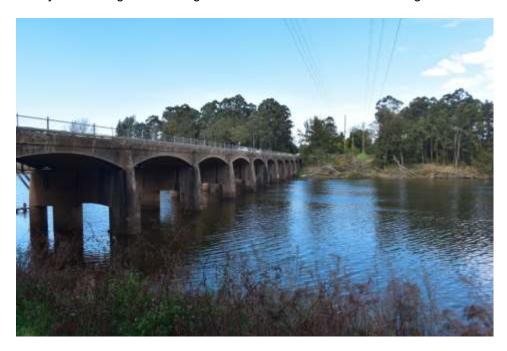


Figure 91: S View of Hawkesbury River Bridge (Source: Artefact, 2023)

5.2.4.1 Statement of Significance

The SHI listing for Hawkesbury River Bridge⁶⁵ has the following statement of significance:

The bridge has rarity value at a State level as one of the earliest surviving reinforced concrete road bridges in NSW. It is one of few concrete Monier arch bridges in Australia and probably the only one in NSW built between 1900 and 1948. It has technical significance due to its size and scale at time of building and position as the largest concrete arch bridge in Australia for twenty-five years, demonstrating the development of technological and engineering skills that were not repeated for another quarter of a century. The bridge is important in the pattern of development of NSW's cultural history. It has been an important item of transport infrastructure in the history of the Hawkesbury district for almost a century, ensuring continued ability to cross the Hawkesbury River at North Richmond at all

⁶⁵ 'Hawkesbury River Bridge' (Heritage NSW, n.d.), State Heritage Inventory, https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4309511.



times except for periods of excessive flooding. It ensured access to the interior via the Bell's Line of road, the only alternative crossing of the Blue Mountains to the west of the Blue Mountains from the Sydney Basin for many years. The stability this has brought to transport movements in this part of the Hawkesbury Valley has made a significant contribution to the commercial and social development of the Valley. The bridge is an impressive and attractive structure, making a significant aesthetic and historical contribution to a historically rich landscape. The bridge has been assessed as being of State significance.

5.2.4.2 Assessment of Significance

Hawkesbury River Bridge has heritage significance at the State level for its historic, aesthetic, social, research, rare, and representative values. The SHI listing for Hawkesbury River Bridge⁶⁶ provides the following heritage significance assessment, which is presented in Table 4 below.

Table 6. Heritage significance assessment for Hawkesbury River Bridge

Criteria	Discussion	
A) Historical Significance	The existence of the bridge, together with evidence of its predecessor, help demonstrate the history and development of transport in the Hawkesbury area and from Sydney to the far side of the Great Dividing Range. Its character has formed the course of transport history locally. The use of Monier arches and early use of concrete demonstrates changing technology in bridge construction. The bridge was the largest reinforced concrete bridge in Australia at time of building, holding this position for twenty-five years. It is also one of the earliest concrete bridges built in New South Wales, and the oldest extant concrete arch bridge. It is linked with the local historical theme of engineering and building the road system and its location shows the continuity of the road system from early tracks to the current status as a main transport route. The bridge has association with regular flooding along the Hawkesbury-Nepean Rivers and the development of technology and practices to overcome the difficulties for movement around the Hawkesbury Valley arising from these floods. It has also seen the coming and going of the railway to the western shore.	
B) Associative Significance	It does meet this criteria	
C) Aesthetic Significance	The subject bridge has a high level of aesthetic significance. Its length and strong, simple lines are visually impressive, endowing it with landmark qualities. The bridge is readily appreciable by the public, there being a park and walkway and viewing platform on the northern side of the river. The uninterrupted views from the bridge along the river are also significant, aided by the low handrails and other features originally designed to cope with floodwaters of greater height than the bridge.	
D) Social Significance	The bridge is significant to the communities of the Hawkesbury who rely on it for everyday transport purposes and who have had, and continue to have, a strong involvement with it due to their work to continue to ensure it meets their needs.	
E) Research Potential	This bridge remained as the largest reinforced concrete bridge in Australia for twenty-five years after its construction. This is one of very few Monier arch bridges in Australia and appears to be the only one in NSW. Its position as the largest reinforced concrete bridge in Australia suggests significant technological and engineering feat to achieve and maintain this status for a lengthy period of time.	

⁶⁶ SHR, 'Hawkesbury River Bridge': https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4309511



Criteria	Discussion
F) Rarity	This is the earliest and probably only reinforced concrete Monier arch bridge in NSW. It is also likely to be one of the earliest concrete bridges in NSW generally.
G) Representativeness	Representative of the Monier arch concept, effectively linking it to the invention and patenting of reinforced concrete some thirty years earlier.

5.2.4.3 Significant views and vistas

The SHI listing for Hawkesbury River Bridge states the following significant views for the heritage item:

The uninterrupted views from the bridge along the river are also significant, aided by the low handrails and other features originally designed to cope with floodwaters of greater height than the bridge.

6.0 ARCHAEOLOGICAL ASSESSMENT

6.1 Introduction

This section discusses the study area's potential to contain historical archaeological resources. The potential for the survival of archaeological remains is significantly affected by activities which may have caused ground disturbance. This assessment is therefore based on consideration of current ground conditions, and analysis of the historical development of the study area.

'Archaeological potential' refers to the likelihood that an area contains physical remains associated with an earlier phase of occupation, activity, or development of that area. This is distinct from 'archaeological significance' and 'archaeological research potential'. These designations refer to the cultural value of potential archaeological remains and are the primary basis of the recommended management actions included in this document.

6.2 Archaeological potential

The archaeological potential of each site is presented in terms of the likelihood of the presence of archaeological remains, considering the land use history and previous impacts at the site. This evaluation is presented using the following grades of archaeological potential:

Table 7: Grading of archaeological potential

Grading	Rationale
Nil	No evidence of historical development or use, or where previous impacts would have removed all archaeological potential
Low	Research indicates little historical development, or where there have been substantial previous impacts, disturbance and truncation in locations where some archaeological remains such as deep subsurface features may survive
Moderate	Analysis demonstrates known historical development and some previous impacts, but it is likely that archaeological remains survive with some localised truncation and disturbance
High	Evidence of multiple phases of historical development and structures with minimal or localised twentieth century development impacts, and it is likely the archaeological resource would be largely intact

6.2.1 Land use summary

Historical activities within the study area have been divided into three general phases of historical activity, which are outlined in Table 8 below.

Table 8. Land use summary

Phase	Discussion
Phase 1: Early land grants and initial development of Bells Line of Road (1794-	 Initial land grants to William Rouse, Richard Rouse, Thomas Crozier, William Noel, John Dight, James Blackman, William Bowman, William Small and Edward Lutterell
1856)	 Residences were built upon the initial land grants, for example the construction of Mountain View began in 1812, located at Inalls Lane
	 The areas were likely significantly cleared of native vegetation forming paddocks for pastoral activities
	 Construction of the Town of Richmond began in 1810
	Construction of punt wharf and ferry across the Hawkesbury River in 1821
	 Hobartville (SHR No. 00035) comprises James Blackman's 1802 and Edward Lutterell's 1804 land grants. It was named in 1816 and included the establishment of light-weight undocumented timber structures associated with yard structures, such as paddocks, pig sties or calf pens may have occurred
	 Archibald Bell marked Bells Line of Road in 1823, to begin with it was used as a stock route during the gold rush, which took place between 1851 and 1880, the stock route was predominantly used locally
Phase 2: Hawkesbury River Bridge, Richmond to	 In 1833 John Town opened the Woolpack Inn in Enfield. The town was renamed North Richmond by 1925
Kurrajong Railway line and road corridors	 Bells Line of Road transitioned from a stock route to a formalised dirt road, it was widened during the process
(1857-1952)	 The original Hawkesbury River Bridge was planned in 1857 and completed by 1860, the bridge suffered damage from floods in 1867 and 1870, by 1900 the bridge deck had suffered severe damage
	 Construction of the new and current Hawkesbury River Bridge began in 1904 and was complete by 1905
	 The construction of the Richmond to Kurrajong Railway line commenced in 1923, and by 1926 the current Hawkesbury River Bridge was modified to facilitate its support of the railway line river crossing.
	Operation of the 'Depot' stone crushing facility within the western portion of the study area.
Phase 3: Subdivisions and modern development (1953 –	Removal of the Richmond to Kurrajong Railway was completed in 1952
present)	 Formalisation of Bells Line of Road and creation of Kurrajong Road as asphal roads
	 Due to weather damage in 1952 the railway tracks on the Hawkesbury River Bridge were severely damaged, it was decided to not re-open the railway line thus modifications to the current Hawkesbury River Bridge were made to
	 remove the railway tracks and replace them with vehicular traffic lanes in 1950 Subdivisions and residential development

6.2.2 Previous ground disturbance

Later aerial evidence indicates that significant ground disturbance has occurred where residential and commercial development have been established. Areas south of the river have remained pastoral, along the western leg of the proposal, with minimal ground disturbance evident.

The majority of the study area is contained within the road corridors for Bells Line of Road, Kurrajong Road, Inalls Lane and Southee Road. These road corridors have been consistently utilised for linear infrastructure, either road or rail, since their establishment. Bells Line of Road has undergone modifications and upgrades throughout its history, indicating that considerable disturbance to previous road surfaces is likely. Similarly, Inalls Lane and Southee Road, which formed the main stock route and later vehicle thoroughfare through early Richmond, have been heavily modified throughout their use.

Kurrajong Road was initially established as the Richmond to Kurrajong rail line. The construction of the railway is likely to have resulted in considerable disturbance to the ground surface along its path. Further, the adaptation of the rail to road usage would have removed evidence of rail infrastructure and resulted in further ground disturbance.

In the location of the former Depot and rail siding, minimal ground disturbance has occurred. The area has been subject to hedge planting and construction of lightweight sheds, although no significant ground clearance is noted through this area.

Construction of modern structures throughout the twentieth century within the study area involved ground disturbances related to the installation of telephone poles, fencing, water or sewerage pipelines, below-ground electrical infrastructure, and other common utilities. Twentieth century land clearing and the planting of large crops would have also altered the landscape of the study area. Where the study area traverses extant farmland, ground disturbances are likely to be shallower overall.

6.2.3 Relevant archaeological assessments and investigations

6.2.3.1 Richmond Bridge (Hawkesbury River Bridge) Duplication and Traffic Improvements. Heritage Impact Strategy. Biosis and Phillips Marler 2019)

Phillips Marler and Biosis were engaged by Roads and Maritime Services (now TfNSW) to undertake a landscape and archaeological Heritage Impact Strategy for the Hawkesbury River Bridge Duplication project. The report presented a preliminary heritage assessment to identify if any heritage items or relics exist within the project area. The assessment included a physical survey of the study area. The report assessed 8 proposed road corridor and bridge alignment options. A summary of the archaeological assessment is presented in Table 9 below.

Table 9: Summary of archaeological potential (Biosis and Phillips Marler 2019)

Option	Potential resources
2013 Option	1925 plan shows 21 structures adjacent to the 2013 option – potential for structural remains and associated yard deposits, fencing or other infrastructure.
Option 1	Potential for remains of landscape features (fence lines, informal farming-related infrastructure) associated with 'Bronte' (LEP Item I444). Potential for remains of small bridges or culverts. Adjacent to, or in the vicinity of, 16 recorded structures and associated fence lines.
Option 2	No recorded structures identified on maps, low archaeological potential.
Option 3	Potential for archaeological remains of undocumented outbuildings associated with 'Hobartville' (SHR #00034), 'McMahons Homestead' (LEP Item I82) and 'Bronte' (LEP Item I444). Potential for fence lines and property markings.
Option 4	Low potential for landscape features, including fence lines and informal farm structures.
Option 5	Potential for archaeological remains of undocumented outbuildings associated with 'Hobartville' (SHR #00034) and 'Mountain View' (SHR #00044). Low potential for landscape features such as fence lines and informal farm structures.
Option 6	Low potential for landscape features such as fence lines and informal farm structures.
Option 7	Potential for remains of fence lines, informal farm structures and other landscape features associated with 'Yobarnie Keyline Farm' (SHR #01826).

That assessment recommended modification of the proposed roadway to avoid impacts to archaeology and identified heritage values. The recommended route included a combination of Options 1, 5 and 6. The report also recommended the preparation of a detailed archaeological impact assessment and Statement of Heritage Impact report.

6.2.3.2 Richmond Bridge and Approaches: Historic Heritage Impact Assessment. AMBS 2012

In 2012, AMBS were engaged by SMEC to provide a Heritage Impact Assessment for strategic concept options within Richmond, North Richmond, and Richmond Bridge. The assessment, identified that there is potential for archaeological remains of the old river crossing, including the punt wharf and former timber bridge to exist adjacent to the current road corridor. Additionally, it determined that there is potential for archaeological remains of the former railway line to North Richmond to exist along Kurrajong Road and throughout North Richmond.⁶⁷

6.2.3.3 Hobartville Conservation Management. Prepared by Clive Lucas, Stapleton and Partners 2004

The 2004 CMP identified that there is archaeological potential for footings of earlier dwellings and buildings, such as the dairy and lodge, as well as other features of the functioning of the estate, such as drains and pipes, some of which are visible above ground. Additionally, it identified that there is potential to encounter the original configuration of the garden and driveway as well as archaeological evidence that would add to the current understanding of the place generally, the worker's cottages and intact privy which may provide rare opportunities to discover information about these building types in the early colonial period. The highest archaeological potential was identified around the house, garden, and workers' cottages approximately 500 metres west of the study area. The report stipulates that if works are to occur in this area then an archaeologist should be consulted prior to any ground disturbance and monitoring may be required (Figure 92 and Figure 99). The report concluded that due to a high level of past ground disturbance in other areas, the remainder of the site does not require archaeological supervision unless sub-surface remains are located.

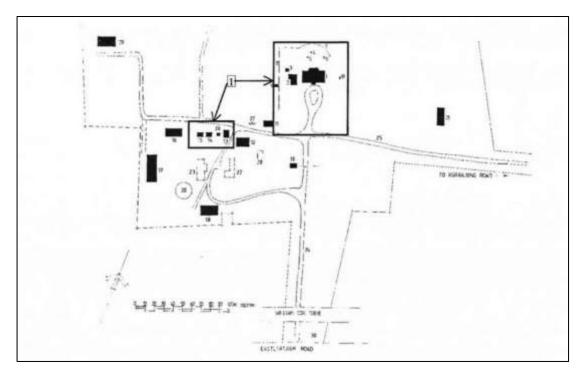


Figure 92: Identified archaeological potential approximately 500 metres from the study area (Source: Hobartville CMP, 2004).

⁶⁷ AMBS, 2012. Richmond Bridge and Approaches: Historic Heritage Impact Assessment.



6.2.3.4 Test Excavations at 26-30 Bosworth Street. Edward Higginbotham & Associates 2004

In 2004, Edward Higginbotham & Associates were engaged by Ramakers Architects to record and interpret the archaeological remains recovered on site during archaeological excavations at 26-30 Bosworth Street, Richmond. The archaeological excavation took place approximately 265 metres to the southeast of the current study area. A test trench was excavated by machine, using a mud bucket (no teeth and 1.8 metres wide). The trench was excavated to a variable depth, removing only topsoil to the interface of the A1 with the A2 Horizon.

Test Trench 1 located evidence of a twentieth century residential structure on the street frontage and of a waterhole, as depicted on the 1841 survey of Richmond. The footings of the twentieth century house that were encountered were believed to be from the 1920s onwards, as indicated by the historical research. The footings were assessed to be of no archaeological significance. The upper fill of the waterhole at 26 Bosworth Street contained no significant deposits. It was theorised that the lower fill of silts and clays, may hold pollen and other significant archaeological information. However, the lower fills were not to be disturbed by the proposed development.

6.2.3.5 Archaeological Management Plan, Richmond, NSW. Edward Higginbotham & Associates 1997

In 1996, Edward Higginbotham & Associates were engaged by the Hawkesbury City Council to complete an archaeological management plan for the town of Richmond. Some of the key objectives of the plan were to:

- Identify and locate all archaeological sites
- assess the cultural significance and survival of all archaeological sites
- Provide a framework for the management and conservation of the archaeological sites

The study determined that there is potential to encounter archaeological remains associated with an unknown structure beneath Chapel Street southwest of the March Street intersection in Richmond (Figure 94). The structure was identified on a c.1811 town map (Figure 95). Additionally, the study concluded that there is potential to encounter archaeological remains southeast of this structure within the northwestern corner of Lot 1 DP509358 and throughout Lot 2 DP1294304 which is located east of Kurrajong Road. All three areas of archaeological potential were assessed as being of state significance and recommended that the sites should be conserved. 68

⁶⁸ Edward Higginbotham & Associates 1997. Archaeological Management Plan, Richmond, NSW, p 5.



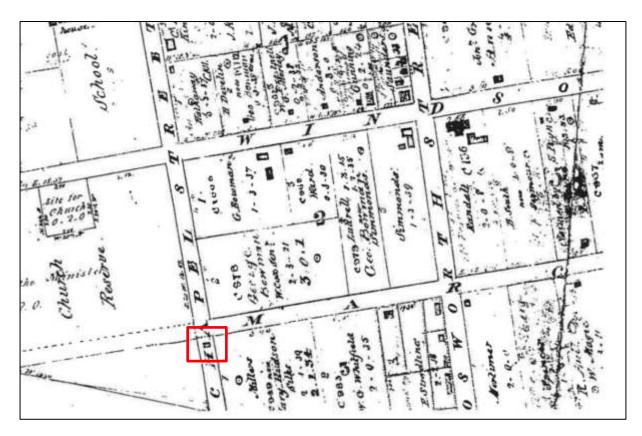


Figure 93: FR Davidson's survey 1831 showcasing unknown structure (in red) on Chapel Street (Source: Edward Higginbotham & Associates 1997).

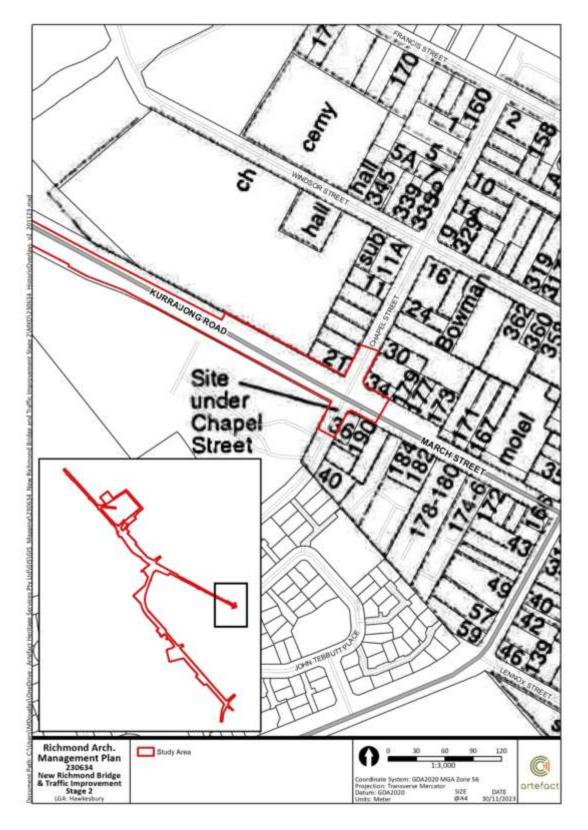


Figure 94: Richmond archaeological management plan (Source: Edward Higginbotham & Associates 1997)



Figure 95: Richmond archaeological management plan (Source: Edward Higginbotham & Associates 1997)

6.2.3.6 Bowman Cottage Excavation. Access Archaeology 1987

In 1987, Access Archaeology were engaged to record and interpret the archaeological remains recovered on site during archaeological excavations at Bowman Cottage at 366 Windsor Street 70 metres northeast of the study area's edge along Chapel Street in Richmond. The principal findings were the line of a demolished brick wall and the base of a brick hearth directly beneath the apparent extension scars in Room 17. Subfloor materials were encountered in Room 4 of the cottage and consisted of three phases of flooring up until 1987. The only undisturbed deposit lay protected in the post holes and in the hollows where the original joists had been. These archaeological remains associated with late 19th century occupation of the cottage were located just 150 metres north of the potential unknown structure identified beneath Chapel Street in 1997 by Edward Higginbotham & Associates.

6.2.4 Assessment of historical archaeological potential

6.2.4.1 Phase 1 (1794-1856)

Potential archaeological remains associated with Phase 1 would be linked to the initial establishment of European settlement in the Richmond Area. Early land grants consisted largely of agricultural land, utilised for cropping and grazing as early as 1794. Archaeological remains associated with this phase may include evidence of light weight structures, indicated by post holes, packed earth surfacing for sheds or shelters.

Evidence of Phase 1 occupation may also be demonstrated by land modifications, including tree boles, rubbish pits, and evidence of water management (dams and channels). Fencelines may also be identified by post holes or remnants of timber posts, demonstrating early land delineation and management. Later ground disturbance within roadways and residential lots is likely to have removed much of the evidence from Phase 1 land clearance and agricultural use.

Further evidence of Phase 1 archaeological remains may include structural remains of the Hawkesbury River punt wharf. Prior to the construction of the bridge, a small punt operated across the river. There is low potential for the identification of timber remains of the wharf and any associated infrastructure or artefact deposits. The punt was also serviced by early roads, including Bells Line of Road and Old Kurrajong Road. There is low potential for identification of former road surfaces associated with these roadways.

Further structural remains may include the cottage at the corner of Chapel Street and Kurrajong Road/March Street, the remains of which would now be below the surface of Chapel Street. There is low potential for the remains of the cottage to be identified below the present road surface. It is likely that ground disturbance resulting from road construction and installation of modern utilises has removed or truncated evidence of the former structure.

Other Phase 1 archaeological remains may include evidence of fences (timber post and rail or stone) and street frontage decoration associated with the Hobartville and Mountain View homesteads. Archaeological potential for these sites would be concentrated around the homesteads, and would be limited to ephemeral or impermanent structures within the study area. The study area may contain remains of early road construction associated with the former alignment of Inalls Road, which was initially established further west.

6.2.4.2 Phase 2 (1857-1952)

Potential archaeological remains associated with Phase 2 (1857-1952) may include evidence of early road constructions, rail infrastructure, and nineteenth century service infrastructure. Bells Line of Road was initially a stock trail, although its modification to a formalised road may have resulted in construction of an engineered surface. Examples of engineered surfaces include Telford Road constructions, which may have been used in the area.

Widening and consolidation of the historical alignment of Bells Line of Road to the north of the Hawkesbury River would have likely occurred during the late nineteenth-early twentieth century, however, as demonstrated in Figure 16 the road in 1946 appears to have been a dirt road surface, which was likely formalised in 1956 to an asphalt surface when Kurrajong Road was formalised. Inalls Lane and Southee Road, as smaller but well trafficked historical thoroughfares, are unlikely to have benefitted from engineered road construction to this degree until later in the twentieth century when they were asphalted. There is low potential for the identification of nineteenth century engineered road surfaces associated with Phase 2 (1857-1952) beneath the present road.



Figure 96: Bells Line of Road (dirt road) at Redbank Creek, North Richmond 1946 (Source: 210256 NSW State Library).

Construction of the Kurrajong Railway Line began in 1923. The railway line ran from Richmond Station through what is now Kurrajong Road and the southern extent of Bells Line of Road, to Phillip Station. Phillip Station was located approximately 200m south of the river bank, along the alignment of Kurrajong Road/Bells Line of Road. After stopping at Philip Station, the railway continued across the Hawkesbury River via Hawkesbury River Bridge crossing Bells Line of Road near Grose Vale Road and North Richmond Station. Aerial imagery from 1947 demonstrates the potential existence of two small rail bridges along Kurrajong Road passing over smaller water bodies (Figure 86). Additionally, Figure 87 potentially demonstrates the existence of a rail siding that diverted from Kurrajong Road southwest towards Old Kurrajong Road.

During operation of the railway, there was also a stone crushing facility, identified as the Depot, located to the south-west of the main Richmond-Kurrajong Line. The Rail siding split southwest from Kurrajong Road at the intersection of Old Kurrajong Road, with the Depot located approximately 200m southwest of the main rail alignment. The depot consisted of support facilities such as offices, storerooms and workers huts, along with industrial equipment including a crusher, conveyor, weighbridge, workshop, powerhouse and water tanks. The location of the former Depot has been subject to minimal ground disturbance and may contain buried remains of the equipment, including footings and subsurface infrastructure.

The railway line was removed in 1952 with the formalisation of Kurrajong Road occurring soon after, likely in 1956. Timber structural remains of the original bridge's substructure remain on the north side of the Hawkesbury River. Additionally, likely *in situ* timber piles protruding from the river are still visible. There is high potential for artefactual material associated with the original bridges to be present along the banks and floor of the Hawkesbury River.

There is low potential that archaeological remains of the former rail line were left in situ during construction of the subsequent roadway. Remains would consist of timber sleepers, track, signal infrastructure, utilities and services and potential hardstand structural remains associated with Phillip Station. There is low-moderate potential for the identification of remains of the former small rail bridges within the study area. There is low-moderate potential to identify remains of the former rail siding along Old Kurrajong Road. There is moderate-high potential for identification of the former Hawkesbury River rail bridge and associated deposits. There is moderate potential for identification of remains of the former Depot.

Phase 2 remains may also consist of historic service infrastructure, such as stormwater and sewer drains. Service infrastructure may consist of timber, brick or stone drains, access pits, wells or cisterns, and former gutters or kerbing. Services may be identified within road corridors, located below modern road constructions. The former services may be perpendicular or parallel to the roads. There is moderate potential for the identification of historical services associated with Phase 2 (1857-1952).



Figure 97: 1947 aerial image demonstrating potential rail bridges north west of Chapel Street along current Kurrajong Road (Source: Historical Imagery Viewer)



Figure 98: 1947 aerial image demonstrating potential rail siding southwest of the current Kurrajong Road towards Old Kurrajong Road (Source: Historical Imagery Viewer)

6.2.4.3 Phase 3 (1953-Present)

Evidence of Phase 3 (1953-Present) may include land modifications, installation of modern services, and remnants of former twentieth century structures. These remains are extant and would not be managed as archaeological resources.

6.2.5 Summary of archaeological potential

Based on the assessment of potential presented above, it has been determined that:

- There is low potential for the identification of archaeological remains associated with Phase 1 (1794-1856) occupation
- There is low to moderate potential for the identification of archaeological remain associated with Phase 2 (1857-1952)
- There is high potential for identification of remains from Phase 3 (1953-Present), although these would not be managed as archaeological remains.

A summary of archaeological potential is provided in the table below and in Figure 99.

Table 10: Historical archaeological potential summary

Item and phase	Potential archaeological resources	Potential
Phase 1 (1794-1856)	 Ephemeral remains of early land clearance, including tree boles and water management Evidence of former road surfaces, including early construction of Bells Line of Road, Inalls Lane and Southee Road. Evidence of lightweight or ephemeral farm structure, including early sheds and fences Remains of the Hawkesbury River punt wharf Remains of fences etc associated with Hobartville and Mountain View 	eLow potential for works. Nil – low potential for relics. Expected low integrity
Phase 2 (1857-1952)	 Evidence of early road constructions, including engineered road surfaces In situ remains of the former Richmond to Kurrajong Railway line and siding In situ remains of the former stone crushing Depot Remains of historic service infrastructure Remains of the former Hawkesbury River bridge 	Low to Moderate potential for works. Low potential for relics. Low to moderate integrity
Phase 3 (1953-Present)	Potential for remains of modern service infrastructure	Extant – no archaeological management

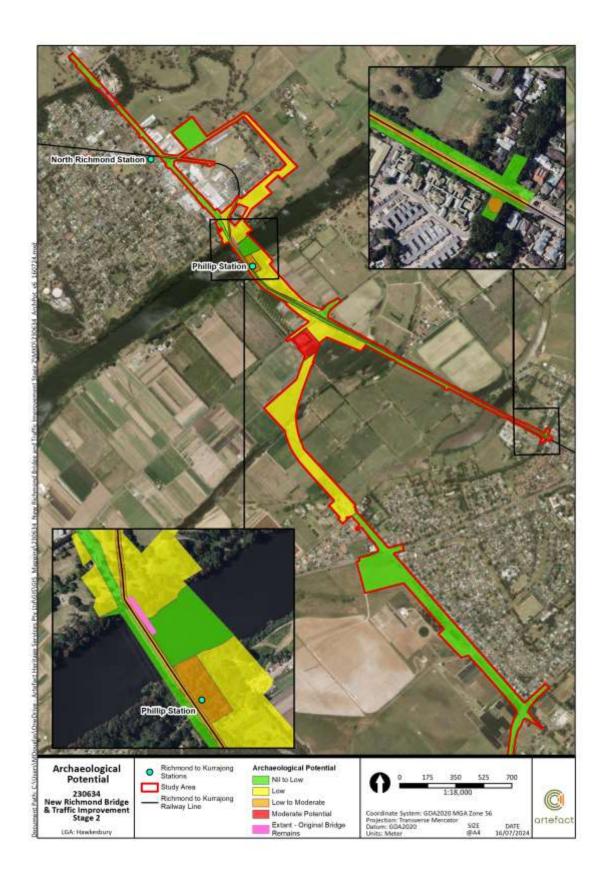


Figure 99: Map of archaeological potential

6.3 Archaeological significance

Archaeological significance refers to the heritage significance of known or potential archaeological remains. It should be clearly stated that archaeological potential (intact subsurface deposits) does not equate to archaeological research potential (the ability to address current research questions) or archaeological significance (the ability of the archaeological resource to address significance assessment criteria).

As with other types of heritage items, archaeological remains should be managed in accordance with their significance. In situations where development is proposed, this can influence the degree of impact that may be acceptable or the level of investigation and recording that may be required.

While archaeological remains often form an integral component of the overall significance of a heritage place, it is necessary to assess them independently from above ground and other historic elements. The NSW Heritage Branch document *Assessing Significance for Historical Archaeological sites and 'Relics'* provides the framework for the significance assessment.⁶⁹ To facilitate assessment of archaeological significance, the guidelines arranged the seven heritage criteria into four groups. A summary of the criteria is included in Table 11.

Table 11: Overview of NSW Heritage Office archaeological significance criteria

Archaeological significance criteria	Meaning
Archaeological Research Potential (NSW Heritage Criterion e)	Archaeological research potential is the ability of the archaeological evidence, through analysis and interpretation, to provide information about a site that could not be derived from any other source, written or otherwise, and which contributes to the archaeological significance of the site and its 'relics'.
	The integrity of a site, the state of preservation of archaeological material and deposits will also be relevant.
Association with individuals or groups of historical importance (NSW Heritage Criteria a, b and d)	Archaeological remains may have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences.
Aesthetic or technical significance (NSW Heritage Criterion c)	Whilst the technical value of archaeology is usually considered as 'research potential' aesthetic values are not usually considered to be relevant to archaeological sites. This is often because until a site has been excavated, its actual features and attributes may remain unknown. It is also because aesthetic is often interpreted to mean attractive, as opposed to the broader send is sensory perception or 'feeling' as expressed in the <i>Burra Charter</i> .
	Nevertheless, archaeological excavations which reveal highly intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric ad remnant structures, may allow both professionals and the community to connect with the past through tangible physical evidence.

⁶⁹ Department of Planning Heritage Branch, 2009: 11–14



Archaeological significance criteria Meaning

Ability to demonstrate the past through archaeological remains.

(NSW Heritage Criteria a, c, f and g)

Archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice of other historic occupation. They can demonstrate the principle characteristics of a place or process that may be rare or common.

A site may best demonstrate these aspects at the time of excavation. It may also be possible to explain the nature of the site and demonstrate past practises via public interpretation with before, during, or after excavation.

The following assessment of archaeological significance for the study area responds to these guidelines.

Assessment against the NSW heritage assessment guidelines

The assessment of the significance of the potential archaeological resource contained within the study area against the NSW heritage assessment criteria is outlined in Table 12.

Table 12: Consideration against NSW heritage assessment criteria

Criterion **Discussion**

of NSW's cultural or natural history (or the local area)

(a) An item is important Archaeological remains associated with Phase 1 development include evidence of in the course, or pattern land clearance, agricultural infrastructure, and early road and stock route development. Phase 1 agricultural remains are unlikely to be identified substantially intact or in situ and would be unlikely to reach the threshold for local significance under this criterion. Intact and in situ archaeological remains associated with early land grants, agricultural structures, residential structures and early structures associated with Phase 1 occupation of Richmond and the town of Enfield dating to the 1800s would reach the threshold of local significance. If identified with a degree of high integrity, Phase 1 remains would reach the threshold for State significance.

> Phase 1 remains associated with early stock route and road development may include former road surfaces. These, if found substantially intact, would be important in demonstrating the construction methodologies for key transportation routes between newly opened Central West farming and mining lands and the Sydney Markets. Phase 1 road remains may be identified on the west side of the river as Bells Line of Road, or on the south side as Old Kurrajong Road. Intact and in situ road remains would reach the threshold for State significance.

Phase 1 remains associated with the 1800s use of early land grants, structural remains associated with the timber wharf and punt and first iteration of the Hawkesbury River timber bridge would also reflect historic development in the area. However, undocumented structures or evidence of historical site patterning are unlikely to be preserved intact and are not likely to be demonstrative of this historical criterion.

Likewise, archaeological remains, associated with Phase 2 development such as structural remains associated with the first Hawkesbury River Bridge, Richmond to Kurrajong Railway line and development of Bells Line of Road also reflect historic development in the area. Archaeological remains associated with Phase 2 development such as structural remains associated with early corridor infrastructure. railway line infrastructure, the stone crushing depot and residential properties may reach the threshold of local significance.

Phase 3 remains are unlikely to reach the threshold of local significance under this criterion.

Criterion

Discussion

(b) An item has strong a person, or group of persons, of importance in NSW's cultural or natural history (or the local area)

The study area is associated with the original land grants of William Rouse, Richard or special associations Rouse, Thomas Crozier, William Noel, John Dight, James Blackman, William with the life or works of Bowman, William Small and Edward Lutterell. Additionally, the formation of the town of Richmond can be associated with the life and work of Governor Macquarie. In 1823, Archibald Bell marked Bells Line of Road with the help of Aboriginal guides. However, it is unlikely that any potential archaeological remains located within the study area could be identified as being associated with any of the above-mentioned individuals.

> As one of the five Macquarie Towns on the Hawkesbury River, Richmond was associated with the main centre for agricultural production in the early colony of New South Wales. Archaeology has the potential to contribute to our understanding of this close connection between the town and the surrounding agricultural land and provide further information on the life of early settlers, as well as the foundation and early development of Richmond. The 1840s to the 1860s provide a period of transition in Richmond which led to the decline of the Hawkesbury as a centre for agricultural production, tying Richmond into the general economic developments of the state in the late 19th century. Archaeological remains may provide evidence of living and working conditions of the local community as well as industrial and commercial development.

> Potential archaeological remains within the study area are unlikely to be linked with any individual. If found intact, remains of road surfaces representing the early iterations of Bells Line of Road would have a strong association with Archibald Bell. This associative significance is likely to reach the threshold for local significance.

Archaeological remains along March and Chapel streets may be associated with Phase 1 and Phase 2 occupation of Richmond which may reach the threshold of local significance under this criterion. If identified with a high degree of integrity, these remains may reach the threshold for State significance.

in demonstrating aesthetic high degree of creative remains. or technical the local area)

(c) An item is important The potential archaeological remains within the study area has little potential for aesthetic significance. Although it is recognised that exposed in situ archaeological remains may have distinctive attractive visual qualities and have visual characteristics characteristics and/or a with the ability to connect communities and individuals to the past through tangible

achievement in NSW (or Potential archaeological remains associated with Phase 1 agricultural and land clearing uses would largely be limited to ephemeral evidence of land clearing, agricultural activities and would be unlikely to represent uncommon or significant architectural, decorative arts styles, or engineering and construction techniques. Remains of the Hawkesbury River punt wharf are also likely to be ephemeral and would not reach the threshold of local significance under this criterion.

> Phase 1 remains of early road surfaces, if found substantially intact, would provide evidence of colonial road construction techniques. This would demonstrate technological advancements in the young colony, and may demonstrate changes in construction techniques over time. Substantially intact road remains would be likely to reach the threshold of local significance.

Intact remains of the stone crushing Depot from Phase 2 may demonstrate the use of early colonial industrial technologies. If found substantially intact, these remains would meet the threshold for local significance.

However, significantly intact and legible remains associated with Phase 1 such as the unknown structure beneath Chapel Street, early services, utilities or residential structures associated with the town of Richmond would meet the local and possibly even the state significance threshold under this criterion.

Extant remains of the timber Hawkesbury River Bridge and potential archaeological remains associated with the formation and operation of the Kurrajong Railway Line would meet the local significance threshold under this criterion.

Criterion

Discussion

Potential archaeological remains with low integrity within the study area associated with Phase 1-Phase 3 are unlikely to reach the threshold of local significance under this criterion.

Archaeological remains with high integrity associated with Phase 1 and 2 developments such as the formation of the Town of Richmond may reach the threshold of state significance under this criterion.

Legible archaeological remains associated with the Richmond to Kurrajong Railway meet the threshold of local significance under this criterion. Extant remains of the original Hawkesbury River Bridge meet the threshold for State significance under this criterion

(d) An item has strong or special association with a particular community or cultural group in NSW for social, cultural, or local area)

Potential substantive archaeological remains associated with Phase 1 may be of some interest to historians (including local historians) and some members of the local community. This would include remains associated with Chapel and March streets and artefactual deposits providing information on the life of early settlers, as well as the foundation and early development of Richmond. Additionally, information gathered on the construction, and operation of the punt wharf and first Hawkesbury River Bridge as spiritual reasons (or the well as artefactual deposits could provide further information on the development of the Hawkesbury River region and its inhabitants.

> However, ephemeral evidence of land clearing and agricultural activities is unlikely to have a significant association with a particular community. Legible archaeological remains associated with Phase 1 and the formation of the Town of Richmond would likely be of local significance and potentially of State significance as an example of the early formation of Macquarie's towns.

> Extant remains of the original timber punt wharf, the Hawkesbury River Bridge and legible remains of the Richmond to Kurrajong Railway Line may contribute to the local community's sense of place or provide a connection to the history of Richmond. The extant archaeological remains associated with the timber wharf punt and original bridge would likely be of local significance to the community.

Potential archaeological remains within the study area associated with Phase 1 and Phase 3 development are unlikely to reach the threshold of local significance under this criterion.

Legible archaeological remains associated with Phase 1 development such as the formation of the Town of Richmond, establishment of the timber wharf punt and extant remains of the original bridge as well as Phase 2 remains associated with the Richmond to Kurrajong Railway meet the threshold of local significance under this criterion.

(e) An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area)

Potential archaeological evidence contained within the study area may contribute to knowledge on a number of questions relevant to major or broader research questions relating to NSW history, such as:

- Peopling Australia Convict Activities relating to incarceration, transport, reform, accommodation and working during the convict period in NSW (1788-
- Developing local, regional and national economies Agriculture Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes; and
- Developing local, regional and national economies Environment; cultural landscape - Activities associated with the interactions between humans, human societies and the shaping of their physical surroundings.

Potential archaeological resources associated with the cultivation of early land grants, would have archaeological research potential. If substantial intact and in situ archaeological remains associated with undocumented agricultural structures, or large preserved deposits of archaeobotanical resources were uncovered, these remains may provide insight into early farming practices within Richmond and may provide evidence of the location of agricultural endeavours. If undocumented agricultural

Criterion

Discussion

structures that could be definitively dated to the 1800s were excavated these structures would inform the extent of previous land grants and indicate past land use.

Legible archaeological remains associated with Phase 1 development such as remains associated with the formation of the Town of Richmond and the establishment of the timber wharf punt along the Hawkesbury River would contribute to our understanding of the development of local and regional economies. However, ephemeral archaeological remains of land clearing and agricultural activities is unlikely to yield information that that substantially contributes to our understanding of NSW's history.

Since the establishment and operation of the original Hawkesbury River Bridge and Richmond to Kurrajong Railway Line are well documented it is unlikely that the remains will provide significant additional information.

An archaeological resource associated with Phase 1 and Phase 2, if found to be significantly intact and legible, may have significance at a local level. Potential archaeological remains associated with Phase 3 within the study area are unlikely to reach the threshold of local significance under this criterion.

(f) An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history

Substantial intact and in situ archaeological remains of undocumented agricultural buildings or subsurface artefact bearing or archaeobotanical deposits dating to the 1800s would likely be considered uncommon within the area. However, within the broader area these types of remains may not be considered rare.

Substantial intact and in situ archaeological remains associated with the original Hawkesbury River Bridge and Richmond to Kurrajong Railway Line are likely to consist of timber piles, timber planks and iron fixtures as well as concrete hardstand, numerous concrete and brick footings, former structures, tracks, timber sleepers, utilities and services. These remains would not be considered uncommon or rare when compared to other historic bridges or railway lines throughout NSW.

An archaeological resource associated with Phase 1, if found to be significantly intact and legible, may have significance at a local level. Potential archaeological remains associated with Phase 2 and Phase 3 within the study area are unlikely to reach the threshold of local significance under this criterion.

in demonstrating the principal characteristics of a class of NSW's cultural or natural places of cultural or natural environments (or the local area).

(g) An item is important Archaeological remains associated with agricultural outbuildings or activities may be representative of early colonial agricultural practices and of previous archaeological evidence of material from a similar context. However, it is unlikely that ephemeral archaeological remains of land clearing, agricultural activities, undocumented town structures, or remains associated with the punt wharf would be able to demonstrate the principal characteristics of the natural or cultural environment of the local area.

> Archaeological remains associated with Phase 2 are likely to be disturbed by later activity, and common in fabric, type, layout and are unlikely to be any different to archaeology of any late nineteenth - early twentieth century examples.

An archaeological resource associated with Phase 1, if found to be significantly intact and legible, may have significance at a local level. Potential archaeological remains associated with Phase 2 and Phase 3 within the study area are unlikely to reach the threshold of local significance under this criterion.

6.3.2 Statement of archaeological significance

The settlement history of the study area (Phase 1) is likely to have been one dominated by open spaces, with low density development associated with agriculture. It is likely that the rich alluvial soil provided a fertile area for the growth of crops, and to provide feed for livestock. Potential archaeological remains of undocumented agricultural structures, artefactual deposits or archaeobotanical deposits, if found intact or in situ may be significant for their ability to hold research potential and provide information regarding the early colonial and agricultural activity within the study area.

Structural remains may also reflect historical events associated with colonial settlement and country estates, agricultural practices, and subdivision of the study area, and may be representative of early colonial agricultural practices within the Richmond area. Legible archaeological remains associated with Phase 1 development such as the formation and construction of the Town of Richmond in 1810 (Figure 11), construction of the timber wharf punt in 1821 and extant remains of the original bridge, which was constructed in 1860, would be significant at a local level as they may provide information regarding the early colonial activity and the development of the local and regional economy within the study area.

Remains of early transportation corridors in this area include stock routes and early roads. These are historically significant for their role in carrying livestock and goods between Sydney and Richmond, and later between Sydney and the resource-rich Central West of NSW. Archaeological remains of these transportation corridors would demonstrate the technological efforts of early colonialists and strengthen our understanding of how these corridors were utilised.

Overall, substantial and *in situ* archaeological remains associated with Phase 1 may have the potential to reach the State significance threshold, however, due to the likely ephemeral nature of the potential remains it is unlikely that significant archaeological remains associated with this phase will be present throughout the majority of the study area. Archaeological remains with minimal integrity would be likely to reach the local significance threshold. Legible and extant archaeological remains associated with development of the punt wharf and original timber Richmond Bridge has the potential to reach the local significance threshold. Additionally, legible and extant archaeological remains associated with the development of the town of Richmond likely to be identified along Chapel and March Street as well as Kurrajong Road within the study area may reach the threshold of state significance.

Archaeological remains associated with Phase 2 development would consist of the extant remains of the original Hawkesbury River Bridge which was constructed in 1860 (see Section 3.5.3) as well as archaeological remains associated with the bridge's substructure which are likely to be encountered on the banks and floor of the Hawkesbury River. Evidence of secondary road construction occurring during formalisation would also be important in demonstrating technological advancement in this period.

Remains associated with the development of the Richmond to Kurrajong Railway which was constructed between 1923 and 1926 (see Section 3.5.4) would consist of timber sleepers, track, signal infrastructure, utilities and services and potential hardstand structural remains associated with Phillip Station. Remains of the siding to the stone crushing Depot may also be identified, along with the remains of the Depot itself. These remains would be significant as an indicator of the development of industry within the Hawkesbury region.

Formalisation from dirt roads to asphalt road of Bells Line of Road (see Section 3.5.5) and Kurrajong Road likely occurred in 1956 but stratigraphy of the original dirt road would likely be encountered below the modern asphalt surface. Legible and intact remains associated with Phase 2 occupation would be significant as examples of the historic development of Richmond. Phase 2 occupation of the area would meet the threshold of local significance.

Archaeological remains associated with Phase 3 would likely consist of undocumented structures made of common type and materials, services and utility installations and examples of modern landscape modifications within the study area that would not reach the threshold of local significance.

6.4 Summary of historical archaeological potential and significance

This archaeological assessment has identified nil-low potential for historical archaeological remains associated with Phase 1, moderate and potential and extant remains associated with Phase 2 and high potential to encounter remains associated with Phase 3. These are summarised in Table 13.

Table 13: Historical archaeological potential and significance

Phase	Anticipated remains	Potential	Significance
Phase 1: Early land grants and initial development of Bells Line of Road (17941856)	Evidence of vegetation removal/landscape modification such as tree boles, plough marks, terracing. Evidence of fence lines/boundaries i.e. postholes. Environmental data/ecological samples. Timber structural remains associated with the punt wharf Undocumented structural remains beneath Chapel Street and adjacent to Kurrajong Road Evidence of undocumented lightweight structures for agricultural purposes i.e. timber shelters for livestock/stockmen. Transport corridors, including early alignments and materials of Bells Line of Road, Inalls Lane, Southee Road and Old Kurrajong Road.	Low – works Nil-Low - relics	Local-State
Phase 2: Hawkesbury River Bridge, Richmond to Kurrajong Railway line and road corridors (1857-1952)	Brick and stone footings associated with structures, possibly reclaimed materials, concrete slabs and/or packed earth and gravel yard surfaces associated with undocumented agricultural buildings. Timber piles, and artefactual material associated with Hawkesbury River Bridge's substructure. Postholes or footings associated with riverside structures or unknown use. Evidence of rail infrastructure, such as timber sleepers, track and signal infrastructure, potential platform footings and utilities. Evidence of the rail siding and stone crushing Depot. Evidence of landscape modification, construction of roads. Archaeological remains associated with the former frontage of residences i.e. postholes, remnant stone and/or brick fencing.	Low- Moderate - works Low - relics Extant - remains of bridge structure	Local
Phase 3: Subdivisions and modern development (1953 – present)	Evidence of landscape modification, construction of roads, utilities and recreational facilities. Evidence of the formalisation of road corridors. Undocumented services. Timber or metal remains from undocumented structures.	Extant	Nil

7.0 THE PROPOSED WORKS

7.1 The proposed works

7.1.1 The proposal

The key features of Stage 2A of the proposal would include:

- a new four-lane bridge over the Hawkesbury River (about 360 metres long) about 30 metres
 downstream of the existing bridge, with two eastbound and two westbound lanes and the road level
 at a height to provide a five per cent AEP flood immunity
- widening of Bells Line of Road and Kurrajong Road to two lanes in each direction from the Terrace Road / Grose Vale Road intersection in North Richmond to just east of the Kurrajong Road / Old Kurrajong Road intersection in Richmond
- a new two-lane bypass south of Richmond town centre (one lane in each direction) between the Kurrajong Road / Old Kurrajong Road intersection and just east of the Castlereagh Road / Inalls Lane / Southee Road intersection, including:
 - a three-way signalised intersection connecting Kurrajong Road and the new bypass, including closure of the existing northern and southern legs of Old Kurrajong Road at Kurrajong Road
 - a two-way gated emergency driveway access connecting the northern leg of Old Kurrajong Road and Kurrajong Road, to be opened during flood evacuation events
 - a 150-metre-long bridge over a tributary to Mareh-Mareh Lagoon (near Inalls Lane)
 - a 120-metre-long bridge over the floodplain parallel to Inalls Lane
 - a roundabout at the Castlereagh Road / Inalls Lane / bypass intersection, with a local road connection to Southee Road
 - local road connections to Yarramundi Lane and Victoria Place from the bypass
 - truncation of Inalls Lane near Mareh-Mareh Lagoon, with local road connections to Inalls Lane from the bypass via Yarramundi Lane and near Drift Road
 - closure of the existing Drift Road intersection with Inalls Lane, with a new local road connection to Drift Road from the bypass
 - footpaths along the southern side of the bypass between Drift Road and Castlereagh
 Road and on each side of the roundabout
- an upgraded active transport network between Richmond and North Richmond, including:
 - a new shared path along the southern side of Kurrajong Road between the existing Richmond Bridge and Chapel Street, Richmond, a distance of about two kilometres, connecting to existing paths along March Street, Richmond
 - conversion of the existing Richmond Bridge and approaches into an active transport only connection
 - active transport connections from the existing Richmond Bridge through Hanna Park to an upgraded shared path on the northern side of Bells Line of Road until east of the Bells Line of Road / Terrace Road / Grose Vale Road intersection
- retention of bus stops along Bells Line of Road and Kurrajong Road
- new drainage infrastructure, including swales and water quality basins



- utilities connections and upgrades (including electrical, gas, water and telecommunications)
- new intelligent transport systems including closed-circuit television (CCTV) cameras to monitor traffic flow and assist with emergency management
- new maintenance access to the three new bridge structures
- permanent retaining walls near the approach to the new four-lane bridge in North Richmond and along Kurrajong Road near the new shared path
- driveway adjustments and tie-ins, including along Bells Line of Road, Beaumont Avenue, Kurrajong Road, Old Kurrajong Road, Inalls Lane, Drift Road and Castlereagh Road
- eight new parking spaces on the northern side of Beaumont Avenue, near its intersection with
 Terrace Road to replace parking spaces removed on Bells Line of Road
- finishing works, including kerb and gutters, signs, landscaping, lighting and line marking
- construction activities, including:
 - early work, including the establishment of a new compliant handrail on the existing Richmond Bridge
 - geotechnical, contamination and utility investigations which may be carried out as early work
 - a temporary roundabout at the Kurrajong Road / Chapel Street intersection
 - civil earthworks, bridge structural works, retaining walls, drainage work, utilities relocations and tie-in work and adjustments to adjoining sections of road
 - establishment of temporary ancillary facilities to support construction, including compound sites, site offices, stockpile and laydown locations, temporary access tracks and water quality devices
 - demolition work for structures and property features that fall in the proposal area.

The key features of Stage 2B of the proposal would include:

- localised widening of Bells Line of Road to provide a dedicated right-turn lane into Crooked Lane
- widening of Bells Line of Road to two lanes in each direction from west of Charles Street to the Terrace Road / Grose Vale Road intersection in North Richmond
- additional capacity improvements to the Bells Line of Road / Terrace Road / Grose Vale Road intersection, including an additional eastbound through lane at the intersection
- an upgraded shared path on the northern side of Bells Line of Road from west of Charles Street to the Terrace Road / Grose Vale Road intersection in North Richmond
- extension of the bypass (one lane in each direction) between the Castlereagh Road roundabout and just south of the Londonderry Road / Southee Road intersection, including:
 - a new signalised intersection at the junction of Londonderry Road, the new bypass and Vines
 Drive
 - closure of the Southee Road local road connection from Castlereagh Road and closure of Southee Road at Londonderry Road
 - a new local road connection to Southee Road opposite Valder Place, with left and right turn lanes provided at this intersection.
 - two new bus stops along the bypass near Hill Avenue (one eastbound and one westbound),
 with a footpath connection to Southee Road
- retention of bus stops along Bells Line of Road and Londonderry Road

- new drainage infrastructure, including swales and a water quality basin on Londonderry Road
- noise screening mounds, walls and/or additional attenuation between the bypass and Southee
 Road along the extended section of the bypass between Castlereagh Road and Londonderry Road
- utilities connections and upgrades (including electrical, gas, water and telecommunications)
- new intelligent transport systems at the Londonderry Road / bypass / Vines Drive intersection including closed-circuit television (CCTV) cameras to monitor traffic flow and assist with emergency management
- driveway adjustments and tie-ins, including along Bells Line of Road, the bypass and Londonderry Road
- finishing works, including kerb and gutters, signs, landscaping, lighting and line marking
- construction activities, including:
 - geotechnical, contamination and utility investigations which may be carried out as early work
 - civil earthworks, retaining walls, drainage work, utilities relocations and tie-in work and adjustments to adjoining sections of road
 - establishment of temporary ancillary facilities to support construction, including compound sites, site offices, stockpile and laydown locations, temporary access tracks and water quality devices
 - demolition work for structures and property features that fall in the proposal area.

The relevant design drawings for the proposal are provided below (Figure 100 to Figure 101).

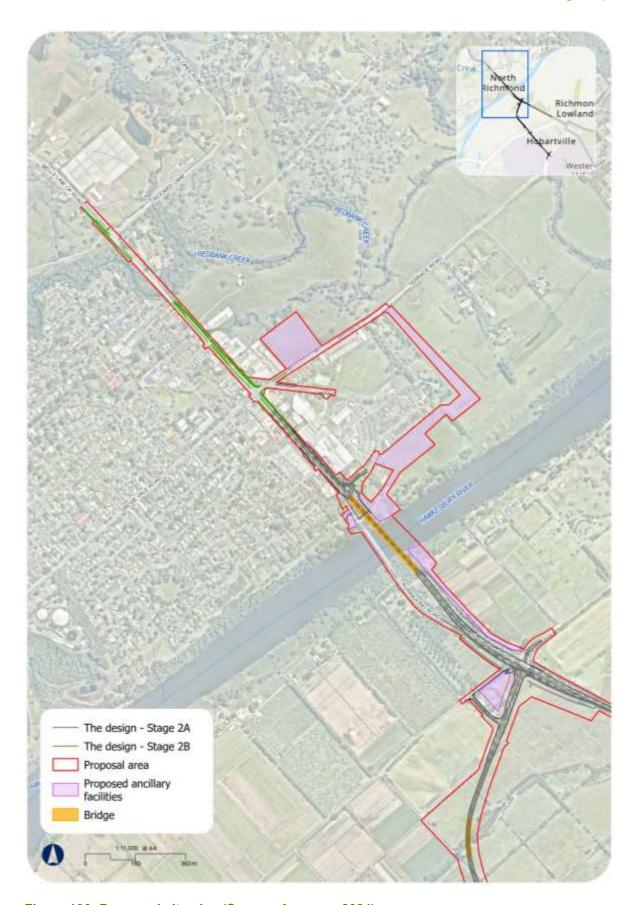


Figure 100: Proposed site plan (Source: Aurecon, 2024)

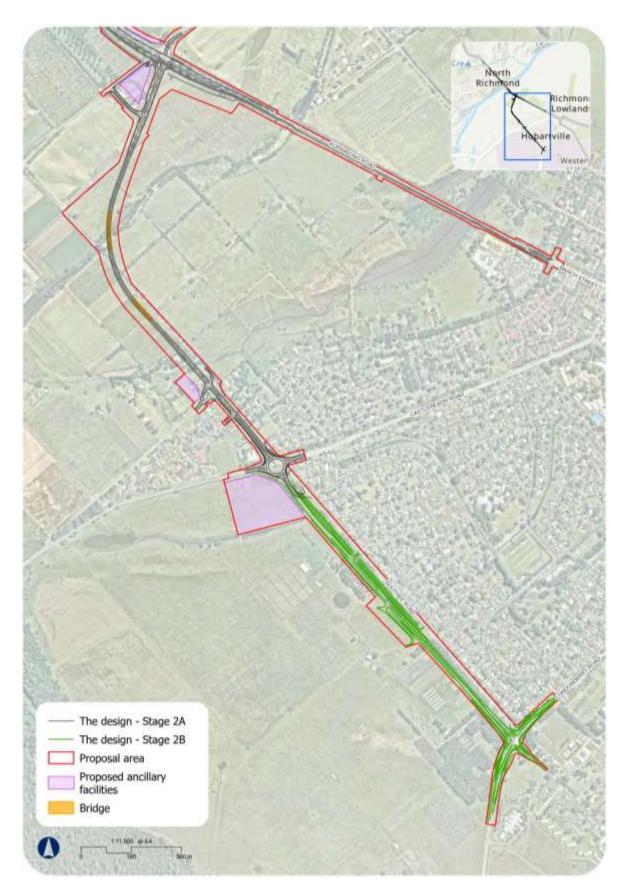


Figure 101: Proposed site plan (Source: Aurecon, 2024)

7.1.2 Proposal justification

Richmond Bridge is currently operating at capacity during peak periods and future traffic demand in the area will increase, driven by residential development west of the Hawkesbury River and background traffic growth. This is expected to further increase congestion and travel times along this arterial corridor.

Richmond Bridge is closed in moderate flood events when flood levels reach about eight metres Australian Height Datum (AHD), which is at about the 50 percent AEP flood level. Since 2020, Richmond Bridge has closed multiple times due to flooding. The closure of this bridge results in disruption to travel between North Richmond and Richmond and disrupts regional traffic using the Bells Line of Road corridor.

The Australian Government and NSW Government are funding traffic improvements between North Richmond and Richmond including a new bridge over the Hawkesbury River. This initiative is part of a wider program of traffic improvements between North Richmond and Richmond which includes previous intersection improvements at three key intersections on the approach to the existing Richmond Bridge, including Bells Line of Road / Grose Vale Road intersection in North Richmond as well as Kurrajong Road / Old Kurrajong Road intersection and March Street / Bosworth Street intersection in Richmond. The proposal builds on the previous intersection improvements and is being carried out as part of a wider program of traffic improvements between Richmond and North Richmond which is being delivered in two stages (Stage 1 and Stage 2). They are:

- Stage 1 involves upgrading The Driftway between Londonderry Road and Blacktown Road to improve safety and flood resilience. This project has been separately determined by Transport and is being delivered separately to the proposal.
- **Stage 2** is the proposal and it aims to improve traffic efficiency, flood resilience, active transport connections and safety of the road network between Richmond and North Richmond.

8.0 HERITAGE IMPACT ASSESSMENT

8.1 Overview

This section assesses the heritage impact of the proposed works on heritage values within the study area.

Within this approach, the objective of a heritage impact assessment is to evaluate and explain how the proposed works will affect the heritage value of the study area and/or place. A heritage impact assessment should also address how the heritage value of the site/place can be conserved or maintained, or preferably enhanced by the proposed works.

In order to consistently identify the impact of the proposed works, the terminology contained in the following table has been referenced throughout this document. The terminology and definitions are based on those contained in guidelines produced by the International Council on Monuments and Sites (ICOMOS)⁷⁰ and the Heritage Council of NSW⁷¹ and are shown in Table 14.

Table 14: Terminology for assessing the magnitude of heritage impact.

Grading	Definition
Major adverse	Actions that would have a severe, long-term and possibly irreversible impact on a heritage item. Actions in this category would include partial or complete demolition of a heritage item or addition of new structures in its vicinity that destroy the visual setting of the item. These actions cannot be fully mitigated.
Moderate adverse	Actions that would have an adverse impact on a heritage item. Actions in this category would include removal of an important part of a heritage item's setting or temporary removal of significant elements or fabric. The impact of these actions could be reduced through appropriate mitigation measures.
Minor adverse	Actions that would have a minor adverse impact on a heritage item. This may be the result of the action affecting only a small part of the place or a distant/small part of the setting of a heritage place. The action may also be temporary and/or reversible.
Negligible	Actions that are so minor that the heritage impact is considered negligible.
Neutral	Actions that would have no heritage impact.
Minor positive	Actions that would bring a minor benefit to a heritage item, such as an improvement in the item's visual setting.
Moderate positive	Actions that would bring a moderate benefit to a heritage item, such as removal of intrusive elements or fabric or a substantial improvement to the item's visual setting.
Major positive	Actions that would bring a major benefit to a heritage item, such as reconstruction of significant fabric, removal of substantial intrusive elements/fabric or reinstatement of an item's visual setting or curtilage.

⁷⁰ Including the document Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS, January 2011.

⁷¹ https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/material-threshold-policy.pdf



artefact.net.au

Table 15: Terminology for heritage impact types

Impact	Definition
Physical	Impacts resulting from works located within the curtilage boundaries of the heritage item.
Potential Physical	Impacts resulting from increased noise, vibrations and construction works located outside the curtilage boundaries of the heritage item.
Visual	Impact to views, vistas and setting of the heritage item resulting from proposed works outside the curtilage boundaries of the heritage item.
Archaeological	Impacts to potential archaeological remains located within the curtilage boundaries of the heritage item.

Items which are not individually mentioned in this assessment, have been assessed as resulting in no impacts and have been included in the Table 16 among the summary of items which would sustain impacts due to the proposed works.

The heritage impact assessment divides the study area into the same sections as the physical context due to the size of the study area, refer to Figure 1 and Figure 2 and Section 4.0 for the detailed description of these sections. As Hobartville, including outbuildings (SHR No. 00035) is within two of these study area sections it has been assessed under its own subheading to avoid splitting the impact assessment for it into separate sections. Furthermore, the heritage impact assessment divides the study area into works pertaining to Stage 2A and those pertaining to Stage 2B.

As Hanna Park is not a heritage listed item, the proposed works would not cause any physical or visual heritage impacts.

8.1.1 Physical heritage impacts – Stage 2A

8.1.1.1 Hawkesbury River Bridge and Road corridor south of the Hawkesbury River

The proposed road corridor works south of the Hawkesbury River have been designed to avoid or only cause minimal physical impacts to the three heritage items within the vicinity of the study area and within the 250m heritage buffer zone. The physical impacts of the proposed works on the heritage items have been assessed individually under separate subheadings from the north to the south along the road corridor. Hobartville (including outbuildings) (SHR No. 00035) (LEP I14) has been assessed under a separate subheading 8.1.1.3.

8.1.1.1.1 Hawkesbury River Bridge (TfNSW s170)

The bridge holds significance for its technological and engineering features of its time, such as its concrete Monier arch construction.

Whilst the existing bridge will remain operational until the new bridge is constructed, after the construction of the new bridge, it is proposed to convert the bridge into an active transport route and include installing new coloured surfacing on top of the existing deck surface to distinguish between cyclist and pedestrian lanes and replacement/addition of new handrails which fix into the concrete deck.

The proposed works will physically and visually alter elements on the deck of the bridge. While the proposed handrail works would physically fix into and alter the original physical fabric of the bridge they would not detract from the significance of the bridge, as the existing metal handrails are not original or significant heritage fabric. Their replacement would not detract from the technical or historic values. Nor will the new handrails impact the aesthetic values the bridge holds which is tied to its

concrete Monier arch structure. Replacement of the deck surface, which is not significant fabric would have a negligible impact to the overall significance of the bridge.

The construction of the new bridge has been analysed in the Noise and Vibration Impact Assessment and has been identified to be a low risk for physical damage to the existing bridge as a result of construction vibration and settlement.

The conversion of the bridge to a pedestrian/cycle bridge would reduce the traffic load on the bridge, and reduce the physical strain on the significant fabric. Adapting the bridge for a new use would be a positive heritage outcome for the fabric and useful life of the bridge.

Based on this, the proposed works would result in a negligible physical impact.

Physical impact: Negligible

8.1.1.1.2 McMahon Homestead (LEP I82)

The proposed works would be located about 180m north-east of the heritage item. Based on this the proposed works would result in a **neutral** physical impact.

Physical impact: Neutral

8.1.1.1.3 Mountain View (SHR No. 00044) (LEP I00044)

The proposed works would not encroach on the curtilage of Mountain View. Based on this the proposed works would result in a **neutral** physical impact. Due to the structural stability of the buildings on Mountain View, and the proximity of the property to the Study Area and the proposed works that the property has the potential to have physical damage as a result of vibration and settlement. The Noise and Vibration Impact Assessment recommends that that Level 1 noise treatments should be considered for the property. The physical impact of these noise treatments would need to be assessed as part of a separate statement of heritage impact.

Physical impact: Neutral.

8.1.1.2 Shared path along Kurrajong Road

Hobartville (including outbuildings) (SHR No. 00035) (LEP I14) has been assessed under a separate subheading 8.1.1.3.

8.1.1.2.1 St Peter's Anglican Church I134

The proposed works would terminate at the edge of the heritage curtilage of the locally listed item, they would not encroach within the heritage curtilage. Therefore, it is considered that the proposed works would result in a **neutral** physical impact.

Physical impact: Neutral

8.1.1.2.2 Avenue of trees east and west side of street (LEP I18)

The study area and proposed works would overlap with the LEP curtilage of the heritage item. The proposed works would require the removal of a singular mature English Plane tree located at the northwest corner of Kurrajong Road and Chapel Street. This tree is significant as it is a part of the row of trees that form the 'Avenue of trees' heritage item, these trees used to line the Avenue that led to Hobartville (SHR No. 00035). The removal of this tree would result in impact to the heritage item itself and detract from the heritage significance of the Avenue of trees. Based on this it is considered that the proposed works would result in a **minor** physical impact. Refer to Section 9.3 for the recommendation on mitigation measures for this physical impact.

Physical impact: Minor adverse

8.1.1.2.3 Former house (LEP I72)

The proposed works would terminate at the edge of the heritage curtilage of the locally listed item, they would not encroach. Therefore, it is considered that the proposed works would result in a **neutral** physical impact.

Physical impact: Neutral

8.1.1.3 Hobartville (including outbuildings) (SHR no. 00035)

As Hobartville is a large heritage item with an SHR curtilage, multiple proposed works would impact the heritage item. While the study area at the road corridor south of the Hawkesbury River does overlap with the SHR curtilage at the west edges of the heritage item the proposed works have been designed to avoid causing physical impacts to the Hobartville (including outbuildings). The tree plantings that line Hobartville at Inalls Lane is located outside of the SHR curtilage and their proposed removal would not physically impact the heritage item.

The heritage item would be impacted at the section of the study area and proposed works at the shared path along Kurrajong Road to the northeast edge of the curtilage of Hobartville. The proposed study area and shared path works along Kurrajong Road would temporarily encroach into the curtilage of the State listed Hobartville (including outbuildings) item, through the removal of the fence and trees along Kurrajong Road for construction purposes. The proposed shared path would allow pedestrians and cyclists to travel along this section of Kurrajong Road safely, separate from the vehicular traffic. At the northeast corner of the State curtilage the proposed shared path works would overlap a small portion of the curtilage. The proposed works in this area would require the removal of all the trees that line the northeast curtilage along Kurrajong Road. The trees are located outside of the State curtilage area. The existing post and mesh fence would also need to be removed.

The 2004 Hobartville CMP does not identify the afore mentioned trees as being significant and do not appear on historic aerial from 1955. They are considered to be a relatively recent planting. However, they do contribute to the amenity of the heritage item. The proposed removal of the post and mesh fence would not cause physical impacts to the heritage significance of Hobartville, as it is recent fabric and outside of the SHR curtilage. The northeast curtilage of Hobartville has been changed from the 1950s up until the 1970s at which the point the curtilage has remained the same until present⁷².

Although the loss of curtilage would cause an adverse physical impact, the loss would be temporary during the construction works only. The temporary lease would amount to 4,882.87m² of the landholding of Hobartville, and would be returned to the property on the completion of the works. Temporary leasing would be used to enable construction works, including access routes and buffer areas to the road works. The temporarily leased land would not be physically impacted by the proposed works. Therefore, it is considered that the proposed works would result in a **minor adverse** physical impact.

Physical impact: Temporary Minor adverse

8.1.1.4 Grounds and landscaping surrounding Hobartville (LEP I14)

The heritage item would be impacted at the section of the study area and proposed works south of the Hawkesbury River along the Inalls Lane edge of Hobartville's LEP curtilage.

While the study area at the road corridor south of the Hawkesbury River does overlap with the LEP curtilage at the west edges of the heritage item, the proposed works have been designed to avoid causing physical impacts to Grounds and landscaping surrounding Hobartville in this section of the overlap. Although the study area overlaps with the LEP curtilage, the actual proposed works would terminate along the edge of Inalls Lane and the local heritage curtilage, they would not physically alter any fabric within the LEP curtilage. The tree plantings that line Hobartville at Inalls Lane is located

⁷² Clive Lucas, Stapleton & Partners, 'Hobartville, Richmond, NSW Conservation Management Plan'.



artefact.net.au

outside of the LEP curtilage and their proposed removal would not physically impact the heritage item. Therefore, it is considered that the proposed works would result in a **neutral** physical impact.

Physical impact: Neutral

8.1.2 Physical heritage impacts – Stage 2B

8.1.2.1 Road corridor north of the Hawkesbury River

There are six heritage items within the vicinity of the study area and within the 250m heritage buffer zone. The physical impacts of the proposed works on the heritage items have been assessed in this section.

The proposed works have been designed to avoid physical impacts to the heritage curtilage of the locally listed heritage items (listed below) and would not encroach within the heritage curtilage. Therefore, it is considered that the proposed works would result in a **neutral** physical impact:

- St Phillip's Anglican Church (LEP I408)
- House (LEP I410)
- Former Police Station and Residence (LEP I406)
- Seventh Day Adventist Church (LEP I407)
- House (LEP I495)
- Sunnyside (Former O'Dea's Dairy) (LEP I413)
- House (LEP I493)

Physical impact: Neutral

8.1.3 Physical heritage impacts – Ancillary Facilities

8.1.3.1 Compounds north of the Hawkesbury River

Three temporary compound areas are proposed north of Hawkesbury River. Refer to section 4.1.3 for the locations and detailed descriptions of the physical context of these compound areas. The compound areas would store materials, plant, equipment, and site offices. Compound area A would be used during both Stage 2A and Stage 2B of the proposed works, all other compounds north of the Hawkesbury River would only be required for Stage 2A works.

None of the compound areas would be located adjacent to or within the curtilage of a heritage listed item. Furthermore, the compound areas would be temporary, they would be removed after the completion of the proposed works. Therefore, it is considered that the proposed works would result in **neutral** physical impacts.

Physical impact: Neutral

8.1.3.2 Compounds south of the Hawkesbury River

The proposed compound area works would consist of four compound area locations south of the Hawkesbury River, refer to section 4.1.5 for a detailed description of the physical context of these compound areas. The compound areas would store materials, plant, equipment, and site offices. Compound area G would be used during both Stage 2A and Stage 2B of the proposed works, all other compounds south of the Hawkesbury River would only be required for Stage 2A works.

None of the compound areas would be located adjacent to or within the curtilage of a heritage listed item. Furthermore, the compound areas would be temporary, they would be removed after the

completion of the proposed works. Therefore, it is considered that the proposed works would result in **neutral** physical impacts.

Physical impact: Neutral

8.1.4 Visual heritage impacts – Stage 2A

8.1.4.1 Hawkesbury River Bridge and Road corridor south of the Hawkesbury River

The proposed road corridor works south of the Hawkesbury River have the potential to visually impact the three heritage items within the vicinity of the study area and within the heritage buffer zone. The visual impacts of the proposed works on the heritage items have been assessed individually under separate subheadings from the north to the south along the road corridor. Hobartville (including outbuildings) (SHR No. 00035) (LEP I14) has been assessed under a separate subheading 8.1.4.3.

8.1.4.1.1 Hawkesbury River Bridge (TfNSW s170)

The uninterrupted views from the bridge along the river are significant to the overall setting and character of the bridge (see Section 5.2.4.1). The proposed works would alter the visual character of the bridge surrounds and obstruct the views to the east of Hawkesbury River. The proposed bridge deck would be located above eye level from the viewing deck of the existing bridge. The proposed bridge would be supported by four large columns. These columns would be visible at eye level from the existing bridge's viewing deck and would interfere with the significant views of the river towards the east. It is considered that the proposed works would result in a **moderate adverse** visual impact.

Visual impact: Moderate adverse

8.1.4.1.2 McMahon Homestead (LEP I82)

The proposed works in this area would consist of the Richmond bypass and two bridges that would cross over the watercourses that run into the Mareh-Mareh Lagoon further northeast of the heritage item. The proposed works would alter the visual character of the wide-ranging paddocks by introducing a road corridor and bridge, they would interfere with the existing view and sight lines. The bridges over the watercourses would be vertical structures jutting in the views of the landscape. The road corridor works would be within 250m of the heritage item. Although, the bridges would be located about 270m east of the heritage item, they would still visibly disrupt the existing visual character of the wide-ranging paddocks. Therefore, the proposed works would result in a **minor adverse** visual impact.

Visual impact: Minor adverse

8.1.4.1.3 Mountain View (SHR No. 00044) (LEP I00044)

The proposed works would require the demolition of the existing dwelling on Lot 1 of DP 743909 (located opposite to the northwest of the heritage item, the dwelling itself is not a heritage listed item). This demolition would further open up the view of the Richmond lowlands, which have been assessed as a significant view for the heritage item and is therefore a positive impact.

The proposed works would also include the construction of two bridges over the flood plains which would be visible in the distance depending on the viewpoint in the property. Some tree coverage exists between Mountain View and the proposed bridges which would obscure these views to a degree. The bridges, although approximately 700m away would alter views towards the Richmond lowlands, a view considered of high significance to the property. Overall, based on this the proposed works would result in a **minor adverse** visual impact.

Visual impact: Minor adverse

8.1.4.2 Shared path along Kurrajong Road

The proposed shared path works along Kurrajong Road have the potential to visually impact the heritage items within the vicinity of the study area and within the heritage buffer zone. The visual impacts of the proposed works on the heritage items have been assessed individually under separate subheadings from the north to the south along the shared path. Hobartville (including outbuildings) (SHR No. 00035) (LEP I14) has been assessed under a separate subheading 8.1.4.3.

8.1.4.2.1 St Peter's Anglican Church (LEP I134)

The proposed works would involve road upgrades and a new footpath, which would be obscured by the visual barrier formed by the vegetation along the southwestern edge of the heritage item. Based on this, the proposed works would cause **neutral** visual impact.

Visual impact: Neutral

8.1.4.2.2 Avenue of trees east and west side of street (LEP I18)

The proposed works would require the removal of a singular tree on the northwest corner of Kurrajong Road and Chapel Street. The tree is located at the corner and is one of the most visible trees of the group of trees that form the avenue. It is a mature tree with a large canopy, the removal of this tree would be obvious and detrimental to the heritage item, altering the visual character of the heritage item and cause a large gap in the avenue and overarching canopy. It is however one of many trees which remain on the avenue. Therefore, it is considered that the proposed works would cause a **minor adverse** visual impact. Refer to Section 9.3 for the recommendation on mitigation measures for this visual impact.

Visual impact: Minor adverse

8.1.4.2.3 Former House (LEP I72)

The proposed works would involve road upgrades and a new footpath, which would be obscured by the visual barrier formed by the vegetation along the northwestern edge of the heritage item. Therefore, it is considered that the proposed works would cause **neutral** visual impact.

Visual impact: Neutral

8.1.4.2.4 Bowman House (SHR no. 00468) (LEP 100468)

The proposed works would involve road upgrades and a new footpath, which would be obscured by the visual barrier formed by the vegetation and residential dwellings to the south of the heritage item. Therefore, it is considered that the proposed works would cause **neutral** visual impact.

Visual impact: Neutral

8.1.4.3 Hobartville (including outbuildings) (SHR No. 00035)

The 2004 Hobartville CMP identifies 6 significant views from Hobartville. The proposed works would result in impact to View 2. View 2 comprises the wide-ranging views (Figure 88) from the house to the west across the Hawkesbury River valley to the Blue Mountains in the distance⁷³. The proposed works in this area would consist of the Richmond bypass and two bridges that would cross over the watercourses that run into the Mareh-Mareh Lagoon further southwest of the heritage items. The proposed works would alter the visual character of the wide-ranging paddocks by introducing a road corridor and bridges, which would interfere with the existing view and sight lines. The road corridor would consist of low lying ground scale works. The bridges would be at the same elevation as the road corridor. However, due to the changing profile and contours of the floodplain the individual pilings of the bridges be of varying levels of obtrusiveness in the significant views of the landscape.

⁷³ Clive Lucas, Stapleton & Partners.



artefact.net.au

The proposed works would require the removal of the trees lining the north-eastern border of Hobartville's State curtilage along Kurrajong Road. The 2004 Hobartville CMP does not identify the afore mentioned trees as being significant, nor are they within the SHR curtilage. However, they contribute to the amenity of the heritage item. Their removal would alter the visual character of Hobartville, as many paddocks are lined with trees. The trees form a partial visual barrier between Hobartville and the existing road corridor, the removal of these trees would open the north eastern frontage of Hobartville to the road corridor visually, which would detract from the existing visual character of Hobartville. Overall, the proposed works would result in a **moderate adverse** visual impact.

Visual impact: Moderate adverse

8.1.4.4 Grounds and landscaping surrounding Hobartville (LEP I14)

The compound area located to the southwest of Hobartville across Inalls Lane would not be sympathetic to the assessed significant View 2 from Hobartville. The plant, equipment and storage materials would be visible; however, the existing visual character of the residential lots already detracts from significant View 2. The work would be temporary in nature. The proposed removal of trees siding the south west at Inalls Lane would visually impact the amenity of Hobartville. Although the trees are located outside of the LEP curtilage, they contribute to the amenity of the heritage item and their removal would detract from the visual amenity and character of Hobartville. The removal of the trees would open the up the view of the temporary compound area to Hobartville and further detract from the visual character temporarily. However, this would only affect a small portion of the large heritage item. Therefore, the proposed works would result in a temporary **minor adverse** visual impact.

Visual impact: Minor adverse

8.1.5 Visual heritage impacts – Stage 2B

8.1.5.1 Road corridor north of the Hawkesbury River

The proposed road corridor works north of the Hawkesbury River have the potential to visually impact the six heritage items within the vicinity of the study area and within the heritage buffer zone. The visual impacts of the proposed works on the heritage items have been assessed in this section.

The proposed works would include road widening, footpath and drainage works; these would be low-laying ground level works. The proposed works would not involve vertical structures, other than road corridor utilities such as power poles and street lighting. These utilities would replace existing utilities and would remain visually consistent with the existing road corridor; therefore, they would not be visually intrusive.

The proposed works would be visually obscured by surrounding trees, vegetation, residential and commercial buildings, thus resulting in **neutral** visual impacts to the following heritage items:

- St Phillip's Anglican Church and Cemetery (LEP I408)
- House (LEP I410)
- House (LEP I495) Sunnyside (former O'Dea's Dairy) (LEP I413)

The proposed works would be visible from the heritage items; however the road corridor would retain its land use and remain visually consistent with its existing visual character. Therefore, resulting in a **negligible** visual impact the following items.

- Seventh Day Adventist Church (LEP I407)
- Former Police Station and Residence (LEP I406)



House (LEP I493)

Visual impact: Neutral to negligible

8.1.6 Visual heritage impacts – Ancillary facilities

8.1.6.1 Compounds north of the Hawkesbury River

It is proposed to locate three temporary compound areas north of Hawkesbury River. Refer to section 4.1.3 for a detailed description of the physical context of these compound areas. The visual impacts of the proposed compound areas on the heritage items have been assessed in this section.

The proposed compound areas would not be visible due to the existing commercial buildings that form a visual barrier. The compound areas would not alter the visual character of the heritage items views as they would be obscured. Compound area A would be used during both Stage 2A and Stage 2B of the proposed works, all other compounds north of the Hawkesbury River would only be required for Stage 2A works. Based on this, the proposed compound areas would have a **temporary neutral** visual impact to the following heritage items:

- House (LEP I410)
- Seventh Day Adventist Church (LEP I4017)
- House (LEP I495)
- Former Police Station and Residence (LEP I406) Sunnyside (former O'Dea's Dairy) (LEP I413)

Visual impact: Neutral

8.1.6.2 Compounds south of the Hawkesbury River

The proposed compound area works would consist of four compound area locations south of the Hawkesbury River. Refer to section 4.1.5 for a detailed description of the physical context of these compound areas. The compound areas would store materials, plant, equipment, and site offices.

The following three compound areas would be located well away from the heritage items identified in this SoHI: compound areas located on Lot 34 of DP 1118821, Lot 1 of DP 742541, and Lot 181 of DP 39768. There are visual barriers formed by vegetation and residential dwellings that would block any visual impacts to heritage items and the proposed compound areas would be removed after the completion of the works. Compound area G would be used during both Stage 2A and Stage 2B of the proposed works, all other compounds south of the Hawkesbury River would only be required for Stage 2A works. Based on this these four compound areas would result in **temporary neutral** visual impacts.

The remaining proposed compound area is located Lot 1 of DP 74309 and would cause temporary visual impacts to heritage items and has been assessed below. Hobartville (including outbuildings) (SHR No. 00035) (LEP I14) has been assessed under a separate subheading 8.1.4.3.

8.1.6.2.1 McMahon Homestead (LEP I82)

The proposed compound area would be blocked from the view of McMahon Homestead by vegetation and therefore would cause **temporary neutral** visual impacts.

Visual impact: Neutral

8.1.6.2.2 Mountain View (SHR No. 00044) (LEP I00044)

The compound area located to the northwest of Mountain View across Inalls Lane would not be sympathetic to the significant view towards the Richmond lowlands. The plant, equipment and storage materials would be visible; however, the existing visual character of the lots already detracts from the significant views. The compound area would be removed after the completion of the works, thus only causing a temporary impact. Therefore, it is considered that the proposed compound area would result in a **temporary negligible** visual impact.

Visual impact: Negligible

8.1.7 Cumulative impacts

Cumulative impacts refer to the combined, overlaid or added actions and interactions within a particular place associated with the past, present and the reasonably foreseeable future.

The Australian Government and the NSW Government are funding traffic improvements between North Richmond and Richmond including a new bridge over the Hawkesbury River. The proposal is being carried out as part of a wider program of traffic improvements between Richmond and North Richmond which is being delivered in two stages.

Stage 1 involves upgrading The Driftway between Londonderry Road and Blacktown Road to improve safety and flood resilience and to cater for future traffic growth. Stage 1 had no impacts to Heritage within the study area.

Other projects that contribute to the cumulative impacts include:

- Hawkesbury-Nepean Valley Flood Evacuation Road Resilience Program (in planning phase)
- Richmond System Wastewater upgrade (REF approved, in delivery, expected completion by 2026)
- Hawkesbury Centre of Excellence (EIS approved, construction on hold)
- South Windsor Liquid Waste Facility Upgrade (in planning phase)
- St John of God Richmond Hospital Redevelopment (in construction, expected completion by 2024)
- Drainage Upgrade Program on Mitchell Drive, Glossodia (completed in late 2023)
- Drainage Upgrade Program on Ian Street, Glossodia (completed in late 2023)

Although the majority of the heritage items identified in this SoHI have been assessed as resulting in neutral physical and visual impacts from the new Richmond Bridge Stage 2 works, these works in tandem with the projects outlined above have the potential to cumulatively impact a number of heritage items. The heritage items that have been assessed as resulting in impacts greater than neutral include:

- Avenue of trees east and west side of street (LEP I18)
- Former House (LEP I72)
- Hawkesbury River Bridge (TAHE CRN s170)
- Hobartville, including outbuildings (SHR No. 00035)
- Grounds and landscaping surrounding Hobartville (LEP I00035 & I14)
- House (LEP I493)

- McMahon Homestead (LEP I82)
- Mountain View (SHR No. 00044)
- Seventh Day Adventist Church (LEP I407)

The Former House (LEP I72), House (LEP I493) and Seventh Day Adventist Church (LEP I407) are located in the suburban Richmond, where the residential and commercial sprawl has already diminished the views to pastoral land parcels and the Richmond lowlands near the Hawkesbury River. These three properties will suffer from the continual change in the visual character of their surrounding areas, with the introduction of another road upgrade project, which has been a consistent cumulative impact in the area from the continual suburban and infrastructure development.

Similarly, McMahon Homestead and Mountain View would suffer from the change in the visual character of the landscape, as these two properties are located closer to the Richmond lowlands. These two properties still have views towards the lowlands and pastoral land parcels. The proposed works would introduce visible infrastructure which would alter the landscape vistas.

Hobartville, including outbuildings (SHR No. 00035) has suffered from continuous curtilage loss to its north side, for example due to the construction of Kurrajong Road. The proposed works would further reduce the curtilage of the heritage item. Although the trees along the north side of Hobartville are not within the SHR curtilage and are recent plantings, their loss would alter the existing visual character of the place and detract from the visual amenity.

The proposed removal of the singular mature English Plane tree at Chapel Street would detract from the physical and visual character of the Avenue of trees east and west side heritage item, these trees formerly lined the avenue that led to Hobartville, however the function of the avenue have changed over time to serve local residential dwellings. Kurrajong Road has already created a break in the avenue of trees.

When considering the heritage impacts of these previous infrastructure projects on Hobartville (noting that Stage 1 of this project had no impacts to non-Aboriginal heritage), the overall New Richmond Bridge and Traffic Improvement would result in a **minor adverse cumulative** impact. The minor adverse cumulative impact is a result of the combined past and proposed works.

However, the benefit of the works would result in modernised road corridor and upgraded new bridge across the Hawkesbury River to ensure the resilience of the road corridor and bridge in the future. This SoHI has included recommendations to mitigate impacts in Section 9.3.

8.1.8 Summary of impacts to heritage items

This section assesses the potential physical and visual impacts of the proposed works on heritage items within the study area and within the buffer zone. The heritage impacts of the proposed works are outlined in Table 16. Items that were not individually mentioned in the above assessment, have been assessed as resulting in no impacts and have been included in the table below among the summary of items which would sustain impacts due to the proposed works.

Table 16: Summary of heritage impacts within SHR and LEP curtilages and within the vicinity in the buffer zone

Item Name	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
Avenue of trees east and west side of street	HLEP 2012 I18	Minor adverse	Minor adverse	Within the study area
Bowman House	SHR No. 00468 HLEP 2012 I00468 RNE Place ID. 3198	Neutral	Neutral	60m north of the study area
Buildings, outbuildings, grounds, trees (of Bowman House)	SHR No. 00753	Neutral	Neutral	200m southeast of the study area
The cottage	HLEP 2012 I124	Neutral	Neutral	190m northeast of the study area
Eltham	HLEP 2012 I125	Neutral	Neutral	175m northeast of the study area
Former house	HLEP 2012 I72	Neutral	Negligible	Adjacent east of the study area
Former police station and residence	HLEP 2012 I406	Neutral	Neutral	Adjacent southwest of the study area
Hawkesbury River (Road) Bridge	TAHE S170 RNE Place ID. 15946	Negligible	Moderate adverse	Within the study area
Hobartville, including outbuildings	SHR No. 00035 RNE Place ID. 3133 NSW NTHR No. 7920	Minor adverse	Moderate adverse	Within the study area
Grounds and landscaping surrounding 'Hobartville'	HLEP 2012 100035 & 114	Neutral	Minor adverse	Within the study area
House	HLEP 2012 I3	Neutral	Neutral	160m east of the study area
House	HLEP 2012 I4	Neutral	Neutral	160m east of the study area
House	HLEP 2012 I17	Neutral	Neutral	160m east of the study area
House	HLEP 2012 I41	Neutral	Neutral	170m north of the study area
House	HLEP 2012 I126	Neutral	Neutral	Within the study area
House	HLEP 2012 I127	Neutral	Neutral	130m north of the study area
House	HLEP 2012 I128	Neutral	Neutral	130m north of the study area
House	HLEP 2012 I410	Neutral	Neutral	130m north of the study area

Item Name	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
House	HLEP 2012 I493	Neutral	Negligible	Adjacent southwest of the study area
House	HLEP 2012 I495	Neutral	Neutral	Adjacent to the west of the study area
Inew cottage	HLEP 2012 I16	Neutral	Neutral	140m southwest of the study area
McMahon Homestead	HLEP 2012 I82	Neutral	Minor adverse	185m north of the study area
Mountain View	SHR No. 00044 HLEP 2012 100044 RNE Place ID. 3134	Neutral	Minor adverse	180m southwest from the study area
Seventh Day Adventist Church	HLEP 2012 I407	Neutral	Negligible	Adjacent north of the study area
St Peter's Anglican Church Group	SHR No. 02023 HLEP 2012 I134 & I129 RNE Place ID. 3184 NSW NTHR No. 4234, 9954, 9955 & 9958	Neutral	Neutral	Adjacent north of the study area
St Phillip's Anglican Church and Cemetery	HLEP 2012 I408	Neutral	Neutral	58m north of the study area
Sunnyside (former O'Dea's dairy)	HLEP 2012 I413	Neutral	Neutral	Adjacent west of the study area
Cumulative Impacts	The overall cumulat impacts.	ive impacts have been	assessed as having m	oderate adverse cumulative

8.1.9 Archaeological impacts

Proposed works with potential to impact archaeological remains include:

- Road widening and footpath modification works
- Construction of new road bypasses
- Bridge piling and abutments
- Installation of drainage infrastructure
- Relocation of utilities and installation of new utilities
 Establishment of temporary ancillary facilities.

The proposed bypass works are unlikely to result in impacts to archaeological resources, due to the low potential for identification of Phase 1 or 2 remains in these areas.

Table 17: Summary of Archaeological Impacts

Proposed works	Proposed excavation activity and depth	Archaeological potential and significance	Assessment of archaeological impact
Bridge piling and abutments	Bridge abutments will be supported by 1050mm diameter piles, established along the north and south riverbanks. There will be 5 piles constructed on each bank. Construction of the bridge abutments would also require bulk excavation in these locations.	former Hawkesbury River Bridge (low/State) Phase 2 Nil Phase 3	There is moderate potential for minor adverse impact to archaeological remains of the former Hawkesbury River bridge and remains of the Hawkesbury Punt wharf (Phase 1).
Construction of new road corridor (bypass)	Construction of the new road corridor will involve bulk excavation cut and filling activities, ground levelling and compaction, and installation of new road surfacing.	Phase 1 Agricultural clearing and land use (low/local) Early road alignment and surfacing (low/local) Phase 2 Engineered road surfaces (low/local) Stone crushing depot (moderate/local) Phase 3 Nil	There is low potential for minor adverse impact to archaeological remains within the Richmond Bypass. Archaeological remains within this area would be related to Phase 1 occupation and are likely to be ephemeral in nature. There is low potential for minor adverse impact to archaeological remains of the former stone crushing depot (Phase 2). Road construction confined to existing corridors has low potential to result in neutral archaeological impacts.
Road widening and footpath modifications	Road widening and footpath installation will require bulk excavation cut and fill activities, ground levelling and compaction, and installation of new road surfacing. Maximum required excavation depth is 1m.	Phase 1 Early road alignment and surfacing (low/local) Chapel Street structural remains (moderate/State) Phase 2 Engineered road surfaces (low/local) Remains of former Richmond-Kurrajong Railway (low/local) Historic service infrastructure (low/nil) Phase 3 Nil	The proposed road widening works and footpath modifications have low potential to result in neutral impact to potential archaeological resources. There is some potential for interaction with historic service infrastructure (Phase 2). Brick or stone drainage (Phase 2) may reach the threshold for local significance. There is low potential for impact to archaeological remains from Phases 1 or 3. No works are proposed within the area of moderate potential identified at the Corner of Chapel and March Streets (Phase 2).

Proposed works	Proposed excavation activity and depth	Archaeological potential and significance	Assessment of archaeological impact
Drainage infrastructure	Proposed drainage works will involve installation of new subsurface pipes, construction of new kerbs and gutters, installation of pits, and construction of new drainage channels and outlets. The depth of proposed excavation will vary across the project area. Typically, new subsurface pipes and pits will require a depth to a maximum of 2m. New channel depths will vary. Kerbs and guttering will not exceed the depth of excavation required to road construction.	Phase 1 Early road alignment and surfacing (low/local) Phase 2 Engineered road surfaces (low/local) Remains of former Richmond-Kurrajong Railway (low/local) Historic service infrastructure (low/nil) Phase 3 Nil	Proposed drainage works have low potential to result in minor adverse impacts to potential archaeological remains. There is low potential for proposed new drainage to impact on historical service infrastructure, including existing brick or stone drains below the roadway. Brick or stone drainage (Phase 2) may reach the threshold for local significance. There is low potential for impact to archaeological remains from Phases 1 or 3.
Utilities relocation	Utilities relocation will require trenching excavation of varying widths and depths across the study area. The proposed relocations will largely occur within areas of existing disturbance, along the existing roadway.	Phase 1 Early road alignment and surfacing (low/local) Phase 2 Engineered road surfaces (low/local) Remains of former Richmond-Kurrajong Railway (low/local) Historic service infrastructure (low/nil) Phase 3 Nil	There is low potential for neutral impacts to archaeological remains across the study area. Utilities relocation is generally occurring within heavily disturbed areas with nil to low archaeological potential.
Temporary ancillary facilities	Ground disturbance not required. Works will be limited to installation of fencing, materials stockpiling and temporary office establishment.	Phase 1 Agricultural clearing and land use (low/local) Phase 2 Engineered road surfaces (low/local) Stone crushing depot (moderate/local) Phase 3 Nil	Nil archaeological impacts expected. One ancillary facility is located within the footprint of the former stone crushing Depot, although no physical impacts are expected during works.

8.1.9.1 Summary of archaeological impacts

The proposed works have low potential to result in above neutral impacts to archaeological remains. Impacts would be limited to former rail remains along Kurrajong Road, or historic infrastructure, such as brick or stone drains. These resources would be considered 'works' and would not require approvals under the Heritage Act.

There is low potential for neutral impacts to potential archaeological remains considered to be relics, including around the footings of the former Hawkesbury Bridge and the former punt wharf.

8.1.10 Summary of archaeological impacts within SHR and LEP curtilages

The following table summarises the potential for the updated design to impact on archaeological resources within SHR and LEP listed curtilages.

Table 18: Summary discussion of potential archaeological impact within SHR and LEP curtilages

Item	Archaeological potential	Archaeological significance	Proposed works	Impact Level
Hobartville including outbuildings #00035 (SHR)	Low	Local	Bypass construction, drainage installation	Neutral
Mountain View #00034 (SHR)	Nil-Low	Local	Nil	Neutral
House #I410 (HLEP)	Nil-Low	Local	Nil	Neutral
House #I41 (HLEP)	Nil-Low	Local	Nil	Neutral
Seventh Day Adventist Church #I407 (HLEP)	Nil-Low	Local	Nil	Neutral
St Peters Anglican Church #1134 (HLEP)	Nil-Low	Local	Nil	Neutral
Avenue of trees east and west side #I18 (HLEP)	Nil-Moderate	Local/State	Tree Removal, Footpath modification	Neutral
Hawkesbury River Bridge TAHE S170 RNE Place ID. 15946	Nil-Low	Local	Removal of vehicle barriers, handrail modification and road resurfacing	Neutral

8.2 Heritage considerations for the proposal

Heritage guidelines prepared by Heritage NSW, DCCEEW (formerly DPE) outline design considerations for proposals.⁷⁴ Relevant design considerations for proposed works located in the vicinity of heritage items are discussed in Table 19.

Table 19: Heritage considerations for the study area (Source: Heritage NSW, 2023)

Heritage Consideration	Discussion
Will the proposed works affect the heritage significance of the adjacent heritage item or the heritage conservation area?	The proposed works would not affect the heritage significance of the heritage items identified in this SoHI. The proposed works would predominantly not result in impacts to surrounding heritage items. Where proposed works would physically or visually impact heritage items, recommendations have been made in Section 9.3 to minimise or mitigate these impacts.
Will the proposed works affect views to, and from, the heritage item? If yes, how will the impact be mitigated?	The views at Hobartville (SHR No. 00035) and Avenue of trees east and west side of street (LEP I408) would be affected by the proposed works. Recommendations have been made to mitigate the impacts in Section 9.3. It has been recommended to avoid removing trees where possible.

8.3 Assessment against relevant policies

8.3.1 Hobartville Conservation Management Plan policies

The following table records the policies that are assessed as being directly relevant to the proposed works. A full list of policies can be seen in the Hobartville Conservation Management Plan⁷⁵:

Table 20: Assessment of proposal against Hobartville CMP policies

Policy #	Overarching policy	Policy detail	Are works consistent with CMP policy? (Yes/No?)	Comments
Policy 6	Statutory Heritage Listings of the Place	Lots 1 and 2 DP 596558 should be added to the State Heritage Register listing for Hobartville	Yes	The proposed works would not interfere with the mentioned lots and would not prevent this policy being implemented in the future.

⁷⁵ Clive Lucas, Stapleton & Partners, 'Hobartville, Richmond, NSW Conservation Management Plan'.



⁷⁴ Guidelines for preparing a statement of heritage impact, by Heritage NSW, Department of Planning and Environment, 2023

Policy #	Overarching policy	Policy detail	Are works consistent with CMP policy? (Yes/No?)	Comments
Policy 9	Significant Fabric	The extent of the significant fabric should be identified as: The landform of the place All of the landscape, vegetation, buildings, contents and site features The subsurface remains (archaeology) of former landscape, vegetation, buildings, contents and site features The occupational deposits (archaeology) beneath and around the above		The proposed works would physically impact the landscape of Hobartville (SHR No. 00035), as the road corridor would encroach on the heritage curtilage of Hobartville (SHR No. 00035), however this would take place in a localised and minor scale and would not impact any significant fabric associated with the listed item.
Policy 16	Views	The following views should be conserved: View 1: Views to the house and surrounding paddocks are possible points along Kurrajong Road View 2: Wide-ranging views from the house to the west across the river valley to the Blue Mountains View 3: View from the house to St. Peter's Church in Richmond, and view from the church to the Bunya pines at Hobartville View 4: View of Hobartville fence and gate from the alienated oak avenue View 5: View of the house from the intersection of the oak avenue and the carriageway View 6: View of the house as first seen when approaching via the carriageway should be reinstated by reducing the bamboo grove	ì	The proposed works would cause a moderate adverse impact to View 2, as they would alter the visual character of the wide-ranging paddocks by introducing a road corridor and two bridges, interfering with the existing view and sight lines. The proposed works would visually impact View 2. Whilst the road corridor would be low lying ground scale works, the proposed bridges that would cross over the watercourses that run into Mareh-Mareh Lagoon, would be vertical structures which proposal into the views of the landscape. Therefore, the proposed works would cause a moderate adverse visual impact.
Policy 39	Intervention in Setting and Associated Places	No new development should be permitted in the valley between Hobartville and the Hawkesbury River in order to preserve the highly significant setting and views to and from the place	No	The proposed works would involve the construction of a road and bridges within this area, the view would be impacted.

8.4 Statement of heritage impact

A statement of heritage impact has been prepared according to Heritage NSW, DPE *Guidelines for preparing a statement of heritage impact* in Table 21 below.⁷⁶

Table 21: Statement of heritage impact for the proposed works

Development Discussion The proposed works involve the northeast post and mesh fence at Hobartville (SHR No. 00035), which are recent fabric and could be Do the proposed works include removal of unsympathetic removed without causing an adverse physical impact to the alterations and additions? How does heritage significance this benefit or impact the heritage The proposal does not propose to remove any other alterations or item and its significance? additions Do the proposed works affect the The proposed works would adversely impact the views of setting of the heritage item, Hobartville (SHR No. 00035) and Avenue of trees east and west including views and vistas to and side of street (LEP I408) from the heritage item and/or a In both cases the removal of trees would cause the adverse visual cultural landscape in which it is impact sited? Can the impacts be avoided Recommendations have been made to avoid the removal of the and/or mitigated? trees Are the proposed works part of a The Australian Government and the NSW Government are funding broader scope of works? Does this traffic improvements between North Richmond and Richmond proposal relate to any previous or including a new bridge over the Hawkesbury River. The proposal is future works? If so, what cumulative being carried out as part of a wider program of traffic improvements impact (positive and/or adverse) will between Richmond and North Richmond which is being delivered these works have on the heritage in two stages. significance of the item? The cumulative impact has been assessed as moderate adverse, refer to Section 8.1.7 for a detailed discussion.

⁷⁶ NSW Department of Planning and Environment, 2023



artefact.net.au Page 117

9.0 CONCLUSION

9.1 Conclusion

This Statement of Heritage Impact has made the following conclusions:

It is noted that the proposed works will encroach on several heritage curtilages of identifies
heritage items for this proposal. The proposed works do not seek to alter any of the existing
gazetted heritage curtilages, all curtilages will remain unchanged

Table 22: Summary of heritage impacts within SHR and LEP curtilages and within the vicinity in the buffer zone

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
Avenue of trees east and west side of street	Chapel Street, Richmond	HLEP 2012 I18	Minor adverse	Minor adverse	Within the study area
Bowman House	368-370 Windsor Street, Richmond	SHR No. 00468 HLEP 2012 100468 RNE Place ID. 3198	Neutral	Neutral	60m north of the study area, within 250m heritage buffer
Buildings, outbuildings, grounds, trees (of Bowman House)	49-51 Bosworth Street, Richmond	SHR No. 00753	Neutral	Neutral	200m southeast of the study area, within 250m heritage buffer
The cottage	313-315 Windsor Street, Richmond	HLEP 2012 I124	Neutral	Neutral	190m northeast of the study area, within 250m heritage buffer
Eltham	317 Windsor Street, Richmond	HLEP 2012 I125	Neutral	Neutral	175m northeast of the study area, within 250m heritage buffer
Former house	190 March Street, Richmond	HLEP 2012 I72	Neutral	Negligible	Adjacent east of the study area, within 250m heritage buffer
Former police station and residence	39 Bells Line of Road, North Richmond	HLEP 2012 I406	Neutral	Neutral	Adjacent southwest of the study area, within 250m heritage buffer
Hawkesbury River (Road) Bridge	Kurrajong Road, North Richmond	TAHE S170 RNE Place ID. 15946	Negligible	Moderate adverse	Within the study area
Hobartville, including outbuildings	Kurrajong Road, Richmond 36-86 Inalls Lane, Richmond	SHR No. 00035 RNE Place ID. 3133 NSW NTHR No. 7920	Negligible to temporary minor adverse	Negligible to moderate adverse	Within the study area
Grounds and landscaping surrounding 'Hobartville'	25-29 Bosworth Street, Richmond	HLEP 2012 I00035 & I14	Neutral	Minor adverse	Within the study area

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
House	35 Bosworth Street, Richmond	HLEP 2012 I3	Neutral	Neutral	160m east of the study area, within 250m heritage buffer
House	9 Chapel Street, Richmond	HLEP 2012 I17	Neutral	Neutral	160m east of the study area, within 250m heritage buffer
House	32 Inalls Lane, Richmond	HLEP 2012 I41	Neutral	Neutral	170m north of the study area, within 250m heritage buffer
House	335 Windsor Street, Richmond	HLEP 2012 I126	Neutral	Neutral	Within the study area
House	337 Windsor Street, Richmond	HLEP 2012 I127	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	339 Windsor Street, Richmond	HLEP 2012 I128	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	91 Bells Line of Road, North Richmond	HLEP 2012 I410	Neutral	Neutral	130m north of the study area, within 250m heritage buffer
House	101A Bells Line of Road, North Richmond	HLEP 2012 I493	Neutral	Negligible	Adjacent southwest of the study area, within 250m heritage buffer
House	15 Grose Vale Road, North Richmond	HLEP 2012 I495	Neutral	Neutral	Adjacent to the west of the study area, within 250m heritage buffer
Inew cottage	7 Chapel Street, Richmond	HLEP 2012 I16	Neutral	Neutral	140m southwest of the study area, within 250m heritage buffer

Item Name	Address	Item/Listing Number	Potential physical impacts	Potential visual impacts	Proximity to Study Area
McMahon Homestead	26 Drift Road, Richmond	HLEP 2012 I82	Neutral	Minor adverse	185m north of the study area, within 250m heritage buffer
Mountain View	22 Inalls Lane, Richmond	SHR No. 00044 HLEP 2012 100044 RNE Place ID. 3134	Neutral	Minor adverse	Adjacent to the north of the study area , within 250m heritage buffer
Seventh Day Adventist Church	54 Bells Line of Road, North Richmond	HLEP 2012 I407	Neutral	Negligible	Adjacent to the north of the study area, within 250m heritage buffer
St Peter's Anglican Church Group	384 Windsor Street, Richmond 347, 347A and 349 Windsor Street, Richmond	SHR No. 02023 HLEP 2012 I134 & I129 RNE Place ID. 3184 NSW NTHR No. 4234, 9954, 9955 & 9958	Neutral	Neutral	58m north of the study area, within 250m heritage buffer
St Phillip's Anglican Church and Cemetery	151 Bells Line of Road, North Richmond	HLEP 2012 I408	Neutral	Neutral	Adjacent west of the study area, within 250m heritage buffer
Sunnyside (former O'Dea's dairy)	21 Pitt Lane, North Richmond	HLEP 2012 I413	Neutral	Neutral	190m southwest from the study area, within 250m heritage buffer

Cumulative Impacts

The overall proposal has been assessed as having **minor adverse** cumulative heritage impacts.

Table 23: Summary of heritage listings and associated archaeological potential

Item Name	Archaeological potential/ significance	Archaeological Impact
Hobartville including outbuildings #00035 (SHR)	Low/Local	Neutral
Mountain View #00034 (SHR)	Nil-Low/Local	Neutral
House #I410 (LEP)	Nil-Low/Local	Neutral
House #I41 (LEP)	Nil-Low/Local	Neutral
Seventh Day Adventist Church #I407 (LEP)	Nil-Low/Local	Neutral
St Peters Anglican Church #I134 (LEP)	Nil-Low/Local	Neutral
Avenue of trees east and west side #I18 (LEP)	Nil-Low/Local	Neutral
Hawkesbury River Bridge TAHE S170 RNE Place ID. 15946	Nil-Low/Local	Neutral

9.2 Approval pathway

The proposal will be undertaken under Part 5 of the *Environmental Planning and Assessment Act* 1979. A Review of Environmental Factors (REF) is required for the proposal this Statement of Heritage Impact will form part of the suite of document that support the REF.

While the concept design stage of this proposal will be undertaken as a REF. This report has identified that there is potential for listed heritage items and archaeological resources (works and 'relics') to be subject to physical impacts as a result of the proposal. Therefore, future detailed design would require the following additional approvals depending on the heritage item affected. Future detailed design would require a separate Statement of Heritage Impact to be prepared for the proposed works to the heritage item, which would assess the significance of the item, its significant fabric or archaeological remains, and whether the proposed works would impact the heritage item:

Table 24: Summary of approval pathways

Approval pathway	Description	Applies to
Section 60 approval	Major works (or standard) approvals under section 60 of the <i>Heritage Act 1977</i> would need to be obtained from Heritage NSW prior to works commencing within SHR listed items.	outbuildings #00035

Approval pathway	Description	Applies to
	The application would need to be accompanied by the SoHI being prepared for the proposal. Where there is potential to impact significant archaeological resources, the application must be accompanied by an Archaeological Research Design and Methodology (see below).	Mountain View #00034 (SHR). This would be required if proposed noise mitigation strategies would have the potential to impact significant fabric or where any works within the SHR curtilage does not fall under s57 exemptions
Archaeological Methodology and Research Design and archaeological approvals	A project wide ARDEM should be prepared to guide archaeological management during the construction phase of the project. The ARDEM would be prepared based on the 100% design and would clarify approval pathways for relics. It is anticipated that the majority of works could be	A Project Area wide ARDEM is recommended Works likely to proceed
	undertaken in accordance with Section 139 exceptions, given the majority of archaeological potential within the study area relates to 'works'. There is minimal potential for relics to be identified.	under s139 exceptions.
Section 65 modifications and amended scope	Any modifications, including minor corrections, clarifications, amendments, or additional works beyond the scope of those works assessed in the SoHI report would require further heritage assessment. If they are deemed necessary following the s60 approval, the client must apply for a Modification of Approval to Heritage NSW.	Hobartville including outbuildings #00035 (SHR)
Consultation with Hawkesbury City Council	The removal of the singular mature English Plane tree would cause moderate adverse physical and visual impacts, which would trigger clause 2.11.2 of the TISEPP and Aurecon would have to consult with the Hawkesbury City Council, refer to Section 2.6	Avenue of trees east and west side #I18 (LEP)

9.3 Site specific recommendations and mitigation measures

Consideration should be given to the following recommendations:

- All relevant construction staff, contractors and subcontractors must be made aware of their statutory obligations for heritage under the NSW Heritage Act 1977 and best practice as outlined in The Burra Charter (Australia ICOMOS 2013) to ensure no archaeological remains or heritage fabric are impacted during the proposed works without appropriate mitigation measures in place. This will be implemented through a heritage induction carried out prior to works commencing and throughout the works program.
- Where proposed works are to terminate along the edge of heritage curtilages and not encroach, great care is to be taken to ensure all staff and contractors are aware of these curtilages and their exact boundaries as defined under Schedule 5 of the Hawkesbury LEP 2012 and the SHR to ensure the curtilages are protected and would not harm the significant fabric within the curtilages. These curtilages should be delineated on site prior to work commencing.

- Detailed design should further consider the avoidance of the removal of the singular mature
 English Plane tree on the northwest corner of Kurrajong Road and Chapel Street, as it is a
 locally significant tree that contributes to the Avenue of trees east and west side of street (LEP
 I18) heritage item, the retainment of this tree would mitigate the minor adverse physical and
 visual impacts
- Although the tree plantings siding Hobartville (SHR No. 00035) (LEP I14) both to the north
 east along Kurrajong Road and to the south west along Inalls Lane are not located within the
 heritage curtilages, it is recommended that where possible removed trees should be reinstated
 like for like upon the completion of the works.
- Due to the structural stability of the buildings on the Mountain View property (SHR No. 00044) (LEP I00044), and the proximity of the property to the Study Area and proposed works, the Noise and Vibration Impact Assessment recommended that the property undergo Level 1 noise treatments. The physical and visual impacts of these noise treatments must be assessed as part of a separate Statement of Heritage Impact which analyses the significant heritage fabric of the buildings and provides an assessment of the potential impact to this fabric as a result of the installation of the noise treatments. This Statement of Heritage Impact should guide whether the proposed noise treatments would satisfy the threshold for Standard Exemption 3 (Alterations to Non-Significant fabric) or require that a Section 60 application is lodged.
- The Noise and Vibration Impact Assessment has identified that several heritage items or areas are within the minimum working distance for heritage items (ie. 40m), with the potential for cosmetic damage. It is recommended that the potential impacts to heritage items as a result of vibration and settlement is reviewed and assessed as part of the detailed design phase for each heritage item which has been identified in the Noise and Vibration Impact Assessment as falling within the minimum working distance.
- Where possible, during the detailed design phase, impacts to heritage items should be further reduced
- As the cumulative heritage impact assessment has found the results of the proposed works to be of minor impacts the proposed works would trigger clause 2.11.1 of the TISEPP and Transport would have to consult with the Hawkesbury City Council, the consultation has indicatively been planned for early 2024
- A suitably qualified and experienced maritime archaeologist should be engaged to provide heritage advice when considering construction methodology within the Hawkesbury River near the original punt wharf and timber remains of Richmond Bridge
- TfNSW heritage specialists should provide heritage advice for the further design development and any heritage interpretation features for the Hawkesbury River Bridge active transport conversion
- Should design changes impact on heritage items, a suitably qualified and experienced
 heritage consultant should be engaged to prepare an updated heritage report as necessary.
 The heritage report should include considerations of measures to minimise visual impacts

- A suitably qualified and experienced heritage consultant should be engaged to undertake a
 photographic archival recording (PAR) in key area of key views, the PAR the recording must
 be in accordance with the *Photographic Recording of Heritage Items using Film or Digital*Capture (NSW Heritage Division, 2006), a digital copy of the PAR should be provided to
 Heritage NSW and Transport.
 - The PAR should address the proposed works at Hobartville (SHR No. 00035) and the existing Hawkesbury River Bridge, as these works have been assessed as resulting in moderate adverse impacts
- Consideration should be given to implementing a Heritage Interpretation Strategy as part of
 the proposal, to interpret the heritage and history of the existing Hawkesbury River Bridge, to
 document and depict all the uses the Hawkesbury River Bridge has undergone and its most
 recent change of us for active transport, interpretive measures could involve interpretive
 signage, panels or displays
- The post and mesh fence along the north eastern curtilage of Hobartville at Kurrajong Road should be replaced once the road has been built to ensure the security of the heritage item and make good the removal of the existing fence
- An ARDEM should be prepared to guide management under Section 139 exceptions, given the low likelihood of identifying relics within the study area. The ARDEM should be prepared in response to the 100% detailed design.
- The Section 139 exceptions should be managed alongside the *TfNSW Unexpected Heritage Items Procedure* (2024), which is to be implemented during all excavation work not subject to direct archaeological supervision.

10.0 REFERENCES

- Artefact, 2022. 'Aspect Industrial Estate'. Aboriginal Cultural Heritage Assessment Report. Unpublished report to Mirvac, held by Artefact Heritage.
- Attenbrow, V. 2010. Sydney's Aboriginal past, investigating the archaeological and historical records. 2nd edn. Sydney, UNSW Press.
- Attenbrow, V. 2012. 'Archaeological evidence of Aboriginal life in Sydney', *Dictionary of Sydney*.

 Accessed 15 Feb 2023 via

 https://dictionaryofsydney.org/entry/archaeological evidence of aboriginal life in sydney
- Barckley-Jack, J., 2009. *Hawkesbury Settlement Revealed. A new look at Australia's third mainland settlement.* Rosenburg Publishing, Dural
- Belshaw, J, Nickel, S, and Horton, C., 2020. 'Histories of Indigenous Peoples and Canada', Thompson Rivers University, online; https://histindigenouspeoples.pressbooks.tru.ca/
- Boon, Paul I, 2017. The Hawkesbury River. A Social and Natural History, CSIRO, Vic
- Collins, D. 1789. An account of the English colony in New South Wales. Vol 1. London, Cadell & Davies
- Currie, J., 2008. Bo-ra-ne Ya-goo-na Par-ry-boo-go yesterday today tomorrow an Aboriginal history of Willoughby. Willoughby City Council in association with the Aboriginal Heritage Office Northern Sydney Region
- Clive Lucas, Stapleton & Partners. 'Hobartville, Richmond, NSW Conservation Management Plan', 2004.
- Coupe, Hewitt, Cserhalmi. 'Historic Buildings Richmond', 1981. https://heritagensw.intersearch.com.au/heritagenswjspui/handle/1/9035.
- Discover The Hawkesbury. 'Hawkesbury's Forgotten Rail Line from Richmond to Kurrajong'. Discover the HAWKESBURY, 2023. https://www.discoverthehawkesbury.com.au/trending/thepansy.
- Gammage, B. 2012. The biggest estate on earth. Sydney, Allen & Unwin
- Gapps, S. 2018. *The Sydney Wars: conflict in the early colony, 1788-1817*. Sydney, NewSouth Books.
- Gapps, S. 2010. Cabrogal to Fairfield City: a history of a multicultural community. Sydney, Fairfield City Council.
- GML Heritage. 'Hawkesbury City Council Cemeteries Strategic Conservation Management Plan Report to Hawkesbury City Council', 2020.
- Goodall, H. and Cadzow, A., 2009. *Rivers and resilience: Aboriginal people on Sydney's Georges River*, Sydney, NewSouth Books
- Griffith, B. 2018. Deep time dreaming: uncovering ancient Australia. Melbourne, Black Inc. Books.
- Hawkesbury Gazette. 'The Long and Winding History of Bells Line of Road'. 2015. https://www.hawkesburygazette.com.au/story/3225258/road-history-is-both-long-and-windy/.
- 'Hawkesbury Historic Roads Bells Line of Road'. Hawkesbury City Council, 2019.

- 'Hawkesbury River Bridge'. Heritage NSW, n.d. State Heritage Inventory. https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4309511.
- 'Hobartville, Including Outbuildings'. Heritage NSW. Accessed 13 September 2023. https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045232.
- Irish, P. and Gowan, T. 2012. 'Where's the evidence? The archaeology of Sydney's Aboriginal history', Archaeology *in Oceania* Vol. 47 No. 2, pp 60–68
- Johnson, D.D. 2003. *Aunty Joan Cooper, through the front door: a Darug and Gundungurra story*. Lawson, Mountains Outreach Community Service.
- Jones, G., 2013. *Bulga*, Bala Boree: Country and Culture, pastoral invasion and Darkinyung dispossession, Hawkesbury to Hunter, Bulga Books, St Albans, NSW
- Karskens, G., 2020. People of the River. Lost worlds of early Australia, Allen and Unwin, Sydney
- Karskens, G., 2009. The colony: A history of early Sydney, Allen & Unwin, 2009
- Karskens, G., Burnett, G., and Ross, S., 2019. 'Traces in a Lost Landscape: Aboriginal archaeological sites, Dyarubbin/Nepean River and contiguous areas, NSW (Data Paper)', *Internet archaeology*, No. 52.
- Karskens et al. 2021, 'Bulyayorang', 'Dyarubbin: Mapping Aboriginal history, culture and stories of the Hawkesbury River, New South Wales', https://arcg.is/004i19
- Kohen, J.L. 2009. *Daruganora: Darug Country the place and the people. Part 2: Darug Genealogy*. Blacktown, Darug Tribal Aboriginal Corporation
- Kohen, J.L. 1985. Aborigines *in the west: prehistory to the present*. Armidale, Western Sydney Proposal.
- 'Lachlan Macquarie Journal Entry', 6 December 1810. Lachlan and Elizabeth Macquarie Archive. https://www.mq.edu.au/macquarie-archive/lema/1810/1810dec.html#dec6.
- Lenehan, Marjorie. 'Rouse, Richard (1774–1852)'. In *Australian Dictionary of Biography*. Australian National University, 1967. https://adb.anu.edu.au/biography/rouse-richard-2612/text3601.
- Murray, R., and White, K., *Dharug and Dungaree. The history of Penrith and St Mary's to 1860*, Hargreen, Penrith, 1988
- Nanson, G.C., Young, R.W., and Stockton, E.D. 1987. 'Chronology and palaeoenvironment of the Cranebrook Terrace (near Sydney) containing artefacts more than 40,000 years old,' *Archaeology in Oceania* Vol. 22 No. 2, pp 72–78.
- National Trust of NSW. 'Hobartville', n.d.
- Pastoral Homes of Australia. Sydney: Pastoral Review, 1931. http://nla.gov.au/nla.obj-268959005.
- Pike, P, and S Collingridge. 'St Phillps Church of England Graveyard'. NSW National Trust, 1980. NSW National Trust Archive.
- Proudfoot, Helen. Historic Buildings of Windsor and Richmond. Kenthurst: Kangaroo Press, 1987.
- Roberts, Carol. 'Hawkesbury History: Ethelbert Ambrook Southee, OBE'. Hawkesbury Gazette, 6 May 2023. https://www.hawkesburygazette.com.au/story/8184322/hawkesbury-history-ethelbert-ambrook-southee-obe/.

- Rosen, S., 1995, Losing Ground. An environmental history of the Hawkesbury-Nepean catchment, Hale & Iremonger, Sydney
- Shellshear, Tim. 'Richmond NSW Townscape Study', 1986. https://heritagensw.intersearch.com.au/heritagenswjspui/handle/1/6749.
- SHR. 'Mountain View'. Heritage NSW, n.d. https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045229.
- Smith, J. and Jennings, P. 2011. 'The petroglyphs of Gundungurra Country', *Rock art research* Vol. 28 No. 2, pp 241–249.
- Sydney Gazette, 7 April 1805
- Tench, W., 1793 [2004]. A complete account of the settlement at Port Jackson. Sydney, Sydney University Press.
- Waterhouse, H., in Historical records of New South Wales Vol. 5, Bladen, 1897
- White, J. 1790 [2003]. 'Journal of a Voyage to New South Wales', Proposal Gutenberg webpage.

 Accessed 15 Feb 2022 via http://gutenberg.net.au/ebooks03/0301531h.html
- Williams, A.N., Burrow, A., Toms, P.S., Brown, O., Richards, M. and Bryant, T. 2017. 'The Cranebrook Terrace revisited: recent excavations of an early Holocene alluvial deposit on the banks of the Nepean River, NSW, and their implications for future work in the region,' *Australian archaeology* Vol. 83 No. 3, pp 100–109.
- Williams, A.N., Mitchell, P., Wright, R.V.S., and Toms, P.S. 2012. 'A terminal Pleistocene open site on the Hawkesbury River, Pitt Town, New South Wales,' *Australian archaeology* Vol. 74, pp 85–97.
- Windsor and Richmond Gazette. "Gypsy-Type Camp" in North Richmond Park'. 2 December 1964. http://nla.gov.au/nla.news-article266721674.
- Windsor and Richmond Gazette. 'NORTH RICHMOND PARK'. 17 May 1929. http://nla.gov.au/nla.news-article85930728.
- Windsor and Richmond Gazette. 'NORTH RICHMOND PARK'. 16 August 1929. http://nla.gov.au/nla.news-article85929479.



Artefact Heritage and Environment ABN 73 144 973 526 Suite 56, Jones Bay Wharf 26-32 Pirrama Road Pyrmont NSW 2009 Australia +61 2 9518 8411 office@artefact.net.au www.artefact.net.au