



Figure 4.1 North West Rail Link construction boundaries and access areas, Epping. (Source: AECOM)



Figure 4.2 North West Rail Link alignment and Cheltenham Service Facility. (Source: AECOM)



Figure 4.3 North West Rail Link alignment. (Source: AECOM)



Figure 4.4 North West Rail Link construction boundaries and access areas. (Source: AECOM)



Figure 4.5 North West Rail Link alignment. (Source: AECOM)

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Figure 4.6 North West Rail Link alignment and construction boundary for Cherrybrook Station. (Source: AECOM)



Figure 4.7 North West Rail Link alignment. (Source: AECOM)

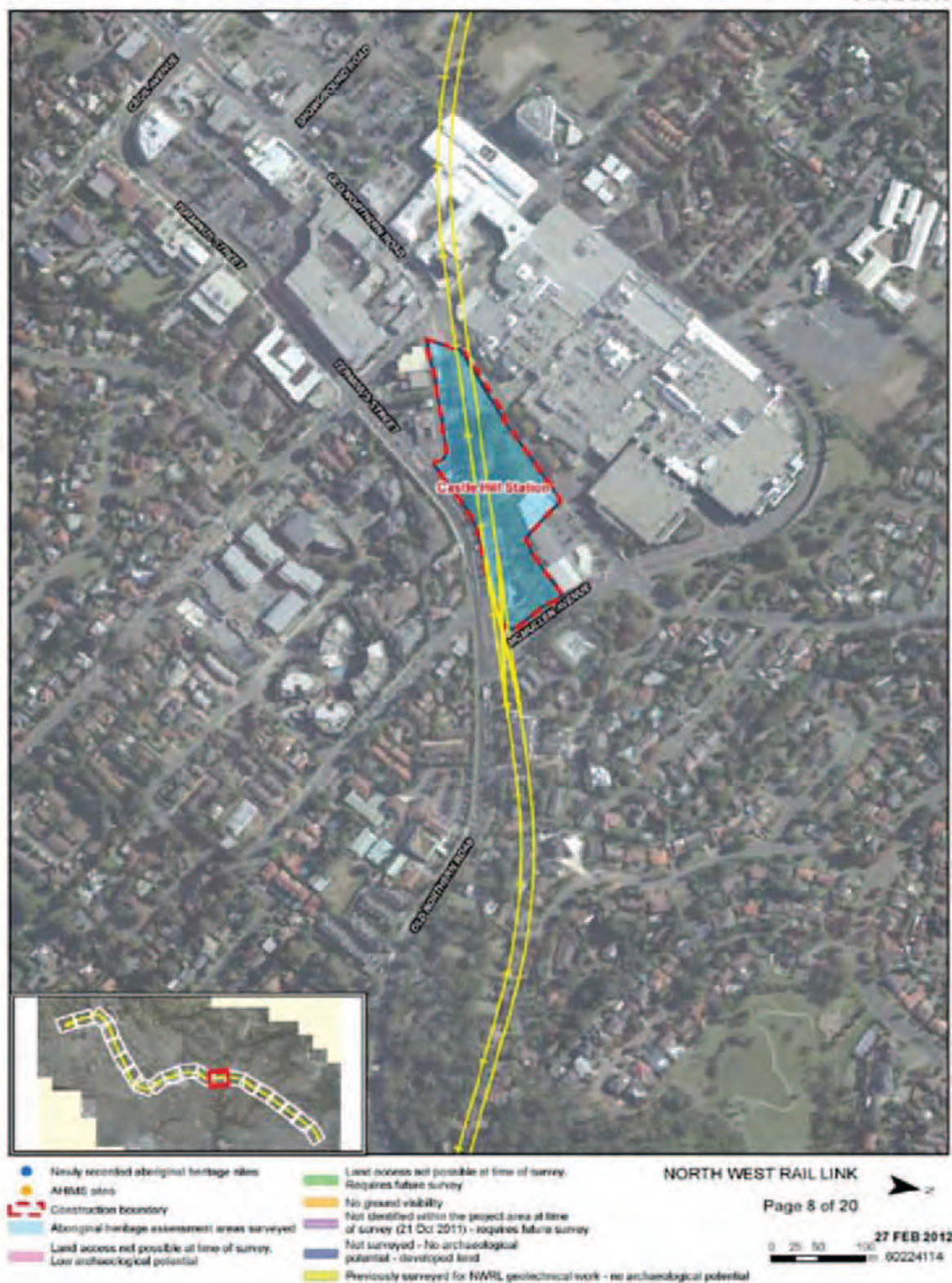


Figure 4.8 North West Rail Link alignment, Castle Hill Station Construction Boundary and Aboriginal heritage surveyed area. (Source: AECOM)



Figure 4.9 North West Rail Link alignment. (Source: AECOM)

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Figure 4.10 North West Rail Link alignment and Hills Centre Station Construction Boundary and Aboriginal heritage surveyed area. (Source: AECOM)



Figure 4.11 North West Rail Link alignment. (Source: AECOM)

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Figure 4.12 North West Rail Link alignment and Norwest Station Construction Boundary with Aboriginal heritage surveyed area. (Source: AECOM)

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Figure 4.13 North West Rail Link showing alignment. (Source: AECOM)

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Figure 4.14 North West Rail Link alignment and Bella Vista Station Construction Boundary including Aboriginal heritage surveyed area. (Source: AECOM)

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Figure 4.15 North West Rail Link alignment showing Construction Boundary and Aboriginal heritage surveyed areas.
(Source: AECOM)

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Figure 4.16 North West Rail Link showing particularly areas surveyed for Aboriginal heritage within the Kellyville station Construction Boundary. (Source: AECOM)

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Figure 4.17 North West Rail Link alignment and areas surveyed for Aboriginal heritage. (Source: AECOM)

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Figure 4.18 North West Rail Link alignment showing Construction Boundaries around Rouse Hill Station and areas surveyed for Aboriginal heritage. (Source: AECOM)

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Figure 4.19 North West Rail Link showing particularly areas surveyed for Aboriginal heritage within Cudgegong Road Station Construction Boundary. (Source: AECOM)

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Figure 4.20 North West Rail Link showing particularly areas surveyed for Aboriginal heritage within the Tallawong Stabling Facility Construction Boundary. (Source: AECOM)

4.2 Endnotes

- ¹ See for example Irish, P 2004, 'When is a Scar a Scar? Evaluating Scarred and Marked Trees at Sydney Olympic Park'. *Australian Archaeology* 59, pp 59–61; and A Long 2005, *Aboriginal Scarred Trees in NSW: A Field Manual*, Sydney, Department of Environment and Conservation.

5.0 Aboriginal Heritage Field Survey Results

This section provides an overview of the results arising from the archaeological survey undertaken for the NWRL in 2011. The first half of the section provides an overview of each construction site—a description of its physical setting, level of impact, a summary of Aboriginal sites recorded and the level of archaeological potential. The remainder of this section details the Aboriginal archaeological sites (and areas with Aboriginal archaeological potential) recorded within the 17 construction sites. In order to facilitate the consequential values assessment, impact assessment and heritage management (Chapters 6 and 7) Aboriginal sites have been detailed in the following order:

- previously recorded Aboriginal sites, which were relocated during the current field survey;
- previously recorded Aboriginal sites, which could not be relocated during the current field survey;
- new Aboriginal sites, not previously recorded; and
- areas with Potential Archaeological Deposit (PAD), not previously recorded.

A summary of all Aboriginal sites (including areas with PAD) that require management prior to and during the construction phases of the NWRL project are provided at the end of this section.

5.1 Physical Description of the Construction Sites

The location of proposed construction sites 1–17 in relation to the NWRL project corridor are shown in Figures 5.1 to 5.18. In general it can be seen that a number of the proposed construction sites have been subject to a high level of prior impact associated with agriculture and development activities over the past 200 years.

However, several of the construction sites do not exhibit such impact and contain evidence for Aboriginal occupation of the Cumberland Plain, and/or have a level of archaeological potential to contain such evidence in a subsurface context.

The following descriptions present an overview of survey conditions (expressed as 'ground surface visibility' and 'exposure'—as defined by OEH under the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*) and the observed/known impacts associated with each construction site. A summary of the subsurface archaeological potential for each construction site is also provided.

Construction Sites 1 to 4—Epping to Cherrybrook

A brief inspection was undertaken for the stations and rail alignment between Epping Decline and Cherrybrook, including the proposed Cherrybrook station, but these areas were not extensively surveyed. However, based on AHIMS data, the brief site inspection and the prior Aboriginal heritage assessments for these locations, the following can be stated.

Construction Sites 1 and 2 (Decline and Epping services facility) may be described as disturbed with a high level of ground surface impact arising from the processes of residential development and transport infrastructure. There is no potential for Aboriginal heritage in the NWRL impact zones at Epping due to the already developed nature of the area (Figures 5.1 and 5.2).

Cheltenham services facility (Construction Site 3) was not visited due to access restrictions. Construction Site 3 contains a large dense area of vegetation. Upon the basis of archaeological modelling, this area can be assessed to have a low to moderate potential for Aboriginal objects, due to lack of previous disturbance and its landscape context (Figure 5.3). NWRL PAD 1 has been assigned within Construction Site 3 to describe this level of archaeological potential.

Construction Site 4 (Cherrybrook Station) contained a mixture of disturbed (from residential development) and undisturbed (containing dense vegetation) land. A registered Aboriginal site (45-6-2861, Stone Artefact Concentration [SAC]) is located within the centre of this construction site; this lower slope landform, which overlooks a number of creeks to the north and northwest, is assessed to possess a low to moderate potential for subsurface Aboriginal objects (NWRL PAD 2 describes the zone with archaeological potential) (Figure 5.4).

Construction Site 5—Castle Hill Station

Construction Site 5 (Castle Hill Station) is to be located within the Arthur Whitting Reserve, between Old Northern Road and Old Castle Hill Road. Survey found that this land has been highly disturbed by landscaping, including gardens, lawns and exotic trees. The construction of the adjacent roads and bulk excavation around the buildings at the eastern end of the park have also caused significant disturbance. Ground surface visibility was approximately 20% with a number of small soil exposures near trees and pedestrian traffic routes. No Aboriginal objects and/or sites were observed within this construction site. There is a very low potential for intact Aboriginal sites to be present at this construction site (Figure 5.5).

Construction Site 6—Hills Centre Station

Prior development impacts associated with Construction Site 6 differ from the east to west (Figure 5.6). The eastern portion of this proposed construction site has been heavily impacted by building and construction, parkland development, terracing and landscaping, construction of gardens and the showground ring. Terracing has involved deep cutting and soil removal (approximately two metres of soil has been removed) to create the works depot and level the showground near the creek. Thus the eastern areas of Construction Site 6 have no archaeological potential.

The western areas of Construction Site 6 were assessed by JMcD CHM 2006. The 2006 study identified an Aboriginal site (located outside the Construction Site) and an area of archaeological potential adjacent to Cattai Creek. The current survey identified remnant soil horizons across the area previously designated with archaeological potential (named NWRL PAD 3), and concurs with the 2006 assessment of a moderate level of archaeological potential for further Aboriginal objects to be located within a subsurface context. Ground surface visibility was approximately 20% across this area, with no exposure. Development of Construction Site 6 will impact NWRL PAD 3.

Construction Site 7—Norwest Station

Construction Site 7 (the Norwest Station) had approximately 30% ground surface visibility due to grass cover, existing buildings and roads (no ground exposures were present).

The area was found to be highly disturbed by modern buildings, cut and imported fills, roads and landscaping. This construction site was assessed to have very low to no potential for intact Aboriginal sites (Figure 5.7).

Construction Site 8—Bella Vista Station

Construction Site 8 (Bella Vista Station) is proposed to be contained within the land of the Homemaker Collection Shopping Centre on the corner of Old Windsor Road and Celebration Drive. Survey in this area recorded 10% ground surface visibility with exposures along the northern end of Celebration Drive.

This construction site has already been highly impacted by development. The course of the creek bank along the northern end of Celebration Drive has been modified. As such this construction site has very low to no potential for Aboriginal heritage sites (Figure 5.8).

Construction Site 9—Balmoral Road (Bella Vista Station to Balmoral Road)

Archaeological survey was undertaken for all properties within the Balmoral Road construction site (Construction Site 9). All of the blocks in this construction site have been impacted by housing development and service installations. In general, ground surface visibility was low at 10% with few soil exposures. However, Properties 86 (16 Cumbelege Lane) and 83 (14 Cumbelege Lane) provided more soil exposures, a result of eroded tracks, topsoil scraping and cutting.

The landform within Construction Site 9 was a lower slope that abutted the creek flat of Elizabeth Macarthur Creek. Despite the residential development, Aboriginal objects have been previously recorded within this construction site and a new site—14 Cumbelege Lane, was recorded. Construction Site 9 has been assessed to have archaeological potential associated with properties 82 (12 Cumbelege Lane) and 74 (2 Cumbelege Lane), which has been described through the allocation of NWRL PADs 4, 5 and 6 (Figure 5.9).

Construction Site 10—Memorial Avenue (Balmoral Road to Memorial Avenue)

Archaeological survey was undertaken for all properties within the Memorial Avenue construction site (Construction Site 10). There was very little ground surface visibility due to dense grass cover—merely a few cattle tracks. In general, this construction site has been subject to a low level of disturbance (primarily historical vegetation stripping), except surrounding residential development and the Burns Road T-way station, where impacts have significantly modified soil horizons.

A number of Aboriginal sites have been previously recorded within and adjacent to this construction site (located within the construction site are three separate stone artefact sites). The current survey identified that the ridge top, hill slope and flat landforms (overlooking Elizabeth Macarthur Creek) have the potential for relatively undisturbed archaeological deposits. These landforms have been characterised through designation of NWRL PAD 7 (Figure 5.10).

Construction Site 11—Kellyville Station (Memorial Avenue to Samantha Riley Drive)

Survey within Construction Site 11 (Kellyville Station) was limited by zero ground surface visibility. Impacts within this construction site were associated with the T-way car park, some residential development and historical vegetation stripping. Prior survey had identified three Aboriginal sites located directly adjacent to this construction site and one (a stone artefact site with PAD) within its boundary. The current assessment has found that raised flat landforms, overlooking Elizabeth Macarthur Creek, have moderate archaeological potential for relatively undisturbed archaeological deposits—NWRL PAD 9 (Figure 5.11).

Construction Site 12—Samantha Riley Drive to Windsor Road

Construction Site 12 (Samantha Riley Drive Station) was surveyed and found to have 10% ground surface visibility. Some impacts were identified, including earthworks adjacent to the creek, stockpiling of gravels, fills and concrete dumping (possibly for road works or remaining from the establishment of the Riley T-way station). Native vegetation has been stripped, except adjacent to Elizabeth Macarthur Creek.

This landform was tested in 1993 (PAD19—RH/CD9 [45-5-0933], McDonald 1993). The area of PAD associated with this site covers the whole construction site, due to the proximity to Elizabeth Macarthur Creek, and landforms suitable for Holocene Aboriginal occupation (Figure 5.12). While there was a sewer line constructed here in 1993, the proposed drainage basin (for which a Section 90 consent was granted) was not constructed.

Construction Site 13—Old Windsor Road to White Hart Drive

The majority of Construction Site 13 (Old Windsor Road to White Hart Drive) was surveyed where access was available (Figure 4.8 shows the locations surveyed). There was no ground surface visibility within any of the areas surveyed.

The northern portions of this construction site contain several previously recorded Aboriginal sites; some of which have been subject to prior Section 90 consent. Other Aboriginal sites were not relocated due to limited ground surface visibility.

Creek flat landforms 100m either side of the two creek lines (towards the south of this construction site) have archaeological potential for relatively undisturbed archaeological deposits—such zones were designated as NWRL PAD 10 (Figure 5.13).

Construction Site 14—Rouse Hill Station

Construction Site 14 (Rouse Hill Station) is to be located within the grounds of the Rouse Hill Town Centre. The majority of this area has been cleared and subject to extensive urban development. Section 90 permits have been previously granted for all lands in the Rouse Hill Town Centre; and there is no archaeological potential for intact Aboriginal sites to remain within the previously developed lands. The Caddies Creek Precinct was subject to archaeological salvage excavation (i.e. JMcD CHM 2007), with the conservation outcome being the retention of all identified Aboriginal grinding groove sites.

The south-west of this construction site has not been developed. As such the lower slope landforms, closer to Caddies Creek, retain a potential for further relatively undisturbed archaeological deposits—these areas have been designated as NWRL PAD 11 (Figure 5.14).

Construction Site 15—Windsor Road Viaduct

Due to access issues, it was not possible to survey Construction Site 15 (the Windsor Road viaduct), although this has been surveyed recently by Kelleher Nightingale (2011). An assessment of landscape associated with this construction site suggests that it has been subject to a low level of previous impact (vegetation stripping and grazing). On the basis of predictive modelling, the ridge top and ridge spur landforms in this construction site have a potential to contain intact Aboriginal sites—designated as NWRL PAD 11. These locations would have provided good views to adjacent landforms and are located close to Caddies Creek and Second Ponds Creeks, both locations with known archaeological deposits (Figure 5.15).

Construction Sites 16 and 17—Windsor Road Viaduct to Cudgegong Road, Cudgegong Road Station and Tallawong Stabling Facility

Construction Sites 16 and 17 were surveyed for Aboriginal sites. Prior survey work had identified a number of Aboriginal sites and areas with PAD (Figures 5.16 and 5.17). The current survey found limited ground surface visibility (10%) and infrequent areas of soil exposure. Disturbance impacts were associated with residential development, farming, ploughing, cropping, grazing, dam construction, farm tracks and vegetation stripping. Some stands of remnant native vegetation were present in property 26 (37 Cudgegong Road).

Survey work identified four previously unrecorded Aboriginal sites, confirmed the presence of some previously recorded Aboriginal sites and confirmed zones with PAD.

5.2 Aboriginal Sites and Areas with Potential Archaeological Deposit

5.2.1 Previously Recorded Sites—Relocated in 2011

Three previously recorded Aboriginal sites (as registered under AHIMS) were relocated during the current survey. Table 5.1 provides information on their content, condition and extent, as could be defined in 2011.

Table 5.1 AHIMS sites relocated during the 2011 survey

Site name/ AHIMS no.	Construction site	Description	Figure no.
45-5-2805 RH/SP15	16 Windsor Rd Viaduct to Cudgegong Rd	A silcrete core, located on the east bank of Second Ponds Creek within the site boundary of RH/SP15. Due to the heavy grass over the remaining area, other artefacts could not be relocated. The extent of PAD with high potential, associated with this site, extends to the boundary and beyond of Construction Site 16. High potential for subsurface deposit exists within 100m of Second Ponds Creek from the corner of Cudgegong Road and Schofields Roads, north-east to Windsor Road at Connie Lowe Reserve. There are some areas of moderate disturbance within this area. Market gardens or former market garden properties have less potential due to extensive ploughing. The following sites and previously recorded PADs are included within this larger PAD. Excluding areas of disturbance from earth works, roads and buildings, this PAD generally has the best archaeological potential within the NWRL project area.	5.16
45-5-3933 RH/A20P 18	17 Tallawong Stabling Facility	Three silcrete artefacts were identified in an exposure within this site at the rear of property 52 on Schofields Road. NB seven objects were recorded in 2009.	5.17
45-5-3355	17 Tallawong Stabling Facility	Two silcrete flakes located at the corner of Schofields Road and Cudgegong Roads are likely part of this previously recorded site. The artefacts were in a disturbed roadside embankment.	5.17

5.2.2 Previously Recorded Sites—Not Relocated in 2011

Table 5.2 details the registered AHIMS sites that were not be relocated during the survey due to poor visibility, inaccessibility and/or time constraints. All of these previously recorded sites are located within the NWRL corridor.

The notes presented for these sites are based on the AHIMS cards and JMD CHM 2006. As registered AHIMS sites, these sites require heritage management during the approvals and development process.

Table 5.2 AHIMS sites not relocated during the 2011 survey

AHIMS site no.	Construction site	Notes on recorded heritage sites	Figure no.
45-5-2861	4 Cherrybrook Station	The site is located in the impact zone of Cherrybrook station. The status of the site since 2006 (JMcD CHM) is unknown as the site was not visited due to access restrictions at the time of survey. JMcD CHM classified the site in 2006 as being within the impact zone but of low archaeological potential. NWRL PAD 2 (which has a greater extent than the original site recorded in 2006) can be designated with low to moderate archaeological potential.	5.4
45-5-3354	10 Memorial Avenue	A large, low density artefact scatter north of Balmoral Road. It lies in land covered by long grass and was not relocated during survey because of visibility. Jo McDonald CHM 2006 considered this site was within the NWRL impact zone and of moderate to high significance.	5.10
45-5-3158	10 Memorial Avenue	Positioned between 45-5-3354 and the T-way—could not be relocated due to a dense garden being on the location.	5.10
45-5-2365	11 Kellyville Station	Situated to the north of Memorial Avenue in cleared and probably disturbed land (Brayshaw and McDonald 1993). Designated as NWRL PAD 8—low to moderate potential.	5.11
45-5-0933	12 Samantha Riley Drive to Windsor Rd	(RH/CD9). Along the hill top adjacent to Elizabeth Macarthur Creek which has experienced low disturbance at the southern end and high levels of disturbance at the northern end from installation of services. Portions of the site were subject to test excavation and Section 90 #545. Since test excavation in 1993, more extensive excavations downstream of Windsor Road have identified an extensive area of alluvium nearing the junction area of Caddies and Elizabeth MacArthur Creek at site RH/CD12 (JMcD CHM 2003). The undisturbed area of site 45-5-0933 has moderate potential to contain stratified deposits.	5.12
45-5-3188	13 Old Windsor Rd to White Hart Dr	Open artefact scatter and PAD on the eastern side of Windsor Road, before the intersection with Schofields Road. This site was recorded on the site card as already being covered by Consent to Destroy no. 2368 for the Rouse Hill Regional Centre western lands. The Mungerie Park bus station proposed to impact the PAD. The extent, condition and potential of this site has not been determined.	5.13

AHIMS site no.	Construction site	Notes on recorded heritage sites	Figure no.
45-5-2649	13 Old Windsor Rd to White Hart Dr	This isolated red silcrete flaked piece was recorded on the eastern edge of Windsor Rd, 425m from intersection with Merriville Road. The site card recommended consent to destroy as part of the Windsor Road upgrade. It is likely that this site has been destroyed by the road upgrade. No further heritage management is required.	5.13
45-5-0961	12/13 Samantha Riley Drive to Windsor Rd / Old Windsor Rd to White Hart Dr	At intersection of Old Windsor Road and Windsor Road. Consent to Destroy no. 621 was granted February 4 1994. It is likely that this site has been destroyed by the road upgrade. No further heritage management is required.	5.12, 5.13
45-5-2904	14 Rouse Hill Station	Located at Rouse Hill Shopping Centre or Windsor Road adjacent to the Centre. Named PAD 2 and excavated by JMCHM in 2006. The location of the site is now below a carpark and it is assumed that the site has been destroyed (no records from AHIMS available to confirm). No further heritage management is required.	5.14
45-5-2905	14 Rouse Hill Station	Located at Rouse Hill Shopping Centre or Windsor Road adjacent to the Centre. Named PAD 3 and excavated by JMCHM in 2006. The location of the site is now below a carpark and it is assumed that the site has been destroyed (no records from AHIMS were available to confirm). No further heritage management is required.	5.14
45-5-3077	14 Rouse Hill Station	Located at Rouse Hill Shopping Centre or Windsor Road adjacent to the Centre. Formerly PAD 1, the site was excavated by Therin in 2005. The location of the site is now below a carpark and it is assumed that the site has been destroyed (no records from AHIMS were available to confirm). No further heritage management is required.	5.14
45-5-0959	14 Rouse Hill Station	(OWR 4) Located at Rouse Hill Shopping Centre or Windsor Road adjacent to the Centre. This site is located beneath Windsor Road and it is assumed that it was destroyed by road works during the early 1990s (no records from AHIMS were available to confirm). No further heritage management is required.	5.14
45-5-0960	14 Rouse Hill Station	(OWR 5) Located at Rouse Hill Shopping Centre or Windsor Road adjacent to the Centre. This site is located beneath Windsor Road and it is assumed that it was destroyed by road works during the early 1990s (no records from AHIMS were available to confirm). No further heritage management is required.	5.14
45-5-3930	16 Windsor Rd Viaduct to Cudgegong Rd	At the rear of 95 Schofields Road. No details regarding archaeological potential; however, the site was located on the edge of a dam wall and is thus assumed to be in a disturbed context.	5.16

AHIMS site no.	Construction site	Notes on recorded heritage sites	Figure no.
45-5-3931	16 Windsor Rd Viaduct to Cudgegong Rd	Isolated artefact on a driveway. No archaeological potential.	5.16
RH/A20P PAD 5	17 Tallawong Stabling Facility	The survey team walked exposures but could not relocate the site. There is an area of vegetation clearance within the site boundary and/or buffer which has caused some ground disturbance. This PAD was visited by JMcD CHM in 2006 and reported as being within the impact zone of the NWRL alignment and was assessed as having moderate archaeological potential.	5.17
45-5-3392	17 Tallawong Stabling Facility	SAC identified through test excavation at specific locations. High level of archaeological potential identified on AHIMS card.	5.17

5.2.3 New Aboriginal Sites—Recorded in 2011

Table 5.3 details the new Aboriginal sites that were recorded during the current study. A succinct description of each site is provided below.

Table 5.3 Newly recorded Aboriginal sites within the NWRL construction sites.

Site name/address	Site type	Construction site no.	AHIMS no.
14 Cumbelege Lane (1)	Stone artefact concentration connected to PAD 6	9 - Balmoral Rd	TBC
Corner of Taggart Way and Balmoral Road	Isolated find	10 - Memorial Ave	TBC
87 Schofields Road	Stone artefact concentration	16 - Windsor Rd Viaduct to Cudgegong Rd	TBC
69 Schofields Road	Stone artefact concentration with PAD	16 - Windsor Rd Viaduct to Cudgegong Rd	TBC
28 Tallawong Road	Isolated find	17 - Tallawong Stabling Facility	TBC
65 Schofields Road	Isolated find	16/17 - Windsor Rd Viaduct to Cudgegong Rd/ Tallawong Stabling Facility	TBC
59 Schofields Road	Stone artefact concentration	16/17 - Windsor Rd Viaduct to Cudgegong Rd/ Tallawong Stabling Facility	TBC

14 Cumbelege Lane (1)

This surface concentration of artefacts was located next the driveway of 14 Cumbelege Lane toward the front of the property. Objects were found on a clearing eroding from a small rise. A small earth cutting has caused the erosion. Eighteen stone artefacts were located on the surface—mostly silcrete, with some quartz and chert. The site has experienced moderate disturbance from

cutting of the bank and driveway. There is moderate potential for further artefacts to be present in the bank.

A tree with a scar of potential cultural origin was noted at 14 Cumbelege Lane. However, examination of the tree by Andrew Whitford of Eco Logical Australia has defined its age to be a maximum of 50 or 60 years. This age precludes the tree bearing a scar of Aboriginal cultural origin.

Corner of Taggart Way and Balmoral Road

This was an isolated silcrete core on a small exposure (1m x 1m) in a clearing approximately 50 metres from Taggart Way. Between the artefact and Taggart Way was a disturbed area with imported gravels, rubbish and fills. There was some potential for further artefacts on and the under the surface, particularly north and east of this artefact (these areas with potential are described as NWRL PADs 4 and 5).

87 Schofields Road

Five silcrete artefacts found in highly disturbed context next to driveway onto Schofields Road. This site is outside the boundary of Construction Site 16 and therefore will not be affected by the proposed NWRL. There is a low to moderate potential for additional artefacts and subsurface deposits at this site.

69 Schofields Road

Two silcrete artefacts and one possible flaked chert piece located in an exposure on a ridgeline. Following topographic contours an area of PAD can be defined surrounding this site. The area of PAD has a moderate to high potential for intact subsurface archaeological deposit.

This site was concurrently identified and registered by GML+JMCHM for a Roads and Maritime Services report in late 2011. The registered AHIMS number is 45-5-4112.

28 Tallawong Road

One red silcrete isolated artefact (flaked piece) located in the plough zone of a market garden. The site is moderately disturbed and has a low potential for further archaeological deposits to be present.

65 Schofields Road

One silcrete core and one silcrete flaked piece, located on a small vehicle track exposure at the rear of the property. There is low potential for further subsurface archaeological deposits.

59 Schofields Road

Six artefacts comprising silcrete, mudstone and chert located in ploughed fields or market gardens. The site was located on a rise overlooking Second Ponds Creek, located to the east. There was a moderate to high level of disturbance across this plough zone, although further artefacts are likely to be present. The condition and integrity of soil (and archaeological) deposits, however, has been assessed to be poor.

5.2.4 Areas with Potential Archaeological Deposit—Recorded in 2011

Based upon the field survey and prior heritage assessments, the following areas of PAD have been allocated. These areas of PAD have no connection to identified Aboriginal stone objects, but have

a level of potential for objects to be recovered from a subsurface deposit. PAD areas are defined on the basis of Aboriginal site modelling, landforms and features which have a good likelihood to contain Aboriginal sites, such as flat hills with views and/or within 100m of a water course, contrasted against the level of disturbance and erosion. The most likely site types to be within these PADs are stone objects, except along Caddies Creek where there is also the potential for grinding grooves.

Table 5.4 Allocated areas of PAD within the NWRL alignment recorded in 2011. Note NWRL PADs 6 and 8 have been previously recorded.

Site name/ AHIMS no.	Construction site	Level of potential	Extent	Figure no.
NWRL PAD 1	3 – Cheltenham Services Facility	Low to moderate	Parkland area covered by dense vegetation with little disturbance.	5.3
NWRL PAD 3	6 – Hills Centre Station	Moderate	The lower hill slopes and flats within 100m of Cattai Creek.	5.6
NWRL PAD 4	9 – Balmoral Rd	Moderate	Copse of trees to the east of 45-5-3158, on a naturally level area on a hill.	5.9
NWRL PAD 5	9 – Balmoral Rd	Moderate	Copse of trees to the south of 45-5-3158, on a naturally level area on a hill.	5.9
NWRL PAD 7	10 – Memorial Ave	Low to moderate	Primarily property 66, within the band of large trees, on flat undisturbed land, overlooking Elizabeth Macarthur Creek.	5.10
NWRL PAD 9	11 – Kellyville Station	Low to moderate	On the hill top overlooking the creek and sites 45-5-2027, 45-5-3064 and 45-5-3955 to the east. It is within remnant or regrowth vegetation on cleared land off Old Windsor Road	5.11
NWRL PAD 10	13, 14 – Old Windsor Rd to White Hart Dr, Rouse Hill Station	Low to moderate	Lower hill slopes within 100m of Caddies Creek. There is a series of sites within 200m of this creek. There is the potential for stone artefact and grinding groove sites.	5.13
NWRL PAD 11	14, 15 – Rouse Hill Station, Windsor Road Viaduct	Low	On the western side of Windsor Road at Schofields Road, this lower slopes landform overlooking Caddies Creek has some potential, particularly on the northern side of Schofields Road. A test excavation (GML + JMcD 2011) of a previously recorded PAD on the southern side of Schofields Road yielded one broken artefact. Portions of the PAD have a demonstrated low potential—however, this level of potential should be confirmed for the portion located within construction areas 14 and 15.	5.14

5.3 Summary of Aboriginal Sites and Potential Archaeological Deposits

Table 5.5 provides a summary of all 27 recorded Aboriginal sites and/or areas with PAD located within the NWRL's 17 construction sites (both recorded in this survey and previously). These Aboriginal sites and PADs require heritage assessment and management before and during the construction of the NWRL. Two of these sites (45-5-3188 and 45-5-0961) have been subject to

prior Section 90 consent and thus do not require future heritage management as they have been previously impacted by other developments and are deemed to be 'destroyed'.

Table 5.5 Aboriginal sites and PAD requiring heritage assessment and management

Site/PAD	Site type	Construction site	Level of archaeological potential	Figure no.
NWRL PAD 1	PAD	3 – Cheltenham Services Facility	Low to moderate	5.3
45-5-2861 and NWRL PAD 2	Stone Artefact Concentration (SAC) with PAD	4 – Cherrybrook Station	Low to moderate potential	5.4
NWRL PAD 3	PAD	6 – Hills Centre Station	Moderate	5.6
14 Cumbelege Lane and NWRL PAD 6	SAC with PAD	9 – Balmoral Rd	Moderate to high potential:	5.9
NWRL PAD 4	PAD	9 – Balmoral Rd	Moderate	5.9
NWRL PAD 5	PAD	9 – Balmoral Rd	Moderate	5.9
Corner of Taggart Way and Balmoral Road	Isolated Find (IF)	10 – Memorial Ave	None	5.9
NWRL PAD 7	PAD	10 – Memorial Ave	Low to moderate	5.10
45-5-3354 NWRL PAD 8	SAC with PAD	10 – Memorial Ave	Moderate to high potential	5.10
45-5-3158	IF	10 – Memorial Ave	None	5.10
45-5-2365	SAC with PAD	11 – Kellyville Station	Low to moderate potential	5.11
NWRL PAD 9	PAD	11 – Kellyville Station	Low to moderate	5.11
45-5-0933 (RH/CD9)	SAC with PAD	12 – Samantha Riley Dr to Windsor Rd	Moderate potential	5.12
NWRL PAD 10	PAD	13, 14 – Old Windsor Rd to White Hart Dr, Rouse Hill Station	Low to moderate	5.13
45-5-3188	SAC with PAD	13 – Old Windsor Rd to White Hart Dr	Unknown. It is possible that this site has been previously destroyed.	5.13
NWRL PAD 11	PAD	14, 15 – Rouse Hill Station, Windsor Rd Viaduct	Low potential	5.14
45-5-2805 (RH/SP15)	SAC with PAD	16 – Windsor Rd Viaduct to Cudgegong Rd	High potential	5.16
45-5-3930	IF	16 – Windsor Rd Viaduct to Cudgegong Rd	Low	5.16
45-5-3931	IF	16 – Windsor Rd Viaduct to Cudgegong Rd	Low	5.16
45-5-3392	SAC with PAD	17 – Tallawong Stabling Facility	Moderate to high potential	5.17
45-5-3933 RH/A20P 18	SAC	17 – Tallawong Stabling Facility	None to low	5.17

Site/PAD	Site type	Construction site	Level of archaeological potential	Figure no.
45-5-3355	SAC	17 – Tallawong Stabling Facility	None	5.17
RH/A20P PAD 5	PAD	17 – Tallawong Stabling Facility	Moderate potential	5.17
69 Schofields Road	SAC with PAD	16 – Windsor Rd Viaduct to Cudgegong Rd/ Tallawong Stabling Facility	Moderate to high potential	5.17
28 Tallawong Road	IF	17 – Tallawong Stabling Facility	Low potential	5.17
59 Schofields Road	SAC with PAD	16/17 – Windsor Rd Viaduct to Cudgegong Rd/ Tallawong Stabling Facility	Moderate potential	5.17
65 Schofields Road 45-5-4112	IF	16/17 – Windsor Rd Viaduct to Cudgegong Rd/ Tallawong Stabling Facility	Low potential	5.18



Figure 5.1 North West Rail Link Construction Site 1—Epping Service Facility, showing impact zone (construction boundary).

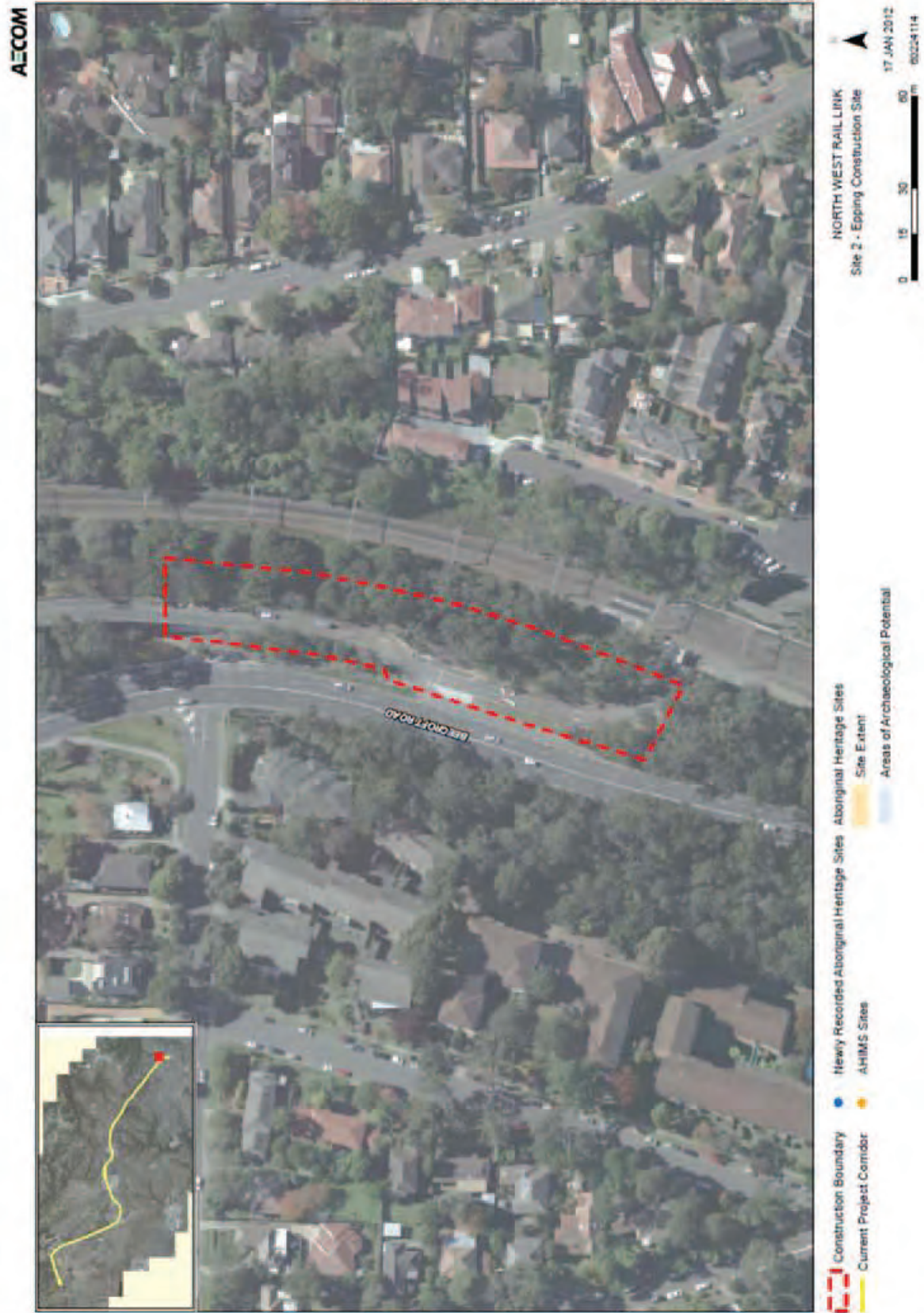


Figure 5.2 North West Rail Link Construction Site 2—Epping, showing impact zone.

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Figure 5.3 North West Rail Link Construction Site 3—Cheltenham Service Facility, showing impact zone and area of archaeological potential.

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Figure 5.4 North West Rail Link Construction Site 4—Cherrybrook Station, showing impact zone and area of archaeological potential.

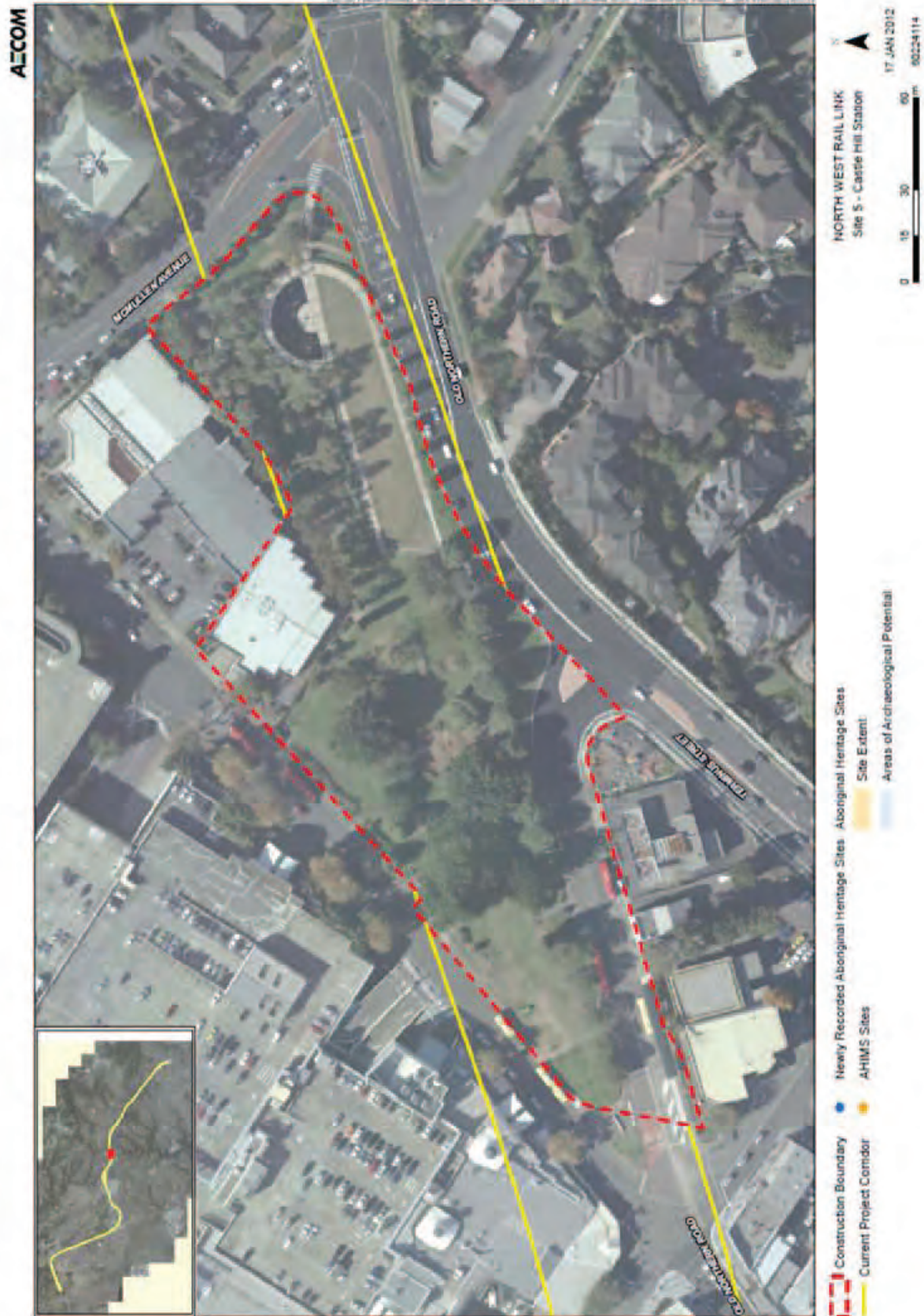


Figure 5.5 North West Rail Link Construction Site 5—Castle Hill Station, showing impact zone.

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Figure 5.6 North West Rail Link Construction Site 6—Hills Centre Station showing impact zone and areas of archaeological potential.

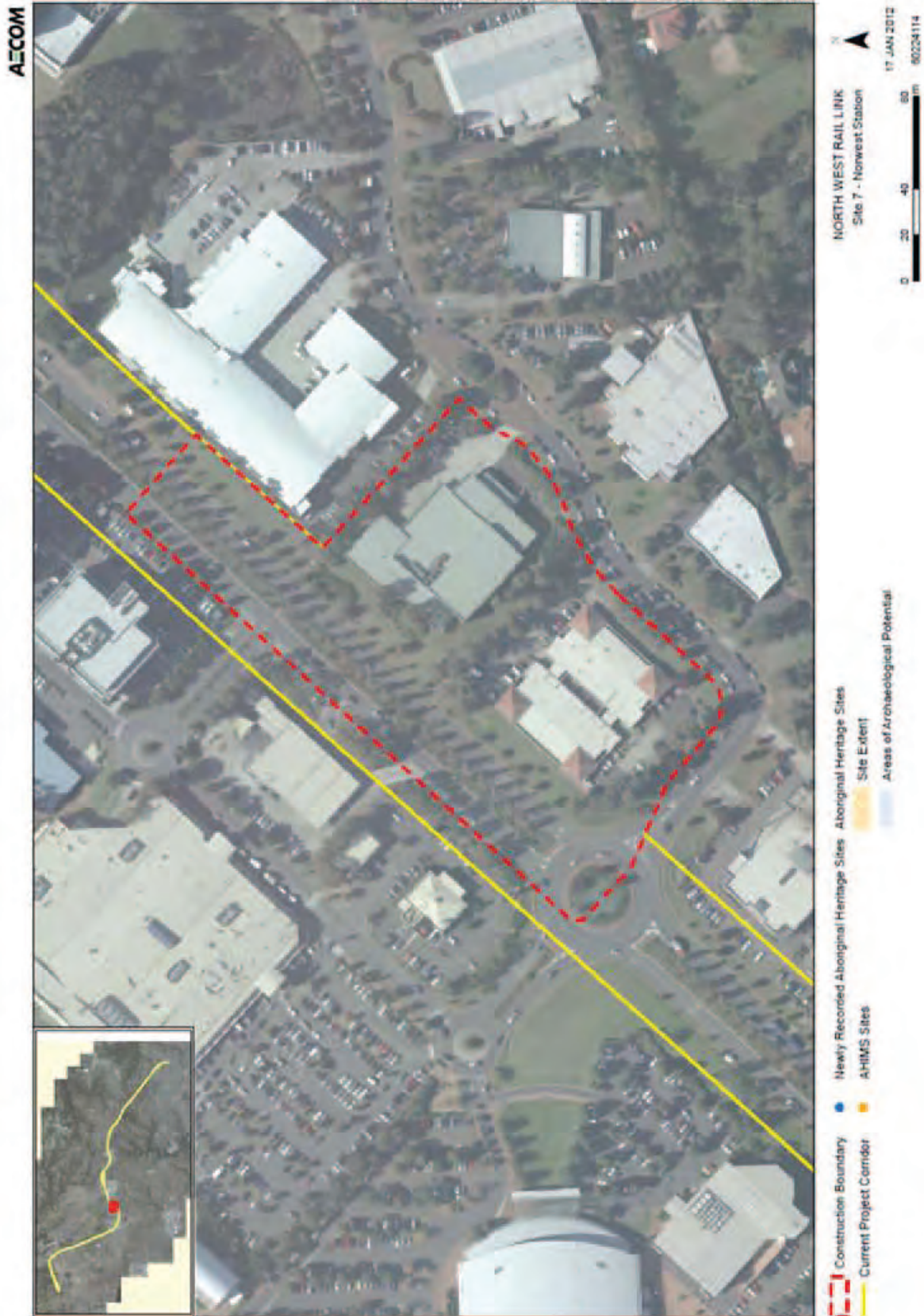


Figure 5.7 North West Rail Link Construction Site 7—Norwest Station showing impact zone.



Figure 5.8 North West Rail Link Construction Site 8—Bella Vista Station showing impact zone.

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Figure 5.9 North West Rail Link Construction Site 9—Balmoral Road, showing impact zone, Areas of archaeological potential, AHIMS sites and newly recorded Aboriginal heritage sites.

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Figure 5.10 North West Rail Link Construction Site 10—Memorial Avenue, showing impact zone, areas of archaeological potential, AHIMS sites and newly recorded Aboriginal heritage sites.

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Figure 5.11 North West Rail Link Construction Site 11—Kellyville Station, showing impact zone, areas of archaeological potential and AHIMS sites.

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Figure 5.12 North West Rail Link Construction Site 12—Samantha Riley Drive to Windsor Road, showing impact zone, areas of archaeological potential and AHIMS sites.

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Figure 5.13 North West Rail Link Construction Site 13—Old Windsor Road to White Hart Drive, showing impact zone, areas of archaeological potential and AHIMS sites.

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Figure 5.14 North West Rail Link Construction Site 14—Rouse Hill Station, showing impact zone, areas of archaeological potential and AHIMS sites.

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Figure 5.15 North West Rail Link Construction Site 15—Windsor Road Viaduct, showing impact zone, areas of archaeological potential and AHIMS sites.

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Figure 5.16 North West Rail Link Construction Site 16—Windsor Road Viaduct to Cudgegong Road, showing impact zone, areas of archaeological potential, AHIMS sites and newly recorded sites.

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Figure 5.17 North West Rail Link Construction Site 17—Cudgegong Road Station and Tallawong Stabling Yard, showing impact zone, areas of archaeological potential, AHIMS sites and newly recorded sites.

