Throwing Stones and Mending Their Ways: The local politics of quarrying, road making and stone use.

Dr. Susan Walter, Archives Coordinator, Bendigo Regional Archives Centre © BRAC 2023

Every day we move through landscapes that have been defined by, and created with stone, but much of it is easily overlooked. Stone is an ancient material used for millennia by mankind to alter nature's landscapes for his own purpose and the work involved in using it can be easily taken for granted and underestimated. Finding adequate resources of suitable quality is only the beginning.

Bluestone is a well-known stone used in historic Victorian buildings. It is a form of basalt created by extrusive lava flows from our ancient volcanic landscapes. For a long time, basalt has been the stone of choice in Victoria for breaking down into gravel (also known as road metal), due to its durability and prolific sources within the state. Not all local councils had easy access to basalt rocks, however, which forced them to try granite or sedimentary rocks or pay an often-hefty price for transport. Even the suitability and durability of basalt varied according to it sources, and those best suited for building were not necessarily also suitable for creating durable or affordable road surfaces. Further complications can arise when issues around transport, handling, processing, law, architectural design, and even social attitudes are brought into the mix.

This article contains some of the local and sometimes quirky stories that can be found on what happened when stone, politics and people were combined.

A Short History of Road Making.

Local roads can easily be taken for granted - until they need maintenance or improvements or impinge on our daily activities. While road design and drainage are key areas that determine how well a road functions, another is the material used to construct them. Aggregate, gravel or "road metal" as it was often referred to, in the form of crushed rock is essential in determining the ability of a road to withstand traffic. In the days before bitumen roads, the metal rims of the wheels of horse-drawn vehicles put significant pressure on road metal and in the wrong conditions would grind it down, creating a dust problem in dry weather and mud in wet weather. Finding sources of good hard road metal was essential if councils were to minimise their expenditure on roads, and in this respect the Borough of Sandhurst (later Bendigo City Council) was no different.

Road making is an ancient art, as the remains of paved Roman roads in parts of Europe attest, but roads of this nature were expensive and labour intensive and beyond the reach of rural councils in colonial Victoria. The basic principle was to have the centre of the road higher than the verges (i.e. convex in shape, also known as the camber of the road), place large stones as a foundation (i.e. pitching or cobbling) and smaller broken stones as an upper layer which could be replaced as it wore down.¹ The 'Turnpike' (toll road) system, introduced in England from the 1650s, charged a levy on those wishing to use vehicles on public roads. This triggered a slow evolution towards effective road management including the design of roads and the materials used in their construction.² Protests by inhabitants over turnpike roads, and evasion of tolls became commonplace, however the introduction of mail distribution by stagecoach and the growing exchange of produce between communities demonstrated the value of public roads.

¹ Thomas Aitken. *Road Making and Maintenance: A Practical Treatise for Engineers, Surveyors, and Others*. London: Charles Griffin and Company, 1907 (2nd Ed.): 1-6.

² Aitken. Road Making and Maintenance, 1907: 8-10.

The methods developed and introduced by John Loudon Macadam (1756-1836) and Thomas Telford (1757-1834), Scottish pioneers of 'good road construction', also made a vast difference to the improvement and repair of roads.³ Macadam is probably more renowned in Australia than Telford, through the term 'macadamised roads' in reference to the 'thorough drainage and carefully prepared material, the bed being formed of broken stone'.⁴ Macadam's approach can be summarised as:

To put broken stone upon a road, which shall unite by its own angles so as to form a solid hard surface. It follows ... that when the material is laid upon the road it must remain in the situation in which it is placed without ever being moved again, and what I find fault with in putting quantities of gravel on the road is that, before it becomes useful it must move its situation and be in constant motion. The distinctive novelty of Macadam's system ... was to substitute small angular stones, prepared from larger pieces, for the large rounded stones then generally made use of in road repairs.⁵

The Victorian colonial government also introduced the system of toll roads on specifically proclaimed 'main' roads, such as the Mount Alexander Road from Melbourne.⁶ Typically the local councils erected and managed the toll booths and either passed the funds on to the colonial government who then spent the funds on the roads from where the money originated, or directed the Councils to spend the money on specific roads. The funding for 'local' (i.e., non-main) roads was raised by charging a rate on the occupants of land within declared urban and rural councils. The origins of many early Victorian councils lie in the formation of Road Boards, created to instigate the construction and maintenance of local roads.⁷ This does not, of course, mean that those elected to represent the rate payers on a Council had any real practical skills, knowledge or understanding of road making and repairs in local circumstances, or employed people with those skills. As we shall see, the City of Bendigo certainly faced its own set of challenges.

A Council Experiment

In February 1866 Bendigo had a dust problem. At that month's meeting, the Mayor of Sandhurst Borough Council moved that tenders be called for the supply of 4,000 yards of road metal to be broken from stone similar in quality to that which was then lying at the Town Hall. The metal was proposed to be laid onto the streets not more than a mile in any direction from Pall Mall. The Town Surveyor said that this would cost a minimum of £1,500 and that 4,000 yards alone would be needed to metal Pall Mall 'from Knight's corner to the Black Swan Hotel and in View Place and View Bend'.⁸ The Mayor's aim was to experiment to see if laying the metal would help to resolve the dust problem and the Council voted in favour of the experiment to use stone instead of the 'mixture of one-third pebbles and two-thirds clay and slate' it typically used on the roads in its 'cheap and dirty

³ Aitken. *Road Making and Maintenance*, 1907: 10-27.

⁴ "Macadamised." Mount Alexander Mail (Castlemaine), 14 January 1898: 3.

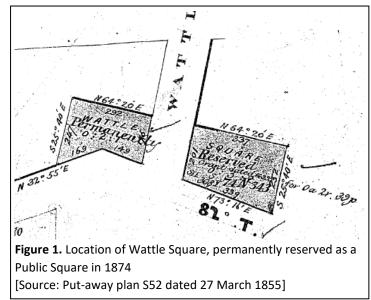
⁵ Aitken. *Road Making and Maintenance*, 1907: 12.

⁶ "Main Roads." Victoria Government Gazette, 5 September 1854: 1988

⁷ For example, read: An Act to establish Road Districts and Shires and generally to provide for the administration of local affairs without the limits of Boroughs 1863 (No. 176) (VIC); An Act for making and improving Roads in the Colony of Victoria 1853 (No. 40) (VIC); An Act for the establishment of Municipal Institutions in Victoria 1854 (No. 15) (VIC); An Act to Amend an Act intituled "An Act for Making and Improving Roads in the Colony of Victoria". 1854 (No. 29) (VIC); An Act to Amend and Consolidate the Laws relating to Municipal Corporations 1869 (No. 359) (VIC); An Act to establish a Board of Land and Works 1857 (No. 31) (VIC); Country Roads Act 1912 (No. 2415) (VIC); Local Government Act 1874 (No. 506) (VIC).

⁸ "Sandhurst Borough Council." *Bendigo Advertiser*, 24 February 1866: 2; PROV, VPRS 16269/P1, City of Sandhurst, Council Minutes, Unit 2, 23 February 1866.

system of dust and mud-making'.⁹ In March the Council accepted the tender of J L Hughes for £1,450 for the 4,000 yards and within a week men were observed breaking the stone, described as 'hard in texture', from Wattle Square (corner of Wattle and High Street) (Figure 1).¹⁰ Wattle Square was Gazetted as a 'Public Square' under the control of the Sandhurst Municipal Council in 1861 so clearly the Council were experimenting with stone taken from a designated public park.¹¹ The Park was permanently reserved from sale in 1874, having also been



occupied by the Golden Freehold Gold Mining Company in 1871.¹²

The stone extracted from Wattle Square would not have been volcanic in nature judging by the events which followed the above reports, and the surface geology of the district being primarily sedimentary in nature.¹³ The men were still breaking up the stone in early April 1866, the work requiring spall hammers and a lot of physical effort.¹⁴ The task of laying the broken stone on the road itself commenced on 3rd April 1866 at View Point and the local media hoped the contractor would be able to complete the whole of Pall Mall and View Point before winter to permit the new surface to set before the wet weather began.¹⁵ The Town Surveyor (George Fletcher, also employed as the Town Clerk) had concerns that a shortage of water would prevent the new stone from binding and Councillor Edward O'Keefe recommended the sections of road not yet metalled be 'picked' to try and encourage better binding. The surveyor was also instructed:

to procure a few yards of the best metal, from the basalt rock, which could be got either from Harcourt or Malmsbury, for the purpose of testing its durability as compared with the metal now being laid down in Pall Mall. The experiment would, he believed, satisfy the public on the subject, as there appeared to be a question of the durability of the present metal.¹⁶

¹⁰ "Sandhurst Borough Council." *Bendigo Advertiser*, 10 March 1866: 3; PROV, VPRS 16342/P1, City of Sandhurst, Committee Minutes, Unit 4 (page 439); "Metalling the Roads." *Bendigo Advertiser*, 15 March 1866: 3; "The New Road Metal." *Bendigo Advertiser*, 2 April 1866: 2.

⁹ "The Sandhurst Council and Road-Making." *Bendigo Advertiser*, 26 February 1866: 2.

¹¹ PROV, VPRS 227/P1, Department of Crown Lands and Survey, Registers of Inwards Correspondence, Unit 6, 1861 Register D, Page 425, Registered Item 6227, Registered 18 July 1861; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 6 September 1861: 1701.

¹² "Private Advertisements." *Victoria Government Gazette*, 27 October 1871: 1881-1882; "Lands Excepted from Occupation for Mining Purposes." *Victoria Government Gazette*, 20 February 1874: 361; "Lands Proposed to be Permanently Reserved from Sale." *Victoria Government Gazette*, 13 March 1874: 535; "Lands Permanently Reserved from Sale." *Victoria Government Gazette*, 21 August 1874: 1566; PROV, VPRS 227/P1, Unit 27, 1874 Register N, Page 45, Registered Item 343 registered 30 January 1874.

¹³ Department of Jobs, Precincts and Regions (Victoria). Earth Resources – GeoVic – Explore Victoria Online. Interactive map. ttps://gsv.vic.gov.au/sd_weave/anonymous.html, 2021. (Accessed 5 August 2021).

¹⁴ "The New Road Metal." *Bendigo Advertiser*, 2 April 1866: 2.

¹⁵ "Metalling the Streets." *Bendigo Advertiser*, 4 April 1866: 2.

¹⁶ "Sandhurst Borough Council". *Bendigo Advertiser*, 5 May 1866: 3.

There appears to have been some public disquiet that the stone being used on the contract was not the best available for the job. At the Council meeting on 18 May 1866, the mayor moved that 100 yards of basalt metal be purchased and spread on Pall Mall, perhaps in a high-impact area near the Shamrock Hotel, as an experiment. While the Surveyor 'believed that although the metal from Harcourt or Malmsbury would not be found to answer one bit better than the metal the Council were now spreading in Pall Mall' he though the action advisable and would hopefully satisfy the public.¹⁷ Councillor O'Keefe was unconvinced at the need for experiment, however, having tested the durability of the Malmsbury and Harcourt metal 'by the machine in the Municipal Green Yard in McCrae street, and the basalt was ground to powder, while metal of the kind now being spread in Pall Mall was almost unbroken'. O'Keefe convinced his fellow Councillors to witness the testing of the stone in the municipal yard before they voted on the motion. The results of the test of Malmsbury bluestone were convincing enough for the motion to be withdrawn, although there was no report on the suitability of the Harcourt granite.¹⁸ O'Keefe also successfully recommended that the metal already spread in Pall Mall be covered with two or three inches of gravel because he did not think it would bind properly without it.

Whether Edward O'Keefe actually had any formal training in road making is not known, but he certainly had experience in road construction. He had previously worked in mining operations in Blackwood and Bendigo. By 1857 he had established himself as a local road contractor, initially working on the Mount Korong Road, before becoming a councillor for Sandhurst in 1860.¹⁹ Whether he had any formal training in road making is not known, but he certainly had experience in road construction. But whatever the road-making methods were in Bendigo in 1866, there were clearly problems that needed to be solved. O'Keefe was, however, correct in his assessment of Malmsbury bluestone for road making purposes. Not all basalts are hard and break into angular pieces when crushed, and although by 1866 Malmsbury bluestone had a strong reputation as a building stone which could be easily worked and carved, it was these very properties which did not make it resistant to road traffic.²⁰

The *Bendigo Advertiser* usually quite critical of the state of the town's roads, determined that by using the Wattle Square stone Bendigo Council had 'mended their ways' and had spared the residents the usual 'plague of dust' created by the typical use of 'tailings and sludge'.²¹ But they could not understand why this metal, which had looked an 'immense change for the better' was then covered with the 'darling tailings' and buried out of sight under O'Keefe's direction. It was suggested that O'Keefe could 'keep the tailings as ballast for railways and tramways, for which they are, no doubt, well adapted, and not thrust them upon our streets to be an everlasting nuisance'. Councillor Moore unsuccessfully made an effort to have the same Wattle Square stone spread on the main road through Long Gully by giving an 'account of 'the dust nuisance in Long Gully, caused by the rubbish laid on the streets under the old system of what was facetiously termed road making'.²² It was suggested by the *Bendigo Advertiser* that the Mayor, with Councillor O'Keefe, should be 'condemned to reside in that portion of Long Gully described by Councillor Moore during

¹⁷ "Sandhurst Borough Council." *Bendigo Advertiser*, 19 May 1866: 2.

¹⁸ "The Qualities of Road Metal." Bendigo Advertiser, 30 May 1866: 2.

¹⁹ "Death of Mr. Edward O'Keefe." *Bendigo Advertiser*, 18 April 1876: 2; *Bendigo Advertiser*, 10 April 1857: 3; *Bendigo Advertiser*, 1 October 1857: 3; "Original Correspondence." *Bendigo Advertiser*, 18 May 1858: 3; "Declaration of the Poll." *Bendigo Advertiser*, 12 January 1860: 2.

²⁰ See: Susan Walter, *Malmsbury Bluestone and Quarries: Finding Holes in History and Heritage*. PhD Thesis, Federation University Australia, 2019.

²¹ "The Council Mending Its Ways." Bendigo Advertiser, 28 May 1866: 2.

²² "The Council Mending Its Ways." Bendigo Advertiser, 28 May 1866: 2.

next summer. They would be cured of their absurd predilection for the cheap and nasty system of making the roads.' A traveller, the newspaper argued, 'whose disagreeable business it is to pass through the dust lane between the shops of Long Gully, must shut his mouth and compress his nostrils and hold his breath until he has passed through the clouds of pulverised dirt that form a large portion of the atmosphere which the constituents of Councillor Moore inhale.'²³

By October 1868 the big road making experiment on Pall Mall was deemed a failure by the *Bendigo Advertiser* and the 'binding' of the surface only created more dust to bind the eyes of the 'unfortunate public of Sandhurst'.²⁴

As a postscript to this story, Councillor Edward O'Keefe died in 1876 and, perhaps ironically, upon his grave in the White Hills cemetery is a monument primarily composed of Malmsbury bluestone (Figure 2).²⁵

Reserving Stone

The very idea that, regardless of quality, stone from Malmsbury or Harcourt should be used on Bendigo's Roads ignored the simple logic that transporting and handling such material was expensive. The railway line would have made the process quicker, but the quarries at Malmsbury and Harcourt were not close to the actual lines and while it was cost-effective to transport large blocks of stone for building purposes, the same could not be said for road metal. Whether large blocks of waste stone were brought to Bendigo and then broken up by hand and spread *in situ* or stone broken at the quarries was loaded onto carts and transported to a railway station, shipped to Bendigo then offloaded



Figure 2. O'Keefe monument, White Hills Cemetery, VIC [Photo: Susan Walter, 2017]

slowly and spread on roads, neither would have been time or cost efficient. Road metal from Big Hill, for example, was being spread on View Place in 1871, the cost of carting it from the railway station being the 'considerable expense' of two shillings per load.²⁶ What Bendigo needed was local quarries of hard gravel.

To this end, it is not surprising that in June and August 1866 Sandhurst's Town Clerk wrote to the Victorian government requesting some two acres of Crown land be set aside for a stone quarry reserve.²⁷ This was approved and gazetted in September 1866 as a temporary reserve:

For the purpose of affording a supply of stone ... the site to be placed under the control of the Council of the Borough of Sandhurst, subject to the condition that the stone thereon shall be used for borough

²³ "The Council Mending Its Ways." *Bendigo Advertiser*, 28 May 1866: 2.

²⁴ "Down With the Dust." *Bendigo Advertiser*, 13 October 1868: 2.

²⁵ "Monument to Mr Edward O'Keefe." Bendigo Advertiser, 23 August 1876: 2; "The Late Mr O'Keefe's Monument." Bendigo Advertiser, 24 August 1876: 2

²⁶ "The New Road Metal." Bendigo Advertiser, 24 June 1871: 2

²⁷ PROV, VPRS 227/P1, Unit 11, 1866 Register N, Page 481, Registered Item 10990, registered 22 August 1866; PROV, VPRS 227/P1, Unit 11, 1866 Register N, Page 344 Registered Item 8327, registered 28 June 1866.



purposes only and that no contractor with the said council shall procure stone therefrom except on payment of the usual stone license fee. 28

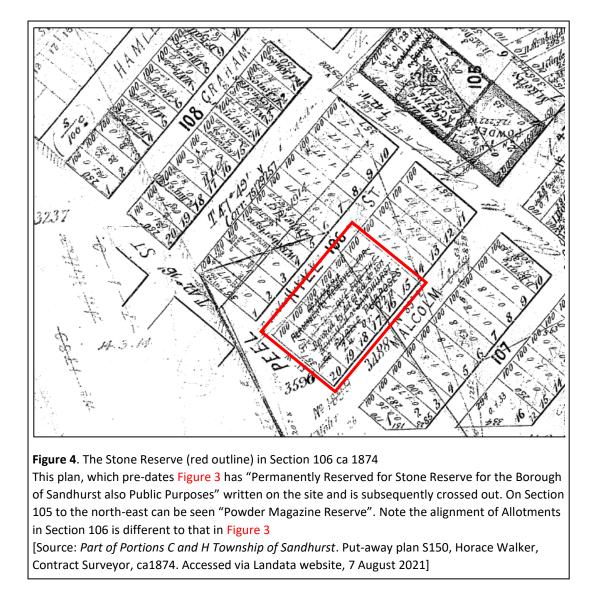
was located.

[Source: Bendigo, in Parish of Sandhurst Plan (Sheet 24) Department of Lands and Survey. Melbourne: Government Printer, 1960]

The reserve was located on allotments 15 to 20 of Section 106c Township of Sandhurst (Figure 3). This is at the aptly-named suburb of Quarry Hill, bounded by what is currently Amer, Peel, Malcolm and Russell Streets. At the time the reserve was created in 1866, the description refers to the allotments being bounded on the southern edge by 'Percy Street' which today is Malcolm Street.²⁹ When the quarry land was permanently reserved in 1874 (Figure 4), the bounding streets were recorded as being Malcolm, Peel, Hill and Russell, suggesting Amer Street was originally Hill Street.³⁰

²⁸ "Lands Reserved, Etc." Victoria Government Gazette, 18 September 1866: 2003.

²⁹ A search of the Goldfields Library Historic Rates Index suggests "Percy Street" is an error. This street name does not appear in the contemporary rate books and Percival Street is not near the stone reserve site. ³⁰ "Lands Reserved, Etc." Victoria Government Gazette, 18 September 1866: 2003; "Lands Proposed to be Permanently Reserved from Sale." Victoria Government Gazette, 13 March 1874: 535.



These formal stone reserves were common throughout Victoria. Stone reserves were also created in the parishes of Heathcote (1867), Huntly (1869), Eaglehawk (1870), Korong, Woodstock, and Campaspe (all 1873), Ravenswood (1874), Goornong (1876) to name a few.³¹ The benefit of these reserves was that they often gave local councils the opportunity to ensure they had adequate resources for road making without buying from, and potentially being exploited by, private quarries. There was one major flaw with this system, however. Despite the reserves being vested in the Councils, they were still Crown land and, as specified in the Sandhurst case above, the Victorian government still required any contractor who was engaged to obtain stone from the reserve specifically for council purposes, to pay for a quarrying license.³² While failure to do so could result in a case of trespass in the local court, such licences added to the costs of public road making.

³¹ "Lands Reserved, Etc." *Victoria Government Gazette*, 16 July 1867: 1270; "Lands Reserved, Etc." *Victoria Government Gazette*, 15 January 1869: 95; "Lands Reserved, Etc." *Victoria Government Gazette*, 14 April 1870: 612; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 6 June 1873: 1016; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 21 February 1873: 350; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 3 October 1873: 1722; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 3 October 1873: 1722; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 24 April 1874: 765; "Lands Temporarily Reserved from Sale." *Victoria Government Gazette*, 12 May 1876: 894.

³² "Quarrymen's Licences." *Bendigo Advertiser*, 5 September 1879: 2.

In July 1873 the Council (now the City of Bendigo) applied to the Victorian government to have the quarry permanently reserved from sale and exempt from the *Mining Statute* (also referred to as the *Goldfields Act*).³³ Again the colonial government obliged, and the land, as 'a site for supply of stone and for Public purposes' was permanently reserved from sale in November 1874.³⁴ But the stone in this quarry would also have only been sedimentary in nature and if the first experiment with such stone did not work, then the long term viability of the new quarry would also be questionable. How long this quarry was active has not been determined. By 1898 the reserve was revoked, and the land sold at a Crown land auction.³⁵ Repurchased by the Victorian government in 1910, the site became the Quarry Hil State School.³⁶

Parochial Stone Throwing: Axedale Versus Malmsbury Bluestone.

Axedale has long been known for its bluestone quarries. Located on the basalt plains of the Campaspe River valley east of Bendigo, they are some of the closest sources of bluestone for the city. The Bald Hill/Woodstock volcanic flows near Marong are a similar distance away from Bendigo and stone was occasionally carted from there to Bendigo, including rock used in the Rosalind Park fernery in 1882 and 1886 (Figure 5).³⁷ Despite being some 14 miles (22 kilometres) away by road, the Axedale quarries were described by the *Bendigo Advertiser* in 1873 as being 'such a short distance from this city'.³⁸ Bluestone has been quarried at Axedale since at least 1861 when their Catholic church was built from bluestone quarried 'on the spot' and by 1873 these quarries had become an 'extensive' source of 'the most magnificent bluestone in the colony' of 'almost inexhaustible' supply sufficient to 'build a pyramid or a city of the most palatial structure'.³⁹ Readers of the *Bendigo Advertiser* might have been agreed with the newspaper's hype, despite similar claims being made about Lethbridge and Malmsbury bluestone, however Bendigo today is not generally known for its bluestone buildings and the predicted palatial city of bluestone did not eventuate.

In 1874 Malmsbury bluestone was also said to have an inexhaustible supply, but the best building stone from these quarries had been consumed by the late 1920s.⁴⁰ Its reputation as an excellent building stone is demonstrated by its use, from 1856, in buildings and structures around Victoria,

³⁸ "Axedale Bluestone." *Bendigo Advertiser*, 2 April 1873: 2.

 ³³ PROV, VPRS 227/P1, Unit 26, 1873 Register K, Page 299, Registered Item 13920, registered 9 July 1873;
PROV, VPRS 227/P1, Unit 25, 1873 Register I, Page 591, Registered Item 28188, registered 8 December 1873;
PROV, VPRS 227/P1, Unit 25, 1873 Register I, Page 625, Registered Item 29830, registered 24 December 1873.
³⁴ "Lands Permanently Reserved from Sale." *Victoria Government Gazette*, 27 November 1874: 2081.

³⁵ "Sale (No. 7814) of Crown lands in Fee Simple." *Victoria Government Gazette*, 27 November 1874. 2081.

[&]quot;Government Notices." Bendigo Advertiser, 17 September 1898: 6.

³⁶ Education Department of Victoria. *Vision and Realisation: A Centenary History of State Education in Victoria: Volume 2*. Melbourne: Government Printer, 1973: 463.

³⁷ D. P. Cherry and H. E. Wilkinson. Bendigo, and Part of Mitiamo: 1: 100 000 Map Geological Report. Geological Survey of Victoria Report 99, 1994; "City Council." *Bendigo Advertiser*, 4 February 1882: 1; PROV, VPRS 16342/P1, Committee Minutes, Unit 16, 3 February 1882 (page 257), 17 February 1882 (page 264), 5 May 1882 (page 290) and 19 May 1882 (page 295); PROV, VPRS 16342/P1, Committee Minutes, Unit 18, 22 January 1886 (page 67); PROV, VPRS 16936/P1, City of Bendigo, Inward Correspondence, Unit 18, letters of 13 February 1882, 20 March 1882 and 19 May 1882 regarding Marong stone; PROV, VPRS 16936/P1, Inward Correspondence, Unit 123, letters of 13 January 1886 and 15 January 1886.

³⁹ "New Catholic Church at Axedale." *Bendigo Advertiser*, 7 December 1861: 2.

⁴⁰ *Kyneton Guardian*, 25 February 1874: 2; McInerny, Kathleen. "The Building Stones of Victoria, Part II. The Igneous Rocks." *Proceedings of the Royal Society of Victoria*, 41, no.2 (1929): 147-148. Axedale bluestone is not mentioned as a building stone currently in use at the time this article was published.

New South Wales, South Australia, Tasmania, Western Australia and New Zealand.⁴¹ Similarly, the Lethbridge bluestone quarries were described in 1874 as 'almost inexhaustible' and 'celebrated' for producing 'splendid bluestone', yet these quarries were also quiet by the 1930s.⁴² Lethbridge stone was used in Melbourne by 1874, Newcastle NSW by 1878 and sold in Adelaide in South Australia by 1881 and Sydney by 1883, however apart from a suggestion in 1913 that it was to be used in New Zealand, it does not appear to have spread much further than this.43 Brunswick bluestone was also used in New Zealand in 1876.⁴⁴ Part of the reason the Malmsbury bluestone was so widely used was the introduction to Victoria in 1867 of machinery that could saw bluestone. Being a highly workable stone and relatively close to Melbourne, Malmsbury became the favoured source of stone used to create products like paving, gravestones, steps, and windowsills.⁴⁵ Similar stone sawing machinery was soon operating in Malmsbury itself (water-powered) and in



Figure 5. The steps to the rockery, Bendigo fernery, ca 1904 [Source: *Australasian (Melbourne)*, 17 September 1904: 31

Bendigo at Messrs Finn and Quinn (steam powered) in Dowling Street, both in 1874.⁴⁶

It was the pitching (cobbling) and paving of the City's cattle yards and streets, and the introduction of the stone-sawing plant at Bendigo that triggered one round of what can be termed 'parochial stone throwing' in 1874. Mr Ward refused to sign a contract with the City Council in March 1873 because he wanted to supply bluestone pitchers for the cattle yards from Malmsbury, and not from Axedale, at a cost of £0-8-11 per yard, the Axedale stone supposedly being 'better' and thus more costly.⁴⁷ Whether Ward's supply was coming directly from Malmsbury was not recorded, but if produced mechanically at that time, the pitchers would have been made in Footscray. Rather than

⁴⁴ "Extensive Blue Stone Contract." Kyneton Guardian, 20 September 1876: 2.

⁴¹ Susan Walter. "Victorian Bluestone: a proposed Global Heritage Stone Province from Australia" in J T Hannibal, S Kramer and B J Cooper (eds.) *Global Heritage Stone: Worldwide Examples of Heritage Stones*. Geological Society, London, Special Publications.

⁴² "News and Notes." *Ballarat Star*, 13 April 1874: 2.

⁴³ "News and Notes." *Ballarat Star*, 13 April 1874: 2; "Newcastle Borough Council." *Newcastle Herald and Miner's Advocate* (NSW) 26 September 1878: 2; "Business Cards." *Evening News* (Sydney) 16 November 1883:

^{1;} The Express and Telegraph (Adelaide), 29 July 1881: 4; "Lethbridge." Geelong Advertiser, 23 July 1913: 5.

⁴⁵ Walter, *Malmsbury Bluestone and Quarries:* PhD Thesis, 2019.

⁴⁶ "The Malmsbury Stone Sawing Company Works." *Bendigo Advertiser*, 24 February 1874: 2; "Sandhurst Steam Stone Sawing and Polishing Works." *Bendigo Advertiser*, 25 May 1874: 2.

⁴⁷ "City Council." Bendigo Advertiser, 1 March 1873: 2; "City Council." Bendigo Advertiser, 8 March 1873: 2.

accept Ward's conditions, the Council called for new tenders, which resulted in Ingham and Co. being granted a contract for the same work at the higher price of £0-10-0 per yard.⁴⁸ In April 1873 the *Bendigo Advertiser* described the new Savings Bank in Hargreaves Street as it neared completion, and specifically noted that the foundation walls were composed of Harcourt granite, and the front steps and entrance porch paving all produced from Malmsbury bluestone.⁴⁹ No public criticism of these vital materials appears to have been made in the newspapers, however the same cannot be said for the Council's decision to use some of the same Malmsbury bluestone paving in Williamson Street in early 1874.

On 27 February 1874 the City Council sought the Malmsbury Stone Sawmill's price for flags (paving stones) for Williamson Street and at the next meeting approved the calling of tenders for the work.⁵⁰. On 27 March, after they received tenders from The Footscray [Stone-sawing] Company, Mr Ingham, Finn & Co. and the Malmsbury [Stone-sawing] Company, they awarded the contract to the Malmsbury Company for £0-13-6 per yard, having put the names of Finn and Malmsbury Company in a hat to decide between the two identical tenders⁵¹. On the same day they also voted to accept a further tender from the same Mr Ingham for more pitched crossings, this time at the higher price of £0-13-0 per yard.⁵² This is most likely Napthali Ingham who operated the bluestone quarries at Axedale.⁵³

Awarding the contract to the Malmsbury company was quite unacceptable to "Ratepayer" who wrote to the *Bendigo Advertiser* believing that the Council should have shown preference to the local company, insisting that the Councillors:

Were placed in that position to look after the best interests of the district, and to promote its welfare and prosperity in every fair and legitimate manner, and consequently it ought to be their duty in deciding upon tenders, not merely to look at the actual price sent in, but it ought to also look at the collateral advantages or disadvantages which would be likely to arise from the acceptance of any particular tender.⁵⁴

"Ratepayer" asserted that **all** the money paid by the Council would be spent locally if Finn, Quinn & Co. were given the job, whereas only the portion paid to install the stone would be spent locally by them contracting the Malmsbury Company. This ignores the fact that Finn, Quinn and Co. was intending to purchase the stone in the rough from Malmsbury, hence some of their own income would be spent outside of the district. He also argued that being rate payers, Finn, Quinn and Co. had more rights to be considered for the work than the Malmsbury Company since the latter would not have contributed to the maintenance of local roads. "Ratepayer" did not consider that if the stone was sent from Malmsbury in the rough (i.e. in an uncut block) and then sawn in Bendigo, freight charges would apply to the portion of the block that was wastage after arrival in Bendigo, and by using this method the Bendigonians set to benefit from paved footpaths would only pay a minor contribution towards the roads in Malmsbury that were being constantly damaged by carting stone

⁴⁸ "City Council." *Bendigo Advertiser*, 22 March 1873: 2-3.

⁴⁹ "The New Savings Bank." Bendigo Advertiser, 29 April 1873: 2.

 ⁵⁰ PROV, VPRS 16342/P1, Committee Minutes, Unit 11, 27 February 1874 (page 2) and 13 March 1874 (page 6).
⁵¹ PROV, VPRS 16936/P1, Inward Correspondence, Unit 13, letters of 9 April 1874 and 10 April 1874; *Bendigo Advertiser*, 30 March 1874: 2.

⁵² PROV, VPRS 16342/P1, Committee Minutes, Unit 11, 27 March 1874 (page 9).

⁵³ "Strathfieldsaye Shire Council." *Bendigo Advertiser*, 20 September 1872: 3; "Perjury Case." *Bendigo Advertiser*, 8 July 1891: 4; "Funeral." *Bendigo Advertiser*, 3 May 1909: 1; his name is sometimes spelt Napthalie.

⁵⁴ Bendigo Advertiser, 30 March 1874: 2.

from their quarries to the railway station for the benefit of other towns.⁵⁵ The extra income earned by the Malmsbury Company for supplying sawn stone could have contributed rates for their local roads. "Ratepayer" also did not even consider that someone in Bendigo who received an income from the works in Williamson Street might dare to purchase something from Melbourne, instead of Bendigo, with that money, such as the materials or equipment purchased to saw the stone at Bendigo.

It is interesting that "Ratepayer" was more perturbed by the location in which the stone would be processed, as opposed to the source of the stone itself, perhaps in recognition that there were fewer alternatives. As a lone voice in this protest, he may simply have been a disgruntled unsuccessful tenderer, and the majority of residents, who had to tread the otherwise rough 'unbinding gravel' footpaths of Bendigo, did not really care where the improved pavements came from.⁵⁶ It might not be a coincidence that the letter sent in protest to the Council by Finn, Quinn & Co. on the same issue bears many similarities in content to the letter sent by "Ratepayer" to the *Bendigo Advertiser*.

Another "Ratepayer" had written to the *Bendigo Advertiser* in December 1871 bemoaning the 'cruel state of the footpaths in Sandhurst' and could not conceive why the Council did not enforce the residents to pay half the costs of installing pavements in the front of their properties in View Point and Mitchell Street, the Council having considered using Footscray bluestone at the price of £0-13-0 per yard and paid £0-15-0 for flagging in Mitchell Street in 1872.⁵⁷ Yet another "Ratepayer" objected to paying for the 'very nice' sawn flagging in July 1872.⁵⁸ Probably tired of the various complaints of a few vocal ratepayers, in July 1872 the Council voted to consider experimenting with an asphalt composite in Bull Street so long as the property holders agreed they would be paying for the entire cost of bluestone flagging if the experiment failed, the Town Clerk being sure the composite would not last more than four years.⁵⁹

The remnant original sawn bluestone paving still visible in several places in Victoria (e.g., Kyneton, Malmsbury, Melbourne) is a testament to the enduring qualities of bluestone for footpaths and while asphalt and concrete pavements eventually became the norm, bluestone paving is once more in vogue in parts of Victoria. It is rare to find surviving original bluestone paving in Bendigo; that surrounding the former Post Office in Pall Mall (Figure 6) is an uncommon example.

By 1875, Malmsbury bluestone was also used in the construction of a new fountain for Mr Lazarus at his West End Hall property, the new gas works in Williamson Street and on Mrs John Reed's grave at the Bendigo Cemetery.⁶⁰ "Ratepayer" however appears to have been silent on this use of Malmsbury bluestone in Bendigo, possibly because Finn and Quin were suppliers for at least two of these works.

 ⁵⁵ Kyneton Guardian, 2 July 1870: 2; "Malmsbury Borough Council." Kyneton Guardian, 14 August 1889: 3.
⁵⁶ "Footpaths." Bendigo Advertiser, 23 May 1872: 2.

⁵⁷ "Paving the Footpaths." *Bendigo Advertiser*, 25 December 1871: 1; "City Council." *Bendigo Advertiser*, 27 January 1872: 2.

⁵⁸ "Footpaths." *Bendigo Advertiser*, 1 July 1872: 3.

⁵⁹ "City Council." *Bendigo Advertiser*, 13 July 1872: 1.

⁶⁰ "Consignees of Goods by Railway." *Bendigo Advertiser*, 16 January 1875: 2; "Consignees of Goods by Railway." *Bendigo Advertiser*, 18 January 1875: 2; "Stone Work." *Bendigo Advertiser*, 20 April 1875: 2; "The Bendigo Gas Company's New Office." *Bendigo Advertiser*, 29 April 1875: 2; "The Late Mrs. John Reed." *Bendigo Advertiser*, 13 May 1875: 2.

In 1880 a railway line to Murchison via Heathcote was proposed.⁶¹ Advocates argued that if this line was built and ran through Axedale it would permit Mr Ingham to 'compete with the Melbourne trade for the supply of bluestone for building, channelling, and other purposes to all parts of the colony. In bluestone alone there would be an immense traffic on the line'.⁶² Bluestone for kerbing and channelling in Bendigo was already being sourced from the 'inexhaustible' Axedale quarries and an estimated 5,000 (cubic) yards of road metal could also be supplied were it not for the freight costs.⁶³ After much deliberation and public debate over the proposed route, tenders for this line were received in January 1887, and the successful tenderer for the Heathcote to Bendigo section, Andrew O'Keefe (son of Edward, above) commenced work in February that year.⁶⁴ The line opened in 1888, including a station at Axedale, so prior to this any Axedale stone used in Bendigo would have been freighted by road.⁶⁵



Figure 6. Bluestone paving surrounding the former Bendigo Post Office, Pall Mall. Probably Lethbridge bluestone. [Photo: Susan Walter, 2021]

During this period, Malmsbury bluestone had been

used in the Bendigo Town Hall improvements (1880), the new gates to the White Hills cemetery (1881), Rev. Dr Backhaus' grave (1884), the Convent of Mercy High School (1885), Quarry Hill State School (1885), and All Saints Church fence (1886).⁶⁶ All installed with barely a hint of local discontent from local ratepayers being expressed via the Bendigo newspapers. This was not the case, however, when work on the new public buildings (Post Office) in Pall Mall, built by the Victorian Government, commenced in 1882.

The site of the new buildings was approved, and plans forwarded to the Council for approval in February 1882.⁶⁷ Being the major source of funds for the project, the Victorian government had significant control over the construction of the buildings, however the site on Pall Mall was chosen by the Council after several years of public debate and administrative difficulties. Tenders were called for the foundations for the building in March 1882, with the contract for £13,072 being

⁶¹ "Proposed New Railway." *Riverine Herald* (Echuca-Moama), 24 June 1880: 3.

⁶² "The Proposed Heathcote Railway." *Bendigo Advertiser*, 6 September 1881: 3.

⁶³ "Proposed New Railway." *Riverine Herald*, 24 June 1880: 3.

⁶⁴ "The Sandhurst to Wandong Railway." *Bendigo Advertiser*, 11 January 1887: 2; "The Sandhurst to Heathcote Railway." *Bendigo Advertiser*, 3 February 1887: 2; "Death of Mr Andrew O'Keefe." *Bendigo Independent*, 14 December 1904: 3.

⁶⁵ "Opening of the Sandhurst to Heathcote Railway." *Bendigo Advertiser*, 2 October 1888: 3.

⁶⁶ "Town Hall Improvements." *Bendigo Advertiser*, 4 December 1880: 1; "The White Hills Cemetery." *Bendigo Advertiser*, 3 October 1881: 2; "Dr. Backhaus' Grave." *Bendigo Advertiser*, 22 November 1884: 2; "Diocese of Sandhurst." *Advocate* (Melbourne), 31 January 1885: 17; "Quarry Hill State School." *Bendigo Advertiser*, 4 February 1885: 3; "Improvements at All Saints' Church." *Bendigo Advertiser*, 26 May 1886: 2.

⁶⁷ "City Council." *Bendigo Advertiser*, 14 January 1882: 2; "City Council." *Bendigo Advertiser*, 4 February 1882: 1.

awarded to Richard Grant of Kyneton in May.⁶⁸ Works commenced in June, and while the foundations themselves were expected to take a year to complete, the whole structure was estimated to require four to five years.⁶⁹ A strike by stonemasons in April 1883 over a reduction in their wages delayed works, and while work on the foundations was said to be nearing completion in May of that year, they were still incomplete in September, partly due to the supply of stone.⁷⁰ During this phase of construction, the public began to raise questions about what type of stone would be used in the upper portions of the building, with suggestions that stone from the Stawell quarries should be considered.⁷¹

By January 1884 it was anticipated that brick and stucco would be used for the superstructure above 'the costly granite and bluestone foundations' which 'had cost between £12,000 and £14,000' and in anticipation local brick makers had already made 'a large number of bricks'.⁷² Tenders were called in March 1884, and a contract for £25,530 accepted by John Pigdon in June.⁷³ The memorial stone for the building was unveiled by the Victorian Governor, Sir Henry Loch, on 8th August that year, it being a piece of Harcourt granite from Blight's quarry and worked by local monumental mason, Peter Finn (Figure 7).⁷⁴ It was originally intended that the foundation stone would be of bluestone, but the council were informed by Pigdon in late July 1884 that he could not source a piece large enough, and the Town Clerk requested permission of the Public Works Department to use a piece of polished granite instead.⁷⁵ Napthali Ingham was however perturbed that Axedale bluestone was not used for the foundation stone, believing that he could have supplied a block of stone of the required size, and the public money which the Sandhurst ratepayers contributed in taxes should be circulated among their own people and working men, instead of spending money in Harcourt or even Lethbridge.⁷⁶ Like "Ratepayer" in 1874, Ingham had also fallen into the trap of forgetting that the Victorian government's contribution to the project was coming from revenue raised Victoria-wide. Perhaps conveniently Ingham also did not mention that both Axedale and Harcourt (approximately 23 kms away and on an existing railway line) were outside the Sandhurst Council boundaries, so in either circumstance locally-raised colonial revenue was being expended in another shire.

Ingham's criticism of the material used for the memorial stone appears to have triggered a wider examination of all the stone used in the building, with questions being asked in the Victorian Legislative Assembly over the choice of Lethbridge (165 miles away) and Malmsbury bluestone in the buildings. Joining in the parochial stone throwing, after stating that the Lethbridge stone was 'finer,

⁶⁸ "Tenders." *Victoria Government Gazette*, 31 March 1882: 778; "Government Tenders." *Bendigo Advertiser*, 5 May 1882: 3.

⁶⁹ "The Sandhurst Public Buildings." *Kyneton Guardian*, 7 June 1882: 2.

⁷⁰ "Strike of Masons." *Bendigo Advertiser*, 9 April 1883: 2; "The Masons' Strike." *Bendigo Advertiser*, 10 April 1883: 2; "Masons' Strike at Sandhurst." *Kyneton Guardian*, 11 April 1883: 2; "City Council." *Bendigo Advertiser*, 12 May 1883: 1; "City Council." *Bendigo Advertiser*, 7 July 1883: 1; "The Public Buildings." *Bendigo Advertiser*, 27 September 1883: 2.

⁷¹ "The Public Buildings." *Bendigo Advertiser*, 9 June 1883: 2; "Sandhurst Public Buildings." *Bendigo Advertiser*, 8 December 1883: 2; "Stawell Stone and the Public Buildings." *Bendigo Advertiser*, 29 December 1883: 2.

⁷² "The Public Buildings." *Bendigo Advertiser*, 5 January 1884: 2; "The Public Buildings." *Bendigo Advertiser*, 16 February 1884: 2.

⁷³ "Public Works Office, Melbourne." *Victoria Government Gazette*, 7 March 1884: 709; "Contracts Accepted." *Victoria Government Gazette*, 4 July 1884: 2016.

⁷⁴ "The Vice-Regal Visit." *Bendigo Advertiser*, 9 August 1884: 1.

⁷⁵ PROV, VPRS 16341/P1, Unit 8, City of Sandhurst, Letter Books 1884-1885. No. 149 telegram(?) dated 30/7/1884 regarding polished granite for memorial stone.

⁷⁶ "Something Rotten in Denmark." *Bendigo Advertiser*, 5 August 1884: 3.

and of closer grain, and with less faults in the facing when dressed' the Geelong Advertiser suggested that 'if Sandhurst prefers a possibly inferior article to oblige somebody in the district, why not humor the caprice, especially if it will save money to the State'.⁷⁷ The Minister for Public Works assured the Assembly that only 850 feet of Lethbridge stone was to be used for the steps and paved



Figure 7. Harcourt granite foundation stone of the Bendigo Public Buildings, unveiled in August 1884 [Photo: Susan Walter, 2022]

areas, compared to the 3,000 feet of Malmsbury stone used on the exposed parts of the building. The justification for continuing to use the latter stone, in preference to Axedale stone, was to ensure there was a colour match between the stone in the foundations and the superstructure.⁷⁸ Ingham does not appear to have commented on the use of Harcourt granite in the columns for the building, nor on *Bendigo Advertiser's* report on Finn and Co. of Bendigo being contracted to create polished Harcourt granite columns for a squatters residence in Tasmania or a bank in Melbourne in October 1884.⁷⁹ Both were private works, but not involving his own product (i.e. bluestone), rate payer's money or a product he could supply (i.e. columns).

The work on the new Public Buildings was reported in February 1885 to have been initially delayed due to an inadequate supply of bluestone from Malmsbury and Lethbridge.⁸⁰ Overall, the project was still expected to be completed on time, and were officially opened on 30 September 1887 by the Commissioner of Public Works, the Hon. John Nimmo, M.L.A (Figure 8).⁸¹ The completion of the Public Offices now meant that the much-needed new law courts could be constructed on the adjoining site.⁸² This triggered a new round of parochial stone throwing.

⁷⁷ "Parliament." *Geelong Advertiser*, 14 August 1884: 3.

⁷⁸ "Parliament." *Age* (Melbourne), 14 August 1884: 6; "Legislative Assembly." *Bendigo Advertiser*, 14 August 1884: 3.

⁷⁹ "Local Industry." *Bendigo Advertiser*, 8 October 1884: 2.

⁸⁰ "The New Public Buildings." *Bendigo Advertiser*, 7 February 1885: 2.

⁸¹ "Opening of the New Public Buildings." *Bendigo Advertiser*, 1 October 1887: 6.

⁸² "The Police Magistrate Protesting." *Bendigo Advertiser*, 26 July 1887: 2.

Tenders for the foundations of the new Bendigo courts were called in May 1890, and with a contract issued in June, work commencing in July.83 The foundation stone was laid by the Governor on 14 October 1890.84 In April 1891, as the foundation works were reported to be nearing completion, the Council sent a deputation to the Victorian government to lobby for the



Figure 8. Granite memorial stone for the opening of the Public Offices in Bendigo, 30 September 1887. This is on another face of the 1884 foundation stone. [Photo: Susan Walter, 2021]

allocation of funds to complete the superstructure.⁸⁵ The government declined, due to lack of available monies, which was possibly just as well since by May, as reported in the *Bendigo Advertiser*, works had been hampered by problems with the supply of Malmsbury bluestone and in August a lorry driver was injured when carrying a load of the stone to the building site.⁸⁶ At this point it was estimated that the foundations would now be completed in October or November. Tenders for the superstructure were finally called in March 1892, with the contract being awarded to David McCulloch and John McAlpine for £24,249 in June 1892.⁸⁷ Before the contract was awarded, a question was asked in the Victorian Parliament in late May if the Lethbridge bluestone specified in the tender could be altered to permit Axedale bluestone 'which was local and equally good'.⁸⁸ It was also noted that slate from Mintaro in South Australia was also specified to be used, in preference to the local Castlemaine Slate.⁸⁹

 ⁸³ "Tenders." Victoria Government Gazette, 9 May 1890: 1748; "The New Law Courts." Bendigo Advertiser, 12 May 1890: 2; "The New Law Courts, Sandhurst." Bendigo Advertiser, 25 June 1890: 2; "Contracts Accepted." Victoria Government Gazette, 11 July 1890: 2785; "The New Law Courts." Bendigo Advertiser, 30 July 1890: 2.
⁸⁴ PROV, VPRS 16936/P1, Inward Correspondence, Unit 31, letter of 12 September 1890; "The Visit of His Excellency the Governor. Second Day." Bendigo Advertiser, 15 October 1890: 3.

⁸⁵ PROV, VPRS 16936/P1, Inward Correspondence, Unit 33, letters of 21 April 1891 and 29 April 1891; "The New Law Courts." *Bendigo Advertiser*, 18 April 1891: 4.

⁸⁶ "The New Law Courts." *Bendigo Advertiser*, 25 April 1891: 4; "The New Law Courts." *Bendigo Advertiser*, 6 May 1891: 2; "Accident to a Lorryman." *Bendigo Advertiser*, 11 August 1891: 2.

 ⁸⁷ "Tenders." *Victoria Government Gazette*, 25 March 1892: 1481; "The Bendigo Law Courts." *Bendigo Advertiser*, 10 June 1892: 2; "Contracts Accepted." *Victoria Government Gazettes*, 29 July 1892: 3104.
⁸⁸ "Parliament of Victoria." *Bendigo Advertiser*, 26 May 1892: 3.

⁸⁹ "Castlemaine Versus Mintora Slate." *Bendigo Advertiser*, 27 May 1892: 2, it is erroneously referred to as Mintora slate.

By now Victoria was in the grip of a depression and work in the building trade was scarce. The specifications for the Law Courts also suggested or requested the use of Malmsbury bluestone. The Borough of Malmsbury, concerned about unemployed local quarrymen, wrote to their local member of the Legislative



Figure 9. Bendigo Court House "Opening Stone" from 10 February 1896, with the memorial carved into Malmsbury bluestone. [Photo: Susan Walter, 2022]

Assembly on 30th May, asking for his intervention in the matter regarding use of stone in the building.⁹⁰ A letter was soon received from Messrs Patterson and Gordon, M's.L.A., that they would attend to the matter, however the Public Works Department informed the Council in July that since the tender specifications did not regulate the contractor to obtain stone from any specific quarries, all that could be required was that any stone used had to be equal to Malmsbury stone.⁹¹ It was probably too late, anyway. By 1st June the Commissioner of Public works had agreed 'to remove the restrictive clause from the specifications' regarding Mintaro slate and the time for receiving tenders was extended.⁹² Upon hearing this news, a deputation from the Mintaro Slate Company visited the Commissioner, stating that the slate was introduced to Victoria in an undressed state and the work to dress it was undertaken in Victoria. The Commissioner 'replied that he had not promised a former deputation that Mintaro slate should be excluded from works in Victoria, but he wished to give local slate a fair play, and thought it should be used where good enough.⁹³ Whether any of the materials from Malmsbury, Axedale, Lethbridge, Castlemaine or Mintaro were 'good enough' to be used in the Courts is hard to determine. When the building was officially opened in February 1896 no description of the building, in terms of any stone used in the superstructure, was reported, other than the use of Stawell stone for the staircase leading to the Supreme Court, the use of which did not elicit any public comment through the Bendigo Advertiser.⁹⁴ In this instance stone from Axedale, Castlemaine, Malmsbury and Lethbridge had all been excluded from the public dialogue. The stone, located on the corner of the building adjoining the intersection with Pall Mall and Bull Streets, used to record the opening of the building, is the same material used in the decorative frieze on the top of

 ⁹⁰ Malmsbury Borough Council. Letter Book, Page 622, 30 May 1892 (copy at Malmsbury Historical Society).
⁹¹ "Malmsbury Borough Council." *Kyneton Observer*, 14 June 1892: 3; "Malmsbury Borough Council." *Kyneton Observer*, 12 July 1892: 2.

⁹² "The Axedale Quarries." *Bendigo Advertiser*, 1 June 1892: 2.

⁹³ "The Slate Question." *Bendigo Advertiser*, 2 June 1892: 2.

⁹⁴ "Opening of the New Law Courts." *Bendigo Advertiser*, 11 February 1896: 3.

the base course (repeated from the Post Office building) (Figure 9). Given the carved work in the stone, it is most likely Malmsbury bluestone.

The parochial attitudes to the use of stone in Bendigo from non-local sources were mostly targeted at public projects. When the new Catholic cathedral was being erected in 1897, the *Bendigo Independent* reported the use of Harcourt granite, Axedale bluestone, and stone (sandstone) from Barrabool and Warrenbayne near Geelong.⁹⁵ While mention was made of the probable freight costs resulting from transporting these materials to Bendigo, no criticism was made of the church or the architects for selecting these materials in the first place. A month later the same newspaper was explaining to the public how this edifice was contributing to the local economy through the use of bluestone from the Axedale quarries, supplied by Messrs Beebe and Mayne.⁹⁶ The Bendigo money spent on stone in Harcourt and Geelong had conveniently been ignored, though it is perhaps no coincidence that Beebe and Mayne regularly advertised their supply of Axedale bluestone in both the *Bendigo Independent* and the *Bendigo Advertiser* from October 1897 until at least 1901.⁹⁷

To identify further hypocritical parochialism, one also only needs to look at local cemeteries to see how local money was spent on the importation of marble from Italy and granites from Scotland to erect memorials to the dear departed. This leaves one burning question: is any gravestone erected to "Ratepayer" constructed only of Axedale bluestone?⁹⁸

Holes in History: Finding Quarries

If you already know about them, the quarries at Axedale are pretty easy to find on Google Maps and Google Earth. The road sign for Axedale Quarry Road is another clue. Documenting the history of these industrial sites through standard archival records, such as rate books, probates, and some land records, is, however somewhat of a challenge, especially if they are on private land. At first appearances, one could be forgiven for thinking that these historic holes were created recently. Newspapers are vital in piecing together their history. The following are brief accounts of some of the Axedale quarries and their operators.

Ingham and Deane:

We have seen above that Napthali Ingham was working with local bluestone, and probably operating a quarry at Axedale, from the early 1870s. In 1885, his quarry was described as being 'situated on the left hand side of the road to Heathcote, beyond the [Campaspe] river' on or adjoining Section B, parish of Axedale (Figure 10).⁹⁹ Ingham appears to have had a monopoly on Axedale bluestone for several decades, a situation which was not remedied until the mid-1890s.¹⁰⁰

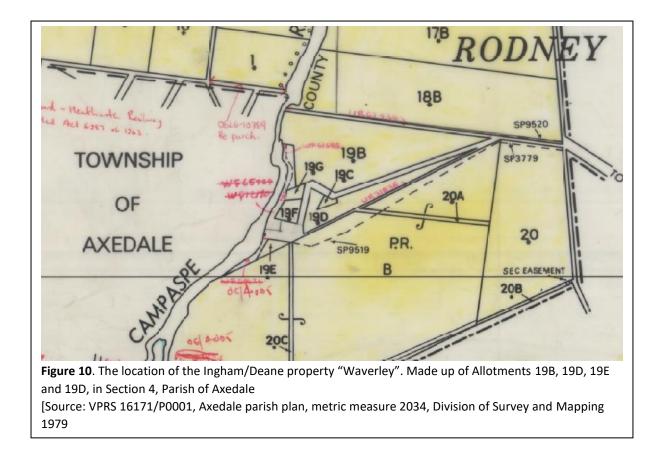
⁹⁵ "The New Cathedral." *Bendigo Independent*, 2 September 1897: 2.

⁹⁶ "Axedale Bluestone." *Bendigo Independent*, 12 October 1897: 2.

 ⁹⁷ Bendigo Independent, 13 October 1897: 3; Bendigo Advertiser, 13 October 1897: 2. These adverts run almost continually until (at least) Bendigo Independent, 9 January 1900: 1 and Bendigo Advertiser, 15 May 1901: 1.
⁹⁸ Peter Hoey Finn's grave in Bendigo Cemetery, for example, in principally of white marble and grey granite.

 ⁹⁹ "The Sandhurst to Heathcote Railway." *Bendigo Advertiser*, 12 June 1885: 3; "Prospectus." *Bendigo Advertiser*, 23 May 1888: 4

¹⁰⁰ "Tramway to the Bluestone." *Bendigo Advertiser*, 22 August 1889: 4; "City Council." *Bendigo Advertiser*, 25 August 1894: 6; PROV, VPRS 16936/P1, Inward Correspondence, Unit 42, letter of 30 August 1895 from Brasier and Boldt.



Napthali Ingham died in May 1909 and his estate was left to his wife Mary Ann, including large tracts of land in Axedale and Weston parishes.¹⁰¹ It is not known if the valuation of his land in the probate application or in the respective rates books took into account the value of his quarrying activities but no details of any quarry or quarrying business are recorded in the inventory of his estate, or in the Strathfieldsaye and McIvor Shire rate books. There is, however, a valuation given for cranes, quarrying tools and worked stone.¹⁰² The railway siding named after him is on the west side of Axedale Quarry Road in the parish of Knowsley.

When Mary Ann Ingham died at her farm "Waverley" at Axedale, the local land she owned was the same, but again no mention of any quarry or quarrying operations being located on the land she owned in the parishes of Axedale and Weston. Mary Ann left her real estate to her married daughter, Alice Louise Deane, wife of Victor Allen Deane, also of Axedale.¹⁰³ The Ingham-Deane property "Waverley" appears to be Allotments 19B, 19D, 19E and 19D, in Section 4, Parish of Axedale, located on the east side of the Campaspe, south of the McIvor Highway and in the vicinity of the former Quarry Hotel on Ingham Road (and located in McIvor Shire) (Figure 10).¹⁰⁴ By September 1921 Victor Deane was running "Waverley Quarries" at Axedale, and was seeking

¹⁰¹ "Obituary." *Bendigo Advertiser*, 3 May 1909: 5 (reported as John Ingham); "Obituary." *McIvor Times and Rodney Advertiser*, 20 May 1909: 2; PROV, VPRS 28/P0003, Probate and Administration Files, Item 112/148, Napthali Ingram (sic); PROV, VPRS 7591/P0002, Wills, Item 112/148, Napthali Ingram (sic).

 ¹⁰² PROV, VPRS 28/P0003, Probate and Administration Files, Item 112/148, Napthali Ingram (sic).
¹⁰³ "Deaths." Argus (Melbourne), 20 August 1920: 8; PROV, VPRS 28/P0003, Probate and Administration Files, Item 174/468, Mary A Ingham; PROV, VPRS 7591/P0002, Wills, Item 174/468, Mary A Ingham; Victorian Marriage Index, registration number 8574 of 1909.

¹⁰⁴ PROV, VPRS 28/P0003, Probate and Administration Files, Item 174/468, Mary A Ingham; this is the only property with a residence on it.

quarrymen and a quarry foreman.¹⁰⁵ This appears to be the first reference to Deane operating quarries at Axedale. A geological map surveyed in 1930 shows Deane's quarry was at the Ingham siding. This adjoined the former Heathcote railway line where it crossed what is now Axedale Quarry Road in the parish of Knowsley. (Figure 11). Whether Ingham or Deane opened this quarry is unclear but neither of them appear as occupying or owning this land in the McIvor Shire rate books.

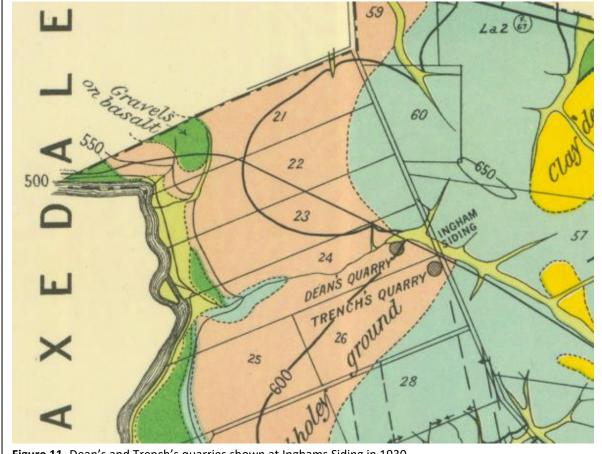


Figure 11. Dean's and Trench's quarries shown at Inghams Siding in 1930 [Source: Geological Survey of Victoria, *Knowsley, County of Rodney*. Geological parish plan, surveyed by J. J. Caldwell, 1930 and issued in 1956]

Victor Deane did not remain in the quarrying and stone crushing business for much longer. In April 1922, Victor was accused of underpaying his quarry workmen.¹⁰⁶ In a 1929 storm which damaged some of the quarry buildings at Inghams siding, Deane's stone barn as also impacted.¹⁰⁷ He was approximately 58 years of age in 1936 when he successfully sued another contractor, and was fined for having in his possession an engine belt which belonged to Henry Trench.¹⁰⁸ In September 1937 Axedale Bluestone Quarries was registered as a company to take over the business of Victor Deane who was in debt.¹⁰⁹ This company offered all of the company's plant, buildings and machinery for

¹⁰⁵ "Situations Vacant." *Argus* (Melbourne), 24 September 1921: 26; Bendigo Regional Archives Centre (BRAC), City of Bendigo, Uncatalogued 20th Century Correspondence, Box K, Axedale Quarries file, letter of 15 January 1934.

¹⁰⁶ "Bendigo and District." Argus (Melbourne), 15 April 1922: 13.

¹⁰⁷ "A Violent Wind Storm." Age (Melbourne), 27 December 1929: 7.

¹⁰⁸ "Bendigo and District." *Argus* (Melbourne), 27 February 1936: 5; "Bendigo and District." *Argus* (Melbourne), 3 December 1936: 15; age estimated from his age of death in 1948 aged 70.

¹⁰⁹ "Company Registrations." *Age* (Melbourne), 2 September 1937: 8; PROV, VPRS 932/PO, Trading Company Registration Files, Unit 1220, Item 21096 Axedale Bluestone Quarrying Company Pty Ltd

sale in October 1938, primarily located on leased quarry land.¹¹⁰ The sale advertisement states 'Executors desiring to realise' which suggests that Alice Deane was selling some of the land she inherited from her father. When she died in 1948, Alice only owned the Waverly farm property, which would confirm the 1938 realisation of their assets.¹¹¹

Brasier and Co.

Contractors and wood merchants, Stephen Riley, George Brasier and Albert Boldt were producing bluestone road metal, pitchers and kerbing for the district's roads by 1894.¹¹² In 1896 they asked if the City Council would pay for an allotment at the Bendigo Railway Station upon which they could store bluestone and supply the Council's contractors with materials.¹¹³ By July 1900 they were operating a stone-crushing machine at the railway yard at Axedale.¹¹⁴ Following the accidental death of Boldt in 1901 when the new King's bridge over Bendigo Creek collapsed, Frederick Nelson joined Riley and Brasier in their firewood and bluestone enterprise (Figure 12).¹¹⁵ In 1900 and 1901, the City Council decided to undertake improvement works on the Back and Bendigo Creeks.¹¹⁶ The latter included paving the creek from Charing Cross to Harney's bridge with bluestone pitchers, the contract for which was awarded to Pickles and Smith in March 1901. Work was well underway on Bendigo Creek by May, however by July, Brasier and Co. was experiencing high demand for Axedale bluestone for road metal and pitchers, and this included the materials needed for paving the creeks.¹¹⁷ The newspapers reported that there were 30 men working at the quarries but more were needed to ensure Pickles and Smith could continue their work on the Bendigo Creek. There was supposedly a shortage of quarrymen, despite the pay rate, and a shortage of railway trucks during grain harvesting season, although the latter was denied by Victoria Railways.¹¹⁸

Brasier and Co. continued to win contracts to supply Bendigo City Council with bluestone road metal and in 1902 they forwarded a sample of screenings they believed would be an excellent binding material and which they could deliver on the roads at seven shillings per cubic yard.¹¹⁹ Given their standard contract rate for broken metal was eight shillings and six pence per yard, this was clearly a cheaper material. Napthali Ingham's request in 1904 that the City Council transfer onto Brasier and Co. his contract to supply the Council with bluestone kerbs and pitchers suggests his quarrying

¹¹¹ Victorian Death Index, registration numbers 2055 (Victor Allen Deane) and 23480 (Alice Louisa Dean) of 1948; PROV, VPRS 28/P0003, Probate and Administration Files, Unit 4839, Item 410/118 Alice Louisa Deane, ¹¹² "City Council." *Bendigo Advertiser*, 25 August 1894: 6. There is no probate for Victor Deane.

¹¹⁰ "Tenders." Argus (Melbourne), 24 October 1938: 13.

¹¹³ PROV, VPRS 16936/P1, Inward Correspondence, Unit 44, letter of 20 November 1896.

¹¹⁴ "Our Country Service." *Bendigo Advertiser*, 6 July 1900: 3. Note: These men are often recorded in newspapers and other records as Reilly, Brazier and Bolt.

¹¹⁵ PROV, VPRS 24/P0000, Inquest Deposition Files, Item 1901/702, Albert Boldt 15 May 1901; "A Shocking Accident." *Bendigo Advertiser*, 15 May 1901: 2; "Work at the Axedale Quarries." *Bendigo Independent*, 8 July 1901: 2; "Municipal." *Bendigo Advertiser*, 2 January 1904: 4; "Bendigo." *Age* (Melbourne), 30 October 1936: 20; PROV, VPRS 28/P0003, Probate and Administration Files, Item 285/802, Frederick John Nelson died 29 October 1936.

¹¹⁶ Bendigo Advertiser, 26 September 1900: 4; "City Council." Bendigo Advertiser, 20 October 1900: 3; "The Back Creek Walling Contract." Bendigo Independent, 17 November 1900: 3; "More Loan Works." Bendigo Advertiser, 16 February 1901: 4; "City Council." Bendigo Advertiser, 23 March 1901: 4.

 ¹¹⁷ "Paving Bendigo Creek." *Bendigo Advertiser*, 8 May 1901: 2; "Paving the Bendigo Creek." *Bendigo Advertiser*, 4 June 1901: 2; "Work at the Axedale Quarries." *Bendigo Independent*, 8 July 1901: 2.
¹¹⁸ "Ordinary Meeting." *Bendigo Advertiser*, 13 July 1901: 3

¹¹⁹ "City Council." Bendigo Independent, 15 March 1902: 8; "City Council." Bendigo Independent, 3 May 1902: 8

activity was diminishing or he no longer had access to stone of a suitable quality for pitchers at a competitive price.¹²⁰



Figure 12. Riley, Brazier (sic Brasier) and Nelson's Quarry at O'Neill's property. Bluestone quarry – Axedale. [Source: Mitchell Library, NSW]

While Brasier and Co. (now also calling themselves Brasier and Co. and Riley) continued to supply the City of Bendigo with Axedale metal, kerbs and pitcher throughout the 1910s, in August 1920 they advertised that their partnership was dissolving and their whole quarrying and stone-breaking operations were up for sale.¹²¹ The items on offer included the right to the Axedale railway siding, and the lease of quarries. Interestingly, the date of the auction coincided with the death of Mary Ann Ingham at her farm "Waverley" at Axedale.¹²²

Trench & Co.

With respect to Brasier's quarry, the Strathfieldsaye rate books show that in the 1921-22 rate year, a **house** in Axedale township formerly occupied by Riley and Co., quarrymen, became occupied by Joseph Senior, the owner being Trench & Co. Pty Ltd.¹²³ This is possibly the quarryman referred to as 'Job Senior' who, when giving evidence at the Licenses Reduction Board's hearing into the Raglan

¹²⁰ "City Council Tenders." *Bendigo Independent*, 31 August 1904: 2; "City Council." *Bendigo Advertiser*, 1 October 1904: 3.

 ¹²¹ "City Council." *Bendigo Advertiser*, 31 August 1917: 3; "Sales by Auction." *Age* (Melbourne), 26 July 1920: 2.
¹²² "Deaths." *Argus* (Melbourne), 20 August 1920: 8; PROV, VPRS 28/P0003, Probate and Administration Files, Item 174/468, Mary A Ingham; PROV, VPRS 7591/P0002, Wills, Item 174/468, Mary A Ingham; Victorian Marriage Index, registration number 8574 of 1909.

¹²³ PROV, VPRS 16136/P0001, Strathfieldsaye Shire, Rate Books, Unit 43, Page 28 and Unit 44, Page 28.

Hotel in July 1916, stated that he was 'a sub-contractor for the company controlling the quarries. The quality of the bluestone could not be better, while there was a plentiful supply of the stone. He had never had less than ten men working for him up till three month's ago'.¹²⁴ Similarly a 'Joe Senior' advertised for quarrymen for the Axedale quarries in 1911 and 1912.¹²⁵ The name Trench and Co., as owners and/or occupiers of the same house in Axedale, continues to be recorded in the Strathfieldsaye rates books between the 1922/1923 and 1927/1927 rate years, after which it is recorded as Henry Lepore Trench until 1941/42.¹²⁶ Trench's actual quarry is recorded on a 1956 geological plan of Knowsley parish (surveyed in 1930), and shown to be adjoining Dean's (sic Deane's) quarry at Inghams Siding (Figure 11).¹²⁷ When Trench died in 1938 no land in Axedale district is included in the inventory of his estate, which suggests that any quarry land owned or occupied was part of Trench and Co.

Reid, 1910

In 1910 Mr G. H. Reid was operating a quarry at Axedale, but further details are sparse other than advertisements seeking quarry workers and offering 1,000 cubic yards of spalls to the Marong Shire Council in June.¹²⁸ The fact that Brasier and Co. were still in business and supplying road metal in 1910 to 1912, suggests Reid was operating at another site, possibly at Ingham's quarry.¹²⁹

Bendigo City's Quarry

By the early 1900s, some Victorian districts and councils were facing noticeable problems with accessing road-making material. This included finding suitable resources, or the capacity to purchase and transport them within their financial constraints. Some of the solutions included the removal and crushing of drystone walls for road metal, operating their own stone-crushing machinery, and the purchase of quarry sites – all mainly designed to cut out the middleman. For example, between 1911 and 1913, the Glenlyonshire purchased some bluestone pitchers from a disused mining site, planned to purchase or lease quarry land at Drummond and Coomoora and had purchased a stone-crushing machine.¹³⁰ The latter was being used in Little Hampton, Lyonville and Drummond, partly with 'disused' stone walls ¹³¹ Similarly, the Borough of Malmsbury received the donation of stone walls for road making in 1912.¹³² In 1919, the Metcalfe Shire was red-faced when their workmen mistakenly removed a stone wall from Mr Bassett's property in Elphinstone, when sourcing

¹²⁴ "Licenses Reduction Board. *Bendigo Independent*, 26 July 1916: 3.

¹²⁵ "Situations Vacant." Age (Melbourne), 23 February 1911: 4; "Situations Vacant." Age (Melbourne), 21 February 1912: 7.

¹²⁶ PROV, VPRS 16136/P0001, Rates Books, Unit 45 page 53, Unit 46 page 27, Unit 47 page 25, Unit 48 page 25, Unit 49 page 25, Unit 50 no page number, rate No. 895 and page 25, Unit 51 no page number, rate number 895, Unit 51 page 25, Unit 53 page 25, Unit 54 page 26, Unit 55 page 25, Unit 56 page 25, Unit 57 page 25, Unit 58 page 26, Unit 59 page 27, Unit 60 page 28, Unit 61 page 28, Unit 62 page 29, Unit 63 page 29, Note: In the latter years the occupier is George Inglis, the owner being the executors of Henry Lepore Trench. His actual name appears to be Henry La Poer Trench.

¹²⁷ Geological Survey of Victoria, *Knowsley, County of Rodney*. Geological parish plan, surveyed by J. J. Caldwell, 1930 and issued in 1956.

¹²⁸ Age (Melbourne), 15 March 1910: 4; "Marong Shire Council." Bendigo Independent, 3 June 1910: 6.

¹²⁹ "Shire of Kerang." *Kerang New Times*, 16 December 1910: 4; "Municipality of Deniliquin." *Independent* (Deniliquin), 7 July 1911: 4; "Shire of Kerang." *Kerang New Times*, 11 February 1913: 4.

 ¹³⁰ "Municipal Quarry Sites." *Kyneton Guardian*, 3 October 1911: 2; "Municipal Quarries." *Kyneton Guardian*, 7 November 1911: 2; "Glenlyonshire Council." *Kyneton Guardian*, 7 November 1911: 3; "Glenlyonshire Council." *Kyneton Guardian*, 7 November 1911: 3; "Glenlyonshire Council." *Kyneton Guardian*, 7 November 1911: 2; "An Expensive Tool Chest." *Kyneton Guardian*, 4 April 1912: 2.

¹³¹ "Successful Stone Crusher." *Kyneton Guardian*, 6 June 1912: 2.

¹³² "Malmsbury Borough Council." Kyneton Guardian, 24 December 1912.

materials to build a retaining wall on a creek.¹³³ Melton Shire Council were also purchasing drystone walls to crush for road making materials between 1924 and 1934.¹³⁴ Marong Shire purchased two quarry sites for a total of £310 in 1924 and 1925.¹³⁵ For the City of Bendigo, the road metal problems faced in the 1860s once more came to the fore in the early twentieth century.

In 1906 the City Surveyor reported that to make the best roads, the best materials, used at an appropriate depth were needed, however the Axedale stone was too expensive to achieve this.¹³⁶ At this time they were also using what was termed 'reefstone' and/or a type of local sandstone.¹³⁷ Axedale metal was costing the Council 11 shillings and six pence to lay it to a four-inch depth, but for the best results at an 8 inch depth it would cost 23 shillings. Councillor Harkness suggested the Council purchase and operate its own portable stone crushing machine and either purchase or lease a quarry. After much discussion, the Council agreed to advertise for any offers to sell or lease a quarry near Bendigo.¹³⁸ The surveyor was also asked to report further on the practicalities of road making if Council purchased a portable stone breaker. Tenders were received from Napthali Ingham to sell 30 acres of guarry land at Axedale for £20 per acre and from T. Burke for 30 or 40 acres guarry land, within a mile of Axedale railway station, for a 10 to 30 year lease, at £55 yearly.¹³⁹ In addition, James Blair (probably the Victorian architect who was also the clerk of works for the new Catholic cathedral) submitted a 'lengthy letter', advocating the use of granite, and enclosed a sample for road-making purposes.¹⁴⁰ In March several of the councillors and the town clerk and city surveyor ventured out to Axedale to visit quarries and potential quarry land and during the visit they saw Brasier and Co.'s stone crushers at work. Seeing the benefits of the machine the consensus was that the Council would consider borrowing a stone crusher for a trial period but did not consider any of the quarry sites worthy of investing public money.¹⁴¹ With respect to Blair's suggestion of trialling Harcourt granite for roadmaking, after the Council sought the advice of the Victorian Public Works Department on the subject they decided against using granite on their roads.¹⁴² In June 1906 Brasier and Co. offered to reduce their prices for road metal if the Council would extend their contract by five years.¹⁴³

In October 1915, the *Bendigo Advertiser* reported that road metal from St Albans near Melbourne was being spread at the Bendigo Railway Station and good shed by the Railways Department (a distance of over 70 miles by road).¹⁴⁴ The reporter supposed that this was due to centralisation and the Department wishing to keep quarrymen in Melbourne employed at the expense of less vocal

¹³³ "Metcalfe Council Notes." Kyneton Guardian, 27 February 1919: 2.

¹³⁴ "Melton Shire Council." *Bacchus Marsh Express*, 5 July 1924: 4; "Melton Shire Council." *Melton Express*, 28 July 1928: 3; "Melton Shire Council." *Melton Express*, 7 May 1932: 1; "Melton Shire Council." *Bacchus Marsh Express*, 28 July 1934: 3.

¹³⁵ BRAC, Shire of Marong, Ledger (covers years 1924 and 1925), Folio 157, Purchase of Property & Land Account, for Woodstock Quarry and Rawlins at Bridgewater.

¹³⁶ "Improving Our Roads." *Bendigo Advertiser*, 13 January 1906: 5.

¹³⁷ BRAC, City of Bendigo, 20th Century Correspondence, Box 61, 1906 Surveyors Reports, reports dated 16 August 1906,7 September 1906, 13 September 1906 and 11 October 1906.

¹³⁸ "Notices." *Bendigo Independent*, 30 January 1906: 3.

¹³⁹ "Road Making in Bendigo." *Bendigo Advertiser*, 10 February 1906: 3.

¹⁴⁰ "Tenders." *Bendigo Advertiser*, 10 June 1991: 1.

¹⁴¹ "In Search of a Quarry." *Bendigo Independent*, 29 March 1906: 2; "Roadmaking." *Bendigo Advertiser*, 5 May 1906: 4.

 ¹⁴² "Road Making in Bendigo." Bendigo Advertiser, 10 February 1906: 3; "Road-Making." Bendigo Advertiser, 31
March 1906: 4; "Roadmaking." Bendigo Advertiser, 5 May 1906: 4.

 ¹⁴³ BRAC, City of Bendigo, 20th Century Correspondence, Box 61, 1906 Surveyors Reports, letter of 1 June 1906.
¹⁴⁴ "The Railways." *Bendigo Advertiser*, 21 October 1915: 4.

Axedale quarrymen. This may well have been the case but, as was the case in 1901 other factors, such as the availability of trucks for the Axedale line or the efficiencies of backloading of trucks which took rural commodities to Melbourne, may have influenced the decision. Perhaps the Department were better informed of the flooding Campaspe River in late September 1915.¹⁴⁵ Similar floods of the Campaspe and the Axedale quarries prevented the supply of Axedale metal and pitchers to the City of Bendigo in September 1917.¹⁴⁶

In contrast to this complaint over St Albans bluestone, there were no apparent complaints in Bendigo of over 8,000 cubic yards of Axedale bluestone being carted to Kerang between 1910 and 1911 (some 92 miles by rail) at the rate of 12 rail trucks per day over a period of 3 months, or that Brasier and Co. had offered in 1911 to supply the municipality of Deniliquin in NSW, also at least 90 miles away.¹⁴⁷ Again, it was deemed appropriate in Bendigo for more distant Councils to spend public money buying Axedale bluestone, but not for anybody else to bring completing materials into Bendigo or spend Bendigo's public money elsewhere.

Another example of this set-in-stone parochialism can be found in May 1916. The engineer of Marong Shire recommended that Council to purchase and use Axedale metal for use on its roads, citing the difficulty and cost of sourcing such materials from Derby and Bridgewater.¹⁴⁸ John Richards, a storekeeper of Bridgewater wrote to both the Bendigo Independent and the Bendigo Advertiser, stating that 'there are four or five quarries near the township of Bridgewater, where there is sufficient stone to supply Victoria with road metal, and as far as getting practical men to get it out, there would be no scarcity'. We must remember here that this was during World War One, and the Shire already knew in December 1915 there was a scarcity of men available to undertake day work, especially urgent road works.¹⁴⁹ Regardless of the accessibility to workers, if, as Richards stated, the supply of stone was genuinely so prolific, local and affordable with which to 'supply Victoria', one has to ask why the Shire Council felt it necessary to declare in October 1915 that it was going to compulsorily acquire land for quarries for Shire purposes.¹⁵⁰ In December 1915 that year it was reported that the County Roads Board had given the Shire permission to test for and 'open quarries on the main road near Bridgewater'. An 'unused road near the railway between Derby and Bridgewater' had been tested for stone, with only six of the 21 holes created yielding stone, the shallowest of which was five and a half feet.¹⁵¹ It seems Richards was the one with eyesight problems, not the supposedly 'ignorant' Marong Shire engineer. The order of Axedale metal went ahead as advised.152

Both Brasier and Co.'s sale and Mary's death appear to have influenced the bluestone road metal market, with the *Argus* reporting in September 1920 that at Bendigo:

¹⁴⁵ "Flooded Rivers." *Riverine Herald*, 22 September 1915: 2.

¹⁴⁶ "City Council." *Bendigo Independent*, 28 September 1917: 7.

¹⁴⁷ "Road Metal Carried Ninety-Two Miles." *Argus* (Melbourne) 4 November 1910: 8; "Municipality of Deniliquin." *Independent* (Deniliquin), 7 July 1911: 4.

¹⁴⁸ "Marong Shire Road Metal" *Bendigo Independent*, 11 May 1916: 8; "Road Metal for Marong Roads." *Bendigo Advertiser*, 11 May 1916: 2.

¹⁴⁹ "Marong Shire Council." *Bendigo Independent*, 3 December 1915: 7, author's emphasis.

¹⁵⁰ "Public Notices." *Bendigo Independent*, 13 October 1915: 8; "Private Advertisements." *Victoria Government Gazette*, 13 October 1915: 3818.

¹⁵¹ "Marong Shire Council." *Bendigo Independent*, 3 December 1915: 7.

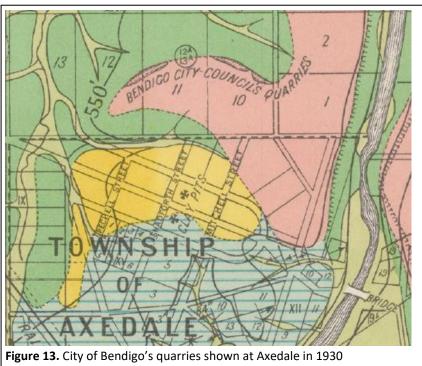
¹⁵² "Marong Shire Council." *Bendigo Advertiser*, 2 June 1916: 5.

The cost of road metal spalls, which six years ago could be obtained at 11½d. a cubic yard, has increased to 5/- a cubic yard. While the prices have risen, supplies from the mines are difficult to obtain and recourse will, it is stated, have to be made to the Axedale bluestone quarries for spalls.¹⁵³

This suggests that the quality of the Axedale metal continued to place in at the higher end of the market with respect to price, and it was only resorted to for major roads or when other supplies became constrained. What is unclear is whether the death of Mary Ann Ingham prompted a new development in the Axedale quarrying industry, or whether these market forces drew more attention on it, but by September 1921 Victor Deane was running the Waverley quarries at Axedale.¹⁵⁴

By 1924 the output from the Axedale quarries had greatly increased, with 2,500 tons of stone leaving the Ingham siding in July of that year, some of which was probably destined for northern Victoria.¹⁵⁵ What was not so well documented is what influence this had on the supply of bluestone materials to the City of Bendigo. If the increased production was mainly supplying other places in the

district and beyond, this may have been a major influence in the decision of the City Council to finally purchase its own quarry. Piecing together the story of this quarry using typical land research skills is just as problematic as the other Axedale quarries. Tracing the history of the ownership and occupation of the City of Bendigo's quarry land through the Strathfieldsaye rate books is problematic because the Strathfieldsaye Shire, and the adjoining McIvor Shire, rarely included details of any quarrying activity when assessing the valuation and rates of land.



[Source: Geological Survey of Victoria, Axedale, *Counties of Bendigo and Rodney*. Geological parish plan, surveyed by J. J. Caldwell, 1930]

The City's purchased a quarry at Axedale in May 1925 from Thomas O'Neill.¹⁵⁶ The Shire of Strathfieldsaye only records the City's new asset in the 1924-1925 rate book because a portion of it

¹⁵³ "Bendigo and District." Argus (Melbourne), 8 September 1920: 6.

¹⁵⁴ "Situations Vacant." *Argus* (Melbourne), 24 September 1921: 26; BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 15 January 1934.

¹⁵⁵ "Other Districts." *Argus* (Melbourne), 9 August 1924: 16; "Bendigo and District." *Argus* (Melbourne), 15 June 1925: 18.

¹⁵⁶ PROV, VPRS 16269/P0001, City of Bendigo, Council Minutes, Unit 11, 14 May 1925 (page 133); PROV, VPRS 16136/P0001, Rate Books, Unit 48, rates assessed on 18 December 1924; Axedale Riding, Page 26.

was leased to Owen Flynn for grazing and Flynn was charged rates.¹⁵⁷ The City Council's quarry was located on the northern fringes of the Axedale Township, on Allotments 11, 12 and 13 of Section 6, adjoining Raglan Street and east of Sugarloaf Road (Figure 13).¹⁵⁸ This is possibly the same site that Brasier and Co. was quarrying prior to 1920 (Figure 12).¹⁵⁹

It took a while for the City Council to layout the quarry and establish the plant required, negotiate a lease with the Railway Department for part of the Axedale Railway State siding, on which they established their stone crushing and processing plant, and obtain a special rate for rail freight from Axedale.¹⁶⁰ This was a costly endeavour requiring an allocation of at least £5,600.¹⁶¹ Before this even took place, the City's Mayor, Cr. W. Ewing, was publicly declaring that the purchase of the quarry was a progressive move and 'there was enough stone in them to last for 1000 years'.¹⁶² The whole set up appears to have been completed by September 1928, and a special committee of the Council was established to manage to operations.¹⁶³ To their dismay, in 1928 the Victorian Railway Commission proposed to significantly increase 'the freight on road making materials used by Municipal Councils'.¹⁶⁴ The Council minutes shows they were in correspondence with the Municipal Association, the National Roads Association and their local members of parliament, all of which opposed the proposal.¹⁶⁵

Flynn paid rates for the land surrounding the quarry he leased, but the City of Bendigo refused to do the same.¹⁶⁶ The City insisted that they could not be charged rates because it was 'land vested in or in the occupation of or held in trust for or under the management and control of any Municipality or the Council thereof'. While the Strathfieldsaye Shire disagreed, their rate books show the City council never paid any rates for the quarry.¹⁶⁷ This meant they were not contributing to the roads they were degrading by their own quarrying activities. In contrast, quarries at Malmsbury were charged rates from 1882.¹⁶⁸ Strathfieldsaye rate books no longer record City of Bendigo as a landowner or occupier after the 1930-1931 rate year, which coincides with the City selling, in August

¹⁵⁷ PROV, VPRS 16136/P0001, Rate Book, Unit 48, rates assessed on 18 December 1924; Axedale Riding, Page 26; PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 14 May 1925 (page 133); BRAC, City of Bendigo, Rent Book, page 119-120.

¹⁵⁸ BRAC, City of Bendigo, 20th Century Correspondence, Box L4, Axedale Quarries file.

¹⁵⁹ Mitchell Library, NSW. Photograph titled "Riley, Brazier (sic Brasier) and Nelson's Quarry at O'Neill's property. Bluestone quarry - Axedale, VIC. FILE NUMBER: FL1674432, <u>https://digital.sl.nsw.gov.au/</u>(Accessed 9 December 2022).

¹⁶⁰ PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 25 November 1926 (page 301), 31 March 1927 (page 342), 14 April 1927 (page 348), 26 May 1927 (page 356), 9 June 1927 (page 360-61), 23 June 1927 (pages 366-67), 7 July 1927 (page 371), 21 July 1927 (page 377), 4 August 1927 (page 382), 1 September 1927 (page 389), 27 October 1927 (page 399), 24 November 1927 (pages 407-08); BRAC, City of Bendigo, 20th Century Correspondence, Box Q, Railways file, letters of 25 March 1927, 9 June 1927; "Country News." *Argus* (Melbourne), 18 August 1927: 11; BRAC, City of Bendigo Plan Collection, Bundle 36, Plan 955 *Axedale Railway Station and Surroundings*.ca 1927

¹⁶¹ "Opportunities." Construction and Local Government Journal (Sydney) 20 April 1927: 18.

¹⁶² Bendigo's Improvements." Age (Melbourne), 30 June 1926: 14.

¹⁶³ BRAC, City of Bendigo, Deed Register, Inventory List dated 30th September 1928; PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 30 August 1928 (page 489).

¹⁶⁴ PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 2 February 1928 (page 427).

¹⁶⁵ PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 16 February 1928 (page 428).

¹⁶⁶ PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 25 October 1928 (page 503); BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, rate notice dated 5 May 1930, and letter of 6 June 1930

¹⁶⁷ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 14 August 1930.

¹⁶⁸ Borough of Malmsbury, Rate Books 1863-1872 and 1879-1894, copies held at Malmsbury Historical Society.

1929, about 95 acres of the quarry land to Duncan John Cochrane, the owner of some of the adjoining land.¹⁶⁹ In fact a line is left blank in the rate books each year to allow for the City's unrated land. Whether this non-payment of rates gave the City council a competitive edge is debatable, given that the McIvor and Strathfieldsaye Shire do not appear to have charged any other quarry operators any extra rates for quarrying activities on otherwise rural land. If they did, it is not recorded in the rate books. The freight discount obtained from the Railway Department may well have enabled the City to produce their own road metal at a discounted rate, but that was the whole purpose for purchasing and operating a quarry in the first place.

What Price Road Making?

How far would we ask our Council' to go to provide us with reliable local roads? In an era of poor supply and high costs, should they break the law? Hidden deep in the City's archives, is a story of how they illegally became a supplier for road metal to other councils and used bluff and political clout to try and make the problem go away.

Victor Deane's financial prosperity, and his relationship with the City of Bendigo, began to waver from 1926. In that year he won a tender to supply them with metal and screenings from Ingham siding, however the council believed his price included delivery to Bendigo railway station.¹⁷⁰ The Finance committee were delegated to deal with the discrepancy voted to cancel his contract and seek new tenders.¹⁷¹ In 1930 he won a contract with the Country Roads Board to procure and spread 220 cubic yards of gravel on the Heathcote-Bendigo Road.¹⁷²

In October 1933 Deane wrote to the City of Bendigo, demanding an explanation as to why they had 'seriously interfered' with his business as a supplier of 'Blue Metal, Screenings, Toppings, Pitchers and Spalls'.¹⁷³ Deane asserted that by entering into contracts to supply 'various Shire Councils, Country Roads Board, Private Contractors and others' with such materials, either within or external to the City Boundaries, they were operating in contravention of the *Local Government Act*. He requested them to desist, or he would take legal action to restrain them from such contracts. Deane's letter was not formally received at a Council meeting, so by not recording it in the Council minutes it was kept out of the public domain. Instead, the Council sought and received legal advice from Councillor W. H Taylor who was also a barrister and solicitor.¹⁷⁴ Taylor's advice was that the City Council were in fact in breach of the *Local Government Act*. He informed the Council that 'neither the Council nor its officers can do any act or make any contract or incur any liability not authorised by the Statute and all acts beyond the scope of the powers granted thereby are void'.

¹⁶⁹ PROV, VPRS 16136/P0001, Rates Books, Unit 51, Rate Number 1869; BRAC, City of Bendigo, 20th Century Correspondence, Box L4, Axedale Quarries file, items of 4 July 1929, 22 July 1929, 24 July 1929, 25 July 1929, 27 July 1929, 2 August 1929, 7 August 1929, 12 August 1929, 24 August 1929, 26 August 1929, 27 August 1929, 28 August 1929, 29 August 1929, 30 August 1929, 1 October 1929, 19 November 1929, 20 November 1929; PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 29 August 1929 (page 588), 24 October 1929 (page 599); BRAC, City of Bendigo, Rent Book, page 120, 122.

¹⁷⁰ "Country News." *Argus* (Melbourne), 28 May 1926: 17; PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 10 June 1926 (page 249).

¹⁷¹ PROV, VPRS 16342/P0001, Finance Committee Minutes, Unit 30, 10 June 1926 (page 191).

¹⁷² "Country Roads." *Weekly Times* (Melbourne), 1 March 1930: 52.

¹⁷³ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 17 October 1933.

¹⁷⁴ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, report undated, written in response to letter of 17 October 1933; "Bendigo's New Mayor." *Herald* (Melbourne), 14 August 1930: 4.

The purpose of acquiring the Axedale quarry, he said, was to provide themselves with materials for Council work, and no other purpose was lawful. He stated that Deane's complaint:

Is well founded and completely justified, as the Council does not possess and has been given no express or implied power under the statute to enter into such Contracts for the sale and supply of metal &c., and such sale and supply of &c., can in no way, in my opinion, be regarded as in any way incident to the powers expressly granted or essential to the declared object and purpose of the Council indispensable to carrying out the duties of the Council under the statute. Any such contracts made and entered into by the Council may be repudiated and cannot be enforced such contracts are in their inception void being ultra vires the Council and are not binding. Not only are such contract ultra vires the Council but in my opinion the Council by injunction may be restrained from entering into such contracts.'¹⁷⁵

Taylor recommended that the Council should immediately cease the supply and sale of quarry products and in a 'discrete letter and without admitting his allegations' Deane should be informed that it is not the Council's intention to supply and sell metal &c'. He warned them that if Deane did take legal action, the Councillors were at risk of facing the cost of the court action, and any damages, out of their own pockets. Finally, he suggested that the Council quietly lobby the Victorian Minister in charge of a proposed Bill to amend the *Local Government Act* to have changes made to permit them to legally supply and sell materials from their Axedale quarry.¹⁷⁶

The Council followed Taylor's advice and the Town Clerk sent the letter to Deane.¹⁷⁷ Several days later, the City's engineer informed the Council that he and Taylor had visited the 'Minister for Public Works ... on the question of a provision in the proposed amendment of the Local Government Act, enabling a council to sell metal etc. ... The Minister ... intimated definitely that provision will be made in a Bill for the amendment of the Act to enable Council's (sic) to sell metal to other shires and public bodies'.¹⁷⁸

Deane, however, was unimpressed and replied to the Council's letter on 14 December demanding that he be compensated for the financial damage he had suffered, through the Councils 'illegal competition' which had 'put out of commission all my Stone Crushing Plant and Private railway siding at Ingham and also my quarries of long periods of time'.¹⁷⁹ In reply, the Council denied all his allegations, refused to compensate him, and stated they would defend any legal proceedings Deane undertook.¹⁸⁰ In his rely in January 1934 Deane was incredulous that the Council were denying their contract to supply 'blue metal' to Marong Shire, an agreement that did take place in 1930, and was recorded in the Council minutes.¹⁸¹ Deane may or may not also have been aware of the Council's sale of screenings to Mr. Ackland in Swan Hill in May 1930, and the tender they submitted to Deakin Shire the same year, but he also accused the Council of supplying 'Blue Metal to "McGrath Bros" of

¹⁷⁵ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, report undated, written in response to letter of 17 October 1933.

¹⁷⁶ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, report undated, written in response to letter of 17 October 1933.

¹⁷⁷ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 9 December 1933.

¹⁷⁸ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 14 December 1933.

¹⁷⁹ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 14 December 1933.

¹⁸⁰ BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letter of 22 December 1933.

¹⁸¹ PROV, VPRS 16269/P0001, Council Minutes, Unit 11, 8 May 1930 (page 645).

Longlea, for the Shire of Strathfieldsaye' for use on the McIvor road at Axedale.¹⁸² Deane believed he would have won the Marong and Strathfieldsaye contracts were it not for the City Council's 'price smashing' activities, and he also suggested that the Council's engineer, Mr. O. Flight, had somehow been able to ascertain his price for the tender for the Marong contract.

No record of any compensation paid to Deane, or any legal action faced by the Council has so far been uncovered in the City of Bendigo's archives, however given that much of this activity was taking place outside of the normal public domain, it might take more detailed research to be certain.

To be fair, the City of Bendigo was not the only council caught up in this illegal trade in road-making materials. In June 1934 a writ was issued by the Supreme Court against the president and councillors of the Shire of Frankston and Hastings following their illegal contract to supply the Chelsea Council with crushed rock for the Point Nepean Road.¹⁸³ This is barely months after Deane's last letter to the City of Bendigo and it seems the latter, and the Councillors, were lucky that Deane had not followed through on his threats, even though it had forced them to cease their illegal trade.

As for the attempt to have the *Local Government Act* amended to permit the trade of road-making and other materials, a Bill was debated for this purpose in the Legislative Council in September 1934.¹⁸⁴ The Melbourne *Age* reported on the passing of a clause to the Act to permit Councils to make and supplying ice, while another clause 'governing blasting and quarrying operations' was deleted.¹⁸⁵ The clause that would permit the 'sale by councils to the Water Supply Commission, Country Roads Board and State Electricity Commission of road-making materials obtained from municipally-owned quarries' (but not other councils) was included but limited to municipalities 'beyond a radius of eighteen miles of the Melbourne G.P.O'.¹⁸⁶ The new *Act* was passed on 16 October 1934.¹⁸⁷

The City Council after some deliberation decided in 1941 to sell the quarrying plant, the purchaser being the State Rivers and Water Supply Commission.¹⁸⁸ Councillor Streader 'voiced his disapproval of the council's action in disposing of the machinery' and argued:

If you do not lay the road foundations satisfactorily, you will never have a road, and the mine metal which the council is using is not the proper stone. The roads in Pall Mall and many other streets have been put down with stone from the Axedale quarries, and the engineer at the time informed me that the quarry was one of the finest assets the ratepayers had.¹⁸⁹

 ¹⁸² BRAC, City of Bendigo, 20th Century Correspondence, Box K, Axedale Quarries file, letters of 12 August 1930 and 15 August 1930; PROV, VPRS 16342/P0001, Committee Minutes, Unit 31, 10 April 1930 (pages 338-339)
¹⁸³ "Restraining a Council." *Argus* (Melbourne), 9 June 1934: 19; "Municipal Quarries." *Age* (Melbourne), 16 October 1934: 13.

¹⁸⁴ "Municipal Government." Age (Melbourne), 21 September 1934: 11.

¹⁸⁵ "Municipal Government." Age (Melbourne), 21 September 1934: 11.

¹⁸⁶ "Municipal Government." Age (Melbourne), 21 September 1934: 11

¹⁸⁷ Victoria. *Local Government Act*, 1934, 25. Geo V, No. 4279, Section 56. Subsection (2) dated 16 October 1934.

¹⁸⁸ PROV, VPRS 16269/P0001, Council Minutes, Unit 12, 14 December 1939 (page 1401), 28 December 1939 (page 1408); PROV, VPRS 16269/P0001, Council Minutes, Unit 13, 11 January 1940 (page 1412), 25 January 1940 (page 1419), 12 June 1941 (page 1627), 7 August 1941 (page 1651), 2 October 1941 (page 1678); BRAC, City of Bendigo newspaper cuttings book, Date range 29/10/1939 to 2/9/1946, *Bendigo Advertiser*, 27 June 1941; "Sales by Auction." *Argus* (Melbourne), 30 August 1941: 9.

¹⁸⁹ BRAC, City of Bendigo newspaper cuttings book, 1939-1946, *Bendigo Advertiser*, 5 September 1941.

In reply, Cr. Michelson, who had approved the purchase of the plant, said 'it was acquired to overcome difficulties in procuring metal for road construction. Although the plant had been sold, the council still had the quarry to go back to if required'. Cr. Galvin added that 'the machinery would have become valueless had it been allowed to remain where it was' and Cr. Ham noted the council was paying rent to the railway department and it was economical to sell the machinery'.¹⁹⁰ A committee of the whole council was given the task of deciding what the sale money should be spent on.¹⁹¹ While an auditor's report in November 1941 stated that the Council now had credit balance, as opposed to being debt, due in part to the 'Sale of Axedale quarries [for] £1,352.1.3' this is actually refers to the plant as we can see from above the Council did not sell the quarry land in 1941.¹⁹² The presence of the name D J Cochrane in the Council's rent book between 1930 and 1957 demonstrates the he was still leasing this land for grazing, as was originally agreed when he purchased the adjoining land in 1929.¹⁹³

Conclusion

Next time we drive on a bitumen or unsealed road, walk past the bluestone-lined Bendigo Creek, a bluestone gutter or kerb, the former Bendigo Post Office or Court House, or visit the fernery in Rosalind Park or a local cemetery, perhaps we should stop and take another look at the materials in front of us. Consider where they were from, how they got there, who was involved, and the huge effort made over many decades to prevent our roads becoming quagmires. Each site has a story to tell. Most of the above stories arose from a desire to secure the materials needed to make our lives more comfortable and, for some, to make a living out of selling them. This sometimes resulted in some petty politics, but that makes the story even more human. It also demonstrates that Council records are an endless source of materials for making the, sometimes, bumpy roads we travel when researching and recording local history. The stories above demonstrate that sometimes an in-depth investigation in archives can reveal more on past events than what is written in openly "public" accounts.

¹⁹⁰ BRAC, City of Bendigo newspaper cuttings book, 1939-1946, *Bendigo Advertiser*, 5 September 1941.

¹⁹¹ PROV, VPRS 16269/P0001, Council Minutes, Unit 13, 18 September 1941 (page 1673); PROV, VPRS 16342/P0001, Committee Minutes, Unit 31, 6 October 1941 (page 1098)

¹⁹² BRAC, City of Bendigo, 20th Century Correspondence, Box XX, report of 25 November 1941.

¹⁹³ BRAC, City of Bendigo, Rent Book, entries for Cochrane on pages 122, 124, 126; BRAC, City of Bendigo, 20th Century Correspondence, Box L4, Axedale Quarries file, letter of 25 July 1929.