Heritage kerbs, channels & laneways



history, significance & guidelines









Contents

I.	Introduction			I.
	1.1	Aim	Page	I
	1.2	Scope of the Report	Page	I
	1.3	Methodology and Definitions	Page	2
	1.4	Study Team & Acknowledgements	Page	3
2	Historical Background & Analysis			4
	2.1	Introduction	Page	4
	2.2	History of Construction of Kerbs, Channels and Laneways	Page	4
	2.3	Brief History of the Area	Page	7
	2.4	Remaining Heritage Kerb, Channels and Laneways in Port Phillip	Page	8
3	Cultural Significance		Page	10
	3.I	Methodology and Criteria for Cultural Significance	Page	10
	3.2	Discussion of Significance	Page	11
	3.3	Statement of Cultural Significance	Page	12
	3.4	What is Significant?	Page	12
4	Conservation Guidelines		Page	13
	4.1	General Policy	Page	13
	4.2	Guidelines	Page	13
5	Select Bibliography		Page	16
	Appendices		Page	17
	Appendix I – Historical Drawings		Page	17
	Appendix 2 – Current Photographs		Page	23



Introduction

I.I Aim

The aim of this report is to identify the significant kerbs, channels and laneways within Heritage Overlay Precincts of the City of Port Phillip. The report then aims to formulate policies to conserve and enhance their contribution to the Heritage Overlay.

I.2 Scope of the Report

The report covers the significance assessment of, and policy for, bluestone kerb and channelling and pitched laneways in Heritage Overlay Precincts and concrete kerb and channelling in the Fisherman's Bend Heritage Overlay Precincts only.

The following is a list of the current Heritage Overlay precincts in the City of Port Phillip:

HOI Port Melbourne

Area generally bound by Ross St to the north, Ingles and Boundary Streets to the east, Pickles St to the south and the foreshore to the west

HO2 The Garden City Housing Estates

Port Melbourne

HO3 South Melbourne, Albert Park, Middle Park & part of St Kilda

Area generally bound by Pickles St, York St and Kings Way to the north, Queens Rd to the east, Fitzroy St to the south and the shoreline of Port Phillip Bay to the west

HO4 City Rd Industrial Area

South Melbourne

HO5 St Kilda Hill

Area generally bound by Fitzroy St to the North, Barkly St to the east, Carlisle St to the south and Port Phillip Bay to the west

HO6 St Kilda East

Area generally bound by Wellington Rd and Dandenong Rd to the north, varying degrees of Alma Rd to the south, St Kilda Rd to the east and Orrong Rd to the west

HO7 St Kilda, Elwood, Balaclava, Ripponlea

Area generally bound by Carlisle St to the north, Glenhuntly Rd to the south, Hotham St to the east and Mitford St and Broadway to the west

HO8 Elwood - Glenhuntly Rd, Ormond Rd

Area generally comprising Glenhuntly Rd as the east-west spine, extending north just beyond Shelley St between Marine Parade and the Elwood Canal, and south generally between Ormond Rd and Ormond Esplanade

HO30 Emerald Hill Estate

Bank, Clarendon, Park, Cecil, Dorcas, Marshall, Fishley, Layfield and Perrins Streets

HO258 St Vincent Place Precinct South Melbourne

HO315 Inkerman St Chapel St, Inkerman St

HO316 Carlisle St Carlisle St, Hawsleigh Ave

HO317 Hotham St Nos. 113-125 Hotham St

HO385 Chusan Street Precinct I-37 Chusan Street

HO386 Godfrey Av/Raglan Street Precinct I-41, 2-36 Godfrey Avenue and 9-23 Raglan Street

HO387 Hammerdale Ave Precinct 2-24, 28-32, 3-17 Hammerdale Avenue, 2-8 Jervois Street

HO388 Holroyd Court Precinct I-7 Holroyd Court

HO389 Kalymna Grove/Inkerman St Precinct I-35, 2-30 Kalymna Gr, 342-374 Inkerman Street

HO390 Mooltan Av Precinct 10-16, 9-15 Mooltan Avenue

HO391 Murchison St/Alma Road Precinct 1-29, 2-24 Murchison St, 20, 22, 26 Landsdowne Street, 160-188, 183-211 Alma Road

HO392 Orange Grove Precinct 4-30, 11-33 Orange Grove and 331 Inkerman Street

HO318 Brighton Rd Brighton Rd, Burns St, Glenhuntly Rd, Heaton St



1.3 Methodology and Definitions

The structure and contents of this report have been written with reference to the key relevant cultural heritage documents in Australia. These are:

The Australia ICOMOS charter for the conservation of places of cultural significance (the Burra Charter) 1999.

Peter Marquis-Kyle & Meredith Walker. The Illustrated Burra Charter, Good Practice for heritage Places. Australia ICOMOS, Sydney 2004.

James Semple Kerr, The Conservation Plan. A guide to the preparation of Conservation Plans for places of European cultural significance, National Trust of Australia (NSW), Sydney, Fourth Edition 1996.

Definitions:

The paving of a road with set stones is called pitching and a stone used for paving is called a pitcher. ¹ The typical key features of kerbs, channels and laneways are indicated in the figures below.



Figure 1. Bluestone kerb and five pitcher channel.



Figure 2. Bluestone kerb and channel with four pitcher.



Figure 3. A pitched bluestone channel in a laneway.



Figure 4. A pitched bluestone laneway.

Blinding/binding: Filling surface gaps with stone sweepings and sometimes sand or tar this was particularly used for macadam road construction.

Bluestone: Form of stone that was quarried and cut into standard sized blocks for masonry use. Cement: In modern civil engineering usage this term refers almost always to 'Portland' cement: a fine powder made by heating a mixture of clay and crushed limestone in a rotating furnace and grinding the resulting nodules. When this cement is mixed with water a chemical reaction takes place forming a brittle solid.² Portland cement, effectively the same material we use today, was also imported, but was not made in Victoria until 1890m and at almost exactly the same date in the adjoining colonies. It is important to understand that Portland cement was used very little for structural purposes like mortar and concrete before 1890. Its main function was cosmetic: it could be used to face buildings in a texture and colour resembling the better English sandstones (like Portland stone hence the name), and it was resistant to weathering even when moulded or cast in elaborate shapes.³

Channel: Open trench for water, sewerage on the side of the road, early form of sewage disposal and drainage for roads, which remains next to the kerb.

Courses: The quantity of pitchers to be used was specified as courses; one pitcher equals one course.



Gauge: The process of measuring sand, gravel, cement and water in specified proportions for mixing to form concrete. Road construction required 2 1/2 gauge.

Grout: Form of adhesive to secure the pitchers in place against each other by placing the grout in the spaces (joints) between the pitchers.

Joint: space between masonry pieces, i.e. bluestone pitchers. Some joints are wider than others depending on the specification at the time of construction.

Kerb: Raised section of masonry that differentiates the level of the road from the level of the footpath and property levels.

Macadam method: Form of road construction that used small broken angled pieces of stone (referred to as 'metal') as a layer for road surface that was then compacted and blinded at the surface level above a depth of at least 200mm of the metal which had been placed on top of a well consolidated subgrade. The broken stone (metal) was also placed at a higher level in the centre above the channels sloping down to the channels to generate a natural drainage motion towards the channels.

Metal: Broken stone to form an impermeable surface layer, usually laid to a specified depth such as 2 1/2 inches thick, and or two layers rolled,

Pitcher: pre-cut bluestone block measuring 6 inches, 8 inches, 9 inches or 12 inches, sometimes requested that they were dressed or rough and without honeycomb effects. Melbourne had very good supplies of basalt.

Ram: to compact or consolidate, eg the consolidation of the metal on the road during construction, or the ramming of pitchers into place with a specified weighted hammer

Rollers: Initially horse drawn and then later vehicle drawn heavy rollers used to compact surfaces and layers in road construction.

Screed/Screen: a layer of mortar laid on top of a concrete floor to provide a smooth finish, often with a gentle slope to allow water to drain off the surface.

Spall: (a) A fragment or chip of masonry, (b) To reduce an irregular stone block to approximately the desired size by chipping with a hammer.

Swale Drain: non constructed earth drain often filled with grass or plants.

Tar: Coal tar was used to coat and fill macadam gaps in the metal which became known as tarmacadam.⁴ Coal tar was a residual by product of the distillation of wood or coal etc.

Telford Method: Stone pitchers placed on subgrade with a layer of sand or gravel on top, followed by 150mm depth of broken stone an earlier method than Macadam's method.

The terms 'place', 'cultural significance', 'fabric', 'conservation', 'maintenance', 'preservation', 'restoration', 'reconstruction', 'adaptation', and 'compatible use' are used throughout this report with their specific meaning as defined in the ICOMOS *Burra Charter*, rather than meanings drawn from common usage. The *Charter* is reproduced in Appendix 1 for easy reference. The **fabric** of a **place** includes all the physical aspects of the place and its surroundings that are experienced while being there. With careful study, the fabric of the place can convey information which may be interpreted. Combined with further research, it may provide information about **cultural significance** that is aesthetic, historic, scientific or social value of the place.

Based on an understanding of the cultural significance of the place, conservation policies can be established to protect the significance of the place. **Conservation** may include the following types of actions:

Maintenance is defined as the continuous protective care of the fabric, the contents and the setting of a place. **Preservation** means maintaining the fabric of a place in its existing state and retarding deterioration. Maintenance has to do with the overall management of the place. Preservation may be one of the actions required.

Restoration means returning the existing fabric of a place to a known earlier state. It can be done by the removal of additions or by reassembling the components of the existing fabric. It does not involve the introduction of new material.

Reconstruction does involve the introduction of new materials into the existing fabric to return it as nearly as possible to an earlier state. Hence reconstruction and restoration share the same aim of achieving an earlier state but differ in that only reconstruction involves the introduction of new materials.

Adaptation is the process of modifying a place to suit proposed compatible uses. These are uses which involve no change, changes which have minimal impact or are reversible. Adaptation is acceptable only when necessary to conserve a place and when it does not detract from cultural significance.

I.4 Study Team & Acknowledgements

The authors of this report are Helen Lardner, Samantha Westbrooke and Kimberley Meagher of HLCD Pty Ltd.

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- The Australian Concise Oxford Dictionary, Seventh Edition, Melbourne University Oxford Press, 1987, p. 830
- John Monash Glossary of terms, engineering pre 1914, website, vicnet http: //home.vicnet.net.au/~aholgate/jm/refrence/glossary.html
- Miles Lewis, Physical Investigation of a Building: An Approach to the Archaeology of Standing Structures, Technical Bulletin No. 9.1 National Trust, Melbourne, 1898, p.32.
- 4. GM Lay, History of Australian Roads, p.17.

2.1 Introduction

Heritage kerbs, channels and laneways are an important part of the historic fabric that contributes to the significance of Heritage Overlay precincts in the City of Port Phillip.

The City's historic kerbs, channels and laneways provide physical evidence which assists in the interpretation of the area's history. The changing treatment of roads and laneways tells us about early engineering practices, settlement patterns as well as providing insight into how we used to live.

2.2 History of Construction of Kerbs, Channels and Laneways

2.2.1 Why have constructed kerbs, channels and laneways?

Originally roads and streets were not much more than tracks marked on the earth, which caused constant concerns about dusty, undrained and unsuitable surfaces for pedestrians and horse and cart. Inclement weather also compounded the problematic lack of drainage in roads and streets, which culminated in sanitary concerns, impassable roads, and reports of children and animals drowning as large waterholes formed in the local streets.⁵

As the Melbourne community flourished, buying or selling goods, attending places of employment or involvement in recreational and religious events required transport and travelling distances required a network of track and routes to enable the means of transport. Road and streets became the means for getting from one place to another whether on foot or by aided transport. The main type of transport used in early settlement was horse and cart, 'the horse was the all-pervasive transport mode of the nineteenth century. Stables, horse -trough and hay storage were an essential part of every home.'6 Obviously not all families could afford to maintain a horse and stable, however the horse and cart was instrumental in influencing the development of road construction. A significant motive from the pressure to construct roads was to permanently address the constant dusty conditions in dry weather, and the muddy and irregular conditions of roads in wet weather. Horse carts had iron wheels which caused ruts and potholes in roads and streets, which would fill up with water or other undesirable matter that made travelling for early settlers a constant struggle against the elements.

Initially, road and street levels were also undefined, which needed to be lower than building levels to allow the building stock to be drained. Melbourne's concerted effort to build roads started in the 1840's with the first 'formal gutters' established in 1846.⁷

Road construction had a dual purpose in Melbourne; as it was not only the means for providing access to places and appropriate surfaces for travelling, but also a means to provide drainage for buildings. Because settlement in Melbourne occurred post industrial age, provisions of drainage and road construction generally occurred at a similar time during the development of Melbourne's suburbs.

The construction of kerb and channelling to roads, and the paving of laneways, is a method of providing drainage for directing excess water from roads and properties.

Kerb and channel was, and still is, provided to the sides of roads to direct excess water away from driving surfaces and to provide a clear path for surface runoff to the stormwater system. Initially this water was directed along a system of channels towards natural water courses, however once the underground stormwater system was established it was directed via the stormwater system to stormwater outlets. For some early streets, the whole surface was paved in bluestone.

With regard to constructed laneways, as settlement density increased, and speculative development saw the construction of closely spaced dwellings, lanes were built into the plans of subdivision to carry away excess water from roofs. Lanes were therefore open stormwater drains and material deposited into them was carried from the laneways into the street eventually ending up in the bay.⁸

In addition to this, once Melbourne had a water supply from about 1860, and prior to the construction of the underground stormwater system, dirtied water from washing and kitchens also needed to be disposed of into laneways. In these cases, properties contained a channel for dirty water leading through the backyard to the lane, dirty water eventually flowed into the lane, then to the street and natural watercourses.⁹

Following the abandonment of the cesspit and earth closet nightsoil disposal systems, and prior to the establishment of Melbourne's sewerage system (commencing in 1897) and the septic tank, the inclusion of laneways in subdivisions also served the purpose of providing access to properties by night carts. The pan system began to

- 6. Maxwell Lay, The History of Australian Roads, p.23.
- 7. Melbourne's Miles, p.219.
- City of Port Phillip, Lurking in Lanes: A Back Fence History of the Lanes and Little Streets of Port Phillip, Exhibition Catalogue, City of Port Phillip, 1998, p. 6.
- 9. Ibid.

Maxwell G Lay, Melbourne's Miles: The story of Melbourne's Roads, Australian Scholarly Publishing, Melbourne, 2003, pp.217-218.



operate from about 1866. The night-soil was accumulated in a pan which the nightman then collected usually once a week. He tipped the contents into his wagon and returned the pan to its place. Later a two pan system was used whereby; the used pan was collected and replaced with a clean disinfected pan. The waste was then deposited on the fringes of the city. The lanes were ideal for the nightman's purpose. By 1891, an estimated 2900 night pans were emptied in Port Melbourne.¹⁰ Refer to Appendix 2 photo 25 which shows Maisie Lane in Port Melbourne containing an outbuilding backing onto the laneway (presumably originally a toilet). This outbuilding has a door to the laneway presumably originally used for access by the nightman.

This system continued after installation of Melbourne's sewerage system for a number of properties until the fees for the service were steeply increased in 1908-9 reducing participation in the night cart service. It was also necessary to continue to collect nightsoil in this way from formerly low lying areas which had not originally been connected, and which were now being used by industry. Pans were still being collected as late as 1941 from unsewered areas north of the municipality.¹¹

The laneways provided milk carts delivering milk to the rear of properties.

2.2.2 Construction Methods

Road construction has had a long history, particularly in Europe, with many methods developed over time from influences by the Romans, the English and the French. Two methods transpired during the development of Australia's colonies from the theories of two Scottish road engineers, Thomas Telford (1757-1834) and John Louden MacAdam (1756-1836).¹² Telford's method was frequently used in Port Phillip's municipal which consisted of laying down after excavation, a horizontal wall of bluestone pitchers, or other masonry material. It was then layered with broken stone which was commonly referred to as 'metal' and provisions for drainage were created at either side of the road. Macadam on the other hand developed this method further with the view that any sub grade surface would be sufficient if layered with 250mm of metal (broken angled stone) and then rolled and blinded. Compacting the metal with heavy rollers and then filling the remaining crevices with sand, stone sweepings or tar (blinding) to provide a smooth surface for road travel. MacAdam's method removed the time consuming technique of laying pitchers as the foundation, however the crushing of bluestone or other masonry into metal was done by hand until machinery was introduced into the quarries in the 1860s.13

A common tendency by contractors was to combine both Telford's method with Macadam's method, even though Macadam's required greater engineering skills as opposed to Telford's method.¹⁴ The combination of both methods was endorsed by the Central Roads Board and later the Board of Lands and Works.¹⁵

The Victorian urban community relied on local councils to construct roads which were based on the allotments designated by surveyors. Councils were responsible for main roads and streets wider than 33 feet and tendered out road construction jobs for rights of way and lanes less than 33 feet.¹⁶ Bluestone spalling and pitchers were bought from local basalt quarries of which there was a good supply in Melbourne¹⁷ and excess supplies were stored in council depots around the municipal.¹⁸

Kerb and Channelling

Construction of kerb and channel for streets using bluestone began in the 1850s and appears to have been a continuing practice up until the 1930s. The use of concrete for kerb and channel construction began around 1912 in some areas, however it appears that bluestone continued to be used for kerb and channel for many years after this in other parts of the municipality. The Annual Report from the South Melbourne City Surveyor to the Public Works Committee in 1912/13 outlined that 1,325 lineal feet of bluestone kerbing and 1,770 lineal feet of concrete kerbing had been used in road construction and maintenance during that year.¹⁹ The Annual Report for South Melbourne in 1927/28 outlined that 318 lineal feet of bluestone and 1,609 lineal feet of concrete kerbing had been used in road construction in that year.²⁰ This demonstrates that while concrete was the predominant material, bluestone was still being used for kerbing in 1928. The continuing use of bluestone may have been to provide continuity of finishes in some areas already laid out in bluestone or may have been because bluestone was preferred over concrete for aesthetic reasons. Nevertheless there is not a definite date where use of bluestone stopped and concrete began. By 1927, however the kerb and

14. Maxwell Lay, The History of Australian Roads, p.17. Melbourne Miles p.222.

- 18. City of St Kilda, Contract Ledgers
- South Melbourne, Annual Report from City Surveyor to Public Works Committee, 1912/13, p. 37.
- 20. Ibid., 1927/28, p. 10.

^{10.} lbid. p. 9

^{11.} Ibid. p.10

Donald Chambers, The History of Road development in Victoria 1834-1961, unpublished manuscript held by SLV, 1989, p.17.

^{13.} Melbourne's Miles, p.221.

^{15.} Melbourne's Miles

^{16.} City of Port Phillip, Lurking In Lanes

^{17.} Melbourne Miles, p.221.

channelling in the new housing estates at Fisherman's Bend was entirely constructed of concrete. Refer to Appendix 2, photos 12 & 13.

The use of bluestone pitchers for construction of kerb and channel in nineteenth Century Melbourne would have been an obvious choice due to bluestone being readily available and its suitability for the purpose. Bluestone is substantially impervious and relatively smooth therefore it allows for good flow of water across its surface. Square edged pitchers could also be cut allowing narrow joints between the pitchers assisting with the flow of water. Its density also meant that erosion of the stone by water and other traffic was slow and therefore it was highly suitable for external use.

Evidence suggests that the original method of construction for early kerbs and channels was bluestone pitchers laid on sand. Refer to Appendix 1, image 8 which is an 1890 drawing of the pitching of Pickles Street outlining the construction method specified for kerb and channel and crossovers at that time. There is no indication on this drawing of the method of jointing used. It is therefore assumed that butt jointing was the method used with sand packed into any spaces. The success of this method of jointing would have depended on the skill or method of the particular contractor doing the work.

The practice of butt jointing was an early method of construction common prior to 1900 and appears to have been phased out after this and replaced with the use of pointing or tar jointing. An 1888 contract for pitching of a lane in South Melbourne specifies 8" pitching on sand,²¹ whereas a 1916 contract for kerb and channel in Baker Street in St Kilda specifies tar grouting.²² A 1931 contract for kerb and channelling in St Kilda specifies pitcher kerb with cement jointing.23 More often than not, tar grouting was used after 1900 and therefore kerb and channel with butt jointing demonstrate the early development of an area. It is assumed that the jointing method was altered due to the loss of skilled contractors to undertake the butt jointing method and it was more economical (time and therefore cost wise) to point or tar joints. Survey work has revealed that as time progressed the joints between pitchers became progressively wider. In the 1970s and 1980s there were wide joints between pitchers and use of a tinted mortar to conceal the joints. It is these changes in joint detailing which distinguish early kerb and channel from later kerb and channel.

A range of sizes of pitchers and kerbs were used for construction of bluestone kerb and channel. Pitchers used for channelling were usually either 8 inch or 6 inch square blocks, whereas the kerbing pitchers included 12 inch \times 6 inch or 12 inch \times 8 inch.²⁴

The shape of the road is an important factor in the appearance of early road construction. The curvature of the road was previously much steeper than is required these days to assist with drainage of water from the roads. This is because early roads had dirt or gravel surfaces. With the introduction of tar surfacing, the curve of the road did not have to be as steep. Water flowed across the tar more readily than gravel or dirt. The curvature of the road also depended on the terrain of the area. The shape of the roads in turn influenced the depth of the bluestone channel and the layback angle of the kerb. As a result the depth of the channel varies from street to street. For example in Appendix 2 compare photo I with photo 2.

The number of pitchers used for road channels varied and would depend on factors such as the practices and policies of the Authority at the time, expense, and the terrain of the particular area. The number of pitchers to the channel could vary from three up to ten. For example a drawing of Pickles Street, Port Melbourne in 1890 (Appendix I, images 8 & 9) shows the use three pitchers to the channel,²⁵ while St Vincent Place precinct in South Melbourne has some areas with ten pitchers (refer to Appendix 2, photo 1). The use of so many pitchers in the St. Vincent Place Precinct may have reflected the prestigious nature of this development and a speculator who was willing to pay for the streets to look as good as the houses.

Laneways

Provision of channels and surfacing to laneways used bluestone pitchers for the same reasons that bluestone was used for road kerb and channel. Due to their drainage purpose, paving to laneways almost always incorporated some type of channel consisting of three pitchers. The channel pitchers would have been laid first and the remainder of the lane pitched after this to ensure that the paving on the laneway sloped towards the channel. The channel would consist of three pitchers. Refer to Appendix I, image 7.

Early laneways were pitched using a number of practices depending on the period and the area of construction.

City Surveyor's Contract Book City of South Melbourne, 1887-1890, held by the City of Port Phillip Records Dept, Contract 235.

^{22.} City of St.Kilda, Street Construction Account, 1916-1936, held by the City of Port Phillip Records Dept, Contract No. 6.

^{23.} Ibid., Contract No. 114.

^{24.} Ibid.

^{25.} Channel Pickles Street West Side, Plan, Contract No. 54, [Between Beaconsfield Parade and Graham Street] 1890.

Some laneways had a central bluestone pitcher channel only and were: unmade; tar paved; or concreted either side (Appendix I, images 3 & 4). Some were fully paved with: a central channel (Appendix 2, photo 27); one side channel (Appendix 2, photo 21); or two side channels (Appendix 2, photo 23). Some had channels leading from the individual properties into the central channel (Appendix 2, photo 20). The reasons for these differing treatments is unknown but may have been influenced by the period of construction and particular policies and practices at the time or the area in which it was being constructed.

For example the area it was being constructed could have influenced the amount of expense outlaid for the particular laneways and if it was not a very built up area, less money would have been spent. The final treatment and expense outlaid would also have depended on who was paying for the laneways to be pitched. The responsibility for laneways altered over time and was different for each area. In some areas pitching of laneways was paid for by residents while in South Melbourne, in 1902, laneways were transferred from private to municipal control under Council engineer A.E. Aughtie's direction. He also began upgrading the roadways, and fully pitching the laneways transferred from private to public control.²⁶

As with kerb and channel, the early pitching of laneways used the butt jointing method with pitchers laid on sand. An engineering drawing of Melville Street, Port Melbourne from 1889 does not indicate use of any jointing material (Appendix I, images 6 & 7). Recent survey work has revealed that, unlike kerb and channel, this method of butt jointing appears to have continued throughout the history of pitching of laneways with very few laneways demonstrating use of tar jointing or cement pointing.

Also it appears that pitching of laneways with bluestone was not a practice that continued much past 1930.

2.3 Brief History of the Area

The City of Port Phillip encompasses a number of areas which include some of the earliest parts of Melbourne as well as suburbs which developed as a result of expanding transport networks. The City of Port Phillip incorporates the following suburbs:

South Melbourne	St Kilda		
Albert Park	East St Kilda		
Middle Park	Balaclava		
Port Melbourne	Elwood		
Fisherman's Bend			

South Melbourne (originally known as Emerald Hill), Port Melbourne (originally known as Sandridge) and St Kilda were all established at early stages in Melbourne's development. These areas developed initially between the 1840s and 1850s, with rapid development occurring particularly for South Melbourne up to the 1890s. In 1870 Emerald Hill became a borough and in 1872 it was proclaimed a Town. In 1883 Emerald Hill became a city and also changed its name to South Melbourne.²⁷ St Kilda became a borough in 1863 and was proclaimed a city in 1890. Sandridge became a borough in 1863, and in 1884 changed its name to Port Melbourne.²⁸ In 1893 Port Melbourne became a town and on 14 May 1919 was proclaimed a city.²⁹ While Port Melbourne and South Melbourne retain extensive mid to late nineteenth century building stock, St Kilda has subsequently undergone a number of development booms which has meant that the area now contains a diverse range of buildings and infrastructure from a number of periods.

Following the slump of the 1890s depression, the Federation period witnessed new building activity on the vacant land of Albert Park and Middle Park, passed up by land boomers a decade or so previously.³⁰ Therefore closer settlement occurred in these areas at the end of the nineteenth Century and the beginning of the twentieth Century. As a result the Albert Park and Middle Park areas predominantly contain Federation style building stock and character.

Other areas have small pockets of early development but closer settlement occurred at later stages. Elwood, for example, while established in the mid to late nineteenth Century, did not have closer settlement until after 1906 following the opening of the electric tramway which extended to this area. Land sales continued from the 1900s to the late 1920s as Elwood became a popular Bayside suburb.³¹

There was a similar pattern for East St Kilda and Balaclava which had early development prior to 1900 along the main roads, but closer settlement occurred after the opening of the electric tramway in 1906.

The more recent heritage area within Port Phillip is Fisherman's Bend which is a Garden City Housing Estate established between 1927 and 1942.

^{26.} City of Port Phillip, Lurking in Lanes: A Back Fence History of the Lanes and Little Streets of Port Phillip, Exhibition Catalogue, City of Port Phillip, 1998, p. 6.

^{27.} City of Port Phillip, A Brief Early History of Port Phillip, www.portphillip.vic.gov.au/ brief_history_portphillip.phtml

^{28.} Ibid.

^{29.} Ibid.

^{30.} Andrew Ward, Port Phillip Heritage Review Version 3, City of Port Phillip, 2005, p. 73. 31. Ibid., p. 128.

2.4 Remaining Heritage Kerb, Channels and Laneways in Port Phillip

The Heritage Overlay precincts cover a large area of the City of Port Phillip taking in part, or most of, all of the suburbs included in the municipality. In particular most of South Melbourne, Middle Park and St Kilda are covered by Heritage Overlays. All of the precincts contain kerb, channels, and laneways which demonstrate the development of the area and in some cases make a strong contribution to the significance of the precinct. Some precincts have more intact heritage kerbs and channels than others. Generally all areas contain a relatively high level of intact early pitched laneways.

2.4.1 Kerb and Channelling

Generally the early street kerb and channels have not been retained in the residential heritage overlay precinct in Port Melbourne. There appears to have been a scheme or policy to reconstruct kerb and channel with concrete kerb and concrete and bluestone channel (refer to Appendix 2, photo 19) that is consistent across most of the Port Melbourne Heritage Overlay precinct. This is confirmed by a report to the South Melbourne City Council in 1980 which reported that, in the City of Port Melbourne, bluestone kerb and channel was being replaced by concrete as a result of a programme that had been commenced ten years earlier and was almost complete by the time of the report.³² Only small examples of earlier kerb and channel construction remain. For example a small section of early kerb and channel can be seen in Bridge Street, Port Melbourne (refer to Appendix 2, photo 7).

In the same report it was outlined that Bay Street was an exception to the programme as Council felt bluestone kerb and channel should be retained because of its historic nature.³³

Bay Street, however, has since undergone change which has not retained the early treatment of kerb and channel. Much of this street has been reconstructed and narrowed with new kerb and channel constructed in concrete. A detail of note appears to be the incorporation of early bluestone kerbing into the paving indicating the original width of the road. (Refer to Appendix 2, photo 14)

South Melbourne has retained the highest level of intact early bluestone kerb and channel in the municipality. This is particularly the case for the inner areas of the City around the early civic precinct and the St Vincent Place precinct. In these areas, it is common to find four or five pitcher channel and kerb (refer to Appendix 2, photo 4) and up to 10 pitcher channel and kerb around St Vincent Place (refer to Appendix 2, photo 1). This said however, there are substantial areas where early bluestone kerb and channel has been replaced by concrete kerb and channel or newly laid bluestone kerb and channel (refer to Appendix 2, photos 16-19). This finding is supported by policy stated in A Report to the South Melbourne Council on Bluestone Street Works in South Melbourne undertaken by the Urban Advisory Committee in 1980. It states that it is policy for bluestone kerb and channel to be restricted to industrial and conservation areas, and that in residential areas, concrete kerb and channel should replace bluestone. The conservation areas of the time would have been around the Civic precinct and St Vincent Place. The industrial area, being the South Melbourne Industrial precinct, also retains a high level of intact early bluestone kerb and channelling, as seen in Appendix 2, photo 5.

Within the South Melbourne precinct there are also large areas where new kerb and channelling has been installed which uses bluestone pitchers or incorporates some bluestone pitchers. For example, in some areas it appears that the early bluestone kerb has been retained but that the bluestone channelling has been replaced with concrete. In other cases there is new bluestone kerb and channelling completely using what appear to be recycled bluestone pitchers (Appendix 2, photo 16). These are distinguishable as recent due to their detailing which uses wider joints as well as the construction of channels with less than three pitchers.

Much of the St Kilda area has been altered with only pockets of intact kerb and channel and laneways. In 1980 it was policy in the City of St Kilda to use bluestone wherever possible with up to three pitcher channels laid. The exceptions were major roads with no aesthetic value.³⁴ Therefore bluestone kerb and channel evident in the former City of St Kilda is not necessarily early as bluestone kerb and channelling was still being laid in the 1980s. In these cases it is the detailing that will distinguish it as early or later kerb and channel. The later examples of kerb and channel tend to have larger joints with, in some cases, mortar applied over the joints.

In the Albert Park and Middle Park areas of the former South Melbourne City Council there is little remaining bluestone kerb and channel. This is consistent with a report undertaken in 1980 which indicated that, by this time, a lot of the early bluestone kerb and channel in

Urban Advisory Committee, A Report to South Melbourne City Council: Bluestone Street Works in South Melbourne, February 1980, p. 27.

^{33.} Ibid.

^{34.} lbid., p.27.



Historical background and analysis

these areas had been replaced by concrete kerb and channel or a combination of bluestone and concrete kerb and channel. $^{\rm 35}$

Where bluestone kerb and channelling still exists in Elwood, parts of St Kilda, East St Kilda and Balaclava, the construction is substantially consistent with three pitcher bluestone channel and kerb (Appendix 2, photos 9 - 11). This may reflect a long running policy by the St Kilda Council to lay streets with three pitcher channel and kerb which also included progressively relaying early bluestone kerb and channel to a consistent specification. It is difficult to determine the date of the three pitcher channel and kerb, however, the predominant jointing method which does not use mortar over the joints indicates earlier (say around 1920s) rather than later construction.

In the Garden City Housing Estates in Port Melbourne, the original layout of the streets and their infrastructure of concrete kerb and channel, and concrete footpaths are essentially unchanged.³⁶ There have, however, been progressive repairs of concrete kerb and channelling with concrete. The match of the concrete has generally not been accurate leaving a patchwork effect in these housing estate areas (refer to Appendix 2, photos 12 & 13).

2.4.2 Laneways

Pitched laneways appear to have survived in all areas covered by Heritage Overlay precincts to a much greater extent than heritage bluestone kerb and channel. There is a mixture of treatments to heritage laneways scattered throughout the municipality, including fully pitched laneways with side or centre channels, and laneways with bluestone channels only.

There are a number of occurrences where the bluestone pitched crossover to the laneway has been retained but the pitching of the actual laneway has been removed.

A number of the laneways in the municipality retain distinctive detailing, such as curving of channelling around pits (Appendix 2, photo 22), early grates to pits (Appendix 2, photo 28) and manhole covers. In particular if the manhole covers contain reference to Emerald Hill or Sandridge in their detailing they have been installed prior to 1883/1884 and indicate the age of the laneway.³⁷

Some bluestone pitched laneways within the precincts also retain evidence of the use of carts. For example, Adams Lane in Port Melbourne contains cart wheel marks etched into the bluestone pitchers (Appendix 2, photo 24). This type of extant evidence of use is very rare.

2.4.3 New Bluestone Features

It is also important to note that a lot of the municipality contains road and landscaping features which include more recent use of new and recycled bluestone pitchers. This includes use in retaining walls, garden edging, roundabouts, traffic islands, as well as new road alignments. (Refer to Appendix 2, photos 29-31)

In 1980 the Urban Advisory Committee reported 'until recently bluestone was thrown on the tip as it was considered worthless; now it is used for landscaping' in the City of Port Melbourne³⁸ and in the City of St Kilda, bluestone was considered to be better as existing supplies were re-used.³⁹

^{35.} Ibid., pp.1-3.

City of Port Phillip, Revised Draft: Design & Development Guidelines Fisherman's Bend, August 2001, p. 13.

^{37.} Pers. Comm. Mark Foord, Port Phillip City Council

^{38.} Urban Advisory Committee, Op.Cit., p. 24.

^{39.} Ibid., p. 27.

3 Cultural Significance

3.1 Methodology and Criteria for Cultural Significance

The basis for assessment of cultural significance in this report is the Australian Heritage Council Criteria which are in accordance with the Burra Charter as follows:

Criterion A:

Its importance in the course, or pattern, of australia's natural or cultural history

- A.1 Importance in the evolution of Australian flora, fauna, landscapes or climate.
- A.2 Importance in maintaining existing processes or natural systems at the regional or national scale.
- A.3 Importance in exhibiting unusual richness or diversity of flora, fauna, landscapes or cultural features.
- A.4 Importance for association with events, developments or cultural phases, which have had a significant role in the human occupation and evolution of the nation, State, region or community.

Criterion B:

Its possession of uncommon, rare or endangered aspects of Australia's natural or cultural history

- B. I Importance for rare, endangered or uncommon flora, fauna, communities, ecosystems, natural landscapes or phenomena, or as a wilderness.
- B.2 Importance in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practiced, in danger of being lost, or of exceptional interest

Criterion C:

Its potential to yield information that will contribute to an understanding of Australia's natural or cultural history

- C.1 Importance for information contributing to a wider understanding of Australian natural history, by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.
- C.2 Importance for information contributing to a wider understanding of the history of human occupation of Australia.

Criterion D:

Its importance in demonstrating the principal characteristics of: (i) a class of Australia's natural or cultural places; or (ii) a class of Australia's natural or cultural environments

- D.1 Importance in demonstrating the principal characteristics of the range of landscapes, environments or ecosystems, the attributes of which identify them as being characteristic of their class.
- D.2 Importance in demonstrating the principal characteristics of the range of human activities in the Australian environment (including way of life, philosophy, custom, process, land use, function, design or technique).

Criterion E:

Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group

E.1 Importance for a community for aesthetic characteristics held in high esteem or otherwise valued by the community.

Criterion F:

Its importance in demonstrating a high degree of creative or technical achievement at a particular period

F.1 Importance for its technical, creative, design or artistic excellence, innovation or achievement.

Criterion G:

Its strong or special associations with a particular community or cultural group for social, cultural or spiritual reasons

G.1 Importance as a place highly valued by a community for reasons of religious, spiritual, symbolic, cultural, educational, or social associations.

Criterion H:

Its special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history

H.1 Importance for close associations with individuals whose activities have been significant within the history of the nation, State or region.

3.2 Discussion of Significance

A.4 Importance for association with events, developments or cultural phases, which have had a significant role in the human occupation and evolution of the nation, State, region or community.

The significance of the heritage kerbs, channels & laneways lies in their demonstration of settlement patterns in the City of Port Phillip, as well as demonstrating early construction practices.

It is the bluestone kerb and channelling and bluestone pitched laneways that are significant in the City of Port Phillip along with the original concrete kerb and channelling in the Fisherman's Bend precincts.

While in some cases bluestone kerb and channelling does demonstrate early establishment of an area, not all of the remaining bluestone kerbs and channels in the City of Port Phillip indicate this. Often the local councils had reconstruction schemes which took up previous kerb and channelling to streets and, while retaining bluestone kerb and channelling, it is not the original treatment. In addition, use of bluestone for pitching kerbs, channelling and laneways continued well into the 1930s and in some areas into the 1980s. In these cases, it is important to look at the detailing of the kerb and channelling to determine its significance. As a general rule kerb and channelling with less that three pitcher channels is not considered to be significant as this indicates a construction date after the 1930s.

Where bluestone kerb and channelling is intact from the main period of development of the area and relates to the phase of significance, it is important in contributing to the overall significance of the area. For example in St Vincent Place, the significance of the area is greatly enhanced by the intact kerb and channelling which dates from the establishment of the precinct. In much of the South Melbourne Precinct, the retention of the bluestone pitched laneways contributes to the significance of the precinct as, along with the housing stock, they demonstrate the construction practices of the nineteenth Century and the boom period.

During the establishment of the City, the more built up an area was, the more demand there was for paving of laneways. Therefore, rather than indicating the early establishment of an area pitched laneways demonstrate the establishment of closer settlement in a particular area. Given that pitching of laneways only occurred up to about the 1930s and that most of the area contains bluestone pitched laneways, the pitched laneways are important for demonstrating that closer settlement occurred at an early stage in much of the City of Port Phillip.

B.2 Importance in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practiced, in danger of being lost, or of exceptional interest

The bluestone kerb and channel and pitched laneways which demonstrate early detailing provide evidence of road engineering practice that is no longer in use. These include the butt jointing method for early kerb and channel and pitched laneways which does not include a mortar joint between stones but relied on the skill of the stonemason to carefully select and place each stone for a particular position. In addition, the relatively early use of fine mortar joints is a practice no longer followed in modern construction techniques.

C.2 Importance for information contributing to a wider understanding of the history of human occupation of Australia.

Particular detailing in laneways demonstrates the changing nature of Melbourne's engineering infrastructure. The original use of laneways as open drains is still indicated by the channels leading from the rear of individual properties into a central channel. Also the paving around pit vents and openings in laneways constructed prior to 1900 indicates the construction of Melbourne's underground stormwater system. The cart wheel marks seen in some lanes provides evidence of the use of night carts which used the lanes for access to the rear of properties prior to, and in the early years of, the installation of Melbourne's sewerage system.

D.2 Importance in demonstrating the principal characteristics of the range of human activities in the Australian environment (including way of life, philosophy, custom, process, land use, function, design or technique).

The remaining heritage kerbs, channels and laneways in the City of Port Phillip are significant in that they demonstrate nineteenth and twentieth Century road construction techniques which were typical across Melbourne's early developed areas. Although there was some local variation, the principal characteristics of the design, materials and stone masonry skills can still be appreciated.

E. I Importance for a community for aesthetic characteristics held in high esteem or otherwise valued by the community.

The high quality of workmanship demonstrated by early bluestone kerb and channel and laneways and their bluestone appearance are of aesthetic significance as it contributes to the nineteenth and early twentieth Century appearance of much of the municipality. They support the remaining buildings and other features in demonstrating evidence of an earlier era.

F. I Importance for its technical, creative, design or artistic excellence, innovation or achievement.

The early bluestone kerb and channelling and pitched laneways demonstrate technical excellence in their expression of the stonemasonry skills available in the nineteenth and early twentieth Century, with the use of butt jointing for bluestone pitchers, and ability to provide curves around pits and corners. Even the narrow joints which came after the butt joints require a level of skill to execute which is beyond most modern masons.

3.3 Statement of Cultural Significance

The early (up until the 1930s) bluestone kerb and channelling and bluestone pitched laneways are of local significance for their demonstration of changing settlement patterns in the City of Port Phillip (criterion A4), as well as their demonstration of early construction practices (criterion D2).

The original concrete kerb and channelling in the Fisherman's Bend precincts is of local significance for its demonstration of the era of development for this part of the City of Port Phillip (criterion A4).

The bluestone kerb and channel and pitched laneways which demonstrate early detailing are of local significance as they demonstrate road engineering practices that is no longer in use. These include the butt jointing method for early kerb and channel and pitched laneways, and also early examples of fine mortar joints (criterion B2).

Particular detailing in laneways is of local significance as it demonstrates the changing nature of Melbourne's engineering infrastructure. The original use of laneways as open drains is still indicated by the channels leading from the rear of individual properties into a central channel. Also the paving around pit vents and openings in laneways constructed prior to 1900 indicate the construction of Melbourne's underground stormwater system. The cart wheel marks seen in some lanes provide evidence of the use of night carts which used the lanes for access to the rear of properties prior to the installation of Melbourne's sewerage system (criterion C2).

The early bluestone kerb and channel and bluestone pitched laneways are of local aesthetic significance for their demonstration of high quality of workmanship and bluestone finish which contributes to the nineteenth and early twentieth Century appearance of much of the municipality. They support the remaining buildings and other fabric demonstrating an era and make the precincts richer in their demonstration of a particular period of development (criterion E1). The early bluestone kerb and channel and pitched laneways are of local technical significance as they demonstrate technical excellence in their expression of the stonemasonry skills available in the nineteenth and early twentieth Century (criterion FI).

3.4 What is Significant?

The following types of kerb and channelling and laneways are of cultural significance to the City of Port Phillip:

Kerb and channelling

- Bluestone kerb and channelling constructed up to the 1930s
- Concrete kerb and channel in the Fisherman's Bend Precincts only
- > Bluestone pitched crossovers
- Kerb and channel furniture such as pit grates installed up to the 1930s

Laneways

- > Fully pitched bluestone laneways with channel/s
- > Laneways containing bluestone channels
- Laneway furniture such as manhole covers installed up to the 1930s

4 Conservation Guidelines

4.1 General Policy

A Statement of General Conservation Policy sets out guiding policies for the conservation of the culturally significant fabric. These policies apply to significant kerbs, channels and laneways and reflect the significance as outlined in the previous section.

4.1.1 Statement of General Conservation Guidelines

Heritage bluestone kerb, channelling and laneways and concrete kerb and channel should be recognised as being of local importance to the City of Port Phillip with historical, aesthetic and technical significance.

All future conservation or development actions for the heritage bluestone kerb, channelling and laneways and concrete kerb and channel should be based on the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter).

Significant kerb, channelling and laneways in the City of Port Phillip should have a conservation approach applied to all aspects of works and use that affect them. This will ensure that the significance of the street infrastructure is maintained for present and future generations. These guidelines provide guidance as to how this shall occur.

4.1.2 Rationale

The significance of the heritage kerbs, channels and laneways lies in their demonstration of the early settlement of the City of Port Phillip as well as demonstrating early construction practices. They contribute to the historical and aesthetic significance of the Heritage Overlay Precincts in the City of Port Phillip.

The aim of the conservation guidelines is to retain significance; therefore the rationale for the conservation guidelines is to conserve significant fabric from kerbs channels and laneways that demonstrate the early development of the area and demonstrate early road construction techniques.

4.2 Guidelines

4.2.1 Objectives

To preserve significant heritage bluestone kerb and channelling, bluestone laneways and significant concrete kerb and channelling contained within Heritage Overlay Precincts in the City of Port Phillip.

To ensure that reconstruction and repair of significant heritage bluestone kerb and channelling, bluestone laneways and significant concrete kerb and channel is carried out in a way that reflects as closely as possible the original appearance.

4.2.2 General Guidelines

Bluestone kerb and channelling and bluestone laneways should be inspected and repaired, and maintained as necessary, to prevent deterioration and the need for reconstruction.

The dates, description and photographs of any reconstruction works should be documented and retained by the Council.

A photographic record should be kept of the existing conditions of significant kerbs and channels and bluestone laneways prior to any works being undertaken.

The significant laneways and kerb and channelling in the City of Port Phillip should be interpreted to explain their significance to the wider community. This could be done through documentation being available for use in displays within the community.

Significant kerb and channelling and laneways should be identified and a database maintained by the Council's engineering department. This database should also record any particular features of the kerb and channel or laneways such as pit covers or cart wheel tracks.

Any permits issued for works to significant heritage kerbs, channels and laneways should include a condition that works must abide by this guidelines.

4.2.3 Bluestone Kerb and Channelling

Council shall maintain and preserve existing bluestone kerb and channelling of cultural heritage significance paying close attention to original detail and construction wherever possible.

Reconstruction should only occur when the existing kerb and channel is at the end of its useful life or when the amenity for residents is negatively affected. Closely inspect the original construction methods and reinstate as close as possible to existing with particular attention to the jointing method and kerb layback angle. If reconstruction of the road is required, including the kerbing and channelling, and where the street (intersection to intersection) is 50% or more significant bluestone kerbing/channelling, then that street will be reconstructed with bluestone for the whole street.

If a street (intersection to intersection) has less than 50% significant bluestone kerbing, then the bluestone section will be retained and reconstructed to the original details and the other sections shall be reconstructed to match their current materials.

Where street narrowing works are required as a first preference possible, methods of street narrowing that visibly retain both the kerb and channelling should be explored and utilised. Where this cannot be achieved bluestone channel should be removed and stockpiled but the bluestone kerb retained in place and incorporated into new paving to indicate the previous alignment of the street.

Where trees or tree roots are impacting on significant bluestone kerb and channel, the minimum amount of kerb and channel required to allow the tree to grow should be removed, if the tree is of significance to the Heritage Overlay precinct. For non significant trees, selection of another species which allows for retention of the heritage kerb and channel is required.

Where disability access is required for incorporation into path systems, they should be installed with minimum intervention to significant kerb and channelling and where possible avoid alteration to or removal of significant kerb and channelling.

Unless there is sufficient evidence to allow for accurate reconstruction of a previous bridge in the same location, bridges over deep channels should be provided in a contemporary manner which is sympathetic to the significance of the precinct and has minimum impact on significant kerb and channelling.

Ensure that contractors demonstrate that they have the capability to achieve accurate reconstruction or maintenance that reflects the original appearance of the kerb and channel.

4.2.4 Bluestone Pitched Laneways

Minimal intervention is recommended in the course of maintaining bluestone pitching in laneways. If bluestone pitchers require removal for resurfacing or to undertake maintenance, the laneway should be reconstructed to match as closely as possible the original appearance, with particular attention to the jointing method.

Where bluestone constructed laneways are closed and become privately owned, bluestones should be removed and retained by Council for use in maintenance and reconstruction of heritage kerbs, channels or laneways.

Ensure that contractors demonstrate that they have the capability to achieve accurate reconstruction or maintenance that reflects the original appearance of the bluestone pitching.

4.2.5 Concrete Kerb and Channelling in the Fishermans Bend Estates

Council shall maintain and preserve existing concrete kerb and channelling of cultural heritage significance paying close attention to original detail and construction wherever possible.

Reconstruction should only occur when the existing kerb and channel is at the end of its useful life or when the amenity for residents is negatively affected. When this is required, closely inspect original construction methods and reinstate as close as possible to existing.

4.2.6 Stockpiling Guidelines

Where road features of no significance which use recycled bluestone pitchers require reconstruction, the bluestone pitchers should be removed and stockpiled for use in restoration works and the feature should be reconstructed in new materials.

Where bluestone pitching is removed from kerb and channel and laneways outside of Heritage Overlay Precincts, the bluestone should be stockpiled for use in repair and reconstruction works undertaken to significant kerb and channelling and pitched laneways contained within Heritage Overlay precincts.

4.2.7 Contemporary use of Bluestone

To ensure that the maximum amount of historic bluestone pitchers are available for reconstruction of significant bluestone kerbs, channels and laneways, the use of recycled bluestone should not be used in new features.

Where possible, new road or urban design features should use contemporary materials rather than recycled bluestone pitchers which can be used to restore existing significant roads and laneways.

Where new bluestone (cut bluestone/pavers) is used in new road features, it should be detailed in such a way that it is distinguishable as new construction.

4.2.8 Recording and Covering

In rare instances where heritage kerbs and channels and laneways cannot be reconstructed due to changes of level or alignment, it may be appropriate to archaeologically record and cover the historic features. If this is done, a separation layer should be provided between the old and new material. This allows the later covering to be removed in the future without damage to the historic fabric beneath if circumstances changes.

5 Select Bibliography

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Borough of Sandridge, Plan of Right of Way off Spring Street Section 47, 1882.

Borough of Sandridge, Plan and Section of Right of Way between Railway and Station Places, 1899.

Borough of Port Melbourne, Right of Way off Farrell & Nott Streets, 1888.

Borough of Port Melbourne, Right of Way Section 4 [Nott Street near Rouse Street] 22nd August 1892.

Channel Pickles Street West Side, Contract No. 54, [Between Beaconsfield Parade and Graham Street] 1890.

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Right of Way Block 55 [Between Bridge and Raglan Streets parallel to Ross and Derham Streets] c.1887.

Right of Way Block 10 [off Princes Street] 7th June 1889.

Right of Way on Section 54 [Pickles Street near Beaconsfield Parade] 1 st July 1890.

Right of Way Section 7 [Dow Street] 1890.

Town of Port Melbourne, Plan of Melville Street, 1899.

Town of Port Melbourne, Plan of Right of Way Section 27, [off Heath Street] 6th May 1912.

Appendix I – Historical Drawings



Image I. Borough of Sandridge, Plan of Right of Way off Spring Street Section 47, 1882. Source: City of Port Phillip Library Service, Local History Collection



Image 2. Detail - Borough of Sandridge, Plan of Right of Way off Spring Street Section 47, 1882. Source: City of Port Phillip Library Service, Local History Collection



Image 3. Right of Way Block 55 [Between Bridge and Raglan Streets parallel to Ross and Derham Streets] c.1887. Source: City of Port Phillip Library Service, Local History Collection



Image 4. Detail - Right of Way Block 55 [Between Bridge and Raglan Streets parallel to Ross and Derham Streets] c.1887. Source: City of Port Phillip Library Service, Local History Collection



Image 5. Borough of Port Melbourne, Right of Way off Farrell & Nott Streets, 1888. Source: City of Port Phillip Library Service, Local History Collection



Image 6. Town of Port Melbourne, Plan of Melville Street, 1889. Source: City of Port Phillip Library Service, Local History Collection



Image 7. Detail - Town of Port Melbourne, Plan of Melville Street, 1889. Source: City of Port Phillip Library Service, Local History Collection



Image 8. Channel Pickles Street West Side, Contract No. 54, [Between Beaconsfield Parade and Graham Street] 1890. Source: City of Port Phillip Library Service, Local History Collection



Image 9. Detail Channel Pickles Street West Side, Contract No. 54, [Between Beaconsfield Parade and Graham Street] 1890. Source: City of Port Phillip Library Service, Local History Collection



Image 10. Right of Way Section 7 [Dow Street] 1890. Source: City of Port Phillip Library Service, Local History Collection



Image 11. Detail - Right of Way Section 7 [Dow Street] 1890. Source: City of Port Phillip Library Service, Local History Collection



Image 12. 1980 Survey of extant bluestone kerb, channelling and laneways in South Melbourne, Albert Park and Middle Park. Source: Urban Advisory Committee, A Report to the South Melbourne City Council: Bluestone Street Works in South Melbourne, The Urban Advisory Committee, February 1980

Appendix 2 - Current Photographs

All photographs taken by HLCD Pty Ltd, April 2006

Kerb and Channelling



Photo I. Cecil Street, South Melbourne



Photo 2. Napier Street, South Melbourne



Photo 3. Montague Street, South Melbourne



Photo 4. St Vincent Place South, South Melbourne



Photo 5. Whiteman Street, South Melbourne



Photo 7. Bridge Street, Port Melbourne



Photo 8. Church Street, South Melbourne



Photo 9. Shelley Street, Elwood



Photo 10. Normandy Street, Elwood



Photo II. Murchison Street, East St Kilda



Photo 12. Page Avenue, Fisherman's Bend



Photo 13. Page Avenue, Fisherman's Bend



Photo 14. Bay Street widening Port Melbourne with bluestone kerb retained indicating the original road alignment



Photo 15. Douglas Street, South Melbourne



Photo 16. Corner Park & Cecil, more recent use of bluestone kerb and channel



Photo 17. Bevan Street, South Melbourne



Photo 18. Dow Street, Port Melbourne



Photo 19. Graham Street, Port Melbourne

Laneways



Photo 20. Esplanade Place, Port Melbourne



Photo 21. Bank Place, South Melbourne



Photo 22. Lane off Church Street, South Melbourne



Photo 23. Adams Lane, Port Melbourne



Photo 24. Adams Lane, Port Melbourne



Photo 25. Maisie Lane, Port Melbourne



Photo 26. Railway Place, South Melbourne



Photo 27. Rosetti Lane, Elwood



Photo 28. Lane off Ferrars Place, South Melbourne

New Road features constructed of bluestone



Photo 29. Traffic Island, Cecil Street, South Melbourne



Photo 30. Retaining wall in Whiteman Street, South Melbourne



Photo 31. Roundabout in Cecil Street, South Melbourne which uses recycled bluestone pitchers