

Lapstone Railway Station Upgrade Statement of Heritage Impact

Prepared by AMBS Ecology & Heritage for SNC-Lavalin (SNC) on behalf of Transport for NSW (TfNSW)

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1 Introduction

AMBS Ecology & Heritage (AMBS) has been commissioned by SNC-Lavalin (SNC) on behalf of Transport for NSW (TfNSW) to prepare a *Statement of Heritage Impact* (SoHI) to assess the impacts of the proposed Lapstone Station Upgrade (the Proposal). This SoHI forms part of the *Review of Environmental Factors* (REF), which is being prepared to assess the impacts of the Proposal, in the considerations for approval under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Background

TfNSW is the lead agency for integrated delivery of public transport services across all modes of transport in NSW. TfNSW is proposing to upgrade Lapstone Station as part of the NSW Government's Transport Access Program (TAP) which aims to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure.

Lapstone Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the Disability Standards for Accessible Public Transport (DSAPT) or the Commonwealth Disability Discrimination Act 1992 (DDA).

Lapstone Station is approximately 63 kilometres from Central Station, Sydney on the Blue Mountains Line of the Intercity Trains Network. The station is located on the eastern edge of the settlement of Lapstone, with the Nepean River about 330m to the south-east. It is a dual platform station with the northbound side of the station (Platform 1) providing services to Central Station, Sydney, and the south bound side (Platform 2) providing services to the Blue Mountains and beyond to Lithgow.

The station building is located on the western side of the station on Platform 1 and contains a waiting room, staff office with ticketing window, storeroom and toilet facilities.

The station and western platform (Platform 1) are accessed via a combination of paths, ramps, and stairs from the station car park and pedestrian footpaths from adjoining roads.

The eastern side of the station (Platform 2) is accessed from the station and western side of the rail corridor via a steel pedestrian footbridge located towards the northern end of the platforms. A dirt track provides informal access to pedestrians from the east, and the neighbouring residential settlement of Leonay, through the adjoining bushland.

The commuter car park is located on the western side of the station. It currently provides one accessible parking space. Untimed on-street parking on surrounding streets is also available on the western side of the station.

Figure 1.1 and Figure 1.2 provide the regional and local site context for the Proposal.

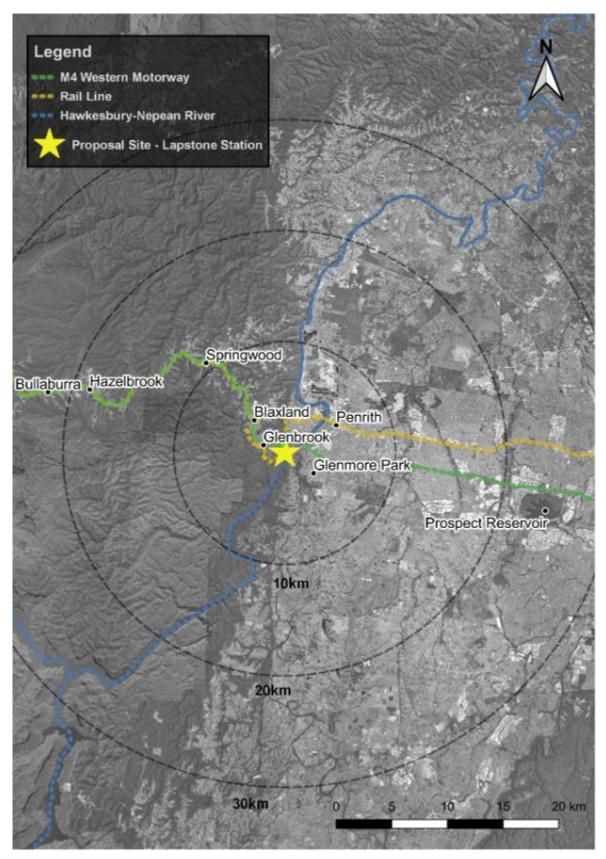


Figure 1.1 Regional context (SNC, 2019: 3).

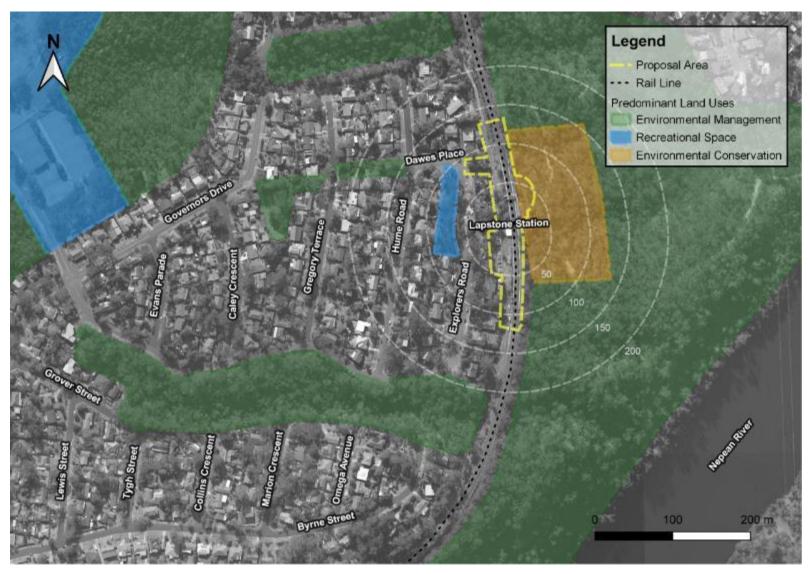


Figure 1.2 Local site context (SNC, 2019: 4).

1.2 Overview of the Project

The Proposal area is identified in Figure 1.3. The Proposal area includes:

- the rail corridor around Lapstone Station (including the station building, platforms, footbridge, shelter and connecting paths and stairs);
- an area of the bushland reserve to the east of the station footbridge;
- a portion of the lower tier of the station commuter carpark, and;
- a proposed construction compound area within the road reserve at the eastern extent of Dawes Place.



Figure 1.3 Proposal Area (SNC, 2019: 6)

As part of the TAP program, the Proposal would aim to provide a station precinct that is accessible for all sections of the community including people with a disability, limited mobility, parents/carers with prams, and customers with luggage.

Key features of the Proposal are:

- installation of one new lift to the eastern end of the existing footbridge and a new footpath from the base of the lift to connect to Platform 2
- construction of a new DSAPT compliant ramp that provides access on the western side of station from the commuter car park to the footbridge
- construction of a new entrance point south of the station building on Platform 1, including new stair and ramp access from the commuter car park
- relocation and upgrade of the existing non-compliant accessible parking space within the commuter car park closer to the new Platform 1 entrance
- provision of a new kiss and ride space which will replace an existing car space
- closure of the steep ramp immediately north of the station building that currently provides access to Platform 1
- all stairs upgraded with compliant handrails, TGSIs and stair nosings
- installation of TGSIs along the full length of both platforms
- localised regrading of some platform areas to achieve compliant cross falls
- modifications to the existing station building layout including:
 - reconfigure the existing station toilets and store room to accommodate one family accessible toilet, one male ambulant toilet, one female ambulant toilet and a new store room
 - the building modifications will include providing level access from Platform 1 into both the waiting room and the new family accessible toilet
- installation of seating cut into the sandstone rail cutting on Platform 1
- closed circuit television (CCTV) cameras to provide coverage to meet security standards for new infrastructure
- power supply upgrade to support new infrastructure
- trimming and removal of trees and vegetation to construct and accommodate the new accessible paths and lift
- ancillary work including installation of platform hearing loops, service relocation, lighting, opal card reader relocation, landscaping, drainage works, wayfinding signage, relocation of bins and furniture, and new bin storage area.

Subject to planning approval, construction is expected to commence in mid-2020 and take around 12 to 18 months to complete.

Temporary site compound facilities would be needed for laying down equipment and machinery, parking plant and vehicles and storage of materials. The proposed area is the vegetated road reserve at the eastern end of Dawes Place.

Figure 1.4 shows the general layout of key elements of the Proposal based on the strategic concept design. The design would be further refined during the detailed design phase.

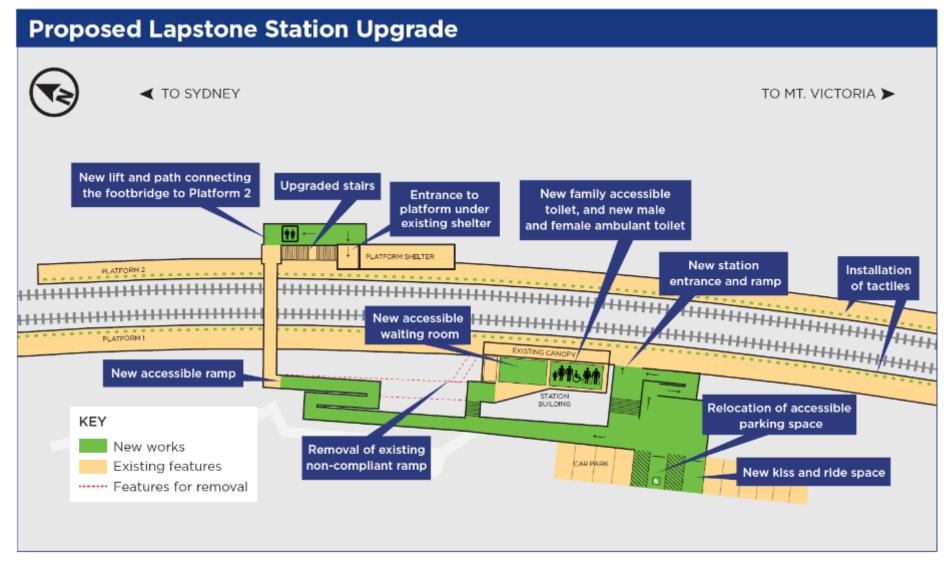


Figure 1.4 Key features of the proposal (subject to detailed design) (ImageCorp, 2019).

The above scope of works pertains to the preferred *Option 2*, which has a minimised impact on the fabric of the *Sedimentary Dykes*. It should be noted that TfNSW previously considered an alternative scope, *Option 1*, that involved the provision of a lift on Platform 1. This option would have had an adverse impact on the fabric of the Sedimentary Dykes, and thus was discounted.

Lapstone Station does not currently meet DSAPT standards. The Proposed Lapstone Station Upgrade has been put forward as a solution to comply with the DDA Act and meet DSAPT requirements. The following DSAPT conditions need to be considered for works along the platform at Lapstone Station:

- resting points with seating must be provided along an access path if the walking distance between facilities or services exceeds 60 metres (m) (AS1428.2 (1992), DSAPT Clause 5.1).
- tactile ground surface indicators must be installed on an access path to indicate stairways, ramps, changes of direction, overhead obstructions below a height of 2000 mm, and hazards within a circulation space or adjacent to a path of travel, such as the rail corridor (AS1428.2 (1992), DSAPT Clause 18.1).
- minimum unobstructed width of an access path must be 1200 mm (AS1428.2 (1992), DSAPT Clause 6.4).
- Seats must be a consistent height of 450mm and include arm rests at a height between 220mm and 300mm above seat, to provide to support people who have difficulty being seated or getting up from a seated position (AS1428.2 (1992), DSAPT Clause 23.1 and 27.2).

Platform 1 is currently too narrow to provide the minimum unobstructed width of an access path, once tactiles and furniture have been installed. To comply with the relevant DSAPT requirements it is proposed that seating is cut into the sandstone rail cutting and locally listed *Sedimentary Dykes* along the western length of Platform 1.

Four seating locations are proposed; there will be two north of the station building, and one south of the station building, as well as one standard bench seat under the cover of the station canopy. The Platform 1 seating is proposed to be 600mm deep, 2,700mm in length, and cut from the surface down to standard bench seat height of 460-500mm above the platform.

It is worth noting that the AS1428.2 (2001) as well as the National Construction Code, Building Code of Australia Vol.1 (2016) includes requirements for vertical clearance, referring to a *'height above floor level of not less than 2000mm'* (NCC, 2016: 512). These conditions are relevant to the proposal to cut seats into the bedrock of the sandstone cutting on Platform 1.

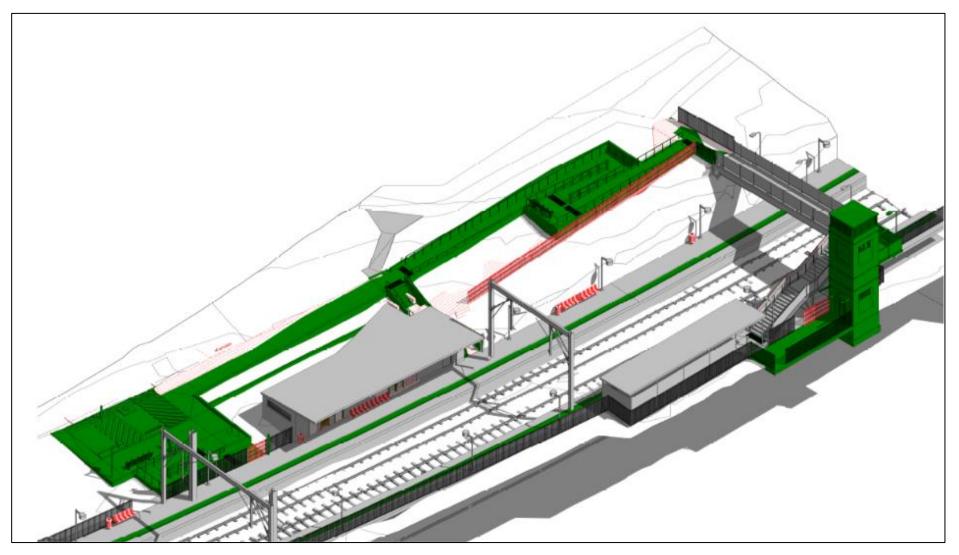


Figure 1.5 Axonometric of Option 2 (subject to detailed design). In this image, grey indicates existing buildings, green indicates proposed works and red represents demolition works (Stantec, 2018: Appendix A).



Figure 1.6 Artists impression of the proposed lift structure on Platform 2 (subject to detailed photomontage from Cambium) (Stantec, 2018: Appendix A).

1.3 Methodology & Authorship

This report is consistent with the principles and guidelines of the *Burra Charter: The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance 2013* and current best practice guidelines as identified in the *NSW Heritage Manual* (1996), published by the Heritage Office and Department of Urban Affairs and Planning, and associated supplementary publications.

In addition, Niche Environment & Heritage prepared the *Transport Access Program 3, Lapstone Railway Station, Lapstone: Heritage Impact Assessment* in 2018, for the preliminary designs of the proposed development. This SoHI updates the Niche report in accordance with the current scope of works.

This report has been prepared by Victoria Cottle, AMBS Historic Heritage Consultant. Jennie Lindbergh, AMBS Director Historic Heritage has provided technical input and reviewed the report.

A site inspection was undertaken by Lian Crisp on 5 August 2019, to assess aspects of the identified heritage items within the Lapstone Station precinct with respect to the works associated with the TAP-3 development. All photographs in this report were taken by Lian Crisp at this time unless otherwise identified.

2 Legislative Context

The conservation and management of heritage items, places, and archaeological sites takes place within the framework of relevant Commonwealth, State or local government legislation. Non-statutory heritage lists and registers, ethical charters, conservation policies, and community attitudes and expectations can also have an impact on the management, use, and development of heritage items. The following statutory and non-statutory lists and registers have been reviewed to identify the location and significance of historic heritage items and places in the vicinity of the Proposal Area:

- World Heritage List
- National Heritage List (NHL)
- Commonwealth Heritage List (CHL)
- State Heritage Register (SHR)
- Relevant Heritage and Conservation (Section 170) Registers
- Blue Mountains Local Environmental Plan (LEP) 2015, Schedule 5
- Penrith LEP 2010, Schedule 5
- State Heritage Inventory (SHI)
- National Trust of Australia (NSW) Register

2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework for the protection and management of places of national environmental significance. The heritage lists addressed by the EPBC Act include the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage List (WHL), the National Heritage List (NHL), and the Commonwealth Heritage List (CHL).

All World Heritage properties in Australia are matters of national environmental significance protected and managed under the EPBC Act (UNESCO 2014). The NHL also protects places that have outstanding value to the nation. The CHL protects items and places owned or managed by Commonwealth Government agencies. The Australian Government Department of Environment and Energy is responsible for the implementation of national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture. The Minister's approval is required for controlled actions which would have a significant impact on items and places included on the WHL, NHL or CHL.

The *Greater Blue Mountains* was inscribed on the World Heritage List in 2000 and on the National Heritage List in 2007. The WHL and NHL curtilage is shown in Figure 2.1 and as indicated, the Blue Mountains Line, and its surrounds, is outside the curtilage. In addition, Lapstone Railway Station and the railway cutting are over 5km from the WHL curtilage, which is further protected by intervening development and bushland. The works will not affect the WHL heritage values of the *Greater Blue Mountains*.

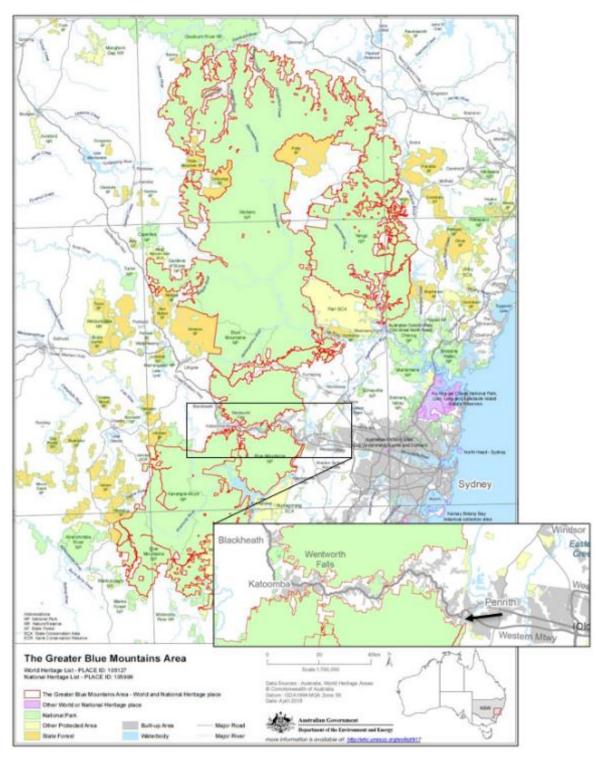


Figure 2.1 The WHL and NHL curtilage map for the Blue Mountains with an insert detail of the Blue Mountains Line and surrounds. The Proposal Area has been arrowed (Australian Government Department of the Environment and Energy, 2019).

2.2 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) provides protection for heritage places, buildings, works, relics, moveable objects, precincts and archaeological sites that are important to the people of NSW. These include items of Aboriginal and non-Aboriginal (historic) heritage significance. Where these items have particular importance to the people of NSW, they are listed on the State Heritage Register (SHR). There are no places within the vicinity of Lapstone Railway Station or the railway cutting listed on the SHR.

Sections 139 to 146, Divisions 8 and 9 of Part 6 of the Act refer to the requirement that excavation or disturbance of land that is likely to contain, or is believed may contain, archaeological relics is undertaken in accordance with an excavation permit issued by the Heritage Council (or in accordance with a gazetted exception under Section 139(4) of the Act). An archaeological relic is defined as meaning *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.

2.3 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the main law regulating land use planning and development in NSW, and requires consideration to be given to the environment as part of the land use planning process. The EP&A Act controls the making of environmental planning instruments (EPIs). Two types of EPIs can be made: Local Environmental Plans (LEPs), covering local government areas; and State Environment Planning Policies (SEPPs), covering areas or issues of State or regional environmental planning importance. LEPs commonly identify, and have provisions for, the protection of local heritage items and heritage conservation areas.

The Lapstone Station building is situated within the Blue Mountains Local Government Area (LGA) and the Blue Mountains LEP 2015 is relevant. However, the railway line marks the boundary of the Blue Mountains LGA to the east and the Penrith LGA to the west, subject to the Penrith LEP 2010. Thus, the heritage items in the vicinity situated within both of these LGAs have been considered.

2.3.1 Blue Mountains LEP 2015 and Penrith LEP 2010

The Lapstone Railway Station is not identified on any heritage registers or lists. The station is not within the immediate vicinity of the Glenbrook Railway Deviation to the south, Item 4803226 on the RailCorp Heritage and Conservation (Section 170) Register, and Item G017 on the Blue Mountains LEP 2015.

Schedule 5 'Environmental Heritage', Part 1 'Heritage Items' in the LEPs identifies the historic objects or places of heritage significance within the immediate vicinity of the Proposal Area; their location and details are summarised in Figure 2.2 below.



Figure 2.2 Combined detail from a Blue Mountains LEP 2015 Heritage Map (west of the Main Western Line) and a Penrith LEP 2010 Heritage Map (east of the Main Western Line). These show the heritage items in the vicinity of the Proposal Area (arrowed).

Site of Edinglassie (A112)

The Site of Edinglassie at Lapstone Place is listed as Item A112 on the Penrith LEP 2010; the curtilage occupies Lot 102, DP 235829 and Lot 2, DP 242718. The former house of 'Edinglassie' is no longer extant; the site is located along the western boundary of the lot. Despite the modest scale of the former residence, heritage listing at a local level is defined by the legal description of the land (i.e. lot and DP). As such, the entire lots are identified as a heritage item despite the former residence being located approximately 350m from the Proposal.

The Statement of Significance for the Site of Edinglassie is:

Significant as the site of the first private residence at Emu Plains and as the country house of a man who was a major figure in the establishment of the Australian Legal system (Fox & Associates, 1987: L-4).

Sedimentary Dykes (L002)

The Sedimentary Dykes on the Main Western Railway (at Lapstone) is listed as Item L002 on the Blue Mountains LEP 2015. The Statement of Significance is:

This place is part of a wider group of similar places with geological and cultural significance ref Lapstone Monocline Group SHI1173106.

The *Sedimentary Dykes* form part of the *'Lapstone Monocline Group'*, encompassing five listed geological items, HH001, L001, L002, L003 and L004 on the Blue Mountains LEP 2015. Their physical description as provided on the SHI is as follows:

The Lapstone Monocline is an upfolding of the sedimentary strata of the Sydney Basin. The monocline has faulting to the west, erosion of its uppermost strata and deep gullies running eastwards. It is 100-150 kms in length, from the Colo River in the north to the area near Bargo in the south, and has caused rocks on the western side to rise over 500m relative to those on the east. The Nepean River cutting deeply into hard rock indicates that it followed the same

course prior to the uplift, which formed the monocline. The uplift took place gradually, as the Nepean River was able to cut down into the rock at a rate that enabled it to retain its course.

The monocline exposes the junction between the Hawkesbury Sandstone group, the Wianamatta Shale Group and Tertiary Gravels at key points along its length. The concentration of these within the Blue Mountains City area has been recognised by five separate listings on the Local Environmental Plan. These are: the Hawkesbury Lookout Fault Zone (HH001); the road cuttings near Knapsack Bridge (L 001); exposures on the platform of Lapstone Railway Station (L 002); an asymmetrical anticline at the foot of the South Lapstone Monocline in Orion Place, Leonay; an asymmetrical syncline at the top of a road cut on the northern side of the western freeway 400m east of the Mulgoa Road underpass; in a series of cuttings in the old Mitchell's Pass Road between its junction with the Great Western Highway and Lennox Bridge (L 003). The ridge-line of the feature is very visible as the horizon above the Castlereagh flood-plain between Hawkesbury Panorama Lookout on the north and Mount Riverview on the south (L 004).

The Statement of Significance of the Lapstone Monocline Group (L001) is:

Criterion (a) Historical: The Lapstone monocline was the Aboriginal stairway from the plains to the Mountains; for the early Europeans it represented a strenuous obstacle to wheeled traffic by road and a major engineering challenge to the railway of the later nineteenth century.

Criterion (c) Aesthetic: The Monocline is the doorway to the Mountains, the universal image of the escarpment seen from the Nepean River. In an uncompromising way, it has aesthetic significance, contributing to the landmark qualities for which the Blue Mountains scenery is renowned.

Criterion (e) Scientific and technical: The Lapstone Monocline is of scientific significance on a State level for its demonstration of a profound event in the geological formation of the Sydney Basin between 15 and 22 million years ago.

Niche assessed the significance of Lapstone Railway Station and included the following Statement of Significance:

The Lapstone Railway station is a contemporary station constructed in 1964. The station itself is not of heritage significance due to its common and modern components. It is built into and onto the geological formation of the Lapstone Monocline Group (SHI ID #1170306). The sedimentary dykes visible at Lapstone Railway Station form a locally significant landscape component (Item L002) of the Lapstone Monocline Group due to their ability demonstrate a geological event and feature which indirectly shaped the patterns of historical movement into the Blue Mountains (Niche Environment & Heritage, 2018: 24).

3 Historic Context

3.1 Early History of the Blue Mountains

The Blue Mountains was a contact area for three Aboriginal groups, the Dharug of the Cumberland Plain, the Gandangara of the Southern Highlands and Burragorang, and the Wiradjuri of the Central Tableland (Jack, 2000a: 2). The Blue Mountains were considered to be an impenetrable natural barrier to the westward expansion of the British colony. Whilst various Indigenous peoples travelled along two main routes across the Blue Mountains, the area was viewed as an impassable maze of sandstone cliffs, deep gorges and dense bush by the early colonists. However, after a series of droughts, insect plagues and failed attempts at farming, the discovery of arable lands was a necessity.

Many explorers, scientists and adventurers had traversed large areas of this wilderness; however, it was not until 1813, that Gregory Blaxland, William Charles Wentworth and William Lawson successfully crossed the mountains (Jack, 2001). The main Dividing Range was crossed at the end of 1813 by Deputy Surveyor of Lands, George Evans; following in his footsteps, Lieutenant William Cox was commissioned by Governor Lachlan Macquarie to construct a road following the route surveyed by Evans. Cox built the road within six months in 1814 with convict labour; it extended for 163 kilometres and was suitable for carriages and stock use (Pratten & Irving, 1993: 4). Small settlements began to develop along the route of Cox's Roads from Emu Plains to Bathurst in the form of inns and way-stations initially built for the travellers. The west was now opened up to agriculture, grazing and the later exploitation of mineral resources (Jack, 2001).

3.2 The Main Western Railway Line (1863-67)

The Main Western Railway, now known as the Blue Mountains Line, was built across the mountains from 1863, generally following the route of Cox's Road, linking Sydney with Bathurst and the Western Plains to Sydney and coastal ports (Figure 3.1). The coming of the railway attracted new settlers and weekenders to the Blue Mountains. Townships were established surrounding the new railway stations, and populated by railway worker families, miners, hotel and guesthouse owners, timber merchants, store keepers, small-scale farmers and market gardeners (Aston, 2009: 15-16).

The first section of the railway over the mountains was constructed in 1863 as a single track from Penrith to Weatherboard; later renamed Wentworth Falls in 1879, after William Charles Wentworth and the waterfalls that are a major tourist attraction of the local area. The line opened in July 1867, with a temporary platform at Weatherboard. The line from Weatherboard to Mount Victoria opened in May 1868, with the final section to Bathurst completed in April 1876. (Lee, 1988: 32-33, 39-40, 52-57).

Unique challenges were presented during the construction of the railway over the mountains. Rail lines are usually built in valleys; however, the line was built instead utilising the mountain ridges. The challenge of traversing the steep slopes of Lapstone Hill was initially approached with the solution of a 'Zig Zag' designed by the railway's Engineer in Chief, John Whitton (Figure 3.2 and Figure 3.3). The Lapstone Zig Zag had a gradient of 1-in-33, and two bridges were constructed over the Nepean River between Penrith and Emu Plains (the Victoria Bridge) and the Knapsack Viaduct over the Knapsack Gully. The Zig Zag allowed the trains to gain height and required them to reverse up one of the three legs (assisted by a bank engine). Down Trains (those travelling away from Sydney) would have reversed from the Bottom Point through the Top Points, known as Lucasville after 1890 (after the small concrete platform built for Mr John Lucas in April 1878, Figure 3.3), and then commenced the climb along Top Road (Pollard & Harper, 2009: 389).

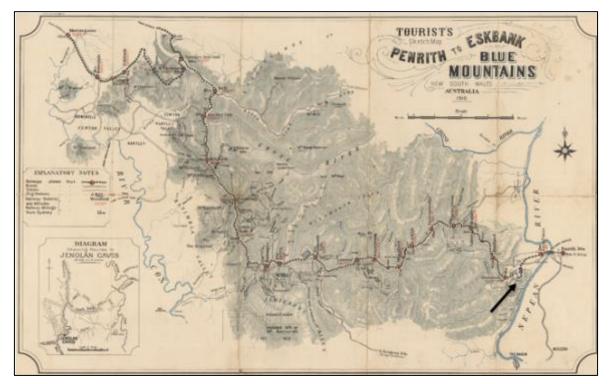


Figure 3.1 Tourist's Sketch Map Penrith to Eskbank Blue Mountains (1910) showing the route of the Main Western Railway over the Blue Mountains. This map was produced after the first Deviation via the Lapstone Tunnel (1892). The location of the Proposal Area has been arrowed (Source: http://nla.gov.au/nla.obj-234011497/view).

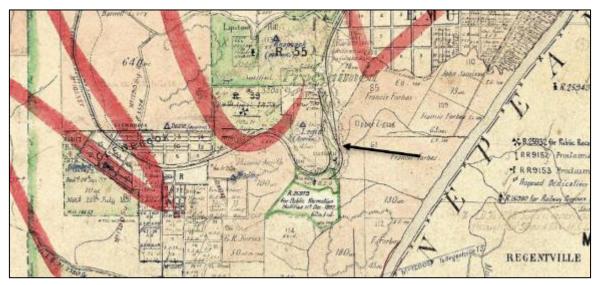


Figure 3.2 Detail of Strathdon Parish Map (1888) showing the Main Western Line from Blaxland to Emu Plains, the Lapstone Zig Zag is arrowed (Source: NSW Historical Land Records Viewer (HLRV), https://hlrv.nswlrs.com.au/).



Figure 3.3 Bottom Point of Lapstone Zig Zag (approx. 417 feet above sea level), c.1870s. Note: The Pointsman's cabin is visible to the right (left) (Source: Blue Mountains Library, https://library.bmcc.nsw.gov.au/client/en_AU/search/asset/1011452/0). Lucasville Platform (c. 1880-1934), Photographed by John Henry Harvey (right) (Source: State Library Vic, Accession no: H91.300/111).

The first proper station above Emu Plains was initially known as Wascoe's (now Blaxland), named after John Outrim Wascoe, the proprietor of the Pilgrim's Inn at that time. A principal reason for the location of station platforms was based on the presence of inns; and these stations were often named after the owners of the inns (Rowland, 1954: 252). During the construction of the line railway workers lived in tent camps alongside the line (Singleton, 1956: 122-125; Aston, 2009: 11-12).

The Blue Mountains Line has been gradually improved since the late nineteenth century to support increasing and faster rail traffic (summarised in Figure 3.6). The Lapstone Zig Zag was replaced in 1892 by a new tunnel, and later the line between Glenbrook and Springwood was duplicated, with a new brick station building constructed at Glenbrook. In response to the difficult terrain, the line duplication also saw 'straightening' of the line at various points, with deviations at Zig Zag (the 10-tunnel deviation), Woodford, Linden as well as Glenbrook. The Glenbrook Deviation was opened in 1913 between Blaxland and Emu Plains, making the previous lines redundant. Glenbrook Station was rebuilt in its present location as part of the deviation works, at the southern edge of Glenbrook Village (Singleton, 1956: 126-130; Aston, 2009: 41-43, 47).

The Main Western Line was electrified from 1957, when electric trains replaced steam trains on suburban services. Steam engines were also subsequently phased out on rural services, replaced by diesel engines (Singleton, 1958: 40). It was on 24 February 1964 that Lapstone Station between Glenbrook and Emu Plains was opened. The Main Western Line now extends for 806.96 kilometres and encompasses 50 working (and 58 closed) railway stations; the stations associated with the Glenbrook Deviation have been summarised in Table 3.1.

Name	Opened	Closed	Kilometres
Emu Plains Station	18 August 1868		57.4
Lapstone Hill Junction	11 May 1913	25 September 1913	
Lapstone Bottom Points Junction	11 July 1867	18 December 1892	
Lucasville Station	15 April 1878	18 December 1892	62.4
Breakfast Point Halt	1 September 1877	1889	62.8
Glenbrook Tunnel (1st)	18 December 1892	25 September 1913	
Glenbrook Station (1st)	11 July 1867	25 September 1913	
Lapstone Station	24 February 1964		63.6
Glenbrook Deviation Tunnel	11 May 1913		65.3
Glenbrook Station	11 May 1913		67.1
Blaxland Junction	11 May 1913	25 September 1913	
Blaxland Station	11 July 1867		71.5

Table 3.1 Opening and closing dates of the stations and other infrastructure between Emu Plains and Blaxland on the Main Western Line (https://www.nswrail.net/lines/show.php?name=NSW:main_west).

3.2.1 The First Deviation (The Glenbrook Tunnel) (1892)

The Lapstone Zig Zag Deviation on 18 December 1892 comprised a new tunnel, known as the Glenbrook or Lapstone Tunnel, aimed to reduce travel times up Lapstone Hill. The contract for the construction of the new rail alignment was let to George Proudfoot (Proudfoot & Company) for £37,000 in April 1891 (Pollard & Harper, 2009: 393). The new line was opened on 18 December 1892 and began from near the Bottom Point and curved through a one-track tunnel approximately 2,165 feet long, before reappearing beside the old line (Rowland, 1954: 260-61). On 26 January 1902 the former Glenbrook Station and the duplication of the line from Glenbrook to Springwood was opened (Figure 3.4), (Pollard & Harper, 2009: 402). The tunnel design was problematic, as the line retained the steep grade of 1-in-33. Wheel slippage was a common occurrence, and train crews and passengers continually suffered from the inhalation of fumes and smoke as a result of poor ventilation.

In 1925-26 the first deviation was reused for a diversion of Mitchell's Pass on the Great Western Highway up Lapstone Hill; it ran over the 1865 Knapsack Valley Viaduct as far as Blaxland (Singleton, 1956: 129-130; Aston, 2009: 43-47; Jack, 2000b: 7). Since 1991, the M4 Motorway was extended onto Lapstone Hill, and the track section on the Great Western Highway between Mitchell's Pass and Knapsack Bridge became a sealed walking track and a flood evacuation route out of Emu Plains (Pollard & Harper, 2009: 402).

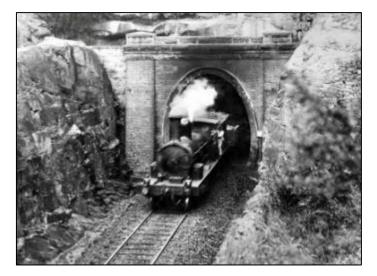


Figure 3.4 A B205 locomotive at the eastern portal of the single line tunnel on the first deviation (Source: Pollard & Harper, 2009: 397).

3.2.2 The Glenbrook (Second) Deviation, Blaxland to Emu Plains (1911-13)

The Glenbrook Deviation was a major scheme to divert the railway around the end of Lapstone Hill ridge, to the south of the original alignment, using the Glenbrook Creek gorge to enter the mountains, thereby replacing the steep grades of the existing single-track line with a longer double track line and much gentler 1-in-60 grades. The works involved extensive rock-cutting and earthworks, and construction of major new infrastructure, including a new brick viaduct across the Knapsack Gully of eight arches with 45-foot spans, a new tunnel under the Bluff (extending for approximately 240m), and a new Glenbrook Station at the end of Ross Street (Figure 3.5). The works were notable for the application of new technologies to railway works, including the first employment of 'steam navvies' to NSW (Pollard & Harper, 2009: 404; Singleton, 1956: 126-130; Aston, 2009: 41-47).

The deviation took three years to construct; the works commenced in January 1911, and the rail alignment and Glenbrook Station were opened on 11 May 1913. A shanty town of 3,000 workers and their families was established on the Bluff during construction (Nepean Times, 1911: 3). Materials for construction were transported via a siding branch off the old main line, and were then lowered down the escarpment by a funicular railway (Pollard & Harper, 2009: 404).

The new line was approximately 2 miles 57 chains longer than the former rail alignment, making the total deviation 7 miles 54 chains (Pollard & Harper, 2009: 404).Initially, the line was only used as the Down line, for journeys away from Sydney; whilst the old rail alignment was retained as the Up line for journeys towards Sydney. As traffic continued to increase, the deviation track was duplicated and the Up line was diverted from 25 September 1913 onwards (Pratten & Irving, 1993: 19). By 1937, goods trains were taking 26 minutes to travel from Penrith to Glenbrook, which equated to approximately half the time it took to navigate the first deviation through the tunnel at Lapstone (Pollard & Harper, 2009: 404).

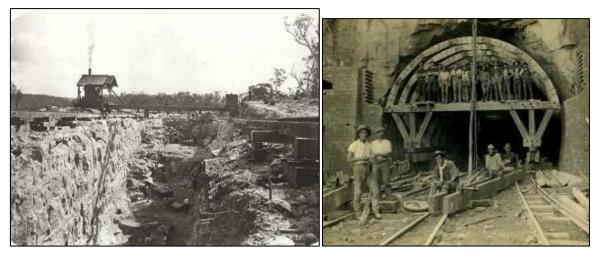


Figure 3.5 Left image: Construction of Glenbrook deviation, 31 December 1912 (Source: NSW State Archives, ID: 17420_a014_a014000726). Right image: Glenbrook Tunnel under construction, 1911 (Source: Blue Mountains Library, https://library.bmcc.nsw.gov.au/client/en_AU/search/asset/1012261/0).

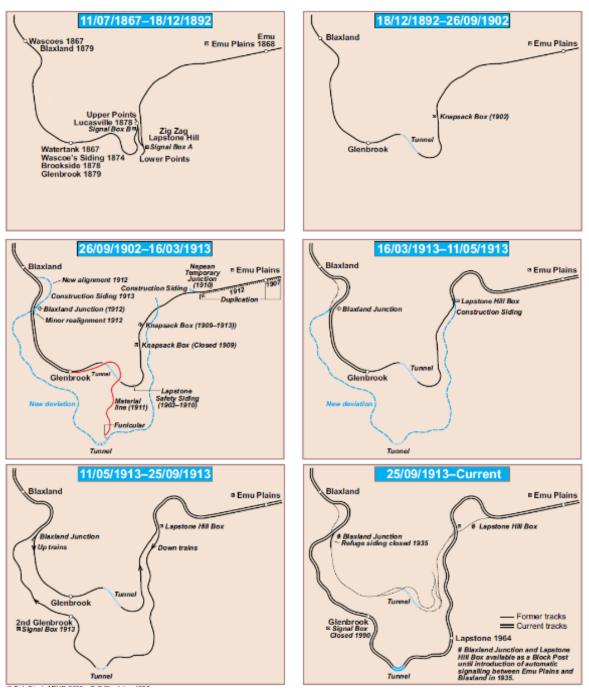


Figure 3.6 Annotated sketch of the stages associated with the construction of the Main Western Line between Blaxland & Emu Plains, from 1892 to the present day (Source: Pollard & Harper, 2009: 410).

3.3 Settlement of Lapstone

The town of Lapstone and the Lapstone Railway Station are situated on land granted to Sir Francis Forbes (1784-1841) in the early nineteenth century (Figure 3.7). In 1824, Forbes was appointed as the First Chief Justice of the colony of NSW and he opened the new Supreme Court of New South Wales on 17 May 1824 (Figure 3.8) (Parliament of NSW, 2019).

In the late 1820s, when the land east of the Blue Mountains was opened up to settlement, Forbes acquired a purchase grant from the Crown for 130 acres south of the township of Emu Plains and immediately west of the Nepean River, (now the location of Leonay). He erected a rural homestead 'Edinglassie' on the land between the River and Cox's Road, just before the ascent to the mountains (Currey, 1966, http://adb.anu.edu.au/biography/forbes-sir-francis-2052). The house was the first

private residence at Emu Plains and was a Gothic cottage set in a romantic garden; the property was used as a country retreat rather than a working farm (Figure 3.9) (State Library NSW, IE795546, General Notes). In 1831, Forbes purchased three additional blocks of land surrounding his original grant, totalling 288 acres (Royal Australian Historical Society, 1932: 254). The Lapstone station stands on Forbes' former 45-acre grant (arrowed in Figure 3.7).

Forbes served as the Chief Justice of NSW for over 12 years, retiring in 1837 due to ill health, soon after receiving a knighthood (Parliament of NSW, https://www.parliament.nsw.gov.au/members/Pages/member-details.aspx?pk=222). He died in Newtown in 1841, and 'Edinglassie' was demolished in the early 1900s (State Library NSW, IE795546, General Notes). Today, approximately 30 hectares of Forbes' grants, remains as pastoral land today, and is situated south of Leonay. The site of the Edinglassie house spans Lot 2 DP242718 and Lot 102 DP235829 (Figure 3.10), and is listed as Item A112 on the Penrith LEP 2010.

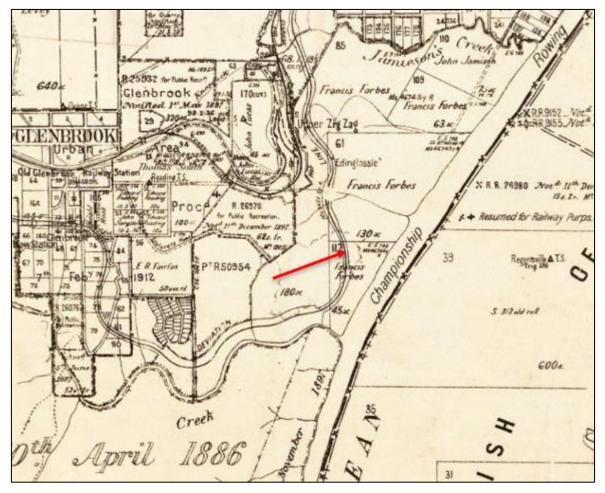


Figure 3.7 Detail of Strathdon Parish Map (1919), showing the route of the Glenbrook Deviation along the southern edge of the village and the approximate of the Proposal Area, prior to the construction of the Lapstone Railway Station (arrowed in red) (Source: HLRV, https://hlrv.nswlrs.com.au/).



Figure 3.8 Sir Francis Forbes. By Henry Samuel Sadd c.1866, mezotint on paper (image: 19.8 x 15.3cm) (Source: National Portrait Gallery, Canberra. Accession no: 2012.134, https://www.portrait.gov.au/portraits/2012.134/the-hon-sir-francis-forbes/).



Figure 3.9 'View of Edinglassie' (1835), watercolour painting by Conrad Martens (Source: State Library NSW, IE8795546).



Figure 3.10 Site of Edinglassie House. The Proposal Area has been arrowed (Source: OEH SHI: A112, https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2260112).

3.4 Lapstone Railway Station

The township of Lapstone was established by Mr Arthur J Hand, a Blue Mountains City Council alderman, who in October 1954, purchased 116 acres of vacant timbered land in the Lower Mountains, known as 'Stephen's Paddock'. This land was situated on the western side of the Main Western Line on part of Francis Forbes' former 180-acre grant to the west (Figure 3.11). It was subdivided into twenty -acre lots and sold soon after its purchase (Nepean Times, 1957: 9). The marketing for the subdivision of this land was largely centred around the future construction of the railway station by Hand (Lewis, 2014).

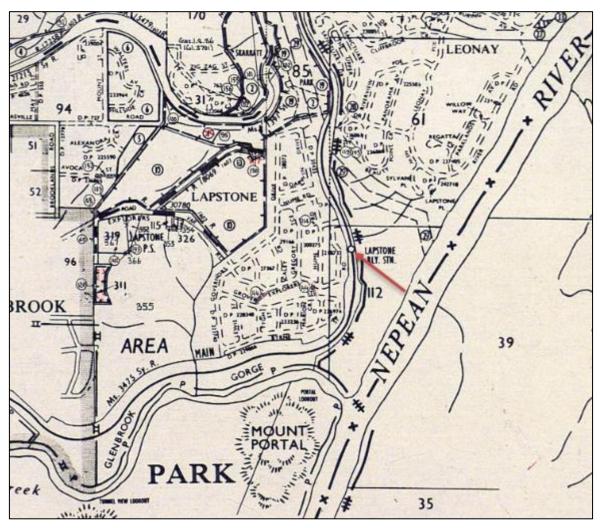


Figure 3.11 Detail of Strathdon Status Branch Charting Map Sheet 2, Diagram D (1976), showing the established town of Lapstone as well as Lapstone Station (arrowed). Note: The outline of Francis Forbes' former land grants is visible. (Source: HLRV, https://hlrv.nswlrs.com.au/).

The construction of Lapstone Railway Station commenced in July 1960, by Hand's company, Lapstone Estate Pty Ltd (Nepean Times, 1960: 1). The sandstone cutting within which the station stands dates to the excavations for the Glenbrook Deviation 1911-1913, which was modified during the construction of the station. The geological features of sedimentary dykes are common in the Sydney Basin and several have been noted in the Glenbrook and Lapstone region. As described above in Section 2.3.1, the cutting at Lapstone and the Sedimentary Dykes (L002) are part of a wider group of places with geological and cultural significance, collectively referred to as the Lapstone Monocline Group (Blue Mountains City Council Heritage Register Review, 2016: 1). Sedimentary dykes have been described in the *Australian Journal of Earth Sciences* as:

mainly offshoots of shale beds or lenses associated with joint systems: in all cases the shale has been injected into overlying sandstone. Thickness of these dykes varies from 10mm to more than 1m, for example at Lapstone Railway Station (GR 817603) (Branagan & Pegram, 1990).

Lapstone station was completed at a cost of £32,566, and was officially opened on 24 February 1964 (Figure 3.12) (Pollard & Harper, 2009: 414). In July of 1964, following the construction of the station, the town of 'Lapstone' was officially named by the Blue Mountains City Council, incorporating *"the area to the south of Glenbrook... 'Lapstone Estate' and a number of adjoining reserves"* (Govt Gazette, 1964: 2049). The name 'Lapstone Hill' was in use in the early 1800s, deriving from the shape of water worn stones in the area, from the bed of the Nepean River. These stones were recognised by travellers and workers in the Blue Mountains area as resembling lap

stones used by cobblers to shape the leather (Blue Mountains Association of Cultural Heritage Organisations Inc, 2015: 13).

The Lapstone Station building is a simple functional face-brick building on the Up platform with limited facilities on the Downside (Pollard & Harper, 2009: 414).



Figure 3.12 Arthur Hand at Lapstone Station (1964) (Source: Lewis, 2014).

4 Physical Analysis

Lapstone Station is aligned north-south within the railway cutting, the township is on the west side of the line, while to the east, the land is natural bushland; there is an unformed walking track trough the site of Edinglassie. This track is utilised by pedestrians and mountain bikers, and it is also infrequently used by Endeavour Energy to access infrastructure for maintenance (Figure 4.1 – Figure 4.3). Primary, vehicle and pedestrian, access is from the west, via Explorers Road, where there is a commuter carpark to the south-west of the station with one DDA car space, clearly marked. The car park is on a moderate slope falling towards the east and the station. A small road reserve is also located at the eastern end of Dawes Place; this area is proposed to be utilised as a laydown area during construction (Figure 4.4 and Figure 4.5).

Pedestrian footpaths from the carpark and adjoining roads connect to stairs, ramps and the footbridge to the Up Platform 1 and across to the Down Platform 2, from which the walking track is accessible (Figure 4.6 – Figure 4.10). The footbridge is characteristic with steel beams and stringers supporting a concrete deck and stair runners (Figure 4.11 and Figure 4.12). The footpath from the carpark has 1960s kerbing and, set into the concrete of the path from Explorers Road are a series of small square features. These may be related to a previous interpretation; the Blue Mountains City Council have been contacted regarding these features and currently there is no known information about their purpose (Figure 4.13 and Figure 4.14).

The Platform 1 building is a simple, blonde face-brick structure with cantilevered awning that houses a waiting room, staff office with ticketing window, storeroom and toilet facilities. Inside the station building there are some moveable heritage items including two commemorative plaques (mounted in 1990 and 2014) and a timber rollover indicator board likely dating to the establishment of the station in 1964 (Figure 4.15 to Figure 4.16). Platform 2 is provided with a shelter comprising a flat corrugated Colorbond roof, supported on steel posts set in concrete and a black Colorbond wall on the east and south sides, with gaps at the top and bottom (Figure 4.11).

As identified above in Section 2.3, two heritage items are within the immediate vicinity of Lapstone Station. The Sedimentary Dykes (Item LOO2) is aligned along the western length of Platform 1; and has been identified as having good integrity. The Site of Edinglassie (Item A112) is located to the east of the RailCorp land and comprises natural bushland traversed by dirt walking tracks; the building no longer exists (Figure 4.17 to Figure 4.22).



Figure 4.1 Looking north from Platform 2 showing station building and platforms. The footbridge can be seen in the background.



Figure 4.3 Dirt track through bushland adjacent to Platform 2.



Figure 4.5 View of the grassed area at the end of Dawes Place looking west.



Figure 4.2 View of the platforms looking south from the footbridge.



Figure 4.4 View of commuter carpark looking south; the DDA park can be seen in the foreground.



Figure 4.6 View of station entrance, looking north, showing access via footpath from the commuter car park (left) and steep ramp to footbridge (right).



Figure 4.7 View of ramp to footbridge looking north. Note: the planter box to the west is to be removed to accommodate the DDA ramp.



Figure 4.9 View looking south of footpaths to station entrance.



Figure 4.11 View from Platform 1 looking north east towards the footbridge and stairs to the sheltered seating area on Platform 2.



Figure 4.8 View rom Platform 2 looking west. The fence alongside the ramp leading up to the footbridge in the background.



Figure 4.10 Entrance to station building and Platform 1.



Figure 4.12 View from base of stairs on Platform 2 to footbridge



Figure 4.13 1960s bull nosed brick kerbing on footpath from commuter carpark.



Figure 4.15 Commemorative plaques inside station building Left: 'Lapstone Station Upgrading Commissioned by the Honourable Mr Bruce Baird' (1990). Right: 'Lapstone Station 50th Anniversary' (2014).



Figure 4.14 Example of the square panel set into the concrete footpath from Explorers Road.



Figure 4.16 Timber rollover indicator board inside station building.



Figure 4.17 View from Platform 2 looking north-west at the sandstone railway cutting on Platform 1 and the Sedimentary Dykes in the vicinity of the footbridge.



Figure 4.18 Eastern elevation of the sandstone railway cutting on Platform 1, north of the footbridge.

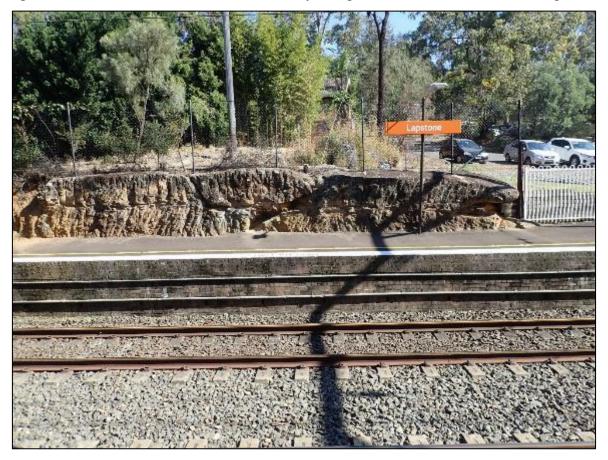


Figure 4.19 Eastern elevation of the sandstone railway cutting and sedimentary dykes south of the Lapstone Station building, south-east of the car park.



Figure 4.20 Eastern elevation of the sandstone cutting, showing the extent of the sedimentary dykes at the south end of Platform 1.



Figure 4.21 Views from the bushland to the east of Platform 2 looking west, back towards the Platform.



Figure 4.22 Looking east to the adjacent bushland from the stairs to Platform 2.

4.1 Archaeological Potential

The proposed construction of the new lift will be within the rail corridor (Lot 1, DP 1111718), which extends for 11m east of the Platform 2 stairs. However, some vegetation disturbance and clearance will be required up to a distance of 20m to facilitate access and construction. Thus, the development will extend approximately 9m into the curtilage of the archaeological and/or terrestrial item, the Site of Edinglassie, immediately to the east. The former house of 'Edinglassie' is no longer extant; the archaeological potential is likely to be limited to the site of the house and its local environment. The site of 'Edinglassie' house is approximately 350m north-east of the proposed construction of the lift on Platform 2, it is unlikely that relics associated with the Edinglassie property will be present. If relics are uncovered during construction, the procedures contained in TfNSW's *Unexpected Finds Guideline* would be followed (TfNSW, 2019).

The archaeological potential in the precinct of Lapstone Station has been assessed as low. As such, AMBS concurs with Niche's previous assessment of archaeological potential of the Lapstone Station precinct:

There are no known or expected archaeological features within the station grounds. Past aerials show this section of the rail was surrounded by bushland prior to the construction of the station, with no clearing or construction in the surrounding area. This makes the potential for archaeological relics likely nil. The land immediately to the east of the station is listed on the Penrith LEP as an archaeological site, however the house of the estate it is named for was located some distance away from the station in what is now the suburb of Leonay. Potential relics are therefore likely to be isolated artefacts without associated stratigraphy. (Niche, 2018:15).

4.2 Analysis of Impacts

The physical condition of the Lapstone Station has been assessed by TfNSW as non-compliant with the DDA Act and DSAPT requirements; as such the following additional scope options were proposed for the TAP-3 upgrade:

Option 1 – Lifts to Existing Footbridge (2 Lifts) Option 2 – Lift to Existing Footbridge (1 Lift & Ramp Access)

As noted above, Option 2 is preferred and although some aspects of the design have not been finalised, the dimensions of the lift, including associated landing to be constructed on Platform 2 will be approximately 16.5m long, 3m wide, and 10.5m high. The following addresses potential impacts to heritage items in the vicinity of the current scope of works Option 2.

4.2.1 Lapstone Station Precinct:

The Lapstone Station, nor any part of it, has not been identified as having heritage significance and as such the proposed works will not have a detrimental effect on the station, platform buildings or footbridge. There is likely to be a short-term impact on the local amenity during the construction period, in particular with the removal of vegetation, increased vehicular activity and temporary laydown areas.

4.2.2 Site of Edinglassie (A112):

Although construction of the proposed lift on Platform 2, on the eastern side of the station, is within the rail corridor there will be a minor impact on the local amenity of the natural bushland area. This will be as a result of clearance of vegetation to a distance of approximately 9m within the curtilage of the Site of Edinglassie. However, the proposed development will not have a significant negative impact on the heritage values of the Site of Edinglassie. It should be noted that the archaeological potential of the development footprint has been assessed as low.

4.2.3 Sedimentary Dykes (L002):

The limited circulation space on Platform 1 is such that it will be difficult to find an area of sufficient width to which the current seating can be relocated. In order to comply with the DSAPT conditions, it has been suggested that the seating be cut into the bedrock at three separate locations, one at the south end, and two at the northern end of the platform (see Section 1.2 above). Each of these seating locations will include removal of a substantial section of the rock face from the top of the cutting down to the top of the seat; 460-500mm above the platform. Each section cut into the bedrock will have a depth of 600mm and length of 2,700mm. Removal of three sections of sandstone cutting will have an adverse impact on the identified heritage values of the Sedimentary Dykes.

5 Assessment of Heritage Impact

Whilst Lapstone Station is not a listed heritage item, the *Sedimentary Dykes (LOO2)* and the *Site of Edinglassie (A112)* have identified local environmental and heritage values. The sandstone railway cutting of the *Lapstone Monocline Group*, encompassing the *Sedimentary Dykes*, has identified historical, aesthetic, scientific and technical significance, contributing to the landmark qualities for which the Blue Mountains landscape is renowned. The *Site of Edinglassie* holds significance as it housed a prominent historical figure in the establishment of the Australian legal system, Sir Francis Forbes, who served as the Chief Justice of the NSW Supreme Court from 1824 to 1837.

The impacts of the proposed TAP-3 upgrade to Lapstone Station on local heritage values of the Lapstone Station precinct and listed heritage items in the vicinity is assessed below.

The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:

The TAP-3 upgrade complies with current safety requirements within the metropolitan rail network, as such the works respect the significance of the continuing safe operation of the rail network.

The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:

Lapstone Station is not a listed heritage item; however, its construction did adversely affect the *Sedimentary Dykes*, and the current proposal will have an adverse impact on the Dykes:

• a key aspect of the sandstone railway cutting of the *Lapstone Monocline Group* and the *Sedimentary Dykes* at Lapstone Station is their visual presence in the landscape. The scope of works includes installation of the seating cut into the bedrock of the sandstone cutting in three separate locations; one at the south end, and two at the northern end of the platform. The removal of three vertical sections of the sandstone cutting will have an adverse impact on the heritage significance of the *Sedimentary Dykes*.

The removal of three vertical sections of the *Sedimentary Dykes* at Lapstone Station is an irreversible action that will have an adverse impact on the significance of the Dykes; however, there will not be a significant impact on the *Lapstone Monocline Group* in its entirety. TfNSW are intending to employ a local artist or craftsmen to assist in developing the design of the proposed seating; this will contribute to a minimisation of negative aesthetic impacts on the dykes. The improved circulation area and improved platform and commuter safety, in accordance with DDA and DSAPT requirements, provides some mitigation against the loss of heritage significance of the *Sedimentary Dykes*.

The following sympathetic solutions have been considered and discounted for the following reasons:

The 'Do Nothing' option has not been considered as this represents no change and thus commuter circulation would continue to be constrained.

The proposed seating to be cut into the fabric of the *Sedimentary Dykes* is necessary to accommodate seating on Platform 1, in order to comply with DDA and DSAPT safety conditions and ensure the ongoing safety of commuters at Lapstone Station and the Main Western Line.

5.1 Statement of Heritage Impact

The scope of works and methodology for the TAP-3 upgrade to Lapstone Station will not have a detrimental impact on the Lapstone Station and buildings, nor on the *Site of Edinglassie* to the east. The installation of seating cut into the sandstone cutting on the Up Platform 1, is irreversible and will have an adverse impact on the significance of the *Sedimentary Dykes*. The work is essential to ensure the on-going safety of Lapstone Station and the Main Western Line, in accordance with the safety conditions of the *Disability Discrimination Act 1992* (DDA) and *Disability Standards for Accessible Public Transport 2002* (DSAPT).

The proposed works associated with the TAP-3 upgrade of Lapstone Station, particularly the installation of seating cut into the *Sedimentary Dykes*, represents some loss of heritage significance. However, there will not be an adverse impact on the *Lapstone Monocline Group* in its entirety.

6 Managing Change

Heritage places contribute to an understanding and character of a community by providing tangible evidence of its history and identity. At times of change, they help to preserve a connection to the past, and can provide a point of reference for interpreting the past to future generations. Article 15 of the Burra Charter refers to managing *change*, which should be guided by the *cultural significance* of the *place* and its appropriate interpretation. The Burra Charter process also recognises that the development of preferred conservation options requires consideration of a range of other factors which could affect the future of a place. These include:

- requirements of the owner, in this instance RailCorp;
- the physical condition of the place; and
- statutory obligations or issues related to heritage and safety requirements.

The primary consideration for the TAP program is that Lapstone Station delivers an accessible, modern, secure and integrated transport facility. This includes making the station safe and accessible in accordance with current safety standards associated with the *Disability Discrimination Act 1992* (DDA) and *Disability Standards for Accessible Public Transport 2002* (DSAPT), while also ensuring the significance of the heritage in the vicinity is maintained and protected where possible.

6.1 Conclusions and Recommendations

The physical condition of the Lapstone Station has been assessed by TfNSW as non-compliant with the DDA and DSAPT. Following an initial assessment and as discussed above, Option 2 has been identified as preferred for the Transport Accessibility Program (TAP-3) upgrade.

The current scope of works will not affect the *Site of Edinglassie* (Item A112) and it is unlikely that relics associated with the property will be exposed. The proposed seating to be cut into the fabric of the sandstone cutting on Platform 1 at three locations will have an adverse impact on the significance of the *Sedimentary Dykes* (Item L002). This represents an irreversible loss of fabric, which will detrimentally affect the *Sedimentary Dykes*. There will not however, be an adverse impact on the *Lapstone Monocline Group* in its entirety.

General maintenance works and upgrades to ensure that railway stations meet safety standards are required to ensure public safety. The TAP-3 upgrade will adversely affect the original fabric of the sandstone railway cutting; however, these proposed works are necessary to ensure the ongoing viability of the station. To protect the heritage value of the *Sedimentary Dykes*, which is part of the *Lapstone Monocline Group*, the following recommendations are relevant:

Recommendation 1

The impact on the heritage values of the Sedimentary Dykes should be minimised where possible. The extent of the vertical removal of the fabric of the sandstone cutting should be minimised to achieve a vertical clearance of 2000mm (measured from the base of the seat at 460-500mm above ground level), unless there is demonstrable risk of collapse. This clearance measurement is in accordance with the safety standards outlined in AS1428.2 (2001) as well as the National Construction Code, Building Code of Australia Vol.1 (2016).

Recommendation 2

Although Lapstone Station is not an identified heritage item, the proposed works will result in an irreversible loss of sections of the sandstone cutting, and will have an impact on the heritage values of the Sedimentary Dykes. As such, an archival photographic recording should be prepared before any excavation of the cutting is undertaken; this recording should be undertaken in accordance with NSW Heritage Council's Photographic Recording of Heritage Items Using Film or Digital Capture (2006) guideline.

Recommendation 3

As recommended by Council, local stonemasons and/or artists should provide input into the design of the proposed seating cut into the bedrock of the Sedimentary Dykes to enhance the visual amenity of the seating. In addition, consideration should be given to including an interpretative plaque into the seating to identify and provide information on the Sedimentary Dykes and their significance.

Recommendation 4

The movable heritage items within the station building, in particular the commemorative plaques and the timber rollover indicator board, should be retained as a record of the history of Lapstone Station. The items may be included as part of any future interpretation of the station.

Recommendation 5

Following the completion of the proposed development, a Public Domain Plan should be prepared, that notes consideration is to be given to the reinstatement of some features surrounding the station. These include the 1960s brick kerbing located at the proposed site compound area and the footpath from the carpark to the station entry, as well as the square panels set into the concrete footpath from Explorers Road.

Recommendation 6

Following completion of works, plantings should be reinstated where possible, to restore the visual amenity of the area. Plantings should be natives or native equivalents of exotic species originally planted within the station precinct. The development footprint will particularly affect vegetation in the lay down areas, as well as surrounding the new DDA compliant ramp and new car parking spaces.

6.2 Statutory Requirements

This assessment has determined that whilst the Lapstone Station precinct is not heritage listed, the two heritage items in the vicinity of the station are significant at a local level. The Sedimentary Dykes is a local heritage item that will be adversely affected by the proposed upgrade works. As such Blue Mountains should be consulted in accordance with Division 1 'Consultation', of the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP):

16. Consultation with public authorities other than councils

(1) A public authority, or a person acting on behalf of a public authority, must not carry out specified development that this Policy provides may be carried out without consent unless the authority or person has:

(a) given written notice of the intention to carry out the development (together with a scope of works) to the specified authority in relation to the development, and
(b) taken into consideration any response to the notice that is received from that authority within 21 days after the notice is given

As such, TfNSW should consult with the Blue Mountains City Council (BMCC) regarding the proposed development within the Lapstone Station precinct.

There are no approvals required under the provisions of the *Heritage Act 1977*.

Bibliography

Aston, N (2009) *Glenbrook and District: A History.* Glenbrook: Glenbrook and District Historical Society.

Australia ICOMOS (2013). *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*. Burwood, VIC: Australia ICOMOS.

Blue Mountains Association of Cultural Heritage Organisations Inc (July-August 2015) *Heritage Newsletter,* Issue 39, pages 13-14.

Blue Mountains City Council Heritage Register Review (2016) *Sedimentary Dykes* (Item L002). *Heritage Review (Draft Amendment 5 to LEP 2015): Council Report 19.* Available from: https://yoursay.bmcc.nsw.gov.au/22793/documents/46385> Accessed on 30/07/2019.

Branagan, D. F & Pedram, H. (1990) 'The Lapstone Structural Complex, New South Wales', *Australian Journal of Earth Sciences*, 37(1), pp.23-36.

Currey, C. H. (1966) 'Forbes, Sir Francis (1784-1841)', *Australian Dictionary of Biography*. Available from: <http://adb.anu.edu.au/biography/forbes-sir-francis-2052> Accessed on 31/07/2019.

Government Gazette of the State Library of NSW (31 July 1964) *Blue Mountains City Council – Naming of Town Lapstone,* page 2049. Available from: http://nla.gov.au/nla.news-article220341399> Accessed on 31/07/2019.

Jack, I (2000b) Heritage Assessment of Glenbrook Village Centre (for the University of Sydney).

Jack, I. (2000a). Blue Mountains Heritage Register Review, Heritage History.

Jack, I. (2001) 'The Significance of the Route across the Blue Mountains in New South Wales'. Paper in *Making Tracks from Point to Pathway: The Heritage of Routes & Journeys*, Australia ICOMOS Conference Alice Springs, Australia, 23-27 May 2001. Available from: <http://www.aicomos.com/wp-content/uploads/The-Significance-of-the-Route-across-the-Blue-Mountains-in-New-South-Wales.pdf>

Lee, R. (1988). *The Greatest Public Work: The New South Wales Railways, 1848 to 1899*. Sydney: Hale & Iremonger.

Lewis, B. C. (26 February 2014) 'Lapstone Railway hits the big 50', *Blue Mountains Gazette*. Available from: https://www.bluemountainsgazette.com.au/story/2111720/lapstone-railway-hits-big-50/> Accessed on 31/07/2019.

Nepean Times (28 March 1957) *Land Speculators Criticised "Destruction of Trees"*, page 9. Available from: http://nla.gov.au/nla.news-article101361610> Accessed on 31/07/2019.

Nepean Times (17 March 1960) *Lapstone Railway Station,* page 1. Available from: http://nla.gov.au/nla.news-article100976637> Accessed on 31/07/2019.

Niche Environment & Heritage (2018), *Transport Access Program 3, Lapstone Railway Station, Lapstone. Heritage Impact Assessment.* Appendix L of the *Scoping Design Report – Lapstone Station.* prepared by Stantec for Transport for NSW (TfNSW).

Office of Environment & Heritage State Heritage Inventories:

Site of Edinglassie (Item A112). <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=22 60112> Accessed on 30/07/2019. L001: Lapstone Monocline <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=11 70643> L004: Lapstone Monocline <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=11 11706>

Parliament of New South Wales (2019). *Sir Francis Forbes (1784-1841).* Available from: https://www.parliament.nsw.gov.au/members/Pages/member-details.aspx?pk=222> Accessed on 31/07/2019.

Paddison, L. I. (1955). *The Railways of New South Wales 1855-1955.* Sydney: Department of Railways, NSW.

Pollard, N & Harper, G. (2009). 'Conquering Lapstone Hill: A Fresh Look at the History of the Emu Plains – Blaxland Section of the Main Western Line', *Bulletin of the Australian Railway Historical Society*, pp. 387-415.

Pratten, C & Irving, R. (1993). *Lapstone Hill Tunnel: Conservation & Management Plan*. Sydney: Art Gallery of New South Wales.

Royal Australian Historical Society, Sydney. (1932), *Journal and Proceedings*. Vol 18, part 5. Available from: http://nla.gov.au/nla.obj-599748558> Accessed on 31/07/2019.

Rowland, E. C. (1954) 'The Story of the New South Wales Railways', *Royal Australian Historical Society Journal and Proceedings*, 40(5), pp. 245-264.

Singleton, C, C. (1956). 'The Ascents of Lapstone Hill', *The Australian Railway Historical Society Bulletin*, 227, pp. 117-132.

SNC (2019) Project Description for REF specialist reports. Lapstone Station Upgrade. Rev G.

Stantec (2018) *Scoping Design Report – Lapstone Station*. Report prepared for Transport for NSW (TfNSW)

Transport for NSW (TfNSW), (2018) Lapstone Station Upgrade Preliminary Environmental Assessment (PEA), Transport Access Program 3 (TAP-3) Ref: 6102311.

Transport for NSW (TfNSW) (2019) Unexpected Heritage Finds Guideline, DMS-SD-115, Sydney.

Australian Government Department of the Environment and Energy (2019) World Heritage Places-GreaterBlueMountains.Availablefrom:<https://www.environment.gov.au/heritage/places/world/blue-mountains>Accessedon26/09/2019.