‘Leisure, pleasure … rubbish and rats?’: the planned and unplanned reclamation of bluestone quarry sites in urban Melbourne, 1835-2000

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Abstract

This thesis explores how regulatory mechanisms and community perceptions of urban extractive industry have changed, particularly during the twentieth century. Extractive industries operational in the twenty-first century are now located well outside of the metropolis, obviating the impacts of this deleterious industrial practice. Yet this was not always the case. Australian cities, settled following the industrial revolution, made great use of these extractive resources often accessing them in quite densely settled areas. Such land-use often took place in inner-urban locales, and the infancy of planning practice at that time saw these quarries established in an ad hoc manner. The absence of controls with respect to the location and management of quarries culminated in an uncomfortable closeness with nearby residential areas. As quarrying operations moved towards the urban periphery during the early twentieth-century, the absence of comprehensive planning failed to prevent suburban development from encroaching upon extractive industry, and in some cases this led to conflict between residents, government, planning bodies, and industry. This is especially apparent in Melbourne, the world's largest metropolitan area atop a basaltic plain, from which the stone has been utilised for construction and roadwork since the city's inception in 1835. Urban planning for quarries was historically absent until the formation of legislation in the 1960s in response to urban and land-use conflict; additionally, the city's ongoing reliance on rubbish tips led tipping to be a default after-use for such sites, also raising ire. Improvements in this process encompassed the creation of legislation, planning policies, and the formation of activist groups to agitate for change. These developments were prompted by land-use conflicts, demographic change, and

increased environmental awareness, all contributing to a perceived need for better planning. The tipping process was recast through a lens of social justice as undesirable undertakings no longer compatible with residential life.

This thesis focuses on the use and after-use of sites of extractive industry in Melbourne, and how these sites and their final outcomes were planned—by government and planning bodies—and 'unplanned'—left to the market or the community to resolve. It demonstrates that comprehensive urban planning for quarries and their after-uses have been historically absent: this was exacerbated by the city's reliance upon landfill as a mode of refuse disposal, which could also be harnessed to remediate excavated sites. These findings were revealed in undertaking case study analyses of the western suburbs of Newport and Niddrie. Although communities in both areas were fundamentally successful in limiting or preventing the complete transformation of their local quarry sites into tips, the form and success of quarry remediation was still fundamentally subject to the limitations of the state government's planning directives.

This thesis found that local communities and groups were crucial to the achievement of a compensatory and judicious land-use outcome for urban quarry sites. The investigations within this thesis reveal the importance of local community as 'watchdogs' of planning processes and procedures in an instance of legislative and regulatory oversight spanning two centuries.

Declaration

This is to certify that:

i. This thesis comprises only my work towards the Doctor of Philosophy except where indicated,

ii. Due acknowledgement has been made in the text to all other material used,

iii. The thesis is no more than 100,000 words in length, exclusive of tables, maps, figures, bibliographies, and appendices.

Victoria Kolankiewicz, January 2020

Preface

The research undertaken with respect to the case studies in this thesis has additionally formed the basis of a number of refereed conference papers and unrefereed symposium presentations, presented nationally and internationally. These are as follows:

- **KOLANKIEWICZ, VICTORIA.** 'Memories of Stone.' Presented at 'From Boom to Bust,' Australian Historical Association Conference, Ballarat VIC, July 2016.
- **KOLANKIEWICZ, VICTORIA.** 'Iron roots, basalt foundations: the informal reclamation of scarred landscapes in Starachowice, Poland, and Melbourne, Australia.' Presented at the European Association for Urban History 13th International Conference on Urban History, Helsinki, Finland, September 2016 (in published proceedings).
- **KOLANKIEWICZ, VICTORIA.** 'Making Something of a Hole in the Ground: The Re-Use of Basalt Quarries in Melbourne's Western Suburbs.' Presented at the Australasian Urban History Planning History Conference, Melbourne, Australia, January 2018 (in published proceedings).
- **KOLANKIEWICZ, V.** 'Niddrie: A case study in inadequate town planning, community activism, and selective memorialisation?' Presented at *The Stones of Melbourne: History, Excavation, Circulation and Affect*, University of Melbourne, Faculty of Arts, March 2019.

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Table of contents

Abstract *i*

Declaration *iii*

Preface *iv*

Acknowledgements *v*

Figures and tables *x*

Abbreviations *xiii*

Chapter 1 Introduction

1.1 The use and re-use of quarried land 1

1.2 Research questions 4

1.3 Extractive industry in Melbourne 5

1.4 Surplus space: capital, power, and rubbish 15

1.5 Case study sites 18

1.6 Contribution 21

1.7 Methodology and theoretical base 22

1.8 Chapter outlines 24

1.9 Conclusion 27

Chapter 2 Literature and methodology: explanatory and exploratory

2.1 Introduction 29

2.2 The narrative-building capacity of an urban historical approach 30

2.3 A theoretical framework: the narrative turn 35

2.4 A conceptual framework: planning as power 39

2.5 Post-industrial landscapes and brownfields 44

2.6 Activism as critique 49

2.6.1 *Spatialising power and capital through planning* 51

2.6.2 *Reform, consumption, and preservation* 54

2.6.3 *Activism as systemic critique* 59
2.6.4 *The changing scope of urban movements in Victoria* 63
2.7 Methodology 66
2.8 Chapter conclusion 73

Chapter 3 Strategic planning for quarries and their after-use
3.1 Chapter introduction 75
3.2 Planning for health 77
3.3 Noxiousness and nuisances 81
3.4 The development of land-use zoning 84
3.5 The MMBW 1954 *Report* for Melbourne 86
3.6 Planning for a growing Melbourne: 1971 90
3.7 Planning for deindustrialisation 98
3.8 A new perspective on community and environment 101
3.9 Planning policies since the Kennett era 107
3.10 Chapter conclusion 109

Chapter 4 Statutory planning for quarries and their after-use
4.1 Chapter introduction 111
4.2 Defining extractive industry 113
4.3 Redefining the mining sector 119
4.4 Developing the Extractive *Industries Act 1966* 123
4.5 Addressing quarry re-use in the 1966 *Act* 130
4.6 Developing tighter controls 132
4.7 The 1966 *Act* in practice 135
4.8 Changes to the 1966 *Act*: reflexivity and responsiveness 139
4.9 Beyond the era of the urban quarry 143
4.10 Finessing statutory controls 146
4.11 Strengthening frameworks for quarry rehabilitation 152
4.12 Chapter conclusion 156

Chapter 5 Tipping as a default after-use for quarrying

5.1 Chapter introduction 157
5.2 Urban waste in early Melbourne 158
5.3 Developing a dependency upon tipping 160
5.4 Early criticism of urban tipping 164
5.5 Mismanagement and mis-use 170
5.6 Comparisons with other Australian cities 176
5.7 Co-operation and restitution 179
5.8 Strategic approaches to the urban tip 180
5.9 Introducing the 'landfill' 186
5.9.1 *The advent of recycling* 192
5.10 Governance and emergent controls 193
5.11 The growing problem of industrial waste 195
5.12 Prolonging the life of the tip: recycling 200
5.13 Formalising opposition to tipping 202
5.14 'The Rule of Diminishing Resources' 205
5.15 Contamination and toxicity 210
5.16 'Victims of history' 215
5.17 Chapter conclusion 217

Chapter 6 Newport Lakes

6.1 Chapter introduction 219
6.2 Site context 221
6.3 The need for urban tips 225
6.4 An opportunity for development 227
6.5 An urban fishery proposal 233
6.6 Recreation and creativity in the quarry 237
6.7 Tipping: tolerance, or compromise? 245
6.8 Fresh ideas for urban nature 248
6.9 Creating Newport Lakes 256

6.10 Chapter conclusion 264

Chapter 7 Niddrie Quarry

7.1 Introduction 265
7.2 Site context 266
7.3 The impact of urban encroachment 269
7.4 Dormancy and early proposals 278
7.5 A second tipping proposal 286
7.6 Activism and community action 291
7.7 From land-use conflict to social justice 296
7.8 Blocking the tip 306
7.9 Creating Valley Lake 311
7.10 Chapter conclusion 318

Chapter 8 Conclusion

8.1 Introduction 320
8.2 Research aim 322
8.3 Conceptual reflections 324
8.4 Significance, contributions, and implications 325
8.5 Scope for future research 327
8.6 Concluding remarks 329

Bibliography 331

Appendix

Appendix A 369
Appendix B 372

Figures and tables

Figure 1.1	A former limestone quarry, now the Butchart Gardens, British Columbia, Canada—an oft-cited precedent for the remediation of quarries.	4
Figure 1.2	The underlying geology of Melbourne.	8
Figure 1.3	A photograph depicting a typical urban clay quarry site in Hawthorn, an eastern suburb of Melbourne.	9
Figure 1.4	Surface settlement (Roy Boyd.	11
Figure 1.5	A newspaper article concerning the development of a bluestone quarry into the Highpoint shopping centre.	12
Figure 1.6	Altona Gate Shopping Centre, noting quarried landform.	12
Figure 1.7	The Homebush brick quarry in Sydney, 2016, noting the closed walkway which allows the public to enter and view the site.	13
Figure 1.8	The Perth amphitheatre.	13
Figure 1.9	Satellite image depicting the Burwood clay quarry in 2010.	14
Figure 1.10	[Burwood] in its present-day form, a housing and shopping centre development.	14
Figure 1.11	A satellite image depicting the Wantirna South clay quarry in 2010.	14
Figure 1.12	[Wantirna South] present-day form as a housing and commercial development, noting the flat landscape and minimal inundation.	14
Figure 2.1	User interface of newspapers.com.	71
Figure 3.1	Description of Extractive Industrial Zones.	89
Figure 3.2	Constraints to development, noting mineral resources in orange.	93
Figure 3.3	Objectives concerning extractive industry.	94
Figure 3.4	Envisioning a clear demarcation, with an expectation of restoration following extractive industrial practices.	99
Figure 4.1	A undated photograph, likely of the late 1960s or early 1970s, depicting urban encroachment upon a gravel quarry in Berwick, on Melbourne's south-eastern urban fringe.	138

Figure 4.2	A satellite image depicts the Berwick gravel quarry in its present-day form, a public open space known as Wilson Botanic Park.	138
Table 4.1	Operational urban bluestone quarries, compiled utilising the 1997 *Melway* street directory.	139
Figure 4.3	The distribution of urban hard rock quarries confined to its western aspect.	144
Table 4.2	Quarries and their after-uses, compiled following site visits.	150
Figure 5.1	Pyrmont Incinerator, 1938.	164
Figure 5.2	West Melbourne Rubbish Tip.	172
Figure 5.3	Recycling in Hobart.	201
Figure 6.1	The location of Newport and its quarry complex, now a park.	221
Figure 6.2	The proximity of houses to the Newport quarry complex, with segments marked for potential recreational use.	224
Figure 6.3	A local newspaper article concerning the housing development.	228
Figure 6.4	Proposed Newport Village.	230
Figure 6.5	Newspaper coverage of the fishing event.	234
Figure 6.6	The Scott and Furphy plan.	242
Figure 6.7	Front cover of a proposal by John Connell Consulting Group, depicting an array of recreational activities.	243
Figure 6.8	Facilities of the proposed passive recreation development.	244
Figure 6.9	Notice of public meeting distributed to local residents.	251
Figure 6.10	The varied landscapes of Newport Lakes. Clockwise: basalt ‘stepping stones’ across flooded quarry; filled tip now a grassy lawn; a wetland enclosed by escarpments; remnant basalt wall.	262
Figure 6.11	The map indicating the final development outcome of the quarry site.	263
Figure 7.1	The location of Niddrie and its quarry complex, now a housing estate.	267
Figure 7.2	Post-war subdivisions of Avondale Heights and Niddrie, Niddrie Quarry circled.	268
Figure 7.3	An aerial image of the Fowler Quarry site in Niddrie, undated but most likely captured in the late 1960s or 1970s.	272

Figure 7.4	Press release concerning the Garden Festival.	282
Figure 7.5	An Environmental Effects Statement as published in *The Age*.	283
Figure 7.6	Excerpt from *The Age*.	297
Figure 7.7	The Steele Creek prior to rehabilitation in an undated image, likely 1970s.	298
Figure 7.8	The Steele Creek, as of 2019.	298
Figure 7.9	Niddrie Quarry website.	299
Figure 7.10	Signs placed in the Spring Gully Reserve, published in *The Age*.	301
Figure 7.11	Helen and Jos van den Berg with group members and signage.	303
Figure 7.12	Newspaper photograph depicting children riding bikes and an abandoned vehicle.	305
Figure 7.13	Newspaper article in *The Age* published following the 'scrapping' of landfill plans.	311
Figure 7.14	Valley Lake Masterplan by Places Victoria.	314
Figure 7.15	Valley Lake in early 2019.	316
Figure 8.1	Proposed quarries on the western suburban fringe—potential sites for future analysis.	328

Abbreviations

Board of Public Health	BPH
Central Business District	CBD
Department of Crown Lands and Survey	DCLS
Department of Mines	DoM
Department of Planning	DoP
Department of Planning and Community Development	DPCD
Environmental Effects Statement	EES
Extractive Industries Advisory Committee	EIAC
Extractive Industry Licence	EIL
Extractive Industrial Zone	EIZ
Environment Protection Authority (Victoria)	EPA
Friends of Steele Creek	FSC
Interim Development Order	IDO
Informal Urban Green Space	IGS
Industrial and Related Activities Task Group	IRATG
Legislative Council of Victoria	LCV
Member of the Legislative Council	MLC
Melbourne and Metropolitan Board of Works	MMBW
Metropolitan Planning Scheme	MPS
Metropolitan Town Planning Commission	MTPC
Moonee Valley City Council	MVCC
Newport Action Group	NAG
Niddrie Lake Co-Ordinating Committee	NLCOC
Niddrie Quarry Action Group	NQAG
Parliament of the Commonwealth of Australia	PCA
State Development Committee	SDC

Special Extractive Zone	SEZ
State Government of Victoria	SGV
Town and Country Planning Board	TCPB
Urban and Regional Land Corporation	URLC

Chapter 1 Introduction

1.1 The use and re-use of quarried land

This research is driven by an interest in atypical urban spaces, which are often vulnerable to development, but can also stagnate as a result of their location, form, and poor planning and governance. An interest in these spaces was sparked by my childhood visits to local tips, as well as excursions to Newport Lakes and Niddrie, the case study sites employed within this thesis. With Niddrie in a stage of development limbo at the time–the 1990s–and Newport Lakes a novel and robust public park, I wondered how these spaces had come into being, why they contrasted so starkly with each other, and what their futures held.

This thesis initially explores the governance and closure of quarries, their re-use for landfill, and how alternative outcomes were achieved. The urban location of the quarry site, and by association the rubbish tip, were inherently subject to conflict throughout the nineteenth and twentieth centuries because of perceived detrimental effects to urban amenity. The role of local actors is not fully developed in existing histories of extractive industry, redressed in this thesis by a focus on local perceptions of these spaces and how communities played an integral role in guiding planning processes towards alternative end-use outcomes. Analysing and untangling complex narratives of planning and protest over such sites throughout the twentieth century reveals that community responses towards the re-use of quarry sites were shaped by changing attitudes towards extractive industry and waste disposal as a result of demographic shifts and growing environmental awareness. These changes are embodied within both realised and unrealised visions for development.

This thesis examines the planning and redevelopment of urban bluestone quarry sites in Melbourne, Australia, beginning with British colonial settlement in 1835. It builds upon on the symbiotic relationship between quarrying and the disposal of refuse, in a manner unique to Melbourne. The

city was settled atop bluestone, and it historically demonstrated great reliance on landfill for disposal of household and industrial refuse in contrast to other Australian cities. Such waste disposal practices were largely unchallenged until the 1970s, a formative decade which saw communities rejecting this land-use as undesirable and inappropriate. Analysis shows that changing community perceptions of the value and acceptability of urban landfilling underscored the pursuit of alternative land-use outcomes for these difficult sites.

A significant portion of the Melbourne conurbation is serendipitously located upon a large tract of high-quality basalt, well-suited to a range of construction and infrastructure applications. The city's northern and western sub-regions are characterised by the basalt plain. Its utilisation has become a distinctive component of Melbourne's urban identity: as Stephanie Trigg writes, 'Melburnians see and touch bluestone every day.'[1] Laneways, gutters, bridges, roads, railway lines, and institutional buildings of Melbourne's mid-to-late nineteenth century owe their form to bluestone, much as Sydney, Hobart, and Adelaide are typified by the use of sandstone, particularly in the construction of colonial institutional buildings.[2] Melbourne is geologically distinct from other Australian state capitals. But it is also significant in an international context, as the largest modern city located atop basalt in the world, positioned as it is on one edge of the third-largest volcanic plains region globally. Its urbanisation since 1835 is a phenomenon not seen in the other major basaltic regions: these are the Deccan plateau of west-central India, the Siberian Traps of north-eastern Russia, and the Columbia River Basalt Group which flows through the North American states of Washington, Oregon, Idaho, Nevada, and California.[3] Both national and international contexts highlight

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[1] Stephanie Trigg, "Bluestone and the City: Writing an Emotional History," *Melbourne Historical Journal* 44, no. 1 (2017): 41-53.

[2] Trevor Howells and Michael Nicholson, *Towards the Dawn: Federation Architecture in Australia, 1890-1915* (Sydney: Hale & Iremonger, 1989), 99.

[3] Hetu Sheth, *A Photographic Atlas of Flood Basalt Volcanism* (Basingstoke: Springer, 2017).

Melbourne as especially unique in its geological character and this has influenced its unbalanced urban development, resulting in a proliferation of industrial uses in the city's basaltic west.

This thesis examines two case study sites, the suburbs of Newport and Niddrie, both located in the western suburbs of metropolitan Melbourne. Here, two distinct quarry re-use outcomes—parkland, and housing—were achieved, beginning in the 1970s and finalised in the 1990s, through agitation and activism by local community members. These case studies highlight local actors as key determinants of land-use outcomes where existing planning frameworks demonstrate oversight. These former quarry sites are also found to be controversial and the focus of numerous characterisations and visions—novel, undesired, monetised, or touristic—prior to their successful re-use, a process spanning decades.

The aim of this thesis is to identify the emergence and determinants of: statutory and strategic planning controls in relation to extractive industrial sites and their re-use; the relationship between quarrying and waste disposal, and why the landfill had emerged as a default 'solution'; and the actions taken by local communities to locate desirable or compensatory after-uses for these spaces. Sustained community objection to landfill proposals in both case study sites is found to be especially significant: in Newport, this took place on a local scale, whilst in Niddrie, this was politicised in the midst of a state election. End-use outcomes are understood as redressing historic injustices of planning and governance which had allowed the co-location of extractive industry, landfill, and the urban realm. The land-uses perceived by the community as most just and appropriate for the sites in question were informed by national and international precedents, such as the Butchart Gardens in British Columbia, Canada, a remediated limestone quarry (see Figure 1.1). This mode of re-use was seen as compensatory.

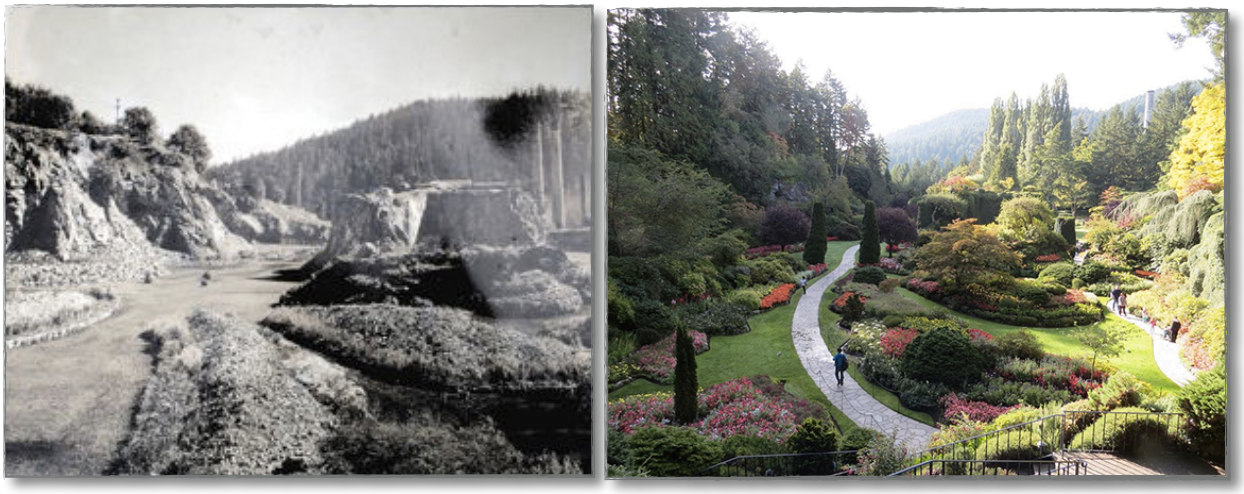


Figure 1.1: A former limestone quarry, now the Butchart Gardens, British Columbia, Canada—an oft-cited precedent for the remediation of quarries (*Sunken Garden*, n.d., The Butchart Gardens, accessed May 2, 2017, https://www.butchartgardens.com/garden/sunken-garden/).

Through archival documentation, newspaper sources, and semi-structured interviews, processes of contestation and activism are highlighted as integral to the determination of the land-use outcomes for these two disused bluestone quarries. This work also illuminates the potential for historic repetition where urban encroachment threatens to curtail peri-urban extractive industrial activity and subsequent landfilling.

1.2 Research questions

Two primary questions guide this research, with a number of sub-queries delving into specific realms of planning and governance. These research questions warrant historical inquiry into past practices of quarrying and refuse disposal, and query the dominance of tipping as a solution not only to waste disposal issues, but also the abundance of urban quarry sites. This provides a necessary context for the planning frameworks created to guide the re-use of quarry sites. It also highlights the basis for re-use as a matter of conflict, particularly where community perspectives do not align with those of local or state government.

These research questions are as follows:

1. How were bluestone quarries in Melbourne historically planned for, both during their operation and re-use?

    a. Why has landfill historically acted as a default solution to the problematic quarry site?

2. What factors contribute to the development outcomes for a bluestone quarry site?

    a. What role has strategic and statutory planning played?

    b. How did local communities negotiate transition or change in instances of re-use?

    c. What emerged as the dominant force determining re-use—town planning mechanisms, local community sentiment, a combination of the two, or something else?

1.3 Extractive industry in Melbourne

Melbourne developed in accordance with progressive and modern urban expectations. From its colonial settlement in 1835 and its subsequent declaration as a town in 1842, the urbanisation of the city took place against a backdrop of prosperity provided by the gold rush in the early 1850s. Well prior to industrialisation, the city 'acquired an overwhelming hegemony in its region, a complex internal economy and a characteristically metropolitan ethos,' in the words of historian Graeme Davison.[4] Early British conceptualisations of best-practice urban organisation were adopted, and cities across Australia were regarded as *tabula rasa*, with the 'overcrowding and pollution of Britain's industrial wens' and like maladies comparatively absent.[5] The emerging Australian metropolises, of which Melbourne was no exception, were seen to have a 'providential immunity

[4] Graeme Davison, *The Rise and Fall of Marvellous Melbourne* (Melbourne: Melbourne University Press, 2004), 41.

[5] Graeme Davison, "Australia: The First Suburban Nation?," *Journal of Urban History* 22, no. 1 (November 1995): 45, doi:10.1177/009614429502200103.

from the poverty, inequality, and political conflicts of the Old World.' Australian cities were more spacious, predicated on railway lines, arranged to maximise public open space, and consequently, far less dense than their British counterparts. This sense of Australian exceptionalism no doubt followed through to physical planning.[6]

The legacies of extractive industrial operations can be found in cities, peri-urban regions, and rural localities internationally. The practice of extracting earthen resources is integral to the creation of the city, where materials support its expansion and development. Clay, for example, could be shaped and fired in kilns to create bricks used in the construction of housing and drains, and this could be done from local resources, particularly in the late nineteenth and early twentieth century.[7] Limestone and sandstone can be fashioned into large blocks, used in construction; lime, in conjunction with sand, can also be used in mortar and cement.[8] Basalt similarly lends itself to a block or cobblestone form—used in buildings, drains, and kerbs—but can also be crushed to create aggregate for road-making.[9] The efficient use of these materials in the developing nineteenth century metropolis of Melbourne necessitated the close proximity of extractive industrial practices to residential and commercial areas. The transport of such heavy materials could not be easily achieved, and would greatly add to logistics costs, warranting the creation of quarry sites near to the city.[10]

The location of bluestone in Melbourne has had a significant influence upon its growth and urban form. A common local sentiment, reflected and reinforced by the media, represents the Yarra River

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[6] Davison, *The Rise and Fall of Marvellous Melbourne*, 41.

[7] Edward Dobson, "Reviews. Brickmaking—a Rudimentary Treatise on the Manufacture of Bricks and Tiles," *English Mechanic and Mirror of Science* 9 (April 23 1869): 106.

[8] Although described as limestone within the Victorian Parliamentary papers, the stone is not a true limestone, but rather 'sandstones with calcareous cement,' as per the Board on Claims to Reward for the Discovery of the Building Stone, *Statistics of the Colony of Victoria for the year 1856, Compiled from Official Records in the Registrar General's Office* (Melbourne: John Ferres, Government Printer, 1858), 3.

[9] "The News of the Day," *The Age*, September 10, 1859, 5.

[10] William Newnham, *Melbourne, biography of a city* (Melbourne: Hill of Content, 1985), 216.

as the veritable barrier between the city's northern and southern halves.[11] The city's eastern and southern suburbs are perceived to be of a higher social, cultural, and economic standing; inner- and middle- suburbs embody this most strongly, whilst the outer fringes of this sub-region maintain provincial character. The city's northern and western aspects, in contrast, have long housed undesirable land-uses. Although the innermost suburbs in these regions have gentrified in the past two decades, they had long accommodated industry and working-class populations, and industrial land-uses were peppered throughout their middle reaches. The fringes of the north and west additionally accommodated the most undesirable land-uses in the city, exemplified in the location of the Metropolitan Sewage Farm in the south-western suburb of Werribee in 1892; of post-war petroleum industrial complexes in the bayside suburbs of Altona and Williamstown; and in the seemingly-random smattering of quarries and tips, where resources were abundant and of good quality, and local residents acquiescent.

Since the nineteenth century, the western and northern regions of Melbourne have been regarded as being of maligned and marginal character, associated with the working-class, the concentration of noxious industry, and poor-quality urban environs. In contrast, the city's eastern and southern suburbs are associated with wealth and prosperity. With respect to the middle-ring eastern suburb of Hawthorn, a 1978 municipality-led study of its land and streetscapes counters the notion of Melbourne as a city split by a river. It determines that 'basalt is the real boundary in Melbourne, and not the Yarra, … shown very clearly by Ivanhoe, an 'eastern' suburb that is west of the Yarra — but east of the basalt' (see Figure 1.2).[12]

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[11] Caroline James, "North Vs South Wars: Melbourne," *realestate.com.au*, February 9, 2016, https://www.realestate.com.au/news/north-vs-south-wars-melbourne/; Natalie Craig, "A City Divided," Sydney Morning Herald, February 5, 2012, http://www.smh.com.au/entertainment/about-town/a-city-divided-20120202-1quub.html.

[12] Ross King, Jeremy Pike and George Seddon, *Hawthorn landscape streetscape and open space study : a report to the community of Hawthorn commissioned by the Hawthorn City Council* (Melbourne: Centre for Environmental Studies University of Melbourne, 1978), 51.

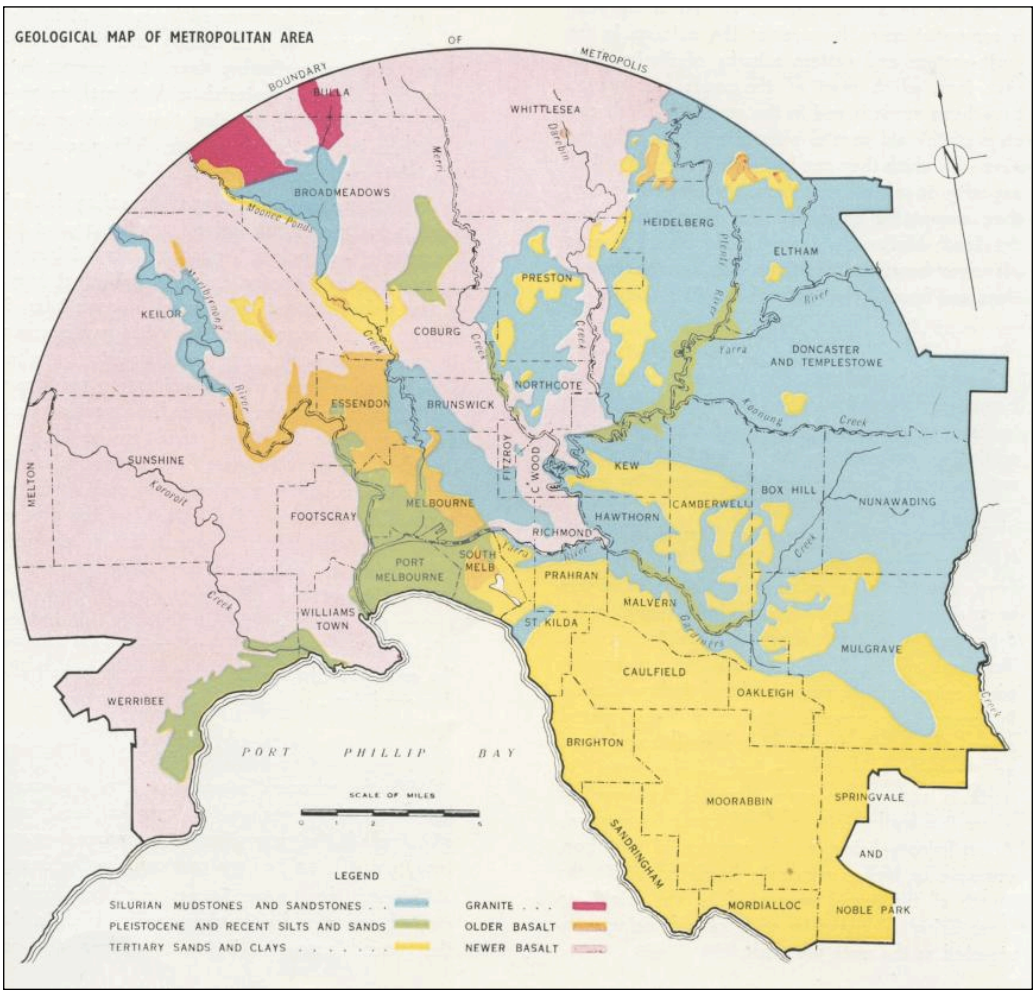


Figure 1.2: The underlying geology of Melbourne (Melbourne and Metropolitan Board of Works, *Geological Map of Metropolitan Area*, 1956, Victorian Places, accessed June 12, 2016, https://www.victorianplaces.com.au/node/65189.

This lends credence to the divisive potential of geology: that it determines not only patterns of urban growth and expansion, but also the qualities of the city's sub-regions, inclusive of socio-economic status, the proliferation or absence of undesirable land-uses, and local identity. This is not to argue that unpleasant land-uses were absent entirely within Melbourne's more pleasant locales—quarries and tips continued to operate throughout middle-class suburbs such as Kew and Hawthorn in the twentieth century, the City of Hawthorn tip closing in 1986—but that they did not play a determining or dominant role with respect to the broader character of the area, nor did they possess a disruptive scale (see Figure 1.3).



Figure 1.3: A photograph depicting a typical urban clay quarry site in Hawthorn, an eastern suburb of Melbourne (Friend, *Quarrying in Victoria*, 75).

Where clay and mudstones abounded in the city's east, such as in Hawthorn gazetted in 1840, so too did salubrious estates and agricultural practices, making use of high-quality soils, perennial waterways, and favourable microclimates.[13] Brick-making took place in Melbourne's eastern suburbs, utilising industrialised processes such as the Hoffmann kiln, invented in 1858.[14] The extent of their development was largely contained to a period of boom-and-bust in the last two decades of the nineteenth century, followed by a brief post-Second World War renaissance as a consequence of expanding suburbanisation.[15] The inextricable tie between extractive industry and the cyclical housing sector, as one aspect of economic function, cannot be overlooked. The sector, as Dennis writes, 'grew or declined with the changes of fortune of the Colony of Victoria and changing demands for building and paving materials.'[16] These landscapes, on the basis of their geology, are fundamentally subject to laws of supply and demand: their form is predicated on economic conditions. The supply of bluestone—entailing the site of extraction, as well as the material obtained—historically took place in an ad hoc fashion, driven by pressures of the 1880s land boom. It was highly responsive to demand, proximate to sites of use, and where surface rubble indicated

[13] Built Heritage, *Thematic Environmental History* (Melbourne: City of Boroondara, 2012), 32, https://www.boroondara.vic.gov.au/sites/default/files/2017-05/Thematic-environmental-history.pdf.

[14] Bryce Raworth, *Former Standard Brickworks : 14 Federation Street, Box Hill* (Melbourne: Bryce Raworth Conservation, 2015), 10, https://www.heritage.vic.gov.au/__data/assets/pdf_file/0025/64258/Conservation-Management-Plan.pdf.

[15] Davison, *The Rise and Fall of Marvellous Melbourne*, 60.

[16] Chrisy Dennis, *Landscapes recycled : the changing environment of Melbourne's west* (Melbourne: Living Museum of the West, 1990), 58.

sufficient quality of stone.[17] Demand for stone, in conjunction with technological advancements, saw improvements in the efficiency of blasting and transportation: the more rock or stone that could be obtained, the larger the quarry site.[18] The expansion of quarries placed considerable pressure upon on adjacent land uses and local residents, not dissimilar to other forms of noxious industry such as abattoirs, boiling-down works, and stockyards.[19]

Although early quarrying operations took place in the inner-northern suburbs of Carlton and Clifton Hill, these sites, like other noxious industries, were soon constrained by surrounding development and subjected to calls from residents for their closure.[20] The inner-western suburbs of Footscray and Yarraville proved opportune: good-quality material could be obtained near to the city, with a local working-class population not only tolerant of blasting and dust, but also a source of labour.[21] Geological and topographic characteristics—treeless, flattened plains of basaltic rubble—of the western suburbs proved not only challenging, but undesirable, particularly in contrast with the city's leafy east: industrial development predominated, especially with operations intensive and noxious in nature. In essence, undesirable land-uses were relegated to this region. Although its basaltic geology saw development of the west out-of-step with eastern Melbourne, this geology allowed for an agglomeration of noxious or heavy industries concordant with the urban quarry, facilitating the growth of this sector. Here, they would operate largely unrestricted and uncontested; a condition exacerbated by the historic absence of legislation to guide and control quarrying operations, not enacted until 1966. Their closure would not come in response to protest or complaint, but as a result of material exhaustion. A map of quarry locations over time can be located in Appendix A.

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[17] "Heavy Motor Traffic," *The Age*, December 12, 1924, 9.

[18] Gary Vines, *Quarry and Stone* (Maribyrnong: Melbourne's Living Museum of the West, 1993), 4.

[19] Dennis, *Landscapes recycled*, 58.

[20] "Melbourne, Saturday," *The Age*, June 25, 1892, 8; "Prahran municipal "TIP."," *The Age*, May 12, 1887, 6.

[21] Vines, *Quarry and* Stone, 20.

Where quarries ceased to function, the sites generally found renewed purpose as tip sites; this was first seen in a small quarry near Prince's Bridge, close to the Melbourne's centre, filled with rubbish and levelled in late 1861.[22] Tipping presented an opportunistic solution for neutralising difficult landscapes, and was also vital to city hygiene. The demise of ad hoc tips and the subsequent growth of managed waste tips, literally 'landfill,' took place in the second half of the twentieth century with the creation of the *Health Act 1958*. This proved a convenient solution to a difficult problem: unlike clay or sand quarries, bluestone quarries are of such a significant size and depth that filling is necessitated to allow re-use. Only parkland and engineered structures can safely exist atop filled bluestone quarries, as the fill beneath is often unstable (see Figure 1.4). A housing estate in the inner-western suburb of Yarraville, later termed the 'Sinking Village,' is testament to this: built atop a small industrial tip, it was destroyed by subsidence within its first decade.[23] This was not attempted atop a filled basalt quarry again, however, a small number of housing estates in Melbourne—including the Niddrie case study site—have made use of unfilled quarried terrain.

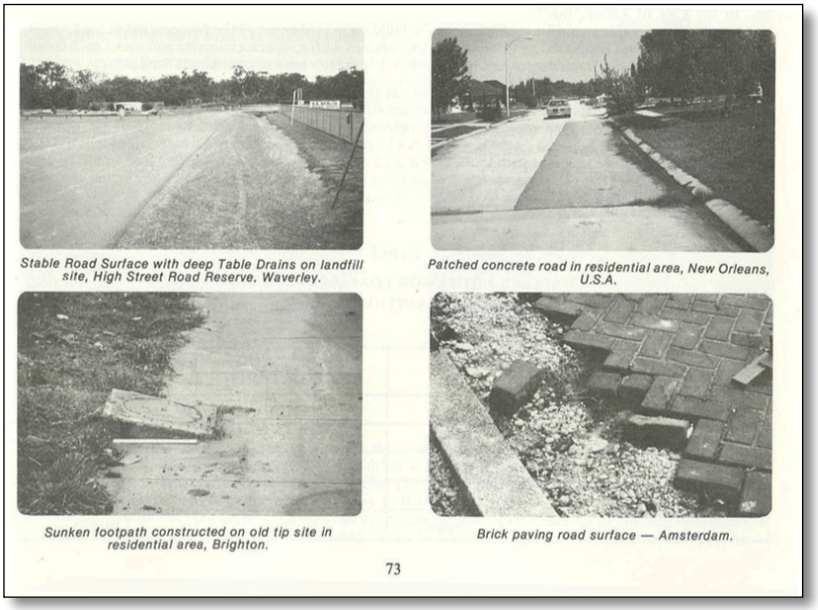


Figure 1.4: Surface settlement (Roy Boyd, *Recycling of Refuse and After Use of Tip Sites*, 1982, 73).

[22] "Labor," *The Age*, December 17, 1861, 6.

[23] Bryan Patterson, "Storm hits houses : Still no help for 'sinking village' folk," *The Age*, January 5, 1974, 2.

Two shopping centres in Melbourne's western suburbs, Highpoint and Altona Gate (see Figures 1.5, 1.6), have also been built atop a basalt quarry, with the quarried void used as basement car-parking; the shopping centre structure sits above this on pylons. This solution cannot be commonly employed so to avoid regional saturation of such large commercial premises.[24]



SUNSHINE FEATURE

Highpoint West, a new shopping centre for Maribyrnong and district, as it will appear when completed in September next year. Work is already well advanced.

Shop centre site was once hole

A $30 million shopping centre giant is rising from the depths of a quarry near Sunshine.

Figure 1.5: A newspaper article concerning the development of a bluestone quarry into the Highpoint shopping centre ("Shop centre site was once hole," September 24, 1974, *The Age*, 27).



Figure 1.6: Altona Gate Shopping Centre, noting quarried landform (Image authors own).

[24] Caitlin Stone, "Quarries and Brickmaking," eMelbourne, published 2008, www.emelbourne.net.au/biogs/EM01213b.htm.

Elsewhere in Australia, unique examples of remediation exist. The Homebush clay quarry (see Figure 1.7), in Sydney, was remediated and closed walkway constructed for visitors, as the presence of critically-endangered frogs precluded development.[25] The Perth Quarry Amphitheatre shows striking re-use, but is small in size compared to bluestone quarries of Melbourne (see Figure 1.8).



Figure 1.7: The Homebush brick quarry in Sydney, 2016, noting the closed walkway which allows the public to enter and view the site (Image authors own).

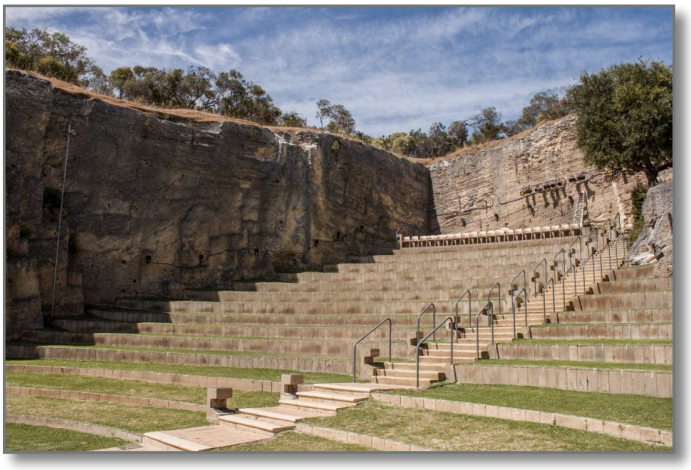


Figure 1.8: The Perth amphitheatre (Alex Hyman, "The grassed seating at the Quarry amphitheatre," ABC Perth, 2016, https://www.abc.net.au/news/2016-01-25/quarry-amphitheatre-2.jpg/7112390.).

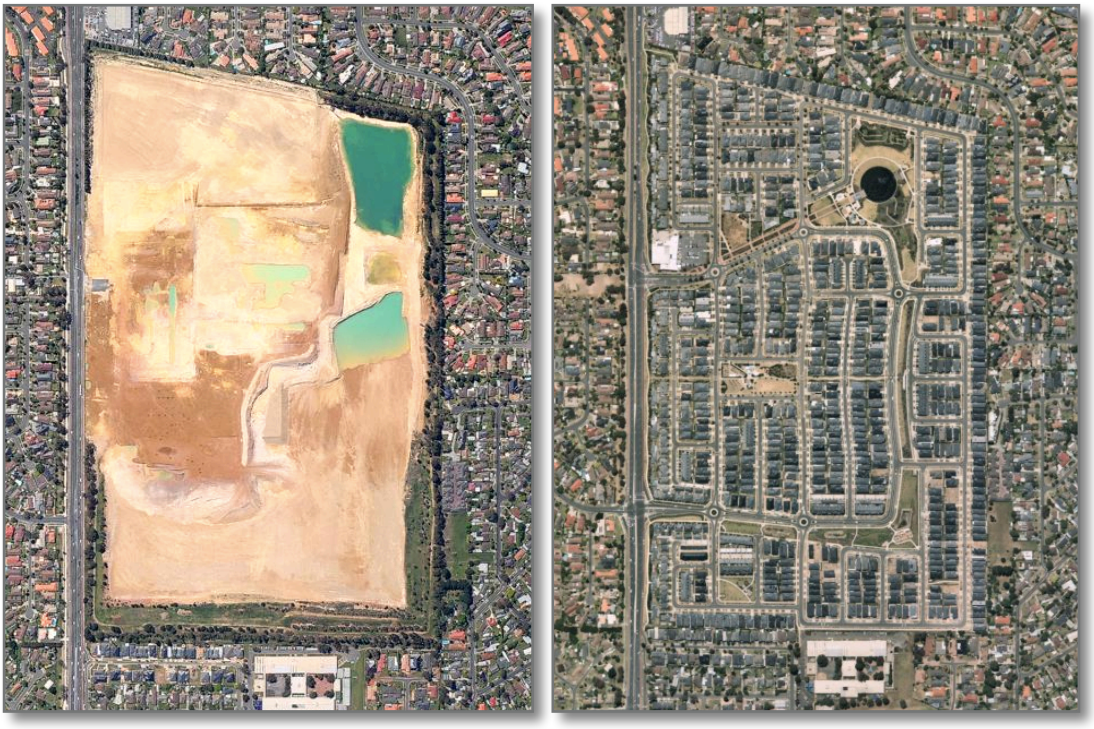
In contrast, countless residential developments exist in pockets of Melbourne once used for clay quarrying, as these landscapes are more readily neutralised into a planar state and carry little risk of instability. Examples of this include a housing and shopping centre development in the eastern suburb of Burwood, previously a sloping site, rather than one marked by significant extraction (see

[25] Michael Wayne, "NSW State Brickworks/Brickpit Ring Walk – Homebush, NSW," Past/Lives of the Near Future, published June 14, 2012, https://pastlivesofthenearfuture.com/2012/06/14/nsw-state-brickworksbrickpit-ring-walk-homebush-nsw/.

Figures 1.9, 1.10).[26] A similar redevelopment can be found in Harcrest Estate, Wantirna South, also the site of a former clay quarry (see Figures 1.11, 1.12). Note the absence of a significant void.



Figures 1.9, 1.10: Satellite image depicting the Burwood clay quarry in 2010 and in its present-day form, a housing and shopping centre development (Nearmap, 2019, nearmap.com).



Figures 1.11, 1.12: A satellite image depicting the Wantirna South clay quarry in 2010, and its present-day form as a housing and commercial development, noting the flat landscape and minimal inundation (Nearmap, 2010, nearmap.com).

[26] "Burwood Brickworks," Frasers Property, 2019, https://www.frasersproperty.com.au/vic/burwood-brickworks/explore.

It is worth reiteration that such land-use outcomes cannot be achieved where bluestone, or basalt, has been extracted. This is to the detriment of Melbourne's western region, which demonstrates an exceptional agglomeration of refuse disposal sites of significant scale owing to the historic presence of bluestone quarries. These sites cannot be remedied easily, nor restored with a purpose consistent with the surrounding locality. These conditions establish a context for urban contestations and tensions, which comprise a focal point for this thesis: how an after-use is determined for these sites where the desires of local actors differ greatly from the interests of municipal or state governments. The late 1970s saw significant change in how residents of Melbourne's western and north-western suburbs responded to, and acted against, the use of local space for quarrying or tipping. This thesis conceptualises incompatible land-uses as unjust, and the achievement of alternative outcomes is posited as restorative and redemptive.

1.4 Surplus space: capital, power, and rubbish

Spaces produced by industrial practices become surplus where economic, political, or social conditions no longer necessitate their use.[27] Quarries operated in urban Melbourne have, broadly, ceased to function where the exhaustion of high-quality resources aligned with an inability to expand caused by urban encroachment vis-à-vis short-sighted planning: this is symptomatic of the unprecedented and unfettered suburbanisation following the Second World War. Alan Berger describes these spaces as *drosscapes*, building upon Lars Lerup's neologism of *dross*: they are remnant spaces produced by the city's growth.[28] For much of Melbourne's history, quarried voids serendipitously provided local and state governments with a means of low-cost refuse disposal, where remnant holes were filled and remade as public open space.

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[27] Martin Kohler and Sabine von Löwis, "Abandoned Open Spaces as Foundation for the Creative City," (Urban Green Spaces : A Key for Sustainable Cities Conference, Sofia, 2008), 62.

[28] A. Berger, "Drosscape," in *The Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 197; Lars Lerup, *After the City* (Cambridge: MIT Press, 2001).

These sites become what Ignasi de Sola Morales terms *terrains vague,* where their visible obsolescence renders them vulnerable to re-use; in other words, their future prospects are tightly aligned with productivity.[29] The redemption of these spaces takes place not through a return to their prior use, but through the assignment of a new purpose through redevelopment.[30] Renewal processes are viewed as 'just', 'sustainable', and 'essential' in a post-industrial world, where the end result of development is aligned with the maximal productive use of space, particularly in already-urbanised areas.[31] This shift was seen in Melbourne, where through the twin imperatives of growth-oriented politics and gentrification the once-declining inner-city became imbued with an increasingly competitive, tourism-oriented and cosmopolitan status in the 1990s. Where planning mechanisms are incapable of comprehensively guiding development, these spaces are especially vulnerable to what Berger describes as 'unfettered, market-driven development,' often not aligned to the desires of local communities.[32] This prompts a conceptualisation of development as the exertion of power over a landscape. The mediatory role of governance and planning together introduce a political dimension where these mechanisms support a particular land-use outcome.[33] Capital and power, and power and town planning, are closely tied in this respect.

Conflicts emerge where planning outcomes do not align with community interests, whether local to the site, or pertaining to the wider city and society.[34] A 1920s proposal to dispose of refuse in Albert Park, two kilometres south of the CBD, prompted uproar from local residents, serving as an initial instance of such robust opposition.[35] Much in the same sense that the unproductive landscape is

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[29] I. de Sola-Morales Rubio, "Terrain Vague," in *Anyplace*, ed. Cynthia C. Davidson (Cambridge MA: MIT Press), 120.

[30] Vassos Argyrou, "'Keep Cyprus Clean': Littering, Pollution, and Otherness," *Cultural Anthropology* 12 (1997).

[31] Joern Langhorst, "Re-presenting transgressive ecologies: post-industrial sites as contested terrains," *Local Environment* 19, no. 10 (2014): 1112. doi:10.1080/13549839.2014.928813

[32] Berger, "Drosscape," 203.

[33] P. Troy, "Introduction," in *Equity in the City*, ed. Patrick Troy (Sydney: Allen & Unwin, 1981), 17.

[34] Hugh Stretton, *Ideas for Australian Cities* (Melbourne: Georgian House, 1975), 27.

[35] ""Tip" in Albert Park," *The Age*, September 2, 1927, 11.

rendered marginal and vulnerable, so too are communities proximate to such sites. Parker describes these citizens as marginal and disenfranchised—'the most deficient in political influence'—who are directly exposed to the implications of development, and who have long endured unpleasant and undesirable land-uses within their local area.[36]

From the mid-nineteenth century onwards, residents of Melbourne's western suburbs occupied a low socio-economic position, owing to their undesirable co-location with noxious or heavy industry and low environmental value. Responding to threats to residential amenity were rarely the domain of the working-class, instead receiving attention from educated members of the middle-class.[37] The 1960s and 1970s brought about a shared pursuit of democracy and justice in tandem with the broadening scope of activist movements, encompassing more diverse ethnicities, classes, and demographics.[38] The influence of capital and culture on urban activist movements in inner-city Melbourne are well documented, particularly in light of economic and social restructuring.[39] A robust body of knowledge exists on town planning conflicts in Carlton and Fitzroy, involving the Melbourne and Metropolitan Board of Works, Housing Commission of Victoria, and the Country Roads Board.[40] However, urban activism in Melbourne's western suburbs, in an era marked by deindustrialisation and its related social and economic shifts, is less well-documented.

As is a concern of this thesis, issues surrounding the creation, use, and after-use of the urban bluestone quarry provide an opportunity to explore the role of community-led activism in

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[36] R. Parker, "Planning and Politics," in *The Politics of Urban Growth*, eds. Robert Parker and Patrick Troy (Canberra: Australian National University, 1972), 29.

[37] Troy, "Introduction," 14.

[38] Troy, "Introduction," 15.

[39] Tanja Luckins, "Gentrification and Cosmopolitan Leisure in Inner-Urban Melbourne, Australia, 1960s–1970s," *Urban Policy and Research* 27, no. 3 (2009): 265, doi:10.1080/08111140802676166.

[40] R. Howe, "The spirit of Melbourne: 1960s urban activism in inner-city Melbourne," in *Go! Melbourne : Melbourne in the sixties*, eds. Tanja Luckins and Seamus O'Hanlon (Melbourne: Circa, 2005), 223; D. Nichols, "A Decade of Turbulence," in *Trendyville : the battle for Australia's inner cities*, eds. Renate Howe, David Nichols and Graeme Davison (Melbourne: Monash University Publishing, 2014), 19.

Melbourne's western suburbs in determining land-use outcomes. It also reveals a long history of inadequate planning with respect to quarry sites, and highlights reliance upon remnant quarried land for waste disposal. This context underscores mounting intolerance of these noxious land-uses by proximate communities, against the desire of government and private interests to continue tipping. It is a historical narrative of justice being sought for vulnerable landscapes by vulnerable citizens. To explore and understand these processes provides insight into historical land-use conflicts, linking injustice and inequity with its origins in historic planning and governance.

1.5 Case study sites

Two case study sites were selected to demonstrate planning, contestation, and successful re-use of urban bluestone quarry sites: Newport Lakes, located in the south-western suburbs of Melbourne, and Niddrie in its north-west.

Newport is a predominantly residential suburb, centred around proximity to heavy industry and historically accommodating a working-class population. The Newport Railway Workshops, where railway stock is built and maintained, have been in operation since the early 1880s.[41] The suburb has additionally hosted a power station complex on the banks of the Yarra River in numerous iterations—initially coal and later gas-powered—since 1919.[42] Bluestone quarrying took place in Newport as early as 1868, with the Newport Lakes site initially utilised on a small scale prior to its operation by local government in the early twentieth century to supply road-making material.[43] Mid-twentieth century quarrying operations were undertaken by private firms, and their increased scale warranted protest from local residents on the basis of noise and dust.[44] Despite these issues,

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[41] Robert Stuart Lee, *The Railways of Victoria 1854-2004* (Melbourne: Melbourne University Publishing, 2009).

[42] Leonie Sandercock, *Property, Politics, and Urban Planning : A History of Australian City Planning 1890-1990* (New Brunswick: Transaction Publishers, 1990), 216.

[43] "Loss on Municipal Quarry," *The Age*, November 13, 1926, 18.

[44] "Council Acts on Complaints of Noise, Damage of Quarry Blasts," *The Age*, October 4, 1960, 6.

quarrying continued until 1974. Its closure was not in response to community concerns, however; material of sufficient quality was simply no longer available.[45] The Western Region Commission, comprised of representatives of each municipality found in Melbourne's western suburbs, advocated tipping on the site in 1977.[46] The site as *tabula rasa* lent itself to novel proposals, such as a cluster housing development.[47] The municipality sought to fill the quarry hole in an expedited manner to mitigate impact on surrounding residents. With a portion of the site used for tipping, income generated would assist remediation of the remainder of the site.[48] Visions for after-use were absent, and this only contributed to the dismay of local residents, who did not want tipping to take place in any form.[49] Consistent agitation by residents did not arrest the use of the site as a tip. However, it was instrumental in the end result achieved, exemplifying compromise. The present-day Newport Lakes site is consequently split into two forms of open space: the westernmost aspect, comprised of filled quarry holes, used as playing fields, and the easternmost aspect retaining its quarried topography and revegetated to create a natural landscape.[50]

The suburb of Niddrie lies sixteen kilometres north-west of the Melbourne central business district. The land was used for grazing prior to the construction of post-war housing estates, typical for Melbourne's fringe at that time. This was the predominant land-use spanning the settlement of Melbourne until the mid-twentieth century, with post-war suburbanisation leading to the

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[45] *The Age*, April 28, 1973, 88; "Pavey's Park," Friends of Newport Lakes, n.d., www.friendsofnewportlakes.com/paveys-park.php.

[46] City of Williamstown, *Record of proceedings of a meeting with representatives of the Western Region Commission convened at the Williamstown Town Hall to discuss future development proposals for the Newport Quarry area*, Meeting of June 23, 1977, VPRS 11564/P0001/12, PROV.

[47] John Griffiths, *City of Williamstown and Pioneer Concrete Services Limited : The Newport Quarry Development : Briefing and Position Paper* (Melbourne: P. A. Consulting Services, 1979), 6.

[48] City of Williamstown, *City Engineer Report to General Committee, March 28 1988, Item 6. Development of Newport Lakes* (Melbourne: s.n.), 3, PROV, VPRS 11565/P0001/73..

[49] Kathy Kizilos, "Residents fear lakes may become pools of garbage," *The Age*, May 28, 1985, 17.

[50] Maarten Hulzebosch, interviewed by Victoria Kolankiewicz, Werribee, Melbourne, March 13, 2019.

establishment of numerous estates in the area.[51] Quarrying predated Niddrie's speculative development; this began to encroach upon the quarry, with some residents comfortable with the close proximity given relatively low land prices, whilst others assumed permanent closure of the quarry was imminent.[52] What came of this were numerous proposals to use the site as a tip following the exhaustion of the quarry. Views of local and state government failed to align to ensure an equitable and just repurposing of the site, sparking local activism through the establishment of groups such as the Quarry Action Group, Save Niddrie Lake, and No Toxic Tip. The re-use of a post-industrial site was politicised through these efforts, and the role of protest is highlighted in its capacity to alter the course of development outcomes, particularly against the backdrop of a state election. This case study also found, however, that the avoidance of a poor outcome does not necessarily comprise a good outcome in and of itself: the construction of an early 2000s housing estate on the quarry site following the defeat of the tip proposal demonstrates this well.

Both sites were quarried prior to the implementation of the *Extractive Industries Act 1966* which implemented operative controls and guidelines for re-use and remediation. Both sites are also located amongst post-war housing developments, resulting in a close and uncomfortable proximity between extractive industry and local residents. An additional point of comparison lies in their closure in the mid-1970s. Re-use of the sites fosters a distinction: Newport Lakes was used for tipping and later redeveloped as parklands, whilst Niddrie was subjected to tipping proposals prior to its redevelopment as a housing estate. This thesis identifies a divergence in political climates as a significant factor, in addition to community sentiment towards urban tipping. This is found to reflect a growing consciousness of environmentalism, traced through historical inquiry into the use of

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[51] Victoria Kolankiewicz, "Henry Krongold and Lincolnville: Tracing The Development of a New Residential Estate in Post-War Suburban Melbourne," in *Remaking Cities, Proceedings of the 14th Australasian Urban History Planning History* (Melbourne: Australasian Urban History Planning History Group and the RMIT Centre for Urban Research, 2018), 232.

[52] Communications from the Secretary of Mines to the Town Clerk of the City of Keilor on the 28th of October, 1968, PROV, VPRS 11559/P0001/130.

landfill as waste disposal. The tipping activities which constituted a form of compromise in Newport throughout 1980s were entirely undesirable for the community of Niddrie in the following decade.

1.6 Contribution

A research report submitted to the University of Melbourne by Denise Friend in 1987 marks an initial investigation into the planning of quarries, which this thesis acknowledges as a limited, but still crucial and very foundational, work.[53] Historical understandings of quarry sites address their materiality and occupation history, but do little to engage with the remaking of these spaces, no less those forces which prompt or control change.[54] Tony Dingle and Seamus O'Hanlon note that histories of the post-industrial era are not commonly constructed, for deindustrialisation processes in the late twentieth century occupy too recent a space in collective memory, and are 'too much of an unfolding story to be genuinely the stuff of "History".'[55] Waste disposal has received similar treatment, and there is a growing popularisation of histories which emphasise stories of the unknown and the atypical, seen in David Sornig's *Blue Lake: Finding Dudley Flats and the West Melbourne Swamp*.[56] Given Melbourne is internationally known for the strong visual presence of bluestone—most particularly in the laneways which cross the city and the suburbs—the narrative behind this motif should also make clear the social and political implications of urban resource extraction. Accordingly, this thesis seeks to bring discussion of the urban quarry as a contested space into Australian urban history—particularly the history of late-twentieth century conflict—

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[53] Denise Friend, *Quarrying in Victoria : History of Legislation and Planning Concerns* (Melbourne: Faculty of Architecture, Building and Town and Regional Planning, University of Melbourne, 1987), iii.

[54] Gary Vines, *Quarry and Stone*, 4; Trigg, *Bluestone and the City*, 41–53.

[55] Tony Dingle and Seamus O'Hanlon, "From Manufacturing Zone to Lifestyle Precinct : Economic Restructuring and Social Change in Inner Melbourne, 1971–2001," *Australian Economic History Review* 49, no. 1 (2009), 53, doi: 10.1111/j.1467-8446.2009.00249.x.

[56] Phillip Nicholls, "A Review of Issues Relating to the Disposal of Urban Waste in Sydney Melbourne and Adelaide : An Environmental History" (PhD diss., University of Adelaide, 2002), 132-150.

through the production of a robust narrative encompassing all aspects of governance and planning, economic and social change, from Melbourne's settlement through to the decision to abandon a tip proposal at Niddrie in late 1999.[57] This posits atypical sites as well-suited to the analysis of activism or conflicting visions and intentions, which previously occupy spatialities much closer—symbolically and in distance—to the heart of the city. Building upon this further, this extends the narrative of urban activism through to the city's periphery, where local activism, both historic and contemporary, remains under-explored.

This research also contributes a foundational understanding of how quarries and tips in urban Melbourne were developed and governed, which bears implications for resource extraction and refuse disposal today as a consequence of thematic repetition over time. This knowledge stands to contribute to contemporaneous discussion of waste management, a growing issue in light of poor management, inadequate governance, and the urban encroachment upon existing quarries and future landfill sites which may come to problematise urban waste disposal further.

1.7 Methodology and theoretical base

An inductive approach to the research and case studies is undertaken in this thesis. A tentative theory is built throughout the research process, akin to what Robert Yin outlines as an 'explanation building' approach whereby research findings form an 'explanation.'[58] The 'inductive leap,' as termed by Pedro Bendassolli, entails a shift from 'knowing facts' to establishing a 'general belief regarding their causes.'[59] The theoretical framework employed in this thesis, the historical narrative, discerns meaning and significance in otherwise 'chaotic' "historical records'," and in turn conceives of urban planning as a narrative in and of itself, with Lieven Ameel further outlining typologies of

[57] Nicholls, "A Review of Issues."

[58] Robert K. Yin, *Case study research : design and methods* (Los Angeles: SAGE, 2009), 13.

[59] Pedro Bendassolli, "Theory Building in Qualitative Research:Reconsidering the Problem of Induction," *Forum: Qualitative Social Research 14*, no. 1 (2013): 1–20.

planning narratives which guide the narrative developed.[60] The coordination of urban change is conceptually framed through the work of key social theorists—Henri Lefebvre, David Harvey, Manuel Castells, and Edward Soja—as an expression of power and capital. The capacity of planning is then explored, tracing how this field embodies and reflects social, political, and economic change. This is crucial in building an understanding of urban activism as a critique, rather than a reaction. Mark Douglas Lowes' work serves as a model in this respect, affirming that the analysis of redevelopment processes highlight a 'point of struggle in contemporary urban life.'[61]

Understanding urban change as fundamentally driven by the distribution and re-distribution of power and capital underlies a rethinking of public opposition and resistance. Such a perspective is essential when developing an urban historical narrative as this warrants close consideration of the city as a complex entity subjected to the exertion of power and influence. The sources utilised in this research inform the assertions made: what was initially a strong interest in disused quarry sites transformed throughout the research process to emphasise the activists and conflicts germane to their development.

The methodology employed capitalises on the vast amount of qualitative data located in newspaper sources, and most especially, archived local newspapers, municipal documentation including council meeting minutes and newsletters, and planning policies and legislation authored by the Victorian government.[62] Complementary sources of qualitative data— archived documentation such as municipal records, reports, plans, correspondence, and collated newspaper cuttings—were obtained from the Public Records Office of Victoria, the State Library of Victoria, and local libraries. These not only inform a historical view of quarrying and quarry re-use, but also a deeper

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[60] Hayden White, *Metahistory: The Historical Imagination in Nineteenth-century Europe* (Baltimore: Johns Hopkins Publishing, 1973), 4.

[61] Mark Douglas Lowes, *Indy Dreams and Urban Nightmares: Speed Merchants, Spectacle, and the Struggle over Public Space in The World Class City* (Toronto: University of Toronto Press, 2002), 8.

[62] Earl Babbie, *The Basics of Social Research* (Wadsworth: Cengage Learning, 2007); Alecia Jackson and Lisa Mazzei, *Thinking with Theory in Qualitative Research: Viewing Data Across Multiple Perspectives* (Oxon: Routledge, 2012).

understanding of the nuanced social, political, and economic characteristics of a place, site, or suburb, at a particular point in time, which invariably influence the nature and patterns of land development and re-use.[63]

This information is further supported and contextualised through a series of semi-structured oral interviews with participants identified from these resources, which focus on personal experiences of, and encounters with, with the redevelopment processes of the case study sites. This also serves the purpose of 'filling in' the historical record already established through the use of primary sources.[64] This provides an additional experiential dimension where more nuanced information can be communicated, which may not have warranted inclusion within a published public text.[65] This methodology is detailed further within chapter 2.

1.8 Chapter outlines

Chapter 2 of this thesis presents a broad range of literature affirming the potency of a historical approach for the analysis of planning outcomes. Presented are conceptual and theoretical frameworks which guide the narrative-based historical exploration of town planning and community activism in Melbourne. This chapter additionally explores urban activism as steeped in power, democracy, and the pursuit of justice, which informs interpretation of historical phenomena and its situation within a broader urban and social context. This chapter also provides a delineation and justification of the qualitative methodology employed in undertaking this research, with particular emphasis on the novel use of digitised newspaper archives to establish and inform a historical narrative otherwise minimally documented.

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[63] William Lawrence Neuman, *Social Research Methods: Pearson New International Edition: Qualitative and Quantitative Approaches*, *7th edition* (Harlow Essex: Pearson Education Limited, 2014), 17.

[64] Patricia Leavy, *Oral History : Understanding Qualitative Research* (New York: Oxford University Press, 2011), 5.

[65] P. Hamilton and L. Shopes, "Introduction: Building Partnerships Between Oral History and Memory Studies," in *Oral History and Public Memories,* eds. Paula Hamilton and Linda Shopes (Philadelphia: Temple University Press, 2008), x.

Chapter 3 provides a comprehensive overview of strategic planning measures instituted to guide Melbourne, beginning with the 1929 *Plan* produced for the Metropolitan Town Planning Commission. A connection between town planning and its role in ensuing hygienic urban environs underscores the later development of zoning as a means of separating incompatible land-uses. Strategic plans are not found to anticipate the development and growth of extractive industry, nor do they adequately address issues of urban encroachment and interface. This is seen as a significant contributor to urban conflict where quarries are poorly situated, and are subjected to urban encroachment.

Chapter 4 focuses on the development of the 1966 *Extractive Industries Act*, in addition to statutory mechanisms developed to curtail the impacts of this industrial sector. It was discovered that prior legislation had not differentiated between stone and minerals, and urban resource extraction effectively considered akin to rural gold mining. This was not fully addressed until the post-war era, following decades of dissatisfaction with the mismanagement and misuse of such sites. The inability of the 1966 *Act* to encourage equitable land-use outcomes for exhausted quarry sites is also found to stem from a strong reliance on tipping to remediate extractive industrial landscapes.

Chapter 5 explores the dominance of landfill as the preferred method of waste disposal, reinforcing the symbiotic relationship between the quarry and rubbish tip. This begins with an initial exploration of refuse disposal as terraforming, neutralising complex or unpleasant landscapes. This chapter then discusses waste disposal in Australia more broadly, substantiating Melbourne's continued use of depressed landscapes for this means. Objections to tipping are also acknowledged, and these examples inform a progressive sentiment in opposition to the continuation of rubbish disposal in an urban setting. This chapter also discusses methods for formal planning appeal and objections in the 1970s—the Planning Appeals Board and Environment Protection Authority—which facilitated a democratic turn in planning. This resulted in the consolidation of urban tip sites

to minimise social and environmental risk. A renewed alignment between government and private enterprise, reflecting economic and political shifts in the mid-1990s, saw a waste disposal facility proposed for Werribee by CSR. This created the basis for community activism in Werribee, the strength of which saw the proposal defeated by the acquiescence of the private interest. Where the Werribee saga demonstrates a straightforward instance of activism—achieving the outcome desired within a period of three years—the two case studies chosen in this thesis demonstrate protracted processes of contestation.

Chapter 6 introduces the case study of Newport, located in Melbourne's south-western suburbs. Productive use of the site was sought following the cessation of quarrying in the 1960s, and proposals were presented for its recreation as a housing estate and park. However, the necessity of locating an urban tip for a coalition of nearby municipalities warranted compromise. Funding to remediate the site was accessed by the City of Williamstown, but this was predicated on its use as a tip. Local residents emphasised their concerns for liveability and sustainability, opposing the tip. Although sustained organised action did not defeat the tip proposal entirely, the vigilance of the local community ensured that the local municipality managed the tip appropriately, and limited its lifespan. With funds generated from tip fees, the filled portion of the site was remedied by the City as playing fields, and the remaining excavated landscape remade as natural parklands, effectively compensating for past transgressions with a land-use outcome respectful to both the site and the local community.

Chapter 7 focuses on the Niddrie Quarry exemplifying community activism in the face of exclusionary governance. This chapter broadly details the numerous proposals to undertake putrescible and inert waste tipping in the Niddrie site between 1981 and 1995, none of which proceeded. A change in state government in 1992 prompted a marked shift towards economic interests, rather than equity, sustainability, and social justice concerns. In light of this, the site was

made vulnerable to its re-use in line with government and private stakeholders pursuits. This case differed from the Werribee scenario, as the proposed Niddrie tip would serve both government and private stakeholders, rather than a single private stakeholder. The events of Niddrie demonstrate how planning frameworks and ministerial powers lent permission for tipping to take place in the face of community opposition. This was only prevented through the vocal organisation of citizens from Niddrie and surrounding suburbs, amplified through media and a subsequent electoral campaign, resulted in the defeat of the proposal and the redevelopment of the site for housing; a closer realignment between government and its consistence.

1.9 Conclusion

Town planning in Victoria was historically piecemeal: generally, responsive to a particular prompt or issue. Consequently, some land-uses were inadequately anticipated or planned for. Statutory mechanisms were predominantly invoked where land-use conflicts were apparent. This is especially true for extractive industry, and the associated after-use of tipping: early regulation was conflated with the mineral mining sector, and early twentieth century regulations by municipalities were poorly enforced, if at all. Almost a century of inaction, with significant impacts upon surrounding communities, was partly resolved through the creation of a dedicated *Extractive Industries Act* in 1966. It was with this that extractive industry became subject to a number of conditions and clauses beyond planning legislation, which had largely proven ineffective in curtailing the uncomfortable interface between such a high-impact land-use and residential development. This problematic proximity would come to plague the urban tip, entirely necessary yet undesirable. The initial investigation undertaken in this thesis details a historical overview of strategic and statutory planning in the state of Victoria with respect to extractive industry and refuse disposal. This underscores key issues pertaining to quarrying and tips, including poor or redundant siting, inadequate management, closure without a prescribed method for resolution, and the assumption

that extractive industrial sites can only be restored or remediated through tipping. These contextualising factors are amplified in the focal region for this thesis, Melbourne's historically maligned west, by virtue of its position atop a large basaltic plain fostering bluestone extraction since the mid-nineteenth century. Increased regulatory mechanisms, however, did little to remedy the challenges faced by those residing within close proximity to quarries. With remediation most commonly achieved through the use of quarry holes for rubbish disposal, communities have been forced to contend with the continuation of an equally-undesirable land-use so close to home: a process necessitating stakeholder involvement, which in turn reveals a continued incapacity of both government and planning mechanisms to guide a sensitive, appropriate, and ultimately judicious land-use outcome. Indeed, government, regional organisations, and private interests demonstrated a continued reliance upon the urban tip for the remediation of quarried land well into the 1990s, resulting in diminished logistical planning and costs of municipal waste disposal.

This research traces the development, closure, and remediation of two quarries in the western suburbs of Newport and Niddrie. In doing so, it is found that quarry-proximate communities were motivated not by the eradication of the quarry or rubbish tip, but rather, the pursuit of justice. Consequently, the involvement of local actors has most significantly shaped land-use outcomes, rather than falling to the hand of government and planners alike. It is difficult to plan in the present, but even more complex to plan for deficiencies compounded by a century of inaction and injustice.

Chapter 2 Literature and methodology: explanatory and exploratory

2.1 Introduction

This chapter addresses the primary theoretical aspects of urban land, its use, and re-use. This is situated in a context of economic change and political power, asserting that land-use outcomes are fundamentally subject to—and expressions of—these forces. Writing an urban history entails the unravelling of these complex and intertwined urban phenomena, framing the production of space as historical narrative. Although these research questions serve as a guide, select themes, bolded below, inform the analysis of literature within this chapter:

1. How were bluestone quarries in Melbourne **historically planned** for, both during their operation and **re-use**?
    a. Why has landfill historically acted as a default solution to the problematic quarry site?
2. What **factors contribute to the development outcomes** for a bluestone quarry site?
    a. What role has **strategic and statutory** planning played?
    b. How did local **communities** negotiate transition or change in instances of re-use?
    c. What emerged as the **dominant force** determining re-use—town planning mechanisms, local community sentiment, a combination of the two, or something else?

The exploration of the ideas and case studies in this thesis is informed by historical inquiry. This is further refined through an urban historical perspective which underscores the development of an

explanatory narrative. This sees historical incidences as having continuing implications and thematic recurrence, rather than being mere events on a timeline without a broader context. A knowledge base is then established: planning is framed as an expression of power and capital. The redundancy of a planned land-use in light of economic shifts is explored. The understanding built through this initial theoretical foray explicates and clarifies the post-industrial landscape, the phenomenon of re-use, and determinants of land-use outcomes. How town planning praxis and theory address post-industrial landscapes is discussed, contributing to an understanding of these spaces as vulnerable and contested. The consideration of economic and political forces in the production of space is essential in constructing an explanatory narrative of urban change. To build upon this, community and urban activism are understood as attempts to reassert power and agency over urban space which is perceived to be open to exploitation by institutional or private, as opposed to community, interests. In the Australian context, community-led opposition to urban change is found to be driven by the pursuit of justice and fairness. The remedying of perceived inequity as it manifests through built form or environment is identified as a leading theme within this body of research, and rests upon the foundational ideas explored within this chapter.

This chapter concludes with an overview of the methodologies employed in this research: semi-structured interviews and archival research in relation to two case studies. Strengths and weaknesses of these approaches are noted, with particular emphasis on a novel aspect of archival research entailing the use of digitised newspaper databases when undertaking research into Australian urban development and change.

2.2 The narrative-building capacity of an urban historical approach

Early definitions of urban history, such as that provided by Harold Dyos in 1968, deemed it a

'newly discovered continent.'[66] Urban history had emerged in the interwar period with Schlesinger's 1933 *The Rise of the City, 1879-1898* as well as Mumford's *Culture of Cities* in 1938, cementing itself in western academe by the mid-twentieth century.[67] The field of urban history thusly entails the construction of an explanatory narrative which details urban phenomena, with particular emphasis on growth, change, and their guiding forces or agents. Histories of cities, towns, or suburbs do not easily fall into the category of urban history; urban history can often be more generalist and all-encompassing of urban processes. With rare exceptions, local histories commonly document events or details without meaningful identification of their origin, impact, or context.[68] Key seminal texts which affirmed urban history as a distinct sub-discipline include Lewis Mumford's 1961 *The City in History*, Spiro Kostof's 1991 *The City Shaped*, and Peter Hall's 1998 *Cities in Civilization*.[69] Each has contributed a valuable dimension to the field. Hall argued for a thematic organisation, rather than a chronological ordering, of urban phenomena; for Kostof, the city, its cultural dimensions and internal relations are inherently meaningful; and for Mumford, the ability of qualitative analysis to forge an understanding of city function, whether in the past, present, or future.[70] Given its relative infancy, in comparison to the broader discipline, urban history exists in a state of 'interdisciplinary chaos' as described by David Goldfield.[71] Goldfield sees this as advantageous, rather than as a weakness, with the field 'invigorated' by the absence of prescribed theoretical or conceptual frameworks and methodologies. This research capitalises upon this

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[66] H. J. Dyos, "Agenda for Urban Historians," in *The Study of Urban History,* ed. Harold James Dyos (London: Edward Arnold, 1976), 6.

[67] Blake McKelvey, "American Urban History Today," *The American Historical Review* 57, no. 4 (July 1952): 919-929.

[68] Gilbert Stelter and Alan Artibise, "General Introduction: What is Urban History?," in *Canadian City: Essays in Urban and Social History*, eds. Gilbert Stelter and Alan Artibise (Montreal: McGill-Queen's University Press, 1984), 2.

[69] John Rennie Short, "Cities in Civilization," in *The Planning Imagination: Peter Hall and the Study of Urban and Regional,* eds. Mark Tewdwr-Jones, Nicholas Phelps, and Robert Freestone (London: Routledge, 2014), 58.

[70] Peter Hall, *Cities in Civilization* (New York: Pantheon Books, 1998).

[71] David Goldfield and Kathryn B. Wells, "Introduction," in *Encyclopedia of American Urban History*, ed. David Goldfield (Thousand Oaks, CA: Sage Publications, 2007), xxxv.

multitude of strengths, harnessing the inter- and multi-disciplinary nature of urban history to produce a historical analysis not only comprehensive, but also conscious and contextualised.

Arguably the first Australian historic narrative published in this tradition was Geoffrey Blainey's *Camberwell* in 1964, providing a comprehensive retelling of the eastern suburb's development in the broader context of Melbourne. Hugh Stretton and Robin Boyd, albeit social commentators and not urban historians, lent similar commentary. Building upon this, Graeme Davison published *The Rise and Fall of Marvellous Melbourne* in 1978, the first text to comprehensively trace the city's growth and decline with respect to its cultural, economic, social, and political spheres. Lionel Frost and Seamus O'Hanlon note great enthusiasm for urban history in 1970s and 1980s Australia, characterised by single case studies and limited temporal periods.[72] The state of the discipline has since come to embrace contemporaneous urban issues, not only increasingly policy-driven, but also comparative: 'to show that ideas ... have historical precedents.'[73]

Urban history is complemented and contrasted with the cognate sub-discipline of planning history. The *Routledge Handbook of Planning History* opens with Carola Hein's assertion that planning is a 'complex discipline, with more than one body of terminology, multiple interpretations, and manifold applications through space and over time.'[74] The act of designing, forming, developing or regulating a space, landscape, or environment attracts numerous descriptors such as city planning, urban planning, town planning, or regional planning. In a similar sense, investigations into the history of cities and their developments may be termed planning or urban history, but also fall within the scope of social history, architectural history, local history, economic history, and recently,

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[72] Lionel Frost and Seamus O'Hanlon, "Urban History and the Future of Australian Cities," *Australian Economic History Review* 49, no. 1 (March 2009): 15, doi: 10.1111/j.1467-8446.2008.00246.x.

[73] ibid.

[74] C. Hein, "Introduction," in *The Routledge Handbook of Planning History*, ed. Carola Hein (London: Routledge, 2017), 1.

psychogeography.[75] The place of urban or planning histories thus warrants distinction. Planning history encompasses a strong focus on the role of planning and its practitioners in determining the form of cities or regions, building upon the definition provided by Hein. Leonie Sandercock similarly distinguishes between planning history and urban history in two respects: the former attempts to 'make sense of planning interventions' whilst the latter provides more general understanding of the city, its development, and concurrent narratives.[76]

Although this emphasis on informed intervention proves valuable, this definition sits uncomfortably alongside more inclusive views of urban history and its explanatory power: that is, an urban history can be constructed with equal emphasis on the roles played by practitioners, as well as the structural capacities of planning systems. Mary Corbin Sies and Christopher Silver, in their edited book *Planning the Twentieth-Century American City*, build upon a 1988 text, Schaffer's *Two Centuries of American Planning*, in an attempt to unite the two, creating what Robert Wojtowicz describes as 'less a coherent tapestry than it is a patchwork of conflicting aims, egos, and results.'[77] In Australia, the sub-discipline of urban history is influenced by international literature, and in this sense, can similarly emphasise planner-oriented histories; such texts, particularly those oriented towards an international audience, have a tendency to feature revelatory projects and influential figures. John Reps' work on Canberra is one such instance of this, documenting an array of global plans and designs for this Australian city, arguably at the expensive of broader circumstances underlying its inception and development.[78]

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[75] ibid.

[76] L. Sandercock, "Introduction: Framing Insurgent Historiographies for Planning," in *Making the invisible visible : a multicultural planning history*, ed. Leonie Sandercock (Berkeley: University of California Press, 1998), 3.

[77] Robert Wojtowicz, "Planning the Twentieth-Century American City, by Mary Corbin Sies and Christopher Silver. Johns Hopkins University Press: Baltimore and London, 1996, and Magnetic Los Angeles: Planning the Twentieth-Century Metropolis, by Greg Hise. Johns Hopkins University Press: Baltimore and London, 1997 (Book Reviews)," *Journal of the Society of Architectural Historians* 57, no. 4 (1998), 487-489.

[78] John William Reps, *Canberra 1912 : plans and planners of the Australian Capital Competition* (Melbourne: Melbourne University Press, 1997).

Shane Ewen incorporates this dimension, writing of urban history as a field 'which, at its heart, is concerned with the study of urban life in the past as well as the history of urbanization … in its broadest understanding as a demographic, legal-institutional and cultural process.'[79] The most remarkable distinction in this sense lies in the attention paid to context: as Ewen continues, an urban history appreciates urban space with respect to 'its wider economic, social, political, cultural and spatial system.'[80] In the Australian tradition, Davison's perspective sees urban history as a corrective measure which remedies overt focus on the practitioner, appreciating a wider cultural context for urban change.[81] This is especially relevant as Australia is described by Asa Briggs, quoted in Davison, as a 'unique social laboratory' that is 'young enough to have its life history examined in detail and old enough to have a life-history that is interesting.'[82] Graeme Davison, Tony Dingle, Shirley Fitzgerald, Robert Freestone, Jenny Gregory, Renate Howe, David Nichols, Seamus O'Hanlon, Victoria Peel, Leonie Sandercock, and Peter Spearritt have firmly established the place of urban history within the Australian context as a discipline capable of providing great insight into the settlement, urbanisation, growth, and decline of the nation, and ultimately, future practices in planning. Freestone clarifies this position thus:[83]

> Without an understanding of the historical purpose of planning in Australian society, there is no scrutiny of decisions which obliterate or transform for the worse the character of places made by planning and the historic intentions behind them.[84]

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[79] Shane Ewen, *What is Urban History?* (New York: John Wiley & Sons, 2015), 1.

[80] Ibid.

[81] Graeme Davison, *City Dreamers: The Urban Imagination in Australia* (Sydney: NewSouth Publishing, 2016).

[82] Graeme Davison, "Australian Urban History: A Progress Report," *Urban History Yearbook* 6, (1979): 102, doi: 10.1017/S0963926800003953.

[83] Margo Huxley, "Historicizing Planning, Problematizing Participation," *International Journal of Urban and Regional Research* 37, no. 5 (September 2013): 1527–41, doi:10.1111/1468-2427.12045.

[84] R. Freestone, "Introduction," in *Urban Nation : Australia's Planning Heritage*, ed. Robert Freestone (Melbourne: CSIRO Publishing, 2010), 2.

This thesis is focused less on the institutional dimension promulgating urban change, although this will be traced to provide context. Such historical delineation clarifies what institutional changes, or lack thereof, the public—as individuals, or organisations—respond to. A greater focus on this public aspect redresses a tendency, in both Australian and international contexts, to write planner- and planning-oriented histories. Such tendencies have been resolved in recent years with renewed focus on the social dimension of the city, however. The 2014 book, *Trendyville: The Battle for Australia's Inner Cities*, by Graeme Davison, Renate Howe, and David Nichols, exemplifies this well, as does Seamus O'Hanlon's 2018 *City Life*, which comprehensively explores the post-industrial condition in the Australian city. This thesis does not strictly detail how legislation and planning frameworks create or ensure an outcome, but how the public engages with these systems and processes. Drawing upon the sentiment behind Hugh Stretton's work, and in particular *Ideas for Australian Cities*, there must be recognition that people are at the heart of urban transformation: the public is saddled with its implications, and accordingly, in a position to agitate for institutional change.[85]

An urban historical perspective allows for the full consideration of urban change including social, political, and economic spheres which not only influence governance, and in turn, planning, but also the sentiments, views, and expectations held by the public. In this sense, tracing a history of land-use and post-industrial development is also a history of urbanisation; environmental awareness; economic decline; urban expectations, and community development, amongst countless other social and spatial phenomena.

2.3 A theoretical framework: the narrative turn

The presentation of historical incidences and facts within this thesis takes place as narration; as such, the theoretical framework employed in this research is presented in the form of narrative

[85] Hugh Stretton, *Urban planning in rich and poor countries* (Oxford: Oxford University Press, 1978).

history. This makes reference to Foucault's work which saw a 'narrative turn' in historical (sub)disciplines take place in the 1970s. The use of the narrative historical approach in this work centres around competing and conflicting historic representations, whether produced by individuals or institutions, necessitating a considered sequencing of events. Hallmark aspects of the framework are then discussed, situating the narrative paradigm as a counterpoint to more limited historical delineations. The use of a narrative theoretical framework in the writing of an urban history can be seen as self-evident: it speaks to an inclination that Hayden White suggests is 'natural,' and with reference to the work of Roland Barthes, 'is simply there like life itself.'[86]

Foucauldian concepts are often employed with respect to the writing of history, crucial in the formation of theoretical frameworks.[87] Foucault's three core interests are identified by Thacker: of history as discourse, of historical writing and its relationship with power, and the relationship between the past and present.[88] In the 1969 text *The Archaeology of Knowledge*, Foucault began with the conceptualisation of historical writing as genealogical, emphasising a sense of continuity commanding the unification and arrangement of disparate events into a coherent narrative. What Foucault advocates are historical narratives which emphasise recurrence, underscoring not only a plurality of 'pasts,' but also the self-correction of historical thinking, analysis, and reflection.[89] Alun Munslow describes the flourishing of this view in the late twentieth century as a 'narrative turn,' a process of 'telling' conscious not only of the 'story' created through the ordering of information, but also how sources themselves depict, explain, or reveal historical fact.[90] This culminates in a

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[86] Roland Barthes, "Introduction to the Structural Analysis of Narrative," in *Image, Music, Text*, transl. S. Heath (New York: Hill and Wang, 1977), 79, in Hayden White, "The Question of Narrative in Contemporary Historical Theory," *History and Theory* 23, no. 1 (1984): 1-33, doi:10.2307/2504969.

[87] J. Rehm, "The use of Foucault in the creation of educational history: A review of literature," in *Proceedings of the 11th Annual College of Education & GSN Research Conference*, eds. Maria Plakhotnik, Sarah Nielsen and Debra Pane (Miami, FL: Florida International University), 150.

[88] A. Thacker, "Foucault and the Writing of History," in *The Impact of Michel Foucault on the Social Sciences and Humanities,* eds. Moya Lloyd and Andrew Thacker (London: Palgrave Macmillan, 1997), 29.

[89] Michel Foucault, *The Archaeology of Knowledge*, transl. A. M. Sheridan Smith (London: Routledge, 2002), 5.

[90] Alun Munslow, *Narrative and History* (London: Palgrave Macmillan, 2007), 4.

historical approach demonstrating self-awareness: it rejects what Geoffrey Elton describes as traditionally descriptive and analytical approaches to writing history, which respectively avoid robust contextualisation and temporal ordering.[91] Hayden White asserts that narration and analysis together allow for a greater critical depth, borrowing from Immanuel Kant to state that 'Historical narratives without analysis are empty, while historical analyses without narrative are blind.'[92]

The writing of a history must go beyond the sequencing of events: as White continues, historical fact must be framed chronologically, narrated, and interpreted and analysed to discern structure, meaning, and thematic significance.[93] Through this, as a sense of 'narrative closure' is achieved, making sense of reality—complex lived histories and 'chaotic "historical records"'—which can often fail to readily fit within a narrativised structuring.[94] For the reader, narration provides the context and structure which renders historical fact understandable. This, Geoffrey Roberts writes, underpins the subsequent explanation of what has taken place, with the narrative dimension fostering 'understanding, comprehension and experience.'[95]

Gabriela Spector-Mersel identifies three key characteristics of the narrative paradigm.[96] She firstly highlights its origin in poststructuralist thinking, which sees social reality to be 'constructed, fluid and multifaceted,' and further refines the narrative approach as distinctly focused upon 'the storied nature of human conduct.'[97] Spector-Mersel further reinforces the value of a 'narrative understanding' in a world wherein stories are shared: between individuals, institutions, nations, and

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[91] Geoffrey Elton, *The Practice of History* (Oxford: Blackwell, 2002), 109.

[92] Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore, MD: Johns Hopkins University Press, 1987), 5.

[93] Ibid.

[94] Ibid, 4.

[95] Geoffrey Roberts, "History, theory and the narrative turn in IR," *Review of International Studies* 32 (2006): 704, doi: 10.1017/S0260210506007248.

[96] Gabriela Spector-Mersel, "Narrative research : Time for a paradigm," *Narrative Inquiry* 20, no. 1 (2010): 211, doi 10.1075/ni.20.1.10.

[97] Ibid, 211.

media. Its secondary characteristic is seen in the narrative as a method of organising and knowing information: that is, reality is understood through its configuration within a narrative form.[98] The third distinguishing aspect of the narrative paradigm lies in its methodological links. The data accrued are stories. These can be individual or personal; institutional and organisational; national and cultural; 'big' and 'small.'[99] Narrative data can be located in observational visits to a site, in interviews, and in archival materials, and warrants consideration of these research objects within the contexts—spatial, temporal, economic, social, political—which bore them. Returning to White, the arrangement of now-contextualised historical chronicle into this narrative form allows meaning to be discerned: 'explanation by emplotment.'[100]

The narrative framework is valuable in forging understandings of urban governance and planning. Ole Jensen utilises the narrative approach in addressing urban branding and intervention in a Denmark port city, as one example.[101] 'Narrative acts of presentation,' Jensen writes, 'are central to city planning': planning itself is seen as 'storytelling,' framing the planner as an author.[102] Jensen refers to Kirsten Simonsen in bolstering the case for the urban historical narrative, in that a multitude of narratives take place amongst complex power dynamics and relations; Jensen contends that power, in this sense, 'links narrative and place.'[103] Akin to Jensen's work, this thesis presents a narrative which makes clear the conflicting views held towards the urban quarry and tip by government and communities respectively.

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[98] Ibid, 212.

[99] Ibid, 213.

[100] White, *Metahistory*, 7.

[101] Ole Jensen, "Culture stories: understanding cultural urban branding," *Planning Theory* 6, no. 3 (2007): 211, doi: 10.1177/1473095207082032.

[102] Ibid, 216.

[103] Ibid, 217.

Lieven Ameel undertakes similar analysis of redevelopment in Jätkäsaari, Helsinki, identifying a further three narrative typologies. These are crucial in framing the discussion arising from thematically-organised historical narratives that comprise the core chapters of this thesis. Ameel's three distinct narratives include narratives *for* planning, as local narratives of existing place, narratives *in* planning, such as documents and interventions concerning change, and narratives *of* planning, which Ameel describes as 'the local narratives of an area and its planning as they develop after, and simultaneously to, the planning process proper.'[104] Ameel views the planning process in literary terms: the planner acts as an author, with planning strategies or visions a story; residents become 'narratees' who in turn produce their own stories, and additional narratives are developed by media and political figures.[105] With the narrative approach underpinning the core chapters of this research, the three typologies put forth by Ameel carry additional explanatory value in finessing the 'meaning' of this body of work. Ameel asserts that a narrative does not only tell a story of change—of urban decline and regeneration, or of stagnancy and change—but also constitutes a rhetorical argument. This theoretical framing unites and clarifies what was explored and discovered from tracing the history of three distinct research directions—strategic planning and statutory planning for quarries, and how Melbourne's reliance upon landfill emerged—and two illustrative case studies.

2.4 A conceptual framework: planning as power

An urban historical approach commands consideration of how purpose is assigned to space. As this thesis grapples with processes of urban change, it is necessary to identify this as originating in shifts in both power and capital. This ultimately reinforces the position of government, institutions, and

[104] Lieven Ameel, "Towards a Narrative Typology of Urban Planning Narratives for, in and of Planning in Jatkasaari, Helsinki," *Urban Design International* 22, no. 4 (2020): 318.

[105] Ibid, 321.

capitalised private interests as determinants of why, how, and when space can be lent new purpose, identity, or meaning.

Urban, town, or regional planning most fundamentally concerns the qualification and organisation of the city: it entails what Lefebvre describes as the 'regulation and administration of built space,' and the act of planning is thusly equated with the exertion of power.[106] A conceptual framework for this thesis looks beyond the realm of urban planning literature, and draws upon a broad range of understandings of capitalist space. It also builds on the work of Lowes, who undertook an exploratory analysis of sporting spectacles and urban identity in Vancouver, Canada. Their work develops an understanding of how grand visions for a city, encompassing the remaking and redevelopment of urban spaces, serves as a 'point of struggle in contemporary urban life.'[107] It guides both the nature of historical inquiry undertaken, and the use of case study sites to examine phenomena in an empirical fashion. The rationale for a case study approach is discussed further within section 2.7 Methodology.

Theoretical understandings of urban space, power, and order inform the conceptual framework which guides this thesis. Lowes' work views the remaking of the urban environment, prompted by large-scale urban events, as an opportunity to highlight contestation over urban space. This thesis adopts a similar approach. The re-use and redevelopment of quarried land is viewed as an expression of power and ideology, whether instigated by the state or by private corporate interests. Competing visions create conflict where community interests do not align with those of dominant forces; attention must be paid to the urban struggle which results. Lowes deems the analysis of these conflicts as essential in a capitalist age. Lowes argues that tracing local resistance to urban

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[106] Henri Lefebvre, *Writings of Cities,* transl. Eleonore Kofman and Elizabeth Lebas (Oxford: Blackwell, 1996) 79.

[107] Lowes, *Indy Dreams*.

change does not contribute to the development of new theory, but rather, sees the application of existing theoretical conceptualisations of capital and space to better comprehend case study sites.

In conjunction with an urban historical perspective, this demystifies and brings to light the oft-unsung and unknown 'stories' of urban struggle and the contexts which bore them.[108] The conceptual framework established highlights the necessity of viewing redevelopment processes and community opposition to these efforts as more than a reactionary response to an undesirable land-use. Instead, resistance and struggle is understood as an attempt to resist the 'spatial domination' that results from uneven distributions of capital and power, particularly where the use and after-use of the quarry site has historically privileged commercial or municipal interests over those of the community.[109]

Social theorists, such as Lefebvre, Harvey, Castells, and Soja, have repeatedly addressed the conceptualisation of space in sociological and geographic realms without locating a fixed or firm meaning for the term.[110] However, these myriad understandings may coalesce to unveil space as both a process and product: an abstraction of a bounded site, it is fundamentally shaped and subjected to social, economic, and physical processes, extruded and practiced across temporal realms.[111] Historicisation plays a formative role in temporal consideration, as well as a methodological one, allowing the spatialisation of social phenomena. Soja powerfully asserts the view that ''life-stories' have a geography too,' and that 'historical imagination' contends with spacelessness, instead serving as redemptive force:

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[108] Ibid, 12.

[109] David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Cambridge, MA: Blackwell, 1990), 92-98.

[110] Edward Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989); D. Martin, "Missing Geography: Social Movements on the Head of a Pin?," in *Geography and Social Movements: Comparing Antinuclear Activism in the Boston Area*, ed. Byron A. Miller (Minneapolis: University of Minnesota Press, 2000), 10.

[111] J. Agnew, "Space and Place," in *Handbook of Geographical Knowledge*, eds. John Agnew and David Livingstone (London: SAGE Publications).

> It is precisely the critical and potentially emancipatory value of the historical imagination, of people 'making history' rather than taking it for granted, that has made it so compulsively appealing.[112]

Castells writes of cities as 'living systems, made, transformed and experienced by people,' and together with Francis Godard, distills the production of urban space to 'the intertwining logic of capital and the state.'[113] Lefebvre posits that the act of planning promotes state intervention.[114] Castells terms this 'systematic intervention,' which thrusts urban space into the political realm: 'politics have become the core of the urban process.'[115] Lefebvre delineates between strands of planning-as-intervention, noting the state as motivated by scientism and rationalism which 'tends to neglect the so-called "human factor,"' whilst developer-led planning occurs 'for the market, with profit in mind.'[116]

Harvey presents a complementary view; asserting this inextricable connection between space and capital, he argues that it also acts as a commodifying force, and increasingly so in the post-industrial age.[117] He terms this spatial product an 'image of place' whereby space becomes imbued with select qualities, conducive to competitiveness and 'spatial domination.'[118] Planning activities of the late twentieth century were conducive to this, as bodies governing cities and private interests worked cooperatively to forge an urban image conducive to patterns of competition and consumption. This

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[112] Soja, *Postmodern Geographies,* 14.

[113] Manuel Castells, *The City and the Grassroots: A Cross-cultural Theory of Urban Social Movements* (Berkeley, CA: University of California Press, 1983), xv, 297; Manuel Castells and Francis Godard, *Monopoville* (Paris: Mouton, 1974).

[114] Henri Lefebvre, *The Urban Revolution* (Minneapolis: University of Minnesota Press, 2003), 78.

[115] Castells, *The City and the Grassroots*, xv.

[116] Lefebvre, *The Urban Revolution*, 83.

[117] D. Harvey, "The Political Economy of Public Space," in *The Politics of Public Space*, eds. Setha Low and Neil Smith (New York: Routledge, 2005).

[118] Harvey, *The Condition of Postmodernity,* 92-98.

in turn manifests as a marketable identity, essential for the city to remain internationally competitive —the revitalisation of a city, through demolition, renovation, or construction, lends itself to what Lowes describes as:

> ... 'higher' social and economic uses - those activities that generate the greatest profits ... The goal has become to upgrade the image of the city - to replace perceptions of the city as a place of disinvestment, deterioration, crime, and poverty. ... More precisely, it is a 'world-class' image of the city that civic elites now strive self-consciously to construct.[119]

Emphasis must be made on the vernacular employed by Lowes: in particular, those spaces or uses which indicate disinvestment or deterioration. These spaces are typically framed as surplus land—outside of an expected 'societal order,' or relics of a past characterisation or function of the city.[120] The stratification of land-uses in this manner affirms that a space can be viewed as undesirable or redundant, and subsequently shaped or remade to serve an economic, social, or political desire. It is essential to acknowledge that an inverse position also exists, wherein landscapes may initially escape these reformative or redistributive effects, discussed within the section below.

This understanding is vital in discussions of post-industrial land, as it contributes to the notion that broader intangible changes within the city, as well as capital accumulation, can manifest visibly and physically. Planning and governance serve as a conduit for the achievement of a spatialised ordering of capital, but they are also subjected to these same conditions, which determine action or inaction. This postmodernist condition bears implications as Harvey deems this 'commodified and prepackaged form of aesthetics' takes place 'at the expense of concerns for ethics, social justice,

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[119] Lowes, *Indy Dreams*, 20-21.

[120] Carol Armstrong and Niraj Verma, "The Social Construction of Brownfields" (paper presented at the Association of European Schools of Planning conference, Vienna, July 2005): 3.

fairness, and the local and international issues of exploitation of both nature and human nature.'[121] Imbued with a greater vulnerability to capital, and commanding state intervention, the form and purpose of these spaces can become assailable to economic and political forces.[122] Sharon Zukin surmises this most succinctly: it is a 'landscape of power [that] gradually replaces the vernacular,' the everyday or the commonplace.[123] This can prompt resistance and struggle, reiterating the need for a conceptual framework which acknowledges the spatialisation of capital and power.

2.5 Post-industrial landscapes and brownfields

> Capitalism perpetually strives, therefore, to create a social and physical landscape in its own image and requisite to its own needs at a particular point in time, only just as certainly to undermine, disrupt and even destroy that landscape at a later point in time. The inner contradictions of capitalism are expressed through the restless formation and re-formation of geographical landscapes. This is the tune to which the historical geography of capitalism must dance without cease.[124]
>
> — David Harvey, 2001.

With this statement, Harvey affirms the endlessly iterative impacts of power and capital. The post-industrial condition inherently embodies these processes, of creation, disruption, and destruction, with far-reaching repercussions. Tracing the theoretical underpinnings of deindustrialisation and subsequent processes of re-creation are much-needed given discussions of industrial land-use within

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[121] David Harvey, *Spaces of Capital : Towards a Critical Geography* (New York: Routledge, 2001), 126.

[122] A. Amin, "Post−Fordism: Models, Fantasies and Phantoms of Transition," in *Post−Fordism: A Reader*, ed. Ash Amin (Hoboken, NJ: Blackwell, 1994).

[123] Sharon Zukin, *Loft living: culture and capital in urban change* (Baltimore: Johns Hopkins University Press, 1982), 269.

[124] Harvey, *Spaces of Capital.*

this thesis: beyond its explanatory power, it also provides valuable context in that the economy of the conurbation of Melbourne has shifted from manufacturing dependence to a service and knowledge-oriented tertiary economy over the past five decades. This has served as a powerful determinant of land-uses, prompting change and transformation as landscapes are used and re-used. Amin cites Hall in describing the social implications of the post-industrial shift as heralding 'the emergence of new identities associated with greater work flexibility, [and] the maximisation of individual choices through personal consumption.'[125] These changes are endemic to the phenomena of deindustrialisation. The impacts of this are acutely visible within the urban realm, as the post-industrial city becomes typified by redundant land-uses, rezoning, remediation, and redevelopment; renewal is influenced by new modes of production and consumption.[126] Cognisance of the theoretical basis of renewal is essential in exploring urban change and conflict. Initially noted are the descriptors of these post-industrial spaces and the processes by which they are re-made, highlighting the meanings with which they are laden. A strong orientation towards productivity is revealed, countered with more nuanced understandings of post-industrial space which warrant 'new conceptualization' of these changes. This lends itself to the analysis of who, or what, determines the form of such sites.[127]

Literature exploring post-industrial landscapes has largely emerged within the prior forty years, in response to economic decline and the subsequent recovery and resurgence revealing opportunities for revival.[128] In this sense, post-industrial landscapes are often understood as having detrimental effects for their surrounding regions and populations: Christopher de Sousa describes them as 'scars' of a 'negligent past,' 'derelict' and with 'disturbing element[s] of disorder … devoid of any

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[125] Amin, "Post-Fordism," 3.

[126] Sharon Zukin, "Loft living as 'historic compromise' in the urban core: the New York experience: Littering, Pollution, and Otherness," *International Journal Of Urban & Regional Research* 6, no. 2 (1982).

[127] Berger, "Drosscape," 2.

[128] Sandra Alker et al., "The Definition of Brownfield," *Journal of Environmental Planning and Management* 43, no. 1 (2000): 49-69, doi:10.1080/09640560010766.

function.'[129] Disused post-industrial land attracts terms such as 'abandoned,' 'under-used,' 'neglected,' 'useless,' 'surplus,' 'idled,' implying absence and a lack of productivity discordant with the contemporary world.[130] These descriptors are fundamentally concerned with capital and its absence, and are accordingly derided by Pierre Bourdieu and Loïc Wacquant as 'neoliberal newspeak.'[131] The remedying of post-industrial landscapes is envisioned as a form of social responsibility, concerned with health, ecological function, safety, and aesthetics, although achieved by corporate means.[132] Renewal processes are viewed as 'just,' 'sustainable,' and 'essential' in a post-industrial world, where outcomes of re-use result in a controlled space in adherence to social, economic, and political order.[133] As post-industrial spaces are cast as 'deprived,' re-use is also associated with a 'culture of respect' and 'civility.'[134] Similar terms also carry meaning: 'brownfield,' for example, not only distinguishes previously-developed land from totally undeveloped sites, but it also denotes these as 'abandoned, idled, or under-used.'[135] Michael Greenberg, Frank Popper and Bernadette West's phrasing 'temporarily obsolete abandoned derelict sites,' or TOADS, further lends a temporal quality to this state, framing it as ephemeral: a mere

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[129] Christopher De Sousa, "Urban brownfields redevelopment in Canada: The role of local government," *Canadian Geographer* 50 (2006): 392; Rui Roda, "Cities as Systems: Reinventing Functions for Abandoned Areas" (paper presented at the Association of European Schools of Planning conference, Bremen, March 2005): 3; Armstrong and Verma, "The Social Construction of Brownfields," 2.

[130] Christopher Ling, John Handley and John Rodwell, "Restructuring the post-industrial landscape: A multifunctional approach," *Landscape Research* 32, no. 3 (2007): 285-309, doi:10.1080/01426390701318171; Tamar Milgrom, "Environmental aspects of rehabilitating abandoned quarries: Israel as a case study," *Landscape and Urban Planning* 87 (2008): 172; Luis Loures and Thomas Panagopoulos, "Recovering Derelict Industrial Landscapes in Portugal: Past Interventions and Future Perspectives," (paper presented at the 3rd IASME/WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development, Paris, 2007): 118; Luis Loures and John Burley, "Post-Industrial Land Transformation—An Approach to Sociocultural Aspects as Catalysts for Urban Redevelopment," *Advances in Spatial Planning* (2012): 223.

[131] Pierre Bourdieau and Loïc Wacquant, "NewLiberalSpeak: notes on the new planetary vulgate," *Radical Philosophy* 105 (January-February 2001): 5.

[132] Loures and Panagopoulos "Recovering Derelict Industrial Landscapes," 118.

[133] Langhorst, "Re-presenting transgressive ecologies," 1112.

[134] Gordon Macleod and Craig Johnstone, "Stretching the Urban Renaissance: Privatising Space, Civilising Place, Summoning 'Community'," *Urban Worlds* 36 (2012): 15; Argyrou, "'Keep Cyprus Clean.'"

[135] Georgette C. Poindexter, "Separate and Unequal: A Comment on the Urban Development Aspect of Brownfields Programs," *Urban Law Journal* 24, no. 1 (1996): 3.

punctuation in a narrative of productive use and purpose.[136] Despite this perception being embedded within literature, there is an emergent awareness of the value such spaces carry. Christoph Rupprecht and Jason Byrne present a recently-established land-use typology, "Informal urban green-space" (IGS).[137] Examples of this include brownfield sites and vacant land, which over time comes to host plant and animal life. Through the stalling of development processes, IGS exemplify urban nature, whilst also providing users of the site with new experiences and encounters. These 'unmanaged' spaces can be described as liminal as they occupy a temporary and unstable position between decline and growth, and are thus subjected to development pressures.[138]

A breadth of appellations also describe the re-use of space. Manoela Ruffioni notes the sheer number of 'terms beginning with the prefix "re",' which include 'redevelopment,' 'restoration,' 'rehabilitation,' 'revitalisation,' 'regeneration,' 'remediation,' 'recycling,' 'renewing' and 'recovery.'[139] A collective sentiment exists amongst authors that these processes 're-establish

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[136] Michael Greenberg, Frank Popper and Bernadette West, "The TOADS: A New American Urban Epidemic," *Urban Affairs Quarterly* 25, no. 3 (March 1990): 435, doi:10.1177/004208169002500306.

[137] Christoph Rupprecht and Jason Byrne, "Informal Urban Green-Space: Comparison of Quantity and Characteristics in Brisbane, Australia and Sapporo, Japan," *PLoS ONE 9*, no. 6 (2014): 1, https://doi.org/10.1371/journal.pone.0099784.

[138] Ibid.

[139] Manoela Rossinetti Rufioni, "Urban Industrial Heritage and the Contemporary City: Protection Policies and Planning Criteria" (paper presented at the 15th International Planning History Society Conference, Sao Paolo, July 2012): 1; Sandra Alker and Adrian McDonald, "Incorporating sustainable development into redevelopment," *Sustainable Development* 11 (2003): 179; Giuseppe Bonifazi et al., "Monitoring of abandoned quarries by remote sensing and in situ surveying," *Ecological Modelling* 170 (2003): 21; P. Butler, A. Kyber and K. Singel, "Working the edge of Appalachia : Post-industrial abandoned mine landscapes, environmental mitigation and cultural resource reclamation through design," in *EAAE Transactions on Architectural Education : Conservation/Transformation*, eds. Laughlin Kealy and Stefano F. Musso (Leuven: European Association for Architectural Education, 2011); Hans Mommaas, "Cultural Clusters and the Post-industrial City: Towards the Remapping of Urban Cultural Policy," *Urban Studies* 41 (2004); Barry Hersh, Dariusz Pęchorzewski and Sharon Xiohang Yu, "Redeveloping Waterfront Brownfields; Ideas, Plans and Experiences for Regeneration of Shipyards on Three Continents" (paper presented at the American Real Estate Society Twenty-Ninth Annual Meeting, Hawaii, December 2012); John Arwel Edwards and Joan Carles Llurdés i Coit, "Mines and Quarries : Industrial Heritage Tourism," *Annals of Tourism Research* 23 (1996): 353; Desmond Bliek and Pierre Gauthier, "Mobilising Urban Heritage to Counter the Commodification of Brownfield Landscapes: Lessons from Montreal's Lachine Canal," *Canadian Journal of Urban Research* 16, no. 1 (Summer 2007): 39-58; De Sousa, "Urban brownfields," 181-2.

conventional planning order.'[140] Jennie Popay et al. describe this as the 'proper thing to do.'[141] Without intervention, these landscapes are cast as impediments to urban function.[142] Such strong institutional emphasis on functional re-use collides uncomfortably with alternate visions for the post-industrial landscape, however, particularly where local populations desire land-use outcomes more difficult to quantify in terms of capital and economic productivity. Where one institution or party sees a pragmatic resolution for an urban ill, another urban actor or entity may not, calling into question the re-use of land in response to differing visions and values.

Lars Lerup's formulation of 'stim and dross' counters rigid perceptions of (un)productivity. 'Stim,' a shortening of *stimulation point* or hegemonic urban characteristics, and 'dross,' as the undesirable remains of a city's growth period, instead lend an organic and cyclic quality to the urban landscape.[143] Berger builds upon this further with 'drosscape,' space '"scaped," or resurfaced, and reprogrammed for adaptive reuse ... a sort of scavenging of the regional urbanized surface for interstitial landscape remains.'[144] Positive or negative attributes are not ascribed to the *drosscape* by Berger, who instead asserts that this landscape should be considered as an inherent product of urban and industrial growth warranting 'new conceptualization and considered attention.'[145] The leading sentiment in Berger's assertion highlights the urban landscape as a vulnerable one: it is fundamentally subjected to external forces and structures which determine use and re-use, purpose

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[140] Alister Scott et al., "Disintegrated development at the rural-urban fringe: Re-connecting spatial planning theory and practice," *Progress in Planning* 83 (2013): 11; Ling, Handley and Rodwell, "Re-structuring the post-industrial landscape."

[141] Detlef Grimski and Uwe Ferber, "Urban brownfields in Europe," *Land Contamination and Reclamation* 9, no. 1 (2001): 143; J. Macadam and R. Shail, "Abandoned Pits and Quarries: A Resource for Research, Education, Leisure and Tourism," in *The Conservation Value of Abandoned Pits and quarries in Cornwall*, eds. Adrian Spalding, Stephen Hartgroves, John Macadam and David Owens (Truro: Cornwall County Council), 77-8; J. Popay et al., "A proper place to live: health inequalities, agency and the normative dimensions of space," *Social Science & Medicine* 57 (2003): 56.

[142] de Sousa, "Urban brownfields redevelopment in Canada," 392; Rui Roda, "Cities as Systems," 3; Armstrong and Verma, "The Social Construction of Brownfields," 2.

[143] Lerup, *After the City*.

[144] Berger, *Drosscape*, 1.

[145] Ibid, 2.

and surplus. Transformation and development, or as Mark Dean writes, a 'project of the city,' is seen as a 'public action of governance': it integrates not only social and political values, but also economic and bureaucratic factors.[146] This raises queries as to who holds a claim to altering space, and to what end. Tracing this remedies what Francesca Russello Ammon considers a weak collective understanding of the history of change within cities, which often fails to consider the full processes entangled within it: 'Stereotypical photographic depictions of urban renewal jump quickly from "Before" to "After".'[147] Complex social and political contestations are interwoven into this intermediary period, and their illumination further distills urban landscapes and their inhabitants as subject to expressions of power and capital.

2.6 Activism as critique

The theoretical understanding developed thus far warrants further clarification in an Australian context. This also provides a historical background to matters of urban activism and conflict, demonstrating thematic repetition. Urban change is triangulated with town planning—the mechanism through which power and capital become spatialised—and local activism, which serves as a means of critique. The politicisation of the profession and its impacts upon urban form and communities are together highlighted, and past instances of urban resistance are detailed as illustrative examples.

Hugh Stretton's *Ideas for Australian Cities* describes urban change as a phenomenon which, 'can be for better or worse; and in practice the choice is hardly ever between change and no change.'[148] Writing during a period when Australian cities were on the cusp of expansion and modernisation,

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[146] "Strategies of Community Engagement: Tactical Urbanism," Bang the Table, published April 2018, https://www.bangthetable.com/blog/strategies-of-community-engagement-tactical-urbanism/.

[147] Francesca Russello Ammon, *Bulldozer: Demolition and Clearance of the Postwar Landscape* (New Haven, CT: Yale University Press, 2016), 146.

[148] Stretton, *Ideas*, 284.

Stretton characterises the city as caught between growth and decay—'blight and renewal, piecemeal or comprehensive'—warranting judgement by its inhabitants.[149] Such assertions are steeped not only in circumstance and context, but also the perspective of the observer who, as Stretton suggests, possesses 'political and moral principles — and alliances of interest — to distinguish better changes from worse ones.'[150] This leads to discussion of conservation and the 'social reasons' underlying a common desire to prevent change from taking place, which can be construed by authorities and institutions as 'emotional, mawkish, [and] reactionary.'[151] Stretton makes clear that such vocal opposition is often driven by the pursuit of justice and morality, and the desire to prevent outcomes for the city where 'from every social injury the victims emerge more resentful, the winners grow more accustomed to getting away with it.'[152] Germane to the focus of this thesis is a particular declaration of Stretton's:

> Good societies, it is true, are never knit together by good feeling alone. But rights and affections — justice and conscience — go together, or deteriorate together in the direction of a heartless and dangerous alienation. Bigger and bigger cities with rising rates of *both* blight and renewal … do seem to degrade both the rights and affections faster than other urban forms do.[153]

The city in its infancy—that is, as a means of spatial organisation—was not subject to democratic decision-making on its form or structure: urban citizens in pre-industrial periods were not well-placed to coordinate the growth of their townships. Robert Parker asserts that very few members of historic populations were 'in a position to quarrel about the choice of planning goals, and fewer still

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[149] Ibid.

[150] Ibid.

[151] Ibid.

[152] Ibid, 293.

[153] Ibid.

to interfere with their consummation.'[154] Town planning, as a response to urban ills caused by industrialisation—poor health, slums, and pollution—was a distinctly paternalistic endeavour, albeit peppered with progressive intentions. However, the evolution of the planner's role throughout the early twentieth century continued to deny the general population the capacity to determine the form and qualities of their environment: rather, the planner was deemed 'better able to determine and guard 'the public interest' than the mass of private individuals' by virtue of their expertise and knowledge.[155] This activity becomes political as a consequence of conflicts taking place over what land is used for which purpose, and by whom.[156] Literature reviewed with respect to activism in Australia traces its origin as a response to the power dynamics evident within town planning, as an extension of government but also in its facilitation of private interests. Melbourne is the primary site of conflict in this respect, although other examples of activism within Australia are noted.

2.6.1 *Spatialising power and capital through planning*

Parker, in 1971, gave a detailed overview of the role of the Australian town planner and how the field and profession had become politicised; this would prompt new ways of thinking about the city, its future, and those residing within it. In response to the 'stresses and contradictions of metropolitan living [becoming] more intense,' the politicisation of urban change would be inevitable. Governments, both state and federal, maintained the responsibility of distributing social services and infrastructure, as well as co-ordinating land-uses, acknowledging the role of planning to achieve a particular economic or social outcome.[157] This distribution could be favourable to some groups or demographics over others, prioritising those with greater economic or political capital; as Parker elucidates, marginal or disenfranchised inhabitants of the city tend to be the 'least articulate

[154] Parker, "Planning and Politics," 29.

[155] Ibid, 31.

[156] Troy, "Introduction," 17.

[157] Parker, "Planning and Politics," 25.

of urban groups and the most deficient in political influence.'[158] In an accompanying work by Peter Loveday, organisations, individuals and bodies familiar with planning and governance mechanisms are said to be best-placed to affect, rather than be affected by, change.[159] This is seen in the narrative of activism in Australia, where exclusionary policies initially affect marginal populations and are later opposed by a more informed class.

Sandercock, in *Cities for Sale*, asserts that such influential political and private interests culminated in the organisation of the city in a manner which excluded the ordinary citizen from participating in planning processes:

> Post-war planning problems in Melbourne stem partly from the enduring political power of property owners—exercised formally through parliament and informally through personal connections between businessmen, bureaucrats and politicians—but also from the use, and abuse, of the new state powers exercised by technical experts and bureaucrats.[160]

Toni Logan typifies town planning as an activity coordinated by local government. Planners employed by municipalities thus act as 'social gatekeepers' who 'help to distribute and control urban resources.'[161] Logan incorporates Marxist paradigms in acknowledging the connection between planning and capital, further highlighting the public sector as integral to the maintenance of capitalism as the dominant mode of production.[162] With planning an aspect of governance—a mode of 'urban managerialism' as Logan decrees it—the role of the town planner transcends mere

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[158] Ibid, 29.

[159] P. Loveday, "Citizen Participation in Urban Planning," in *The Politics of Urban Growth*, eds. Robert Parker and Patrick Troy (Canberra: Australian National University, 1972), 139.

[160] L. Sandercock, "Melbourne: Capitalism, Crude and Uncivilized," in *Cities for Sale*, ed. Leonie Sandercock (Melbourne: Melbourne University Press, 1975), 146.

[161] T. Logan, "Local planning : Practice and potential in metropolitan Melbourne," in *Conflict and Development*, ed. Peter Williams (Sydney: Allen & Unwin, 1984), 99.

[162] Ibid, 100.

built form to encompass questions of class and power, particularly where conflicts and discomfort between land-uses and users arise. For Logan, speaking of the work of Castells, how responsive government and planners are to issues faced by the community can ultimately reveal the structural impediments to a truly just or egalitarian outcome:

> …through power structures organised labour can win concessions in conflict with the short-term interests of specific fractions of capital, although only if the long-term interests of the dominant classes are not threatened … a more comfortable position for urban planners …[163]

Logan's analysis demonstrates the nature of planning as a function of government. She notes that initial town planning in Victoria was coordinated largely by local government prior to the establishment of the 1944 *Town and Country Planning Act*, which introduced planning schemes, zones, a basis for their distribution, and the use of permits and conditions to facilitate or deny development. Logan makes the assessment that this system was founded upon pre-war town planning legislation in England, which had attracted criticism on the basis of its 'negative, permissive and parochial outcomes.'[164] Plans produced by the MMBW following the institution of the 1944 *Act* had assumed population growth albeit at a lower level than that which eventuated; post-war expansion of the population and the city was not anticipated and thus not planned for. In tandem with this was an uneven level of consideration for the interests of business, especially under the Henry Bolte-led government which had harnessed town planning mechanisms to facilitate industrialisation and thereby the economic health of the state. Generalist policies were developed by the MMBW which failed to fully grasp the nuanced conditions of particular municipalities, warranting the development of local planning schemes and frameworks: for instance, in Altona, an industrial western suburb of Melbourne, a petrochemical facility proposed on a site zoned by the

[163] Ibid.

[164] Ibid, 102.

Board for industry was prohibited in a local planning scheme by the City.[165] This exemplifies the institutional oversight which becomes far more apparent in the exploration of urban quarry and tip planning and governance throughout this thesis.

2.6.2 *Reform, consumption, and preservation*

The link between capital and power, and power and town planning, is inextricable. It carries great importance in detailing the history of urban activism, and outlines these movements as not only reactionary to a particular issue, but also a litmus test for democracy and egalitarianism: an attempt to remedy unbalanced, inadequate, or exclusionary governance or planning. As Freestone reinforces, there is a need to investigate such circumstances through a historic lens: these struggles are often 'obscured by "top down" history with its bureaucratic-technocratic orientation tending to enshrine official perspectives and a focus on plans, planners and planning institutions.'[166]

Whether activism, 'social movements,' or 'collective activism' are appropriate terms to describe this phenomenon is beyond the scope of this thesis; similarly, there is little capacity to assess the potential impact of such efforts, as Julie-Anne Boudreau notes with reference to Castells' *The Urban Question*.[167] However, activist movements in Australia can be traced to earlier historic forms, which are vastly different and indicate changes in the broader environments addressed or opposed by such groups. These warrant distinction as each movement exhibits a particular focus or motivation: on reform, consumption, or preservation.

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[165] "Altona to Have Carbon Black Plant if Safe," *The Age*, May 7, 1958, 3.

[166] R. Freestone, "Introduction : The historical role and significance of Australia's town planning associations," in *Cities, Citizens and Environmental Reform: Histories of Town Planning Associations*, ed. Robert Freestone (Sydney: University of Sydney Press, 2009), 2.

[167] J. Boudreau, "Global Urban Social Movements: Emerging Forms of Political Action," in *Global Urban Politics : Informalization of the State*, ed. Julie-Anne Boudreau (Cambridge: Polity Books, 2017); Manuel Castells, *The urban question : a Marxist approach*, transl. Alan Sheridan (London: Edward Arnold, 1977).

One early incarnation of community activism entails the organisation of citizens to promote reform: for the promotion or advancement of particular urban conditions or fixtures. This is exemplified in the origin of progress and town planning associations.[168] The earliest such organisations were formed in the wake of Ebenezer Howard's United Kingdom-based Town and Country Planning Association, established in 1899.[169] This served as a strong precedent for the creation of like organisations focused on urban reform, upon which the Victorian Town and Country Planning Association was modelled in 1914.[170] Many were deeply entrenched in, and motivated by, concerns for public health, stemming from the relatively poor conditions experienced in cities of the nineteenth and early twentieth centuries. Hannah Lewi and Nichols observe the development of urban activism in Australia from its most elementary form as inner-urban 'tenants' leagues of the early twentieth century.[171] They refer to Patrick Mullins' view that such groups sought to preserve a particular aspect of 'residential life,' responding to attempts by institutions or private interests to alter the urban fabric.[172] The additional sentiment that community interests and self-interest can coincide is also expressed by Lewi and Nichols, invoking the work of Saul Alinsky.[173] These organisations advocated and encouraged the practice of planning in a formal sense, entailing lectures, exhibitions, and conferences, rather than engaging in the type of vocal, performative activism observed in the later twentieth century.[174] Although such activities did take place in a public context, their constitution was much more professional than less-formal community

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[168] R. Freestone, "Introduction : The historical role," 2; D. Nichols, "Precursors: Melbourne in the Postwar Period," in *Trendyville*, eds. Renate Howe, David Nichols and Graeme Davison (Melbourne: Monash University Publishing, 2014), 10.

[169] Freestone, "Introduction : The historical role," 3.

[170] Ibid 4.

[171] Hannah Lewi and David Nichols, ""You Never Appreciate What You Have Until There is a Chance You May Lose It" Community Activism and the Conservation of Public Swimming Pools," *Fabrications: The Journal of the Society of Architectural Historians, Australia and New Zealand* 24, no. 1 (2014): 115-6.

[172] Patrick Mullins, *The Struggle Against Brisbane's Freeways, 1966-1974: An Australian Case Study of Urban Development* (Brisbane: University of Queensland, 1979).

[173] Saul Alinsky, *Rules for Radicals: A Practical Primer for Realistic Radicals* (New York: Random House, 1971), 120.

[174] Freestone, "Introduction : The historical role," 12.

organisations. They tended to attract built environment practitioners and reformist thinkers of the upper-middle classes.[175] Complementing these early associations were reformist movements deeply embedded within religious welfare organisations in existence throughout the 1930s and 40s.[176] Whether these early movements truly reflected values of the broader community is questionable; however, it is apparent that participation in such organisations was predicated on an elite economic and social position held by the individual. As such, early town planning associations were not democratic in the sense that later activist movements demonstrated, particularly since the 1960s.

As the origin of urban crises shifted from public health and hygiene to economic conditions in the twentieth-century city, the concept of 'urban struggle' was posited by Castells.[177] In an Australian context, Mullins applies the notion of 'urban struggle' as 'working-class action over consumption issues, specifically over issues of housing and residential facilities, and it is action which has been particularly less characteristic of class struggles since the late 1960s.'[178] Mullins suggests that the social and economic conditions of the 1960s had 'tightly contained' the scope and power of action; it was only in the 1970s that societal conditions had become sufficient to allow for such a movement to become 'widespread' and acknowledged more broadly. This adheres to Castells' belief that an 'urban struggle' is validated as an 'urban social movement' in that it achieves some effect or outcome.[179] Lowe notes that this measure of success is difficult to ascertain and weakened as a consequence; Castells has also critiqued the distinction.[180] The organisation of movements, as well

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[175] Ibid, 15.

[176] Howe, "The spirit of Melbourne," 222.

[177] Mullins, *The Struggle*, i.

[178] Ibid.

[179] Castells, *The City and the Grassroots*, 298.

[180] S. Lowe, "Social bases and the mobilization process," in *Urban Social Movements : The City After Castells,* ed. Stuart Lowe (New York: St. Martin's Press, 1986), 66.

as their intentions, dramatically differs across contexts and cannot be placed neatly within Castells' categorisations, as Fred Caloren notes.[181]

Howe notes the formation of residents' associations, such as that taking place in response to slum clearance by the Housing Commission of Victoria, as fundamentally distinct from the early progress associations noted by Freestone, as well as others in Melbourne. The Residents' Association of the suburb of East Melbourne is one example: established in 1954, its activities were distinctly focused on heritage and preservation.[182] Heritage is frequently discussed as a motivator of community organisation and action: Tonkin critiques the role of activism in preserving the built heritage of Melbourne. Ray Tonkin discusses the inability of the National Trust to successfully preserve a broader swathe of heritage buildings, which resulted in the establishment of activist groups composed of progressive architects, historians, and planners to advocate for structures which had escaped a relatively narrow view of what constitutes 'heritage.'[183] James Lesh similarly highlights the role of urban heritage in mobilising Australian activist movements.[184] Lewi and Nichols note that local activism in the Australian context can vary from thematic—continuing the example of heritage, driven by the preservation of built heritage—or motivated by a single issue, where activist groups fold upon the 'completion' of their objective.[185]

The nature of the associations formed was highly dependent on the demographic constitution of the area, which in itself was susceptible to change as a result of gentrification. Stemming from struggles acutely felt by marginal populations later displaced, many associations became composed of

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[181] F. Caloren, "The Urban World of Manuel Castells," in *The City and Radical Social Change,* ed. Dimitrios I. Roussopoulos (Quebec: Black Rose Books, 1982), 53.

[182] Howe, "The spirit of Melbourne," 219.

[183] Ray Tonkin, "The Conversion of Melbourne" (paper presented at 17th International Council on Monuments and Sites General Assembly and Scientific Symposium, Paris, November 2011), 945.

[184] James Lesh, "From Modern to Postmodern Skyscraper Urbanism and the Rise of Historic Preservation in Sydney, Melbourne, and Perth, 1969-1988," *Journal of Urban History* 45, no. 1 (Jan 2019): 126, doi: 10.1177/0096144217737063.

[185] Lewi and Nichols, ""You Never Appreciate"," 118.

intellectual 'cosmopolitans,' who had increasingly settled in suburbs such as Carlton and Fitzroy.[186] In this respect, the impact of gentrification on movements and community groups is highlighted, reinforcing the relationship between capital and culture.[187] Sandercock surveyed the constituency of eleven residents' groups in relation to 1960s inner-suburban slum clearance in Melbourne, as well as the 1969 *Melbourne Transportation Plan*, finding that they were largely comprised of 'middle class/professional' residents, 'primarily defensive, some narrowly self-interested.'[188] Their influence rendered grassroots activism a more strategic and professional endeavour, achieving its eventual recognition within the realm of town planning. Not only were activist movements increasingly organised and formalised, but their means of communication with the broader populace would also change: this saw the publication of literature and film, the distribution of letters and like materials, the organisation of meetings, demonstrations, and protests, and direct engagement with political representatives in a manner not seen previously.[189] In the case study sites of Newport and especially Niddrie, community movements were well-developed and able to draw upon these past successes and precedents to inform their approach.

Freestone discusses the late-twentieth century emphasis on public participation in the profession as something now 'so entrenched that it is inconceivable that any study of policies, decisions and outcomes could be divorced from an appreciation of this broader community context.'[190] Certainly the notion of citizen participation was normalised and sought to be included within planning processes with the formation of Sherry Arnstein's ladder of citizen participation, denoting degrees

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[186] Ibid, 220.

[187] Luckins, "Gentrification and Cosmopolitan leisure," 265; Renate Howe and David Nichols, "A new relationship between planning and democracy? Urban activism in Melbourne 1965-1975," (paper presented at 11th International Planning History Conference 2004, Universitat Politecnica de Catalunya, Catalunya, Spain, July 2004), 3.

[188] Sandercock, "Melbourne," 58.

[189] Ibid, 59.

[190] Freestone, "Introduction : The historical role," 1.

of participation stratified into segments such as non-participation, tokenism, and genuine empowerment.[191]

2.6.3 *Activism as systemic critique*

The 1960s and 1970s were formative decades for activist groups. The rise of urban activism made clear that that cities and their populations could not be presided over without consideration of the desires and needs of citizens, and served as a robust foundation for future movements. This is the basis upon which activism in the Australian context is explored.

Loveday addresses the role of citizens in planning, stating that 'no comprehensive official consideration of participation in urban planning' could be located with respect to the Australian context.[192] He begins with the notion that politicised planning invariably results in the expectation that political intervention can, and will, take place to mitigate undesirable outcomes, even when those outcomes are permitted by government in the first instance. Opportunities for the average Australian citizen to engage with planning processes were historically lacking, and largely restricted to the legally-enshrined ability to object to an undesirable planning scheme amendment or permit application.[193] Patrick Troy, in the introductory chapter for his edited collection *Equity in the City*, notes that planners, when criticised, could simply 'take refuge behind technical arguments which the public did not have the expertise to challenge.'[194] The publication of plans—perhaps in the interest of transparency or democracy—depicting undesirable urban outcomes, however, would provide the necessary means for the formation of organised groups opposing such projects. Troy identifies this opposition as 'the forerunner of a new type of politics' stemming from 'local groups

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[191] Sherry Arnstein, "A Ladder Of Citizen Participation," *Journal of the American Planning Association* 35, no. 4 (1969): 216-224.

[192] Logan, "Local planning," 129.

[193] Ibid, 135.

[194] Troy, "Introduction," 15.

who saw that their residential amenity would suffer … [who] are predominately middle-class people who did not challenge the basic philosophy of the proposals - they simply did not want the 'improvement' … to disturb their lives.'[195] Arguably, this sentiment developed into a more holistic and nuanced one by following decade, where single-issue politics became increasingly supplanted by objections to systemic injustice. This is best exemplified in the Niddrie case study.

As such, throughout the 1960s and 1970s, activist groups began to change in both composition and scope, to address these broader systemic issues.[196] Troy ascertains that:

> By the beginning of the [1960s] it was obvious that the traditional way of ordering urban affairs was failing to meet the challenge presented by the growth of the cities and the emerging dissatisfaction with the inequitable outcomes of the system.[197]

Howe and Nichols describe 1965 to 1975 as a 'watershed' period which ultimately allowed for the establishment of 'more democratic' methods of planning.[198] Prior to this, as Howe observes, the planning discipline comprised of 'interlocking and often competing … bureaucratic silos,' pitting the interests of the MMBW of Works against the State Electricity Commission, the Victorian Railways, the Housing Commission of Victoria, and the Country Roads Board.[199] The 1960s and 1970s were crucial decades in the development of citizen-led movements, responding to the significant social, economic, and physical changes taking place in the city as promulgated by these bodies. Nichols and Howe highlight shifts during this time towards more sensitive and responsive town planning:[200]

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[195] Ibid, 14.

[196] Ibid, 15.

[197] Ibid, 15.

[198] Howe and Nichols, "A new relationship," 8.

[199] Nichols, "A decade of Turbulence," 19.

[200] Howe and Nichols, "A new relationship," 2.

> Post-war centralised planning models were destabilised by a demand for more transparent and consultative planning models, alongside a questioning amongst academics and other critics of large-scale infrastructure and corporatist planning.[201]

Simone Battiston identifies the importance of the Whitlam federal government in this respect: it facilitated the establishment of organisations and social movements in Australia, particularly where state governments engaged in projects to community detriment.[202] The initiation of the Australian Assistance Plan in 1973 sought to encourage and embolden citizens to actively participate in processes of governance and planning.[203] Susan Kenny, in exploring the new groupings and alliances formed by local residents in response to perceived problems, notes the informal nature of such organisations in the face of more rigid, formal, and technocratic town planning and governance.[204] A distinction can be drawn between the two case study sites in this respect, with opposition to tipping in Newport an informal endeavour, and that observed in Niddrie as far more formalised, organised, and allied with existing community groups.

Examples of movements, in varying degrees of formality and impact, can be found throughout mid-twentieth century Australia. In South Australia, the 1968 *Metropolitan Adelaide Transport Study*—sharing many characteristics with the 1969 freeway programme in Melbourne—provoked the mobilisation of democracy in this respect, albeit met by a state government far more responsive to, and inclusive of, community views.[205] Within the following decade, the proposal of a freeway

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[201] Ibid.

[202] Simone Battiston, *Immigrants Turned Activists : Italians in 1970s Melbourne* (Leicestershire: Troubador Publishing, 2012), 98.

[203] Susan Kenny, "Contestations of Community Development in Australia," *Community Development Journal* 31, no. 2 (April 1996): 105, doi:10.1093/cdj/31.2.104.

[204] Ibid, 107.

[205] Sandercock, "Melbourne," 61.

network in Brisbane, Queensland, prompted similar opposition, as noted by Mullins.[206] Between 1966 and 1974, Mullins examined compulsory acquisition efforts and the establishment of groups such as the Brisbane Freeway Protest and Compensation Committee. Reiterating the close connection between urban protest and activist movements and political ideology, the involvement of the feared yet ultimately ineffectual Communist Party of Australia framed freeway proposals not only as contrary to environmental quality but also upheld as a facilitator of capitalist modes of consumption.[207]

Sydney, New South Wales, differs from these examples somewhat, with Howe noting this divergence via the Builders' Labourers' Federation's green bans in Sydney, while acknowledging the role of union movements in Melbourne as 'more community-based.'[208] The actions and entities directly opposed in Sydney tended to be private and corporate, rather than public, bodies, albeit with exceptions such as public housing development at Woolloomoolloo. Conflicts arose between local residents and developers in 1970 at Kelly's Bush, where the developer A V Jennings sought to construct 'luxury' houses contrary to the wishes of the community.[209] Similar efforts were undertaken by the Union to prevent the demolition of heritage buildings in The Rocks, which were to give way to a modern development of plazas and towers; the site was barricaded by local residents and union members.[210] In the same decade, the saga at Potts Point, which resulted in the

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[206] Patrick Mullins and University of Queensland Department of Sociology and Anthropology, *Residents and the Brisbane northern freeway : the pre-relocation situation* (Brisbane: Department of Anthropology and Sociology, University of Queensland, 1976); Patrick Mullins, *Brisbane Northern Freeway Impact Study : social consequences. General report no.1. Residents and the Brisbane Northern Freeway: the pre-relocation situation* (Brisbane: University of Queensland, 1976).

[207] Communist Party of Australia, *Free transport – not freeways : the invaders* (Brisbane: Communist Party of Australia, 1972).

[208] Howe, "The spirit of Melbourne," 223.

[209] James Colman*, The House that Jack Built : Jack Mundey, Green Bans Hero* (Sydney: NewSouth Publishing, 2016), 71.

[210] M. Burgmann and V. Burgmann, "Breaking the bans, breaking the union," in *Green Bans, Red Union: Environmental Activism and the New South Wales Builders Labourers' Federation* (Sydney: UNSW Press, 1998), 258.

displacement of the local community by luxurious apartment developments, displayed what Thompson described as 'the most profound external indication of the need for planning reform.'[211]

Whether in response to corporate or public attempts to reshape the environment, it is clear that opposition can act as a litmus test: beyond planning reform, it also makes clear what parties possess demonstrable influence over the city, and to what end. This is a crucial query with respect to when, and how, quarry sites are ascribed with new purpose.

2.6.4 *The changing scope of urban movements in Victoria*

Historical repetition is also present. With activism spurred on by the 'radical restructuring' of the mid-twentieth century city, it is observed to ebb and flow in tandem with deindustrialisation and renewed economic prosperity. Activism, in this sense, is fundamentally subjected to changes in the Australian economic and political landscape; it is responsive to capital and power, in the slow decline of manufacturing sector and the subsequent post-industrial lull in the late 1970s and 1980s. A commonality can be observed amongst Australia's state capitals in this regard, forged by the related processes of deindustrialization and gentrification, invokes reference to Castells:

> …the most effective urban protest movements emerging from urban activism took place in cities caught in the upside of economic and social restructuring.[212]

One could argue that the extent of change is mirrored by the extent of protest. Activism in this context viewed by Howe and Nichols as a component of a 'wider response' to what was seen as the 'global crisis of capitalism.'[213] This marked an emergent emphasis upon justice, both social and

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[211] Susan Thompson, *Planning Australia : an overview of urban and regional planning* (Cambridge: Cambridge University Press, 2007).

[212] Castells, *The City and the Grassroots*, 58.

[213] Howe and Nichols, "A new relationship," 6.

environmental, in an increasingly-organised fashion, and in an increasingly-globalising world.[214] Connections may be drawn between residents' associations and local community activist groups and later organisations founded upon principles of democracy. To discuss this in greater detail, we return to the Victorian context.

The Rainbow Alliance was one such organisation, which did not respond to single issues or urban crises, but sought to remedy what Boris Frankel describes of his own experiences as 'everything from greenhouse action and urban planning issues to alternative socio-economic policies and everyday politics.'[215] The organisation was conceived of and founded in the late 1980s by Joseph Camilleri, philosopher, social scientist, and academic at La Trobe University, Bundoora.[216] Simon Booth and Verity Burgmann described the movement as attempting to 'bring together the various strands of radical thinking in order to counter the existing hegemonies in Australia.'[217] Broad aims for the movement were established which encompassed core principles including, but not limited to, the eradication of all modes of inequality; the development of co-operative environments, 'living and working,' the democratisation of decision-making; the public ownership of institutions; and institutional reform to ensure genuine public participation in decision-making processes. The organisation produced numerous publications which critiqued urban and infrastructure development during its time: brief examples include a robust series of conference proceedings, as well as a text on the proposed Multifunction Polis in South Australia, and the need for increased community participation in local government.[218]

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[214] Boudreau, "Global Urban Social Movements," 77.

[215] Boris Frankel, "Radical politics: the falterings of a third way," *Arena Magazine*, no. 35 (June-July 1998): 37-42.

[216] The organisation's name reflects its constitution of 'A Movement of People with many shades of opinion but one common aim of ending the exploitation of people and nature' (Joseph Camilleri, "Rainbow Alliance: A New Political Movement," Joseph Camileri, n.d., www.josephcamilleri.org/content/rainbow-alliance-new-political-movement).

[217] Simon Booth and Verity Burgmann, "Australian radical intellectuals and the imagining of counter-hegemonic alternatives," *Social Alternatives*, 26, no. 1 (2007): 26-31.

[218] Joseph Wayne Smith, "Enclaves Unlimited: Urbanisation, Immigration and the Multifunction Polis," *Urban Policy and Research*, 9, no. 1 (1991): 63-66, doi: 10.1080/08111149108551458; Rainbow Alliance, *Community participation in local government* (Fitzroy, VIC: Rainbow Alliance, Fitzroy, 1996).

The nature of the projects responded to by activist groups responded to also changed remarkably after the 1980s. Projects which had historically attracted considerable public scrutiny as a consequence of government transparency had now become hidden from view, reduced to private transactional arrangements between governments and private firms or developers.[219] This is seen in both case study sites, where ownership and responsibility are obfuscated in a series of bureaucratic entanglements. Newport demonstrates this at a highly local scale, however, given that its development took place in a political and economic context fostering greater government cooperation and more sensitive interventions.

In Victoria, this was exacerbated by the election of the Liberal Kennett government in 1992, amplified by the undertaking of major infrastructure projects contributing to the state's recovery from economic decline felt in the previous decade. Not only had the economic impetus to redevelop surplus land arisen with great enthusiasm, advocated by government efforts for Melbourne to be reconceived as an international city of great economic and touristic potential, but the means by which land *could* find new purpose was entirely obfuscated by complex and covert processes. Emphasis was placed upon growth, regeneration, efficiency, and the stimulation of the economy—municipalities were amalgamated, major projects put forth, and the pursuit of a new face for Melbourne was in full swing, at the expense of community participation.[220] This background sees the Niddrie case study depict a renaissance of sorts. Calling upon Castells again, the degree of economic restructuring seen in Melbourne in the 1990s no doubt lent a compelling rationale for the strength and extent of the movement to stop the site's use as a tip.[221]

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[219] R. Howe, "A New Paradigm? : Trendyville in the Twenty-first Century," in *Trendyville : the battle for Australia's inner cities*, eds. Renate Howe, David Nichols and Graeme Davison (Melbourne: Monash University Publishing, 2014), 185.

[220] Howe, "A New Paradigm?" 185.

[221] Castells, *The City and the Grassroots*, 58.

2.7 Methodology

For the purposes of this research, a qualitative approach has been selected: this capitalises upon the explanatory power of historical documentation and experiential information conveyed through interviews with select respondents.[222] Documents were located predominantly in the Crow Collection at Victoria University, Footscray, and Public Record Office Victoria in North Melbourne. Interviews have been undertaken with five respondents identified from materials obtained throughout the archival research process. Although not a core aspect of the methodological approach, the researcher visited the case study sites numerous times to become familiar with the landscapes. These experiences were crucial in building a close understanding of the changes which had taken place within those spaces, spanning industrialisation through to re-use.

The case study method was influenced by its use in Lowes' analysis of major sporting events and contested urban identity. Deemed by Lowes a 'useful research design,' the case study approach is 'often in rich detail,' and acknowledges 'the how and why of a problem.'[223] This could be understood as integral to the construction of an urban history. Lowes grounds his analysis in observations, and his work becomes an 'exploratory study.' This builds upon the work of Robert Stebbins who defines this as a 'broad-ranging, purposive, systematic, prearranged undertaking … leading to description and understanding of an area of social or psychological life.'[224] This approach is fundamentally steeped in grounded theory, but also emphasises the development of knowledge as a crucial element driving the research process. Stebbins states that researchers 'explore' when they possess little, if any, knowledge of a topic, but 'nevertheless have reason to believe it contains elements worth discovering.'[225] This is especially pronounced when the research topic comprises an

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[222] Babbie, *The Basics of Social Research*.

[223] Lowes, *Indy Dreams*, xvii.

[224] Robert Stebbins, *Exploratory Research in the Social Sciences* (Thousand Oaks, CA: SAGE Publications, 2001), 3.

[225] Ibid, 6.

'uncharted area' which intersects with a 'pervasive personal orientation.'[226] Such statements ring true for this thesis, which was initiated with a divergent focus on the use of abandoned extractive industrial landscapes. The exploratory approach fostered further historical inquiry as to how such landscapes stagnate, and what planning interventions, or lack thereof, contributed to this. Stebbins asserts that exploration depends greatly upon 'flexibility in looking for data and open-mindedness about where to find them,' which informs the methodologies employed in this work.[227]

Archival research provided a foundational knowledge basis, but was also informed, complemented —and in some instances, contrasted—with information derived from semi-structured interviews, and *vice versa*.[228] Interviews were valuable, not only conveying experiential knowledge but also 'filling in' historical record where the topic or focus was not sufficiently detailed or described.[229] Findings are also generative in nature, with no objective meaning to discern but rather, a cumulative series of insights.[230] The contribution of interviews to this body of work builds upon the identified liberating power of oral histories: that their origin of this method emerged from a sense of social responsibility, as the histories of those 'overlooked and oppressed' are gathered in 'creating a history of everyday lives.'[231] The experiences and perspectives of interview participants contend with the narrative apparent in media and government documentation, providing vital context and clarification.

Documents and archival resources were located and analysed, including published texts, newspapers, municipal meeting minutes, Census information, maps, and policies and legislation.

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[226] Ibid, 3.

[227] Ibid, 6.

[228] Lisa M. Given, *The SAGE Encyclopedia of Qualitative Research Methods* (Los Angeles: SAGE, 2008).

[229] Leavy, *Oral History*, 5.

[230] Ibid.

[231] J. Ritchie et al., *Qualitative Research Practice: A Guide for Social Science Students and Researchers* (New York: SAGE Publications, 2013), 4.

The analysis of archival documentation is essential when building an understanding of historic urban change. This capitalises upon the accessibility of PROV, a source of substantial information which effectively constitutes the 'historical memory of the Victorian Government.'[232] Dingle and O'Hanlon have effectively described the decline of industry in Melbourne's inner-city and Geelong with the methodology of document analysis.[233] Many of these are drawn from the MMBW (extant 1891-1992), but also complementary agencies and government departments. In addition to this, Dingle and O'Hanlon utilise a case study approach which serves as a precedent for qualifying historic urban change. In focusing on a selected site, the progression from industrial to residential land use can be identified, inclusive of the factors leading to this shift. Whilst the establishment of a timeline of change is helpful, 'more nuanced, historically informed studies' in the form of a case study address change at an especially focused, local level.[234] This should not comprise the sole basis of historical inquiry, however. As Simon Gunn asks:

> Are there certain types of histories that emerge 'naturally' from the archive? What in the archival forms and functions make this so? What other types of histories might be obscured by these conventions?[235]

Looking beyond PROV, a 'novel' and relatively underdeveloped iteration of document analysis was employed: newspaper analysis. This builds upon the existing methodology of document analysis, involving the evaluation of physical and digital documents for data which can elucidate meaning or contribute to a broader narrative or set of knowledge.[236] Document analysis is complementary to the

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[232] "Vision and corporate plan," Public Record Office Victoria, published September 2017, https://prov.vic.gov.au/index.php/about-us/legislation-and-governance/vision-and-corporate-plan.

[233] Tony Dingle and Seamus O'Hanlon, "The inner city transformed: industrial and post-industrial Melbourne in pictures c1970-2005," *City Structure*, 20 (2005).

[234] Dingle and O'Hanlon, "From Manufacturing Zone," 54.

[235] Simon Gunn, *Research methods for History* (Edinburgh: Edinburgh University Press, 2012), 23.

[236] Glenn Bowen, "Document Analysis as a Qualitative Research Method," *Qualitative Research Journal* 9, no. 2 (2009): 28.

case study approach and forms a considerable element of the methodology employed in this research. In this instance, the case study is considered a unit of analysis, warranting its contextualisation and exploration through a multiplicity of sources. Not only does the use of document sources provide meaningful information and historical insight, but it also speaks of the context in which it was created, allowing for more robust historical inquiry in relation to established case studies. Analysis of the material derived from digitised newspaper archives was undertaken manually, as qualitative analysis software serves little purpose beyond coding articles.[237] The researcher in this instance has interpreted each article qualitatively. Archived newspapers are an ideal medium, for their reflection on and documentation of sociocultural values arguably absent in more formal material sources; moreover, newspapers can address social, cultural, or urban phenomena otherwise deemed unworthy of academic or formal analysis or coverage. As such, newspapers can function as both a primary and secondary source, ripe for analysis across a number of humanities fields, and increasing the 'richness' of existing data.[238] Some authors contend that, although a number of meaningful analyses of the methodology exist in relation to its potential to uncover singular events or issues, assessments of its application across broad time periods is highly limited.[239] However, studies over the duration of two centuries of newspaper publication have been undertaken to a considerable degree of success in establishing strong understandings of narrative and cultural phenomena as portrayed within newspapers.[240]

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[237] Florian Kaefer, Juliet Roper and Paresha Sinha, "A Software-Assisted Qualitative Content Analysis of News Articles: Example and Reflections," *Forum: Qualitative Social Research* 16, no. 2 (May 2015).

[238] Faith E. Taylor et al., "Enriching Great Britain's National Landslide Database by searching newspaper archives," *Geomorphology* 249 (November 2015): 52.

[239] Christopher Dingle and Laura Hamer, "False Memories and Dissonant Truths: Digital Newspaper Archives as a Catalyst for a New Approach to Music Reception Studies," (paper presented at the Digital Humanities Congress 2012, Sheffield, England, September 2012).

[240] Thomas Lansdall-Welfare et al., "Content analysis of 150 years of British periodicals," *Proceedings of the National Academy of Sciences of the United States of America* 114, no. 4 (Jan 2017): 457.

Archived newspaper sources are generally been accessed either through archived clippings or microfiche, located within an archive or library.[241] Numerous weaknesses are evident with the use of such physical material, initially including difficulties of access, poor organisation, the potential for material to be lost or damaged, and the need to access microfilm readers in order to view the material.[242] These issues delay the research process considerably. In contrast, the digitisation of the material allows for increased ease of access conducive to the undertaking of research on a limited timeline. Digitised newspapers develop the use of this methodology, particularly in order to establish historical patterns or themes, although this is highly dependent on the quality and availability of newspaper data. Huub Wijfjes states its potential clearly:

> Almost all historians working with historical media sources agree that the greatest potential in working with digital sources lies in reconstructing long term connections between contents that till now could not be connected.[243]

This approach is well-utilised 'to trace the narratives and mythologies' surrounding an event or issue, it has previously been reliant upon the collation of physical newspaper cuttings, generally located within a press archive.[244] The methodology is growing in popularity on account of its capacity to unearth new types of historical information as the researcher is no longer limited to published books or similar texts. Technological development has allowed for considerable progress in accessing newspaper archives as these become digitised; a limited range of works has addressed

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[241] D. C. Miller and N. J. Salkind, "Microfiche as an Archival Medium," *Handbook of Research Design & Social Measurement 6th edition*, eds. Delbert C. Miller and Neil J. Salkind (Thousand Oaks CA: SAGE Publications, 2002).

[242] George McMurdo, "The interface between computerized retrieval systems and micrographic retrieval systems," *Journal of Information Science* 1, no. 6 (Dec 1979).

[243] Huub Wijfjes, "Digital Humanities and Media History," *Journal for Media History* 20, no. 1 (2017): 4, doi: 10.18146/2213-7653.2017.277.

[244] Matthew Reason and Beatríz García, "Approaches to the newspaper archive: content analysis and press coverage of Glasgow's Year of Culture," *Media, Culture & Society*, 29, no. 2 (March 2007): 305.

the democratisation of archival newspaper sources as particularly beneficial to historians.[245] The retrieval method is equally as integral as this allows vast archives to be searched for specific material, decreasing the time taken to do so.[246] Although difficulties in accessing archival material have been reported in international contexts, such issues have not been encountered in the undertaking of this thesis largely as a consequence of paid subscription-based access to a privatised archive of Australian newspapers, via newspapers.com.[247] Although this comes at some financial expense to the researcher, this ensures the digitised material is well organised, readily searchable, and usually of print quality (see Figure 2.1). There is a significant contrast between newspaper articles accessed through newspapers.com and the digitised sources acquired in the course of this research from municipal libraries, with the latter often unsourced, of poor or unreadable quality, or disorganised.

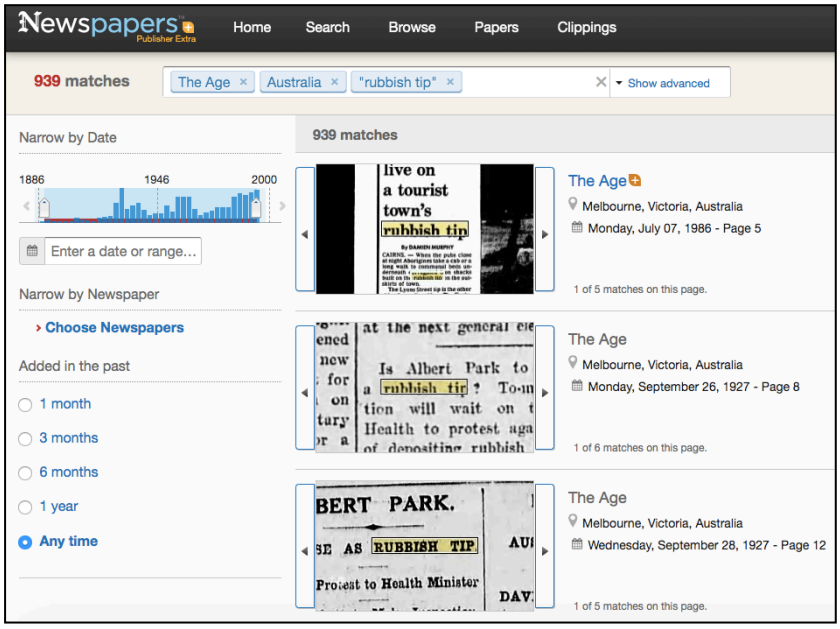


Figure 2.1: User interface of newspapers.com (*Newspapers.com*, accessed October 11, 2019. Screenshot authors own).

[245] Ian Anderson, "Are You Being Served? Historians and the Search for Primary Sources," *Archivaria*, 58 (2005): 81-129; Helen Tibbo, "Primarily History: Historians and the Search for Primary Source Materials," (paper presented at the 2nd Joint Conference on Digital Libraries, New York, 2002), 1-10; Luna Hassan, Steve Wade and Julie Wilkinson, "The Impact of Digitisation Projects on the Work of Local Historians," (paper presented at the UK Academy for Information Systems Conference, Oxford, 2012), http://aisel.aisnet.org/ukais2012/2.

[246] Robert Allen and Robert Sieczkiewicz, "How Historians use Historical Newspapers," *Proceedings of the American Society for Information Science and Technology* 47, no. 1 (Feb 2011): 1–4.

[247] Sanjica Faletar Tanacković, Maja Krtalić and Darko Lacović, "Newspapers as a Research Source: Information Needs and Information Seeking of Humanities Scholars," (paper presented at the International Federation of Library Associations World Library and Information Congress, Lyon, France, August 2014), 2.

Public digitised sources such as Trove, operated by the National Library of Australia, proved valuable: Trove contains approximately seven hundred Australian newspaper publications and over three million government gazettes, which are constantly added to. However, they can also suffer from quality and search issues precluding access, and newspaper publications beyond 1950 are few in number.

In order to locate more specific information, print copies of local newspapers were also accessed in libraries; these local publications reported more frequently on community matters not noted in larger, city-wide publications such as the *Age*, and this was helpful in remedying any gaps. Despite these varied issues, Trove, newspapers.com and library collections were all utilised to a significant degree in the undertaking of this work, and their contribution to the establishment of a historical narrative of quarrying and re-use was inordinate. This research could not have been undertaken without access to past newspaper publications.

The newspaper itself can contain a varied array of information, albeit considered more informal, 'sensationalistic' and less scientifically-rigorous than other publications.[248] Additional weaknesses inherent in this method include the absence of digitised material, which may incorrectly suggest the absence of that phenomena where the researcher's work is driven by data. This is further problematised by information retrieval methods which may not necessarily associate a particular search term with the term or phrase detected within an archived newspaper source. This is overcome, however, through the use of additional sources, whether in the form of other documents and archival material—meeting minutes, reports, and other public records—or in complementary qualitative methods such as semi-structured interviews.[249] Again, Wijfjes surmises this weaknesses well:

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[248] Ibid, 12.

[249] Bowen, "Document Analysis," 27.

> Solely relying on digital analysis is therefore too limited in scope and even dangerous because it feeds the idea that only information that is instantly available online is relevant. That creates 'digital laziness' which is a direct threat to the historical need to critically evaluate all relevant surviving sources and not only the digitally available.[250]

Awareness of the shortcomings of digitised newspaper research is thus integral to a comprehensive work of historical analysis. The researcher must also remain conscious of the capacity for the journalist to shape the reader's understanding of an issue through the use of language, again highlighting the need for vigilance and triangulation of alternative materials and methods.[251]

2.8 Chapter conclusion

Urban history, in the Australian context, serves as a powerful tool to unravel the complexities of the urban landscape: it allows for a greater understanding of contextualising factors contributing to growth and decline, inaction and intervention.[252] These interventions—the act, and outcome of, town planning decisions—are understood as exertions of capital and power, but also as a narrative.[253] Urban space is inherently vulnerable to these forces, particularly those rendered obsolete through political, social, but most frequently, economic change.[254] Brownfield or post-industrial sites are identified as experiencing this vulnerability. How these shifts manifest in urban change may be critiqued by inhabitants or users of the city, resulting in agitation, activism, and struggle.[255] A strong co-occurrence is identified in the 1960s and 1970s Australia, where urban

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[250] Wijfjes, "Digital Humanities."

[251] John Steel, "Introduction : Digital newspaper archive research," *Media History* 20, no. 1 (January 2014): 1.

[252] Sandercock, "Introduction: Framing Insurgent Historiographies," 3.

[253] Lefebvre, *Writings of Cities,* 79.

[254] Zukin, "Loft living as 'historic compromise."

[255] Castells, *The City and the Grassroots*, 298.

activism and the post-industrial decline and revival of the inner-city are documented. Themes of justice and inequity are identified which guide the findings of this thesis.[256]

This chapter additionally affirms the use of qualitative methods. These dovetail with the narrative-oriented approach of this thesis, and entail the analysis of historic documentation and archival material; in undertaking this research, participants were identified and semi-structured interviews were conducted, revealing nuanced information and complementing or contrasting written historic record. The novel method of newspaper analysis, through digitised and physical archive, also contributed greatly to the creation of a historical narrative.

[256] Troy, "Introduction," 15.

Chapter 3 Strategic planning for quarries and their after-use

3.1 Chapter introduction

This chapter investigates how the Victorian planning system has addressed the urban quarry, predominantly in the coordination and planning of their after-use. This is initially discussed in the vein of strategic planning policy. Such policies provide visions and actionable objectives for programmes coordinating urban change and growth, and exist at both State and local government levels. This is distinct from statutory planning, which effectively describes the legislative mechanisms which establish and control land-use through the provision of permits.[257] These permits adhere to the requirements outlined within planning schemes relevant to that area. The strategic policies discussed within this chapter pertain to broad visions for metropolitan Melbourne. Finer-grained information pertaining to the strategic planning policies influencing the land-use outcomes of urban bluestone quarry sites are discussed alongside individual case studies in chapters 6 and 7.

Strategic planning policies rarely differentiate between bluestone quarries and those of other materials, such as sand and clay. How these policies address extractive industry more generally is thus considered, particularly in response to scope for continued operation, and the establishment of future quarries. A history of Victorian strategic planning mechanisms must first be established to explore this, warranting discussion of the early entities which undertook such planning activities. Explored within this chapter is the evolving town planning entity that was the MMBW, its acquisition of planning powers, and how the strategic documentation produced by this body

[257] Victorian Auditor-General, *Victoria's Planning Framework for Land Use and Development* (Melbourne: Victorian Government Printer, 2008).

addressed the urban quarry. How individual municipalities address the urban quarry is also of interest; this will be discussed alongside each case study in chapters 6 and 7 respectively.[258]

The specificity of strategic documentation declines over time with respect to the scale and severity of the issue of urban quarrying—the diminished number of quarry sites likely underlies their decreased presence within strategic plans, although in many instances, this was insufficient to begin with. Changes in planning entities are also noted, particularly in the dissolution of the MMBW in 1992, and the subsequent uptake of strategic planning matters by State Government departments. Strategic plans for Melbourne became increasingly general under State Government control, no longer utilising specific directives but rather, presenting broader and more flexible guiding concepts for urban growth and development.[259] This is best surmised by Goodman, Maginn, Gurran and Ruming:

> This disconnect implies significant potential conflict between the ambitious strategic plans and the regulatory processes on which they depend for implementation.[260]

The analysis of historic strategic planning documentation reveals that the after-use of bluestone quarry sites is fundamentally left subject to two forces identified in this research: statutory control and community objection.

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[258] This is a difficult historical exercise for a number of reasons, predominantly on the basis of municipal amalgamations as undertaken under the Kennett government in 1994. Municipalities have changed over time, both annexing land from neighbouring Shires or Cities, or merging with adjacent ones. Although such a phenomena is not unique to Melbourne, it does problematise a historical exploration of how individual municipalities have addressed quarrying in their strategic planning directives and documentation. The two case studies discussed in this thesis provide a more fine-grained insight into the involvement of municipal government, however.

[259] Infrastructure Victoria, *Learning from the past : A history of infrastructure planning in Victoria* (Melbourne: Infrastructure Victoria, 2016), 2.

[260] Robin Goodman et al., "Simpler, Faster, Cheaper - Australia's Urban Aspirations and the Planning Reform Agenda," (paper presented to the State of Australian Cities Conference 2013, Sydney, November 2013), 17.

3.2 Planning for health

The historical activities of the MMBW owes much to its British precedent, the Board of Works, which was largely concerned with the provision of sewerage and water infrastructure. Service provision was the predominant form of 'planning' in nineteenth century Melbourne.[261] At Melbourne's settlement in 1835, water was obtained from springs or wells, and transported by small private firms; the expansion of the city saw attempts to coordinate water supply, both by colonial and local governments.[262] Global public health crises—for instance in London and Paris—had made clear the need for sewerage; Melbourne's initial concerns were only for fresh water. Yet disease, particularly typhoid, was prevalent and a connection between individuals' health, and that of the water supply, became clear to authorities.[263] The Select Committee on the Sewerage of and Supply of Water for Melbourne met in 1852-3, and the report produced clarified that sewerage is 'altogether dependent' on the water supply: 'Neither of these measures can be effectively carried out independently of the other. To dissociate them would be injurious to both.'[264] The proposed system would take into account the adoption of sewerage in British cities such as London, Manchester, and Liverpool, making use of 'tubular drainage' rather than older red brick drains used for stormwater. The close consideration of where sewerage pipes would travel could be taken as an early instance of town planning—by way of ideal situation and site selection—as the topography of the city is closely considered, with inclines and natural drainage integral to the feasibility of a sewerage system.[265]

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[261] Infrastructure Victoria, *Learning from the past*, 1.

[262] Malcolm Abbott, Wei Chun Wang and Bruce Cohen, "The long-term reform of the water and wastewater industry: The case of Melbourne in Australia," *Utilities Policy* 19, no. 2 (June 2011): 115.

[263] Royal Commission to Inquire Into and Report Upon the Sanitary Condition of Melbourne, *Second Progress Report of Royal Commission to Inquire Into and Report Upon the Sanitary Condition of Melbourne : Water Supply of the Metropolitan Area* (Melbourne: Robert S. Brain, Government Printer, 1889), 4.

[264] Select Committee on the Sewerage of and Supply of Water for Melbourne, *Minutes of Evidence* (Melbourne: John Ferres, Government Printing Office, 1852-3).

[265] Select Committee, *Minutes of Evidence*, 8.

The pursuit of sanitary urban conditions can be viewed from a contemporary perspective as an ancestor of present-day town planning. That it was not seen as a core concern of any government agency is shown in the 1852-3 report which refers to issues which do 'not properly fall within' the committee's consideration although it would 'not be thought out of place.'[266] The Town Treasurer was cited in contextualising the issue of urban sanitation through discussion of increasing population density, from 'five, to eight or nine persons for each tenement,' reflecting a 'late continuous stream of immigration.'[267] A similar connection was being made contemporaneously in the Haussmannisation of Paris, strengthening the view that overcrowding would lead to poor public health outcomes, resolvable by a reconfiguration of urban form.[268] Indeed, the provision of sewerage and water were anticipated to remedy 'filthy lanes … accumulations of wet and muck' in order to recreate Melbourne as 'one of the most healthy cities in the world.'[269] Beyond cramped urban conditions, early perceptions of unhealthy environments took into consideration noxious or unpleasant land-uses taking place: 'cesspools and rubbish depots of their respective localities' occupied allotments with 'accumulations of filth … to the depth of three or four feet.'[270] These issues were of little importance in comparison to the provision of water and sewerage infrastructure. Sir James Frederick Palmer, Chairman of the Committee, and later, a member of the Legislative Council, proposed a number of conditions to be suggested to the Council, effectively mimicking the statutory aspects of town planning:

> The due regulation of cesspools and dust bins.
>
> The prevention of improper deposits in or near the City.[271]

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[266] Select Committee, *Minutes of Evidence*, 10.

[267] Ibid.

[268] Antoine Paccoud, "Planning law, power, and practice: Haussmann in Paris (1853–1870)," *Planning Perspectives*, 31, no. 3 (Dec 2015): 342.

[269] Select Committee, *Minutes of Evidence*, 10.

[270] Ibid.

[271] Select Committee, *Minutes of Evidence*, 11.

Matters relating to the provision of fresh water began far earlier than efforts to provide the city with an efficient and hygienic sewerage system. Reflecting the findings of the aforementioned report, the State Government consolidated powers in 1853 relating to water within the Commission of Sewers and Water Supply; in 1860, this Commission's duties devolved to the Board of Land and Works; and in its subsequent incarnation in 1867, the Water Supply Department of the Mines Department. Catchment areas were established north-east of the city. The first such system established between 1853 and 1857 made use of a gravity-fed supply from the Yan Yean Reservoir, later joined by the Maroondah system of dams.[272] The health crisis experienced by Melbourne had been in part resolved by the provision of fresh water; this could only be remedied entirely, however, with adequate sewerage. The Victorian government delayed the provision of sewerage infrastructure until 1889. Legislation was passed to establish the MMBW in 1890, consisting of 40 elected Commissioners from 22 municipalities. The Board was described as taking on 'the character of a local government.'[273] The MMBW came to dominate planning matters in Melbourne. The coordination of the servicing of the metropolis was an extension of its initial responsibilities in managing water catchments, sewerage disposal, and stormwater reticulation.[274] This marks a shift towards the formalisation of its activities as a component of urban planning. However, the MMBW was not the lone entity preoccupied with such matters.

The MTPC was established by the Victorian Government in 1922, in part to address 'unsatisfactory conditions' and to provide for future demands of the city and its populace.[275] The genesis of town planning as a distinct function of governance also stems from the unfulfilled MTPC 1929 *Plan for General Development*. Freestone writes of the MMTPC as emphasising 'the best city functional

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[272] "Yan Yean Water Supply System," Heritage Council Victoria, published December 2013, https://vhd.heritagecouncil.vic.gov.au/places/13088/download-report.

[273] Abbott, Wang and Cohen, "The long-term reform of the water and wastewater industry."

[274] Ibid.

[275] Robert Freestone, Marco Amati and Peter Mills, "Ideas on the Move and Modernisation," (paper submitted to the 17th International Planning History Conference, Delft, July 2016), 1.

tradition: efficiency, economy, specialization, and coordination.'[276] Part X of the *Plan* discussed the legislation necessary to enact the strategies specified within it, and the urban ills warranting remedy. The poor cohesion between the thirty-seven municipalities in existence at this time was one motivation for the Plan, which would serve the purpose of uniting over sixty separate government, municipal, and semi-government agencies.[277] It is clearly stated within the *Plan* that a single planning scheme, or 'definite programme,' coupled with supervision, would resolve the problems resulting from ad hoc, organic, or poorly coordinated urban growth, whilst simultaneously anticipating the future needs of the city.[278] Fairbairn's 1973 urban profile of Melbourne defines this as a 'device for controlling growth by decreeing what activity should be performed where, in the adjudged best interests of the whole community.'[279] This was not yet enshrined within legislation, despite the inclusion of an outline for a hypothetical *Town Planning Act* for Victoria within the *Plan* itself.[280] The establishment of the MTPC and publication of its 1929 *Plan* marked a distinct focus on 'functionalism and "hard" physical planning,' with the core product a comprehensive plan.[281] In the period spanning from the establishment of the MMBW through to the creation of the MTPC, town planning occupied a nebulous realm.[282] Town planning associations had sprung up throughout Australia but had little influence on the form of the city. What established Australian cities as distinct from those subject to British town planning was the sentiment that Australian and American cities were of the 'new world' and thus ideal for comprehensive, rather than incremental, planning interventions.[283]

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[276] Ibid, 195.

[277] MTPC, *Plan of General Development : Melbourne : Report of the Metropolitan Town Planning Commission 1929* (Melbourne: H. J. Green, Government Printer, 1929), 291.

[278] MTPC, *Plan*, 291.

[279] Kenneth Fairbairn, *Urban Profile of Melbourne* (Sydney: Angus and Robertson, 1973), 76.

[280] MTPC, *Plan*, 292.

[281] Ibid, 128.

[282] Freestone and Grubb, "The Melbourne metropolitan town planning commission," 130.

[283] Ibid.

3.3 Noxiousness and nuisances

The MTPC would lend a sense of control and guidance effectively uniting the previously disparate approach of local municipalities, not through ‘patching-up’ or ‘hotch-potch’ methods, but ‘thorough replanning’ entirely.[284] The 1929 *Plan* was the first such comprehensive city plan in Australia, and broached the topic of a zoning scheme for entire metropolis. This established typologies of use encompassing commercial, industrial, and residential zoning, with industry mostly relegated to the western suburbs of Melbourne, reflecting its historic concentration there.[285] Although the *Plan* was well-received, it lacked support from the Country Party government and was not implemented.[286] However, its plan presents insight into how planning was to accommodate industrial practices, most especially those noxious or atypical in nature. The topography of the city is analysed in Part I of the *Plan*, noting the clustering of heavy industry around the lower reaches of the Maribyrnong and Yarra Rivers and the presence of a system of wharves.[287] Also acknowledged is the concentration of the ‘best' residential development in the southern and eastern suburbs owing to the pleasant undulating character of that region. The link between geological characteristics and industry is further made clear in the clarification that clay deposits in the north have encouraged the establishment of industry in suburbs such as Brunswick and Coburg. Basalt warrants no discussion, nor is any link made between it and the industry present in the Maribyrnong catchment; such elision is typical of twentieth-century Melbourne planning.

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[284] Ibid, 131.

[285] It is always worth reinforcing that industry located itself here for a number of strategic reasons, but also because these activities were undesirable elsewhere in the city.

[286] L. Sandercock, “Melbourne: Bureaucracy Tempered by Anarchy,” in *Property, Politics, and Urban Planning: A History of Australian City Planning*, 1890-1990, ed. Leonie Sandercock (New Brunswick, NJ: Transaction Publishers, 1990), 110.

[287] MTPC, “Part 1 : Surveys and Studies : Local Topography,” in *Plan for General Development*, ed. MTPC (Melbourne: Government Printer, 1929), 25.

Part IX of the *Plan* concerns 'Noxious and Offensive Trades.'[288] The *Plan* considers 'noxious' or 'offensive' land-uses in line with definitions within the *Public Health Act 1889*: abattoirs, fellmongers, bone mills, manure works and depots, fish-curing establishments, glue factories, piggeries, marine stores, soap and candle works, and boiling-down works. The criteria for deeming an industrial sector 'offensive' is predicated on 'nuisance or injury to health' which could endanger the 'healthfulness of the district and of its inhabitants.'[289] Quarrying is only mentioned in the *Act* to specify that any site used for brickmaking, quarrying, or mining must be securely fenced, and that measures be taken to prevent 'any noxious or offensive drainage or other matter from flowing or being thrown or cast into any such excavation.'[290] It is not specified as a noxious industry in and of itself.[291] This is despite perceptions of quarrying, as well as the quarry hole, as 'nuisances.' Blasting in quarries would often cause vibrations, dust, and noise, in addition to presenting significant risk to workers.[292]

Whether a quarry could act as a 'nuisance' in its after-use also warrants clarification, in that the act of quarrying should be considered distinct from the process of filling the hole. One North Fitzroy quarry exemplified this well: its depiction as a 'nuisance' resulted from an accumulation of nightsoil, rather than the act of quarrying.[293] In the *Act*, sanctioned or municipal tips are also not discussed, despite being described as a 'nuisance' in media of the time: tips attracted scavengers in Prahran, and comprised the basis for 'cause of complaint for a long time past' in West Melbourne.[294] Inspector Butler of the Central Board of Health assessed municipal tips in Collingwood as a

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[288] MTPC, *Plan*, 160.

[289] *Health Act 1890* (Vic.), Part III—Regulations By-Laws Orders Etc., 1313.

[290] *Health Act 1890* (Vic.), Part XII—Enforcement of Act., 1377.

[291] *Health Act 1890* (Vic.), Part XII—Enforcement of Act., 1377.

[292] *The Age*, September 12, 1891, 10.

[293] *The Age*, May 27, 1887, 7.

[294] *The Age*, October 28, 1884, 5; *The Age*, July 2, 1887, 15.

'nuisance' in light of the fact that they had been filled so rapidly with refuse—'created by certain persons who desired to have their land filled up for building purposes'—that it would 'create enough disease to last for years.'[295] A tip in Edinburgh Gardens, Fitzroy, proved so unsanitary that a nearby school was closed.[296] Perhaps these sites failed consideration in the Act if the statement of Edward Delbridge, Chairman of the Fitzroy Council, were to ring true: that one 'could certainly find worse nuisances on ground nearer the heart of the city.'[297]

These 'worse nuisances' described in the 1929 *Plan* were said to occupy 'decidedly unsuitable locations' within central locales: the densely-populated working class suburbs of Abbotsford, Collingwood, and Richmond were especially subject to a concentration of noxious trades at the turn of the nineteenth century.[298] Due to the need to dispose of effluent, they were often within close proximity to waterways, preventing full public use of streams and rivers. Although the *Plan* would not have curtailed existing noxious industry, it would have curtailed the expansion of such firms, and through zoning, relocated unpleasant activities well away from the urban core. Associated industries would also avail themselves of these new locations, facilitating a clustering of like industry and effectively consolidating these within a much smaller area, rather than facilitating their dispersal throughout the city. Even in the absence of formal zoning, industries clustered in particular areas of Melbourne. In many cases, this reflected the underlying geological and topographic conditions of the city and its outlying suburbs: Melbourne's west in particular lay upon a basalt plain, with little to no undulation of the landscape, and close proximity to waterways. The *Plan* refers to these industrial agglomerations to reinforce the key premise of a zoning scheme for the city: that a clear understanding of where industries lie would allow for the informed 'segregation' of

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[295] Refuse of the past differs greatly from that seen in municipal tips today. Whilst contemporary waste is often putrescible in nature, with a considerable portion of household goods recycled, historic tips predominated accommodated decaying matter of both plant and animal—*The Age*, June 7, 1890, 4; *The Age*, January 7, 1888, 10.

[296] *The Age*, October 25, 1888, 10.

[297] *The Age*, May 27, 1887, 7.

[298] *The Age*, May 27, 1887, 7; MTPC, *Plan*, 161-2; *The Age*, May 14, 1861, 3.

industrial land, 'so that they will be convenient to the sources of their labour, their raw products, and the city's commercial and business life.'[299] This demonstrates some foresight with regards to the future of the quarry, albeit very broadly and relating to its continued operation, rather than outlining parameters or presenting a framework for its re-use.

3.4 The development of land-use zoning

Zoning, as proposed in the 1929 *Plan*, was a new endeavour for Melbourne. Industrial Districts would be declared accommodating specific modes of operation within the sector, and these Districts would be located in strategic areas of the city. Whilst smaller factories would continued to operate in desirable residential enclaves like Hawthorn and Brighton[300] in Melbourne's east and south-east, newer industrial operations of larger scale and impact would be relegated to the urban fringe.[301] Existing industrial areas within close proximity to wharves in Port Melbourne and Williamstown would be encouraged to expand, with the potential to also link these manufactories by rail. Land as far west as Sunshine, approximately sixteen kilometres from the central city, was considered ideal for heavier industries, and large populations of willing working-class men could readily commute to the suburb from their homes in the inner-west. A ribbon of industry was also envisioned for the northern suburbs of Melbourne, stretching from Richmond and Collingwood to Preston and Coburg; the outer south-eastern sector of the city would similarly accommodate industry on its very edge, in Mulgrave and Moorabbin.[302] Zoning, as it is discussed in the *Plan*, appears to encapsulate a fine balance of distance: not so far from the metropolis that workers cannot access the firm, but not so close that industrial activity could prove disharmonious or detrimental to the area. The *Plan*

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[299] MTPC, *Plan*, 162.

[300] Such suburbs were 'practically wholly residential and the comparative freedom from conflicting uses … materially added to their attractiveness' although tips were still present in many instances (MTPC, *Plan*, 157).

[301] MTPC, *Plan*, 178.

[302] Many of these suburbs still retain an industrial identity today, particularly those located further from the central city such as Sunshine, whilst those closer have undergone processes of deindustrialisation and gentrification.

engages with degrees of impact in a sophisticated manner, segmenting Industrial Districts into "A", "B", and "C."[303] The "A" District would disallow noxious and heavy industries, such as lime cement manufacture, arsenic recovery, metal melting, and hydrochloric acid works, entirely. The "B" District similarly disallowed noxious trades, but permitted heavy machinery works generally contingent with railways or dockyards, subject to a design allowing light and air sufficient to ensure the health of those employed there.[304] Quarries are implicitly excluded from Districts "A" and "B" as no land within them should be utilised for any industry creating 'offensive odours, smoke, dust, noise, or vibration.'[305] The declared "C" District would accommodate the industry disallowed elsewhere in the city. Rather than a zone applied in select areas across the city, this District would comprise a single site of 1,174 hectares south-west of Sunshine which had been identified in a prior report by the Committee. The need for clear policy to guide the development of noxious industry was seen as integral to the health of the metropolis. The displacement of noxious industry would benefit the local population whilst simultaneously providing a 'security of tenure' for firms.[306]

Quarries, however, consistently escape robust discussion—or any discussion at all. The *Plan* targeted livestock and related industries, implying that the definition of 'noxious' pertains more readily to the visceral trades of slaughter, bone boiling and milling, rendering, and gut-spinning. A close reading of the use restrictions within each district clarifies that quarries are excluded from all three: with extractive industry classed as emitting 'dust, noise, or vibration', this is disallowed from Districts "A" and "B", and not mentioned as a permitted land-use in District "C" at all, as that district is inclusive only of 'industry … which creates offensive odours.'[307] Such a glaring omission

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[303] MTPC, *Plan*, 179.

[304] Ibid, 180.

[305] MTPC, *Plan*, 180.

[306] Ibid, 181.

[307] Ibid.

makes clear the lack of regard with which extractive industry appears to be held: a land-use which has dominated both the real and figurative margins of the city throughout its history.

The MMBW was not officially tasked with town planning until 1948. This reflected, in part, a need for comprehensive planning in light of the post-war suburban boom—a phenomenon experienced nationwide—as the city was expanding rapidly.[308] Pre-war urban development had additionally created issues in the speculative subdivision of suburban land; housing shortages; and the poor provision of open space. Reflecting the failure to implement the 1929 *Plan*, Melbourne was a 'jigsaw of local authorities defying metropolitan oversight.'[309] In this interim period, civic-minded public figures such as Frederick Oswald Barnett and Frank Heath envisioned constraining green belts and linear parks for the city, taking into account existing creek and river catchments, and determining a hypothetical city limit.[310] The Victorian State government thus granted the MMBW power over planning matters, noting the relationship between infrastructure and development, in order to preempt and resolve issues stemming from suburbanisation.

3.5 The MMBW 1954 *Report* for Melbourne

The MMBW effectively overtook the coordination of the city's development on a large scale, noting the absence of a capable city-wide entity. The absence of statutory planning measures had left the city's form subject to the market.[311] The MMBW's 1954 plan, *Melbourne Metropolitan Planning Scheme 1954: Report*, influenced by the 1929 MTPC *Plan*, cemented the Board's status as the chief

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[308] Jock Collins, "Globalisation, Immigration and the Second Long Post-war Boom in Australia," *The Journal of Australian Political Economy*, 61 (2009), 244.

[309] Freestone, Amati and Mills, "Ideas on the Move," 1.

[310] Frederick Oswald Barnett, Walter Oswald Burt and Frank Heath, *We must go on : a study in planned reconstruction and housing* (Melbourne: The Book Depot, 1944).

[311] M. Buxton and R. Goodman, "Protecting Melbourne's Green Wedges - Fate of a Public Policy," in *Urban Green Belts in the Twenty-first Century*, ed. Marco Amati (Abingdon: Routledge, 2016), 61.

determinant of the city's planning activities.[312] The extent of planning in this instance was the specification of select areas for particular uses: in essence, the declaration and location of zones, a matter previously undertaken by individual city councils. In 1974, Max Neutze, head of the Urban Research Unit at the Australian National University, surmised the underlying rationale for zoning-as-planning most succinctly in a seminar on Melbourne's urban development; that the most traditional role of urban planning is to 'segregate activities which might interact with each other adversely … [and] to protect the amenity of existing areas.'[313] Where municipalities levied rates on householders within their jurisdiction, the Board accrued funds from every household in the metropolitan area—a 'metropolitan improvement rate'—which would then allow for the acquisition of public open space, as well as planning activities, although, as noted by Tsutsumi and Wyatt, this was predominantly coordinated by water engineers, rather than urban planners.[314] Consequently, the zoning of land tended to reflect areas which were at a lesser cost for their full servicing by the Board—again, the work of engineers rather than planners—as opposed to fulfilling informed and considered visions for the city as determined by planners alone. A historic pattern exists where these spaces, undesirable for residential use, and often difficult to service, come to accommodate an industrial flavour. This is especially true of Melbourne's western suburbs, where the basaltic soil problematised shallow excavation for services, and the landscape—flat and devoid of trees—presented an aesthetic and climatic disincentive to settlement.

Zoning was again employed in these instances not only to formalise the existence of a particular precinct or district, but also to ensure industrial activity could continue to flourish through the ability to access sites optimal for the manufacturing and transportation of goods. This is especially

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[312] Max Nankervis, "Living Suburbs. Living Policy? Some Comments on Melbourne's Recent Metropolitan Planning Document: "Living Suburbs"," *Urban and Policy Research*, 14, no. 1 (1996): 65.

[313] Max Neutze, *Urban Development in Melbourne : aspects of the post-war experience* (Canberra: Australian Institute of Urban Studies, 14 June 1974), 8.

[314] Jun Tsutsumi and Ray Wyatt, "A brief history of metropolitan planning in Melbourne, Australia," *Applied GIS*, 2, no. 2 (2006): 2.

true when a specific site is necessary for that activity, thereby restricting the number of potential locations for that firm. However, of continued importance was the necessity of access to a labour force. Alongside a reasonable distance to a workplace, it was also necessary to shield residents from conditions created by industry which 'extend beyond their immediate vicinity and can spoil a neighbourhood,' in turn demonstrating the fine balance integral to the existence of urban industry.[315]

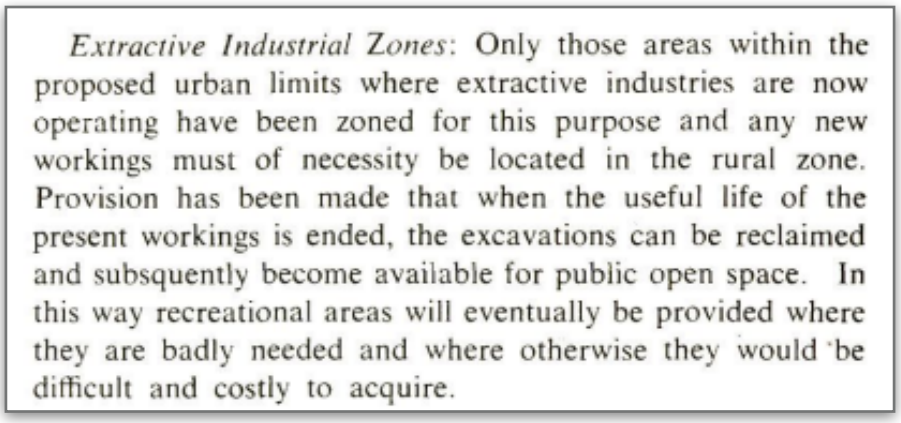
The MMBW's notion of a 'nuisance' differed significantly from that discussed in the 1929 *Plan* given the modernisation of industry over two decades: a reduction in fumes and noise, in addition to the beautification of factory sites, had greatly changed the way in which production marked the landscape. In many instances, the modern factory contributed positively to the streetscape, in a direct contrast to the small and cramped manufactories of decades prior. Firms were no longer constrained by the surrounding built form, and their location on the outer-suburban fringe gave them room for expansion in addition to their location along major transportation routes, allowing workers easy access to their place of employment. This model is based on that seen in North America and Australia; architects toured plants there to inform their work.[316] The northern suburbs of Melbourne accommodated a number of factory complexes which adhered to a model of architecturally-designed buildings within an open, landscaped setting. Two examples, both designed by Buchan Laird and Buchan, include the 1960 Caterpillar Factory in Airport West and the 1964 Ford Factory in Campbellfield. Such techniques to soften the impact of industry could not be applied to all forms of manufacturing, however, particularly those 'offensive or dangerous' industries which—to compound their atypical character—were excluded from the General Industrial Zone specified in the 1954 *Report*. 'Special Industrial Zones' would be marked where industry in need of effluent disposal could be co-located with a main outfall sewer. Similarly, the

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[315] MMBW, "Industry and Its Needs," in *Melbourne Metropolitan Planning Scheme 1954 : Report*, ed. MMBW (Melbourne: McLaren & Co. Pty. Ltd), 46-48.

[316] "Business in the Bay Area," *Oakland Tribune,* April 1, 1955, 52.

'Dangerous Industrial Zone' would allow for the production of explosives to take place with a 'high degree of insulation from other development,' mitigating risk to the populace and property whilst also allowing for the later expansion of the practice.[317] 'Offensive Industrial Zones' additionally specified two sites—one west of the city in Brooklyn, and another in Campbellfield—where prevailing winds would not carry noxious odours towards residential areas. These three zone typologies positioned noxious industry as involving risk of contamination, explosion, or exposure to unpleasant by-products. None of these conditions apply directly to extractive industry, however, with the Plan acknowledging that the effects of quarrying are limited to that land use (see Figure 3.1). This warranted the special designation of an 'Extractive Industrial Zone' to specify land appropriate for quarrying. Although discussion of the EIZ is limited to a single paragraph within the Plan, it is noted that the EIZ would only apply to operational extractive industry, and any new workings must be located outside urban areas. Further still, the EIZ take into account the 'useful life' of the quarry and the potential for reclaiming the site following its exhaustion.[318]



Extractive Industrial Zones: Only those areas within the proposed urban limits where extractive industries are now operating have been zoned for this purpose and any new workings must of necessity be located in the rural zone. Provision has been made that when the useful life of the present workings is ended, the excavations can be reclaimed and subsquently become available for public open space. In this way recreational areas will eventually be provided where they are badly needed and where otherwise they would be difficult and costly to acquire.

Figure 3.1: Description of Extractive Industrial Zones (MMBW, *Melbourne Metropolitan Planning Scheme 1954*, 50).

The after-use of the quarry must take the form of public open space, so that 'recreational areas will eventually be provided where they are badly needed and where otherwise they would be difficult

[317] MMBW, "Industry and Its Needs," 50.

[318] MMBW, "Industry and Its Needs," 50.

and costly to acquire.'[319] A major weakness of this EIZ is the absence of any declaration of buffer areas, which would protect extractive industry from the potential constraining factor of suburban encroachment. It is instead emphasised, in a much broader sense, that ensuring the amenity of residential areas is vital, and that 'no industrial process shall be carried out within a distance from the zone boundary.'[320] The strict adherence to defined zones is viewed as the primary protective factor for the continuation of industry, and the mitigation of any circumstances leading to a loss of amenity for residential districts. This perspective is a highly simplistic one, arising from a technocratic perspective on town planning—a cartographic exercise depicting colourised zones—rather than a nuanced and complex set of interactions between land-uses and users. Although it did not fully anticipate the difficulties in planning for extractive industrial land-uses or their post-industrial form, the *Report* briefly acknowledges their eventual closure and re-use; an instance of foresight. It could be argued that any insufficiencies were merely the result of ignorance on the part of contributors to the *Report*, rather than a wilful omission, though this is impossible to establish.

3.6 Planning for a growing Melbourne: 1971

No substantial plan for the metropolitan Melbourne had been put forth in the period between the 1954 *Plan* and 1971's *Planning Policies for the Melbourne Metropolitan Region*. However, the changing character of the metropolis was of considerable interest to the MMBW, and a new approach would soon be warranted. The Minister for Local Government between 1964 and 1971, Rupert Hamer, conducted a review of urban planning policies statewide, leading to submissions from the state's Town and Country Planning Board[321] and the MMBW. A 1967 report on the matter

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[319] Ibid.

[320] Ibid.

[321] It should again be noted that the MMBW continued to play a dominant role in Melbourne's planning, despite the continued existence the TCPB. The TCPB continued to operate until it was absorbed into the Department of Planning in 1981 (Michael Buxton, Robin Goodman, and Susie Moloney, *Planning Melbourne: Lessons for a Sustainable City* (Melbourne: CSIRO Publishing, 2016).

of the administration of the city's growth, *The Future Growth of Melbourne*, posited that the city's population would increase from two to five million by the end of the century.[322] Planning policy for the city would thus warrant careful consideration, with frameworks and directives developed by government—reflecting fiscal constraints and economic visions—to be enacted by planning authorities. The report displays greater awareness of the intricacies of town planning, beyond simplistic zoning measures seen in the 1954 *Plan*. Rather, it called for greater specificity from Government on urban growth and form, balancing planning idealism with pragmatic economics.

In a summary of the report, strategic planning is defined for the layperson as a 'new concept of broad planning for the modern phenomenon of the conurbation,' likened to the steel structure of a building: 'the internal layout of the building is not apparent and very often it is left to individual tenants to determine.'[323] This entailed far more discussion of demographics than the previous plans, using these figures to better understand urban phenomena affecting the city as a whole, rather than presenting specific guidelines for smaller scale development. For instance, one concern is the disconnect between places of residence and places of employment; a circumstance that, given urban growth, would prove difficult to manage obviating the advantage of early action.[324] Again, land-use bears little relevance to the discussion: instead, the report proposes growth alternatives of urban densification, controlled outward growth in the south-eastern corridor, the creation of satellite cities, and the establishment of growth corridors along freeway and railway systems.[325] Of these options, growth corridors and satellite cities presented an opportunity for the maintenance of 'Non-Urban' areas, allowing for continued land-uses requiring large tracts of land within close proximity to urban settlement. The report states that a declared 'Non-Urban' area containing 'deposits of

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[322] MMBW, *The Future Growth of Melbourne : a report to the Minister for Local Government on Melbourne's future growth and its planning administration, June, 1967* (Melbourne: s. n.).

[323] Ibid, 9.

[324] Ibid, 8.

[325] Ibid, 16.

minerals … should be preserved where possible,' but makes no mention of quarrying, instead outlining the ongoing need for primary production—orchards and market gardens—as well as space for airports and sporting complexes.[326] For a document so focused on anticipating future land-use patterns, most especially those on the urban fringe, the absence of any detailed discussion of extractive or noxious industry is remarkable. Although quarrying is not encompassed within the scope of the report, speculation upon the shape of urban settlement is arguably a simpler task than locating a site of both high material quality, good transport proximity, and low risk of residential encroachment.

Building upon its 1967 report, the Board of Works produced a plan for Melbourne in 1971 titled *Planning Policies for Metropolitan Melbourne*. This plan drew a narrative thread from the 1967 report in discussing limitations to urban growth (see Figure 3.2); unlike prior visions for the city, from 1929 and 1954, the 1971 *Policies* would define non-urban areas, defined corridors for growth, and areas selected for the conservation of flora, fauna, or natural resources. Whilst the 1967 report proposed a number of future spatial forms—of which the 'corridor' typology of expansion was favoured, along highway lines—the 1971 *Policies* sought to emphasise an inverse notion: constraints to urban expansion. It largely focused on the formalisation of open space, environmental conservation, and the establishment of 'green wedge' areas bounding the metropolis. The physical constraints to development noted are typically natural phenomena: flood-prone areas, for example, act as one constraining factor, in addition to designated catchment areas, sewerage processing facilities, electricity, transport, and water infrastructure, poor terrain, and areas of environmental sensitivity.[327] This thematic orientation situated extractive industry as a constraining factor, underlying its inclusion within the 'Non-Urban' areas outlined in the 1967 report.[328]

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[326] Ibid, 17.

[327] MMBW, *Planning Policies for Metropolitan Melbourne* (Melbourne: s.n., 1971), 5.

[328] Ibid, 9.

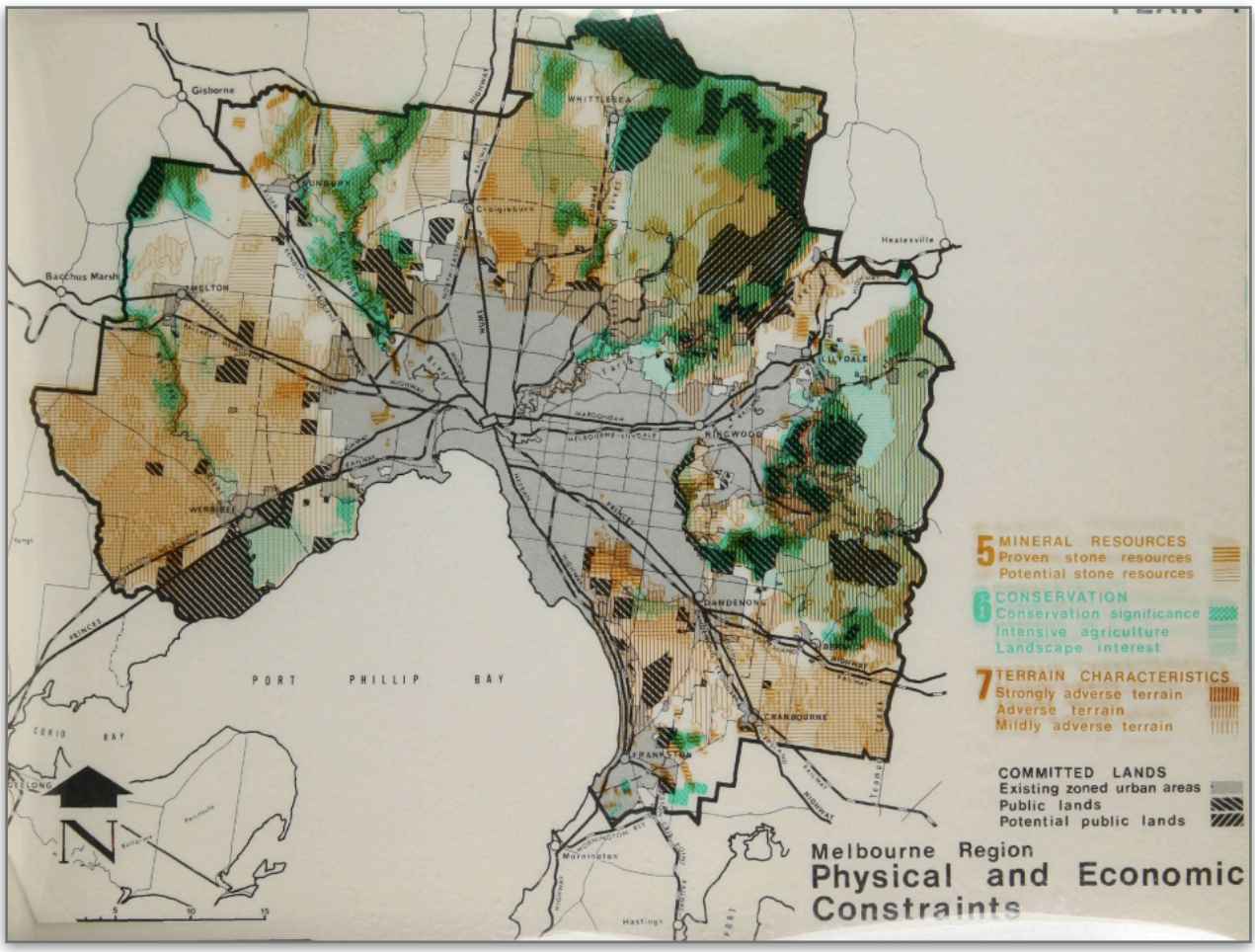


Figure 3.2: Constraints to development, noting mineral resources in orange (MMBW, "Physical and Economic Constraints," 1971, *Planning Policies for the Melbourne Metropolitan Region*, 53).

Waste disposal also warranted consideration as a component of better urban planning for the environment, a matter of keen interest given its inextricable link with urban quarrying. Landfill, as stated in the report, was 'only a temporary solution,' problematising the longevity of this mode of after-use whilst also reflecting a progressive environmentalist sentiment not seen in prior planning documentation.[329] This same notion appeared in an outline of a planning overlay for land containing mineral or construction resources, such as clay, rock, and sand. There appeared to be a compensatory aspect in that such undesirable landscapes were noted in the plan as capable of supporting recreational uses in the future, following remediation. Consideration of the environment

[329] Ibid, 37.

was enshrined in a set of conditions to be taken into account in the authority's decision on the use of land for extractive industrial activity, emphasis being authors own:

1. The use of land for competing urban purposes.
2. **The need to conserve certain areas for landscape, ecological or similar reasons.**
3. The effect of extraction on drainage patterns and the after use of the land.[330]

Constraints were thus placed on a land-use considered a constraint in and of itself. Although the report acknowledged that the Industrial Revolution brought about 'irreparable damage to the [E]arth's life support system,' some industrial activities were seen as vital to the city's expansion, and stated objectives of the plan reflected the need to conserve materials (see Figure 3.3).[331] Extractive industry directly related to the city's post-war growth in that it provided materials for the construction of buildings and infrastructure, by way of clay for bricks, and crushed basalt for road asphalting. Continued access to these materials would cause considerable harm to the environment, but such practices could not be fully eradicated from the urban landscape. This would therefore warrant close management, by both the Mines Department and the MMBW, to ensure extractive practices took place in a manner producing least harm to surrounding landscape and population.[332]

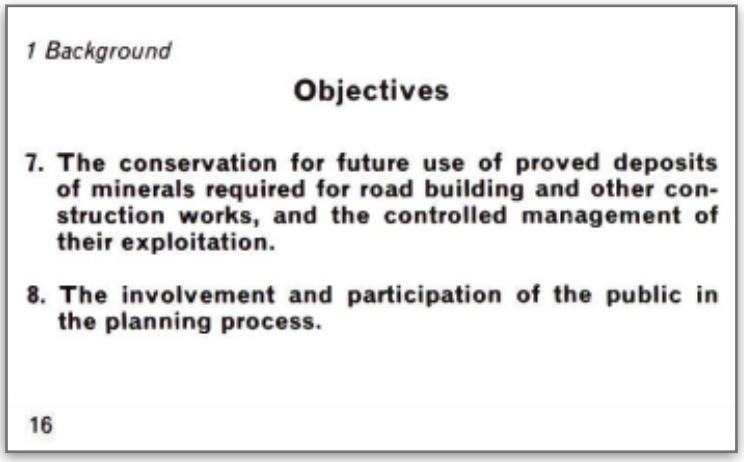


Figure 3.3: Objectives concerning extractive industry (MMBW, "Objectives," 1971, *Planning Policies for the Melbourne Metropolitan Region*, 16).

[330] Ibid, 43.

[331] Ibid, 35, 43.

[332] Ibid, 43.

The identification of 'proven' deposits would determine the boundary of a planning overlay for extractive industrial use. However, the discussion of known basalt deposits in the 1971 document is limited to a single sentence identifying their location as 'to the west and north of Melbourne.'[333] The majority of the report addresses deposits of clay and sand instead, perhaps prioritised given their location within the city's main growth corridors in the east and south-east. These particular deposits would be subject to urbanisation pressures far more than their western basaltic counterparts given the extent of urbanisation in that sector of the city.

Under the 1971 plan, extractive industry would take place within Special Extractive Zones, typically where quarrying was already taking place, or where deposits of sand, clay, or stone were known to be of high quality and readily available.[334] This zone is stated as complementary to the existing extractive industrial zone enshrined within the Metropolitan Planning Scheme. The Plan clearly states that land within the SEZ is not to be used 'for any urban purpose following the completion of extractive activities,' but also fails to outline appropriate modes of after-use for the site, necessary for those sites under the existing zoning scheme.[335] The MMBW appeared to exclude itself as an entity capable of influencing the after-use of a quarry site, instead deferring to the quarrying firm, relevant municipality, and the Mines Department.[336] The application of planning principles as outlined within strategic and statutory documentation should additionally be considered. The absence of the MMBW from this decision-making process appears entirely arbitrary, and without justification.

Objections to the 1971 plan were published in a February 1974 document by the MMBW, titled *Report on General Concept Objections.* The 1974 *Report* largely focused on objections to the

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[333] Ibid, 44.

[334] MMBW, *Planning Policies*, 84.

[335] Ibid.

[336] Ibid.

amendment of Schemes 3 and 21 to the MPS, relevant to a total area of 5,029 square kilometres.[337] Approximately four thousand objections to the amendments were recorded, submitted by members of the public in response to explanatory seminars and exhibitions. Objectors—individuals or companies—to extractive industrial zones were noted, although the reasons for their objections are not outlined in detail, only that their concerns relate to the distribution and location of said zone.[338] A brief appendix listing objectors shows no reference to any quarrying firm; quarry firm representatives are also impossible to distinguish from other citizen objectors given the lack of identifiers.[339] The issue of extractive industry escapes further elaboration within the recommendations of the *Report*, with the last reference to this land-use merely acknowledging that it presents 'problems … which are being examined.'[340] Intriguingly, the *Report* closes with contemplative and nuanced discussion, rejecting the previously technical tone of the document to which it responded; instead, under the sub-heading 'Strategies for Melbourne,' there is some musing on the nature of urban change, stating that societal responses to change manifest as either rejection or assimilation.[341] This only warrants mention in the context of urban quarrying as it alludes to the underlying basis for the environmental movement emerging at that time: a new awareness of 'the despoliation of the natural environment,' with a concurrent attachment of values to the physical landscape, would perhaps come to inform the post-industrial outcome of the quarry site as much as—if not more than—planning policy.[342]

Further modifications were made to the 1971 directives on non-urban areas which were published by the MMBW in a 1977 document, *Review of Planning Policies for the Non-Urban Zones :*

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[337] MMBW, *Report on General Concept Objections*, 1974 (Melbourne: s.n., 1974), 4.

[338] MMBW, *Report on General Concept Objections,* 13.

[339] Ibid*,* 15-17.

[340] Ibid*,* 26.

[341] Ibid, 39.

[342] Ibid*,* 39.

Melbourne Metropolitan Region. These modifications were in response to the previously noted four thousand objections received by the Board following the publication of its 1971 *Report*. The most significant modifications concern alterations to zone boundaries; the necessitation of a permit for new subdivision; the establishment of minimum density for subdivisions; and greater controls to ensure the retention of 'natural features and resources' within such developments.[343] The SEZ is acknowledged as an extraneous 'non-urban zone' which would 'identify and conserve known resources of stone,' only warranting consideration if any impact was to be noted on surrounding land zoned for another purpose, for conservation or residential use as two limited examples.[344] This concern is highlighted in an unspecified number of submissions to the MMBW; landholders, 'pressure groups,' and members of the public expressed concern regarding the 'detrimental effect on the amenity of the neighbourhood' where extractive industry occurred, as well as potential conflicts with landscapes of conservation value.[345] This is compounded by the 'highly capitalised' nature of the industry which has led to more intensively-worked, larger sites.[346] As such, the quality and availability of the material underlies the selection of a site for quarrying.

Although operational quarries were already located in areas zoned Extractive Industrial under the MPS, the declaration of a SEZ by the MMBW would preserve areas of known basalt reserves to prevent the encroachment or sterilisation of the material in the future. This would also help to prevent the encroachment of development as witnessed in relation to historic urban quarries in metropolitan Melbourne. Also discussed, albeit in the brief stipulation of policies and their implementation, is the need to ensure quarried landscapes are restored in adherence with the Extractive Industrial licence for the site: the MMBW recommended an unimplemented program

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[343] MMBW, *Review of Planning Policies for the Non-Urban Zones : Melbourne Metropolitan Region* (Melbourne: s.n., 1977), iii.

[344] Ibid, 12.

[345] Ibid, 14.

[346] Ibid, 33.

conducted by an unspecified inter-departmental body to oversee restoration.[347] The need for such a coordinated response was thus evident at the time; perhaps its absence indicated faith in the licensing system to deliver appropriate post-industrial outcomes. This is discussed in great depth within the following chapter.

3.7 Planning for deindustrialisation

Deindustrialisation began in Australia in the 1970s, resulting in significant change to the urban landscape. The post-industrial era saw the demise of industrial precincts occupying large sections of land in the inner-city, which could be remade and reformed in line with the new economic paradigms.[348] These conditions were seldom-anticipated by planners, in the view of Ray Wyatt, lecturer in town planning at the University of Melbourne, who published a research paper in 1978 on the relevance of metropolitan planning strategies to the modern era.[349] A new plan for the city was warranted to address this shift, in addition to demographically-driven changes in the provision of housing stock, and the form of outer-suburban development. The MMBW published the *Metropolitan Strategy Implementation* in 1981, outlining changes to the MPS responsive to the changing needs of the population. This document addresses planning in a far more strategic manner, outlining objectives and principles for planning activities within the city. The specification of extractive industrial zones in prior documentation is now lost to two broad categories of non-urban land use: 'Broadscale Mixed or Intensive Farming,' and 'High Ecological and Landscape Interest Value.'[350] Non-urban land is equated with the 'metropolitan countryside,' and it is briefly noted in Chapter 16 of the strategy that the 'countryside' not only exists for the purpose of agriculture,

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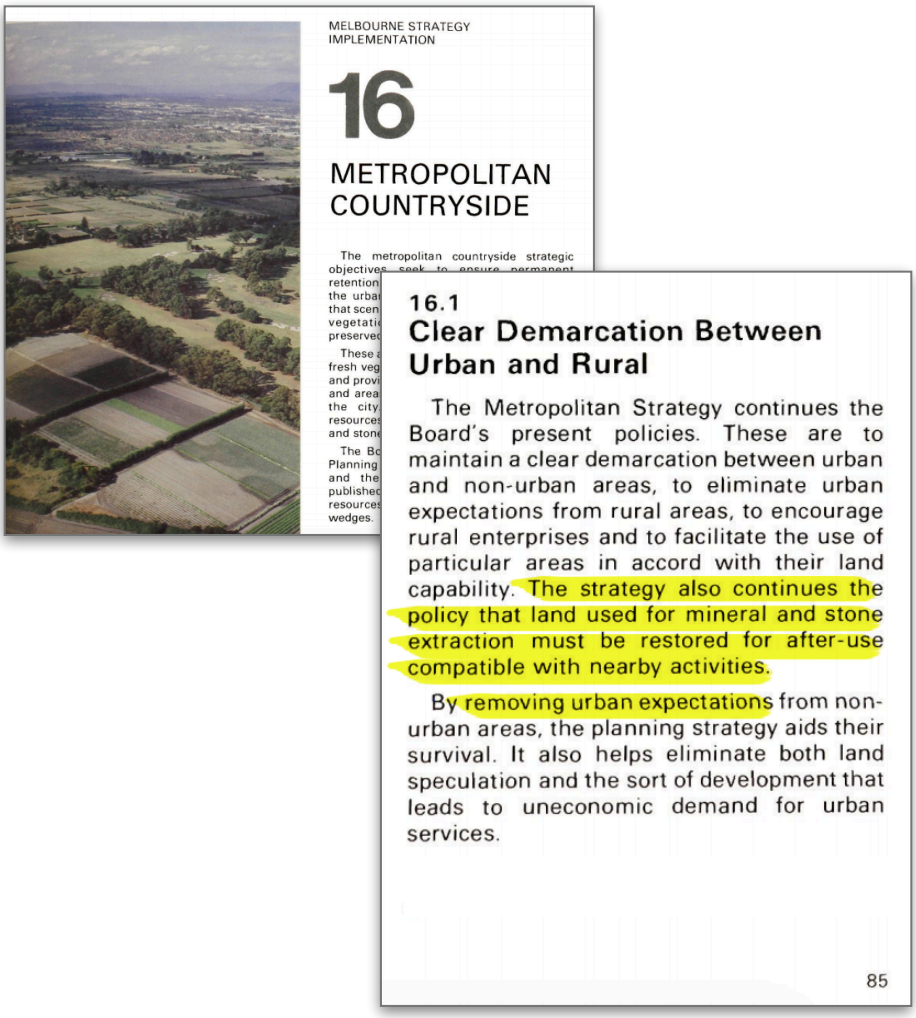
[347] Ibid*,* 78.

[348] Seamus O'Hanlon and Chris Hamnett, "Deindustrialisation, Gentrification and the Re-invention of the Inner City: London and Melbourne, c.1960–2008," *Urban Policy and Research*, 27, no. 3 (Sep 2009); Dingle and O'Hanlon, "From manufacturing zone to lifestyle precinct."

[349] Ray Wyatt, "Melbourne's metropolis strategy - the search for legitimacy," *Research Paper 35* (Melbourne: University of Melbourne, 1978).

[350] MMBW*, Metropolitan Strategy Implementation* (Melbourne: s.n., 1981), 11.

conservation, and recreation, but also to accommodate extractive industry.[351] The MMBW maintained the view that extractive industrial landscapes must be restored to a state concordant with surrounding forms of land-use (see Figure 3.4). The MMBW additionally recognised that the declaration of a 'countryside' area removed the potential for 'urban expectations' endangering extractive industry.[352] This also entails the necessity of a clear demarcation between urban and rural, based on the existing boundary established by the MMBW, enshrined within the MPS.[353]


MELBOURNE STRATEGY IMPLEMENTATION

16

METROPOLITAN COUNTRYSIDE

16.1

Clear Demarcation Between Urban and Rural

The Metropolitan Strategy continues the Board's present policies. These are to maintain a clear demarcation between urban and non-urban areas, to eliminate urban expectations from rural areas, to encourage rural enterprises and to facilitate the use of particular areas in accord with their land capability. The strategy also continues the policy that land used for mineral and stone extraction must be restored for after-use compatible with nearby activities.

By removing urban expectations from non-urban areas, the planning strategy aids their survival. It also helps eliminate both land speculation and the sort of development that leads to uneconomic demand for urban services.

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Figure 3.4: Envisioning a clear demarcation, with an expectation of restoration following extractive industrial practices (MMBW, *Metropolitan Strategy Implementation*, 1981, 16).

[351] Ibid, 23.

[352] Ibid, 85.

[353] Ibid, 87.

The consideration of urban extractive industry—or lack thereof—commands a refocusing on urban industrial activity as it is accommodated in the 1981 *Strategy*. Of interest is the fact that industry was encouraged within the metropolis so long as it did not result in a loss of amenity to the surrounding area. This condition arguably endangered the existence of the urban quarry, as well as noxious industry more generally—there was a sense that these land-uses, in an urban setting, were becoming outmoded. Addressing these factors would be of little relevance to the changing city relative to more pressing concerns, such as planning for the provision of shopping complexes, office buildings in the city centre, and newly-designated district centres.[354] The absence of these intensive land-uses from the discussion, however, may simply reflect the emergent post-industrial character of Melbourne: it is made clear that 'technological changes, employment and environmental impact, are to be reflected in planning policies.'[355] This can be seen in the *Strategy* addressing, for the first time in a plan for the city, the 'potential of vacated industrial sites for re-use and rehabilitation, particularly in the inner areas.'[356] This re-use of land is commonly referred to within urban planning literature as brownfield development, and would have comprised a novel approach at time of publication.

The 1981 report emphasises a number of 'Planning Measures' for industrial land which predominantly concern the subdivision and 'recycling' of industrial sites, as well as the concentration of industry, the downsizing of factory units, and the promotion of home offices.[357] This pertains to more common forms of industrial land re-use relevant to normative modes of production, further reinforcing that the urban quarry is an atypical industrial site commanding atypical outcomes.

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[354] Ibid, 57.

[355] Ibid, 65.

[356] Ibid, 31.

[357] Ibid, 65.

3.8 A new perspective on community and environment

A tumultuous decade of economic growth and decline saw the state experience unprecedented inflation and a concordant housing boom, before reaching near-bankruptcy in the early 1990s. City planning policies of this period thus warranted further revision. Much had changed in the urban landscape: almost all bluestone quarrying had ceased, and the majority of non-operational sites remediated.

In July 1982, Evan Walker, Minister for Conservation and Planning, announced that the state government would begin investigations into the living conditions in Melbourne's western suburbs, acknowledging community concerns over land-use planning and environmental issues largely stemming from past industrial practices.[358] The Western Suburbs Planning and Environment Action Program was launched in association with this government initiative, its initial stages involving the identification of key issues affecting the region.[359] A working group was established to receive submissions from the local community, enshrined within a 1983 publication; it consisted of three employees of the Department of Planning, two from the MMBW, and one from the Environment Protection Authority Victoria, hereafter EPA.[360] Two consultants worked alongside this group. The program was led by a steering committee chaired by David Yencken, with eleven other members

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[358] Maxine Cooper and Associates, "Planning and environment issues in the western suburbs of Melbourne," in *Western Suburbs Planning and Environment Action Program : Stage 1, issues identification report*, ed. Maxine Cooper and Associates (Melbourne: Western Suburbs Action Program, 1983).

[359] A companion 'Facts Booklet' was published by the Western Suburbs Action Program in October 1982 ("Planning a better place to live : The Western Suburbs Facts Booklet") which provided a number of data sets on demographics, housing stock, and industry. Land zoned for quarrying is said to occupy a total of 2.24% of the total municipal area, with 0.08% of that in the City of Altona—the Newport Lakes quarry and another site in Millers Road—and the remaining 2.16% in the City of Sunshine, comprising of a Sunshine North complex and the still-operational Kealba quarry. It is difficult to ascertain how this fact booklet may have informed potential submissions on the matter.

[360] The EPA was established as a statutory authority in 1971 under the Environment Protection Act 1970. Its establishment sought to integrate environmental concerns with the duties of state government. Its responsibilities concern the enforcement of legislation with respect to pollution and environmental degradation, carried out by both individuals and firms (EPA Victoria, "About EPA," State Government of Victoria, published 2019, https://www.epa.vic.gov.au/about-epa). Its creation It was established in response to complaints from citizens living near to polluting industry; the discharge of waste into Melbourne's waterways served as another prompt (Jack Darmody, "I get the low down on the dirt—by phone," *The Age*, November 13, 1970, 4).

representing the Minister for Planning, DoP, the MMBW, the EPA, and five municipalities.[361] Two members also represented the Western Region Commission.[362] The committee worked to remedy what was felt to be a 'history of government involvement with the people of the west' that had been 'patchy and somewhat unsatisfactory.'[363] This is a key finding of the report, stated early in the piece: government involvement is defined not only as governance itself but also the role of related agencies in 'matters of land use planning and decision making, environment protection controls [and] the programs of environmental involvement.'[364]

The 1983 publication emphasises the importance of the perspective and contributions of those who lived and worked in the region, expressing a sensitive understanding of the 'low level of response' as symptomatic of 'scepticism … or lack of confidence' in addition to issues with communication and a lack of knowledge that such a program was being undertaken.[365] Five core themes emerged in submissions made by the community, three based on conflicts between residential and industrial land-uses. The uncomfortable relationships arising from close proximity between these land-uses, as well as the inadequacy of controls established by the EPA to mitigate any unwanted effects of industry on nearby residents, are two major concerns; also evident was the view that the 'needs and concerns' of residents must be considered in planning for future development in the region.[366] The establishment of buffer zones and the need for 'particular attention' to be paid to problematic sub-

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361 Yencken was not only an influential architect, having co-founded Merchant Builders in 1965, but also a key figure in shaping the city of Melbourne through close involvement in urban planning discourse and directives ("Citation – Professor David Yencken AO," Faculty of Architecture, Building and Planning, University of Melbourne, n.d., https://about.unimelb.edu.au/__data/assets/file/0030/15897/yencken.pdf). Yencken also founded the town planning firm Tract, which he chaired from 1971 until 1979. This familiarity with the planning sphere no doubt bolstered his capabilities which led him to become Secretary (Chief Executive) of the Ministry of Planning and Environment, from 1982 until 1987.

362 Western Region Commission, *The Western Region Commission puts you in the picture* (Melbourne: Western Region Commission, 1974).

363 Maxine Cooper and Associates, "Planning and environment issues," 1.

364 Ibid.

365 Ibid.

366 Ibid.

regions dominated by vacant land or noxious industry were also acknowledged.[367] In contrast to the perspective of residents, representatives of industry who also contributed submissions highlighted the restrictive nature of EPA controls, warranting greater consultation between industry and the EPA, as well as the realisation that industry would need 'special attention' to 'protect and promote' its presence in the west well into the future.[368] Other concerns were also raised in terms of housing diversity, greenery, and recreational and cultural facilities. The dominant theme, however, is industrial land-use and the associated difficulties resulting from its location within an urban setting.

Responding to these concerns, the 1983 publication stated a range of objectives: to take a 'collaborative approach … to plan with the community rather than for it', review existing planning policies and programs, imbue existing planning activities with a sensitivity to the western region's character, and undertaking enhancements to community facilities and sites of environmental significance.[369] Considerable consultation was undertaken with community members, informing the publication of a report identifying key issues raised by residents and groups on the matters of industry, recreation, and residential land. The first study cited in the report was undertaken by consultant planners Maxine Cooper and Associates. A core concern identified in this study was the absence of adequate planning controls to ensure appropriate buffer zones between industrial and residential land, as well as to address visual, air, and water pollution.[370] This was found to contrast with the self-reported commitment of residents to the region—fifty-three respondents in six group discussions—who vocalised 'a strong feeling of belonging or identification with the area' and disinclination to move elsewhere despite the impact of industry.[371] However, this was also said to vary on the basis of individual proximity to industry, length of residency, and involvement within

[367] Ibid, 5.

[368] Ibid, 2.

[369] Ibid, 6.

[370] Ibid, i.

[371] Ibid, i.

the ‘blue collar’ industrial sector, as the ‘level of unacceptability’ of industrial impacts wavered in response to these factors.[372] Older residents, as well as those working locally, ‘tended to accept the industrial development as part of their living environment,’ whilst those employed in more professional sectors were less tolerant.[373] Overall, however, both working-class and professional residents of the western suburbs expressed the view that governance had proved insufficient, reflecting both low socio-economic conditions as well as its relative political surety in remaining a safe Labor seat. The presence of industry was not assessed as an issue in and of itself, but rather, framed as an unpleasant consequence of inadequate urban planning controls permitting the encroachment of residential development. This was exacerbated by the perception of heavy, noxious, or offensive industrial sectors as unplanned—again, too close to residential development, and lacking buffers to mitigate any impacts. This study highlighted the value of community consultation in that such statements revealed a shared sense of cynicism toward the planning system and the government enforcing it.

A more in-depth study was contributed to the report in 1983 by the Industrial and Related Activities task group consisting of Alan Wareham of the EPA, Brian Kirby and John Manton of the DoP, Nick Fothergill from the MMBW, and Elaine Brown of the Victorian Chamber of Manufacturers. This in-depth exploration of the industrial issues facing Melbourne’s west also considered concerns outlined by residents in a total of seventy-five submissions. Poor planning, said to have allowed the close proximity of conflicting land-uses, was again highlighted in addition to aesthetic impacts, pollution, safety hazards, and traffic. Residents opined that planning provisions for negotiating the interface between residential and industrial land-uses was insufficient and lacked meaningful opportunities for community involvement; representatives of industry argued similarly albeit with reference to the ongoing expansion of industry, which would ultimately be facilitated by remedying land-use

[372] Ibid, ii.

[373] Ibid, ii.

conflicts. Intriguingly, however, the majority of resident submissions concerned manufacturing firms producing unpleasant odours, noise, and water pollution.[374] Visual hazards are acknowledged in only thirty percent of submissions, in contrast to more emotive acknowledges of the impacts of industries producing noxious smells or fumes. Even so, the visual detriment to Melbourne's western regions is merely highlighted as an opportunity for better landscaping in buffer zones and factory sites.[375] One submission raised the potential for the Sunshine North quarry complex to be closed and 'made into a park' not dissimilar to Cherry Lake in Altona, which had functioned for many years as a race track and holding dam for industrial run-off prior to its remaking.[376] Firms comprising the Altona Petrochemical Complex stated their belief that similar parklands could be created throughout the western suburbs albeit created by a unified front of land-use planners, planning authorities, and municipalities, rather than by the firms owning or utilising the sites in question.[377] This is contrary to the conditions of extractive industrial permits and licenses and demonstrates, in the instance of the industrial sector, a worst-case outcome.[378]

This reflected an emergent environmental sentiment. In a similar vein is the identification of the Maribyrnong River catchment area as warranting significant investment to improve its environmental quality, marred after years of use as a drain for industrial effluent. Remedying its damaged state would not only improve the quality of habitats for native flora and fauna, but also create new spaces for recreational use. These early investigations in the Western Suburbs Planning and Environment Action Program would also inform the comprehensive 1984-6 MMBW plan for

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[374] IRATG, "Report on industrial and related issues," in *Western Suburbs Planning and Environment Action Program : Stage 1*, issues identification report (Melbourne: Western Suburbs Action Program, 1983), 5-10.

[375] Ibid, 13.

[376] Ibid.

[377] It is surprising that other examples of post-industrial parkland development in the area—Cherry Lake and Paisley Park—are absent in the companion publication. There is a section on "Urban Conservation, Recreation and Development of Community Facilities," which instead discusses the development of parkland and recreational facilities on both the Newport and Altona foreshores, both sites which had also seen prior use. It is not known why the two existing sites are not cited as precedents for redevelopment.

[378] IRATG, "Report on industrial and related issues," 13.

the catchment area, the *Lower Maribyrnong River Concept Plan*, building upon the 1982 MMBW document *Planning Opportunities along The Maribyrnong River*. There is a demonstrable interest in the remediation of this riparian environment, with the Ministry for Planning and Environment also producing a 1984 *Maribyrnong River Plan.* The impact of extractive industrial practices is acknowledged in this document, and it is stated that quarrying has produced a 'scarred and disfigured landscape' in the Maribyrnong Valley, though most particularly on an escarpment located in Sunshine North.[379] The visibility of this decimated landscape was said to attract a strong community awareness of quarrying operations, with an unspecified number of submissions to the investigation noting the McGrath Quarry site as one which could be resolved with environmental and recreation interventions. A 1986 proposal for the reclamation of the Sunshine North quarry complex also refers to a much earlier City of Sunshine assessment conducted in 1974, which argued that that the 'amenity and attractiveness of the area' should be improved through the phasing out of extractive industry, the rehabilitation of quarried areas, and the acquisition of land for development as parkland.[380] Remediation activities are thereby not limited to the quarry site alone, but are also relevant to the health and quality of the environment more broadly.

The information garnered from this 1986 proposal reiterates a constant theme: the amplification of the impacts of quarrying—and industrial activity generally—through poor or absent town planning controls that ultimately allowed industry and residential land to be located within close proximity. This would then warrant heavy-handed intervention in order to return them to a usable state; far more than that outlined in the conditions of an Extractive Industry licence. Melbourne's growth throughout the 1980s, localised within its suburban and fringe areas, coupled with 'higher expectations' from residents as to the quality of their surrounding environments, would dictate

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[379] Kirsten McDonald, *McGraths Sunshine Quarry: A Reclamation Proposal* (Melbourne: s.n., 1986), 35.

[380] Ibid.

especially well-thought-out solutions for the quarried site.[381] A 1987 state government policy—distinct to plans created by the MMBW—emphasised the awareness of residents in relation to conservation, recreation, and the quality of urban spaces. The view that these qualities could all be ensured through sensitive land use planning conflicts with the sentiment that the enforcement of licence conditions could do the very same; however, in practice, this did not take place.[382] Moreover, strategic framework addressing quarry sites would appear to erode over time, rendering the remediation of quarried land a purely legislative and bureaucratic exercise distanced from strategic policies for the city, complicating their reintegration into the urban landscape further.

3.9 Planning policies since the Kennett era

Strategic plans for the city of Melbourne took on an increasingly generalist character throughout the 1990s; a significant contrast to historic strategic plans discussed earlier in this chapter. Reflecting a renewed notion of growth and transformation, the Kennett Government (1992-1999) sought to reshape the city as a 'confident, competitive, outward-looking' one, and in 1995, developed a plan, *Living Suburbs*, focused on economic growth, liveability, infrastructure, and development.[383] This was the first such plan put forth by a state government, as the MMBW had been abolished in the year of Kennett's election, reformed without its planning responsibilities, as Melbourne Water.[384] The core tenets of the 1981 plan remained, particularly district centres and green wedges, but the

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[381] SGV, *Shaping Melbourne's Future : the government's metropolitan policy, August 1987* (Melbourne: Government Printer, 1987), 29.

[382] Ibid.

[383] The Liberal Kennett government was elected to power in 1992, following a tumultuous period of economic decline under previous Labor governments, in many senses attributed to the difficulties of deindustrialisation—Melbourne's economy was highly reliant on manufacturing and the demise of this industrial sector led to precarious economic circumstances ultimately warranting heavy-handed intervention to revive and bolster the city's economic, social, and cultural aspects. This was predicated upon the shift to a tertiary-sector led economy, reliant on the provision of services, knowledge-based industries, and tourism (see: Brian Costar and Nick Economou, *The Kennett revolution : Victorian politics in the 1990s* (Sydney: UNSW Press, 1999); SGV, *Living Suburbs : A policy for metropolitan Melbourne into the 21st century* (Melbourne: s.n., 1995), 2).

[384] Tony Dingle and Carolyn Rasmussen, *Vital connections : Melbourne and its Board of Works, 1891-1991* (Melbourne: McPhee Gribble, 1991).

overarching vision for the city shifted in scale and ambition. The policy instead makes clear intentions for a city more appealing for tourism and trade, with qualities of aesthetic appeal, efficiency, and flexibility, situating the city within an international context, and in turn minimising —if not excluding entirely—the finer-grain planning issues that featured within historic plans. The after-life of extractive industry, given this, is not discussed at all until the election of the Labor Bracks government in 1999.

Although beyond the temporal scope of this research, plans for Melbourne created in the new millennium warrant mention: historical repetition is apparent in the continued reliance upon landfill to resolve the extractive industrial landscape, further discussed in the concluding chapter of this thesis. The 2002 *Melbourne 2030* plan situated extractive industry as a non-urban land use; a defined urban growth boundary would serve as a 'management tool' in this respect.[385] There is a noted overlap with the later 2005 *Plan fo*r *Melbourne's growth areas*, which specifies the need to preserve access to extractive resources, given the difficulty in locating high-quality materials so close to the city, reiterating past rationale.[386] Directives to guide the after-use of quarries are not discussed, again reflecting that such initiatives were essentially complete.

The absence of quarrying entirely is apparent in the 2008 *Planning for all of Melbourne* document produced by the state government.[387] However, in December of the same year, the update to *Melbourne 2030—Melbourne @ 5 Million*—declared a number of investigation areas for urban growth which reinforce the growth area quandary identified in the 2005 report. Areas of interest in the city's west concern Wyndham and the Melton-Caroline Springs corridor, both of which sit atop bluestone, and continue to accommodate extractive industrial operations. Quarries are noted as a

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[385] SGV, *Melbourne 2030: Planning for sustainable growth* (Melbourne: Department of Infrastructure, 2002), 36.

[386] SGV, *A plan for Melbourne's growth areas* (Melbourne: Department of Environment, Land, Water and Planning, 2005).

[387] SGV, *Planning for All of Melbourne : The Victorian Government response to the Melbourne 2030 Audit* (Melbourne: s.n., 2008).

constraint precluding development, and warrant 'meaningful consideration.'[388] This is discussed further in the concluding chapter of this thesis as an opportunity for further analysis. A report complementary to the *Melbourne 2030* update, *Delivering Melbourne's newest sustainable communities*, was published simultaneously; it notes the encroachment of new urban growth areas upon quarries established beyond the city limits, yet another instance of historical repetition.[389] Potential for repetition is bolstered by the 2014 *Plan Melbourne* strategy, which notes tipping as an ideal after-use for quarry sites in Initiative 5.8.1, which addresses waste management. This comes despite a brief historic detailing of incompatible land-use within the *Plan*:

> Historically, planning for our city's waste and resource recovery infrastructure has been medium-term, focusing on the opportunistic use of old quarries for landfills. This has not always matched the timeframes of urban land-use planning and, as a consequence, conflicts between landfills and residential land uses have occurred.[390]

This passage, unusually reflective for a planning document, makes the weaknesses of past plans exceptionally clear.

3.10 Chapter conclusion

Despite the practice of zoning for extractive industrial activities, and the development of numerous strategic plans to guide the growth of metropolitan Melbourne, there had been no substantial strategic visioning which seeks to mitigate the encounter between urban development and quarry sites, nor to appropriately dictate a framework for developing a suitable after-use for the quarry site. Descriptions of urban quarry sites and their future forms are, at best, superficially acknowledged in

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[388] SGV, *Melbourne 2030: a planning update - Melbourne @ 5 million* (Melbourne: s.n., 2008), 19.

[389] SGV, "Melbourne West Investigation Area (Wyndham Growth Area)," in *Delivering Melbourne's Newest Sustainable Communities*, ed. SGV (Melbourne: Department of Planning and Community Development, 2009), 29-37.

[390] SGV, *Plan Melbourne*, 150.

planning strategies, which could suggest a reliance upon statutory measures to resolve past, present, and future issues. The after-use of a quarry site would ultimately respond to the legislative requirements for the site rather than strategic plans for Melbourne, warranting further exploration of this—and the genesis of relevant legislation—in the following chapter. .

Chapter 4 Statutory planning for quarries and their after-use

4.1 Chapter introduction

This chapter provides a historic overview of the statutory frameworks utilised in quarrying and town planning practices. It begins with discussion of the creation of early mining legislation following settlement, exploring the weaknesses of the *Mines Act 1890* and its subsequent incarnations, before analysing the context surrounding its modernisation as the *Mines Act 1958* and the creation of the *Extractive Industries Act 1966.* Throughout this chapter there is extensive discussion of Victorian legislation as conducive to the function and operational requirements of quarry. It subsequently becomes clear that the after-use of quarry sites, also referred to as 'rehabilitation' and 'reclamation,' is neglected; largely absent, even in the comprehensive *1966 Act*, which sought to remedy numerous issues observed to stem from rural and urban quarrying, such as operational conditions, safety, urban encroachment, and resource sterilisation.

Planning did not function appropriately to reserve land for quarrying where good-quality and abundant resources and the absence of conflicting land-uses coincided. Further still, planning mechanisms were weak in their acknowledgement of the post-industrial conditions of the site, and unable to ensure best-practice outcomes. The practice of zoning land for a specific use plays a major role in creating appropriate spaces for extractive industry to function but this is insufficient for controlling urban encroachment to quarry site boundaries. Legislative controls showed significant weaknesses in failing to apply retrospectively to sites, particularly where buffer zones are required. They were furthermore incapable of specifying a desired after-use for a site, leaving this to local government and the quarry owner or operator. A key role is identified in local community influence, which is not discussed in any aspect of the legislative or strategic planning

policies relevant to quarries beyond the opportunity to appeal against a permit or licence being issued.

This chapter further reveals that discussions formative in the creation of the *1966 Act* failed to anticipate future land-use issues beyond the operational lifespan of quarry sites. More recently legislation had also undertaken a softer approach with respect to the identification of appropriate land-uses for the post-industrial bluestone quarry site, such as for passive and active recreation. Negotiating post-industrial outcomes consequently emerged as the responsibility of local actors—the municipality, and those who resided within it—forging a context for the three case study sites discussed later within this work.

In undertaking this research, numerous libraries and archival collections were utilised in order to locate secondary historical work concerning quarries, bluestone, or extractive industrial practices in Melbourne. This was noticeably absent with the exception of Vines' *Quarry and Stone* and one report, located in the late stages of compiling this thesis, owing to the recent digitisation of a collection by the Architecture, Building and Planning Library of the University of Melbourne. This is a research report authored by Denise Friend, a student of the Department of Town and Regional Planning at the University. It was submitted in November 1987, and titled *Quarrying in Victoria : History of Legislation and Planning Concerns.* Friend helpfully notes that 'there had been nothing written on the history of the extractive industry'—'no documentation [of] its history, its legislation or its present day problems'—and as such, the work largely incorporates otherwise unavailable transcripts from State Development Committee, hereafter SDC, inquiries into extractive industrial practices, as well as personal communications with Leigh Maylor of the Department of Minerals and Energy, and Peter Morse of Boral Resources.[391]

[391] Friend, *Quarrying in Victoria*, iii.

Although there are a number of commonalities between this thesis and Friend's work, Friend's work was authored as a report, rather than a body of research; it provides a more succinct overview of the issues experienced by the mining sector, in particular noting the impacts of urban encroachment. Moreover, however, it exists as a helpful collection of primary source materials which would otherwise be inaccessible or unable to be located within public record.[392] Friend's use and synthesis of data accessed in the course of her communication with employees of the TCPB and Boral comprises a valuable primary source which this research builds upon. Most noticeable, however, is that Friend's work is truncated in the late 1970s, disallowing any discussion of the state of extractive industrial sites—and the relevant statutory and strategic frameworks—throughout the following decade, a time of significant change. This serendipitously creates a strong basis for the analysis of bluestone quarry rehabilitation and remediation processes, which this research seeks to address.

4.2 Defining extractive industry

The term "extractive industry" is traditionally used in reference to a broad range of industrial sub-sectors: at times, it can describe the quarrying of stone and clay, but also—as noted within discussion of post-war income tax relief to the aforementioned sector—the extraction of coal, gold, and oil.[393] In this work, the definition employed stems from that outlined by the SDC in 1965:

> "Extractive industry" includes the extraction for commercial purposes of sand, gravel, clay, turf, soil, rock, stone or similar materials from the land and, when carried out on the land from which such materials are extracted, the treatment of such materials and the

[392] Ibid, 2.

[393] "The Mining Industry: Taxation Relief," *The Age*, June 4, 1945, 4.

> manufacture substantially from such materials of burnt bricks, baked tiles, pottery, and cement products.
>
> This definition follows substantially the definition used in the Interim Development Order of the MMBW, and can be taken to include extraction from all commercial stone quarries, clay pits, sand pits, and gravel pits … The definition should not be taken as applying to mines, either of the open-cut or underground varieties.[394]

The first instance in which State government sought to intervene in the extraction of resources was in the form of a proclamation made by Charles La Trobe, Lieutenant-Governor of Victoria, on the 15th of August, 1851, in a supplement to the Government Gazette.[395] Responding to the beginning of the gold rush, La Trobe sought to address the extraction of gold and ores from Crown soil. Quarrying was considered akin to mining in early legislation as a consequence of early Colonial divisions of power. Hunt states that following settlement, natural resources were considered to be under British control, with Governors of the colonies granted, by way of title[396] to land, 'ownership of minerals … presuming those resources to be part of the land,' with the exception of silver and gold as exclusive property of the Crown.[397] Specific regulations were developed in relation to gold mining in areas such as Heathcote, Steiglitz, Beechworth, Castlemaine, Hepburn, and Ballarat.

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[394] SDC, *1964-65 : Victoria : Report of the State Development Committee on Extractive Industries* (Melbourne: A. C. Brooks, Government Printer, November 1964), 11.

[395] States did not exist in Australia until 1901; prior to this, they were Colonies of the British Empire. These Colonies had the capacity to legislate. The Legislative Council of Victoria, hereafter LCV, was established by the Act for the Better Government of Her Majesty's Australian Colonies in 1850, an Act of British Parliament.

It must also be reinforced that the Australian Federal government had no jurisdiction over the manner of mining beyond the designation of some sites as Crown land. All modes of governance and town planning referred to within this chapter are in reference to State and municipal governance.

[396] Land titles were complex; how these titles were considered in terms of access to resources beneath the surface changed based on the dates which they had been alienated from the Crown. Land alienated prior to March 1 1892 was sold in a manner allowing full ownership of land beneath the surface inclusive of all extractive substances. That alienated after this date, but prior to 1949, was limited to a given depth with ownership of mineral resources above that depth potentially reserved to the Crown. This was changed in 1949 for a duration of two years to include basalt and granite as reservable resources. After 1951, this continued in relation to *all* extractive resources, stone and mineral. Landholders in this case would only possess surface rights to the land.

[397] Michael Hunt, *Mining law in Western Australia*, *4th ed.* (Annandale, NSW: The Federation Press, 2009), 1.

Many of these regulations were decreed in local courts. The gold rush necessitated close management of resource procurement and had forged a regulatory system for mining later serving as a precedent elsewhere in Australia and New Zealand.[398] The establishment of legislation responded to an inquiry by the Gold Fields Commission resulting in the *Gold Fields Act of 1855*; although unrelated to the act of quarrying, an amendment to this Act of the same year did specify that the Court possessed the power to enforce 'rules and regulations for determining the extent and position of any claim the conditions on which it shall be worked and the application and use of any machinery and such local rules and regulations relating to mining.'[399] This establishes the basis for a statutory approach to the coordination of any mining activity, inclusive of basalt extraction—amongst other forms of extractive industry—at this juncture.

The *Mines Act 1890* established the regulations governing procurement of any material from the earth by a private individual under licenses and leases. The Miner's Right provision of the *Act* created a system wherein an individual would be issued with a document entitling them to Crown land for the purpose of gold mining, for a fixed period, and to undertake necessary activities—such as creating cuttings or dams—where conducive to mining. As this was deemed in the public interest, a private landholder could not prevent miners from accessing the Crown land beneath their own private property. The *Act* would also outline the necessity of a license for exploratory activities locating materials other than gold; the land in question could not be occupied by the holder of a Miner's Right, or business licence.[400] The individual obtaining the license would be held to a royalty or fee paid to the Governor in Council. These fundamental notions are integral to the later development of the *Mines Act 1958*.

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[398] Robin Sharwood, "The Local Courts on Victoria's Gold Fields, 1855 to 1857," *Melbourne University Law Review*, 15 (June 1986): 516-7.

[399] Ibid, 514.

[400] *Mines Act 1890* (Vic) Division 1.—Mining Management, (7) Licenses to Search for Metals and Minerals other than Gold, 2510.

The extent to which this newer *Act* fails to accommodate urban quarrying is remarkable given the growth of the industrial sector over the previous 68 years: as the state of Victoria—and especially Melbourne—grew, quarry operations consolidated, being worked more efficiently due to technological progress, addressing increasing demand.[401] Although this wavered, in response to a boom-and-bust in the final decade of the nineteenth century, the industry recovered. The number of stone quarries fell from 152 in 1872-4 to 65 in 1900, recovering to 99 in 1910.[402] The first statutory indication of an uncomfortable relationship between quarrying and urban development can be seen in the amendment of the *Local Government Act* in 1910 to allow Councils to include a by-law prohibiting quarrying. This was not retrospective, however, and did not apply to existing quarries; furthermore, its application was inconsistent and weak. Some municipalities, such as the City of Camberwell, banned quarrying, whilst others necessitated applications for permits to be granted so to allow quarrying.[403] This did little to ensure all quarries within a particular municipal area would be operated to a specified standard. These factors progressively highlighted the need to centralise controls for extractive industry to achieve balanced and considered planning outcomes.

Friend notes that conflicts existed within municipalities as well, with Council inspectors and the Inspector of Mines often disagreeing on the adequate standard of operations.[404] The Mines Department could not enforce municipal by-laws, which is significant as the Department controlled blasting and the use of explosives. Over time, however, more Councils began to adopt and modify such by-laws. Often this would warrant the quarry operator or landholder to agree to a schedule to the permit, wherein the land would be transferred to the council upon the completion of quarrying for a municipal tip. Royalties would also be paid to the municipality in order to compensate for

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401 Friend, *Quarrying in Victoria*, 28.

402 SDC, *Re-Inquiry into Extractive Industries : Transcript of Proceedings before the State Development Committee* (Melbourne: A. C. Brooks, Government Printer, 1963), 12.

403 Geoffrey Blainey, *A history of Camberwell* (Melbourne: Jacaranda Press, 1980).

404 Friend, *Quarrying in Victoria*, 31.

damage to roads and the surrounding area, as well as to establish funds for the eventual remediation of the site.

These powers were made more extensive through the *Town and Country Planning Act 1944.* The TCPB was created in 1946 under this *Act*. Its first function was to advise the Minister of Public Works.[405] Its activities primarily concerned the establishment of planning schemes where municipalities had failed to do, and it assisted in coordinating the activities of municipalities throughout Melbourne. The TCPB reported to the Minister of Public Works. The Act enabled Melbourne's municipalities to create a planning scheme. The 1944 *Act* determined three outcomes for land-uses in metropolitan Melbourne, stratifying these into land-uses requiring permits; land-uses not requiring permits; and prohibited land-uses. In permitting a particular land use, the municipality could establish desirable conditions to be met in the course of development. Planning schemes had to be advertised, which was also a necessary condition for any amendments to the Scheme. Municipalities were also able to issue an Interim Development Order preventing any construction or development activities upon a specified parcel of land. Comments would be invited from the public and heard by the municipality on the basis of its planning activities, albeit with no scope for appeal. This informed the assessment by the extractive industrial sector of this planning mechanism as 'oppressive,' though rights of existing use remained.[406]

Planning powers were granted to the MMBW in 1949 under the *Town and Country Planning (Metropolitan Area) Act*, acknowledging the *de facto* role the MMBW had come to play in town planning.[407] The Minister for Local Government was responsible for resolving any conflicts or inconsistencies between municipal Planning Schemes and the MMBW's 1954 Planning Scheme,

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[405] "Town and Country Planning Board," Public Record Office Victoria, published n.d., https://researchdata.ands.org.au/town-country-planning-board/492078.

[406] SDC, *Inquiry into Extractive Industries. Transcript of Proceedings before the State Development Committee* (Melbourne: W. M. Houston, Government Printer, 1957), 203.

[407] From 1954 until its dissolution in 1991, it was the primary planning body for metropolitan Melbourne.

which placed existing areas of extractive industry within a distinct Extractive Industrial Zone.[408] Areas covered by an IDO also conflicted, resulting in circumstances where two Orders would cover a single site, necessitating the landholder to meet the conditions of both the municipality and MMBW.[409] Quarries operating within an EIZ did not require a permit. As such, quarries throughout urban Melbourne were operated to differing degrees, reflecting the absence of controls in some instances, and the presence of restrictive IDOs, by-laws or Planning Schemes elsewhere, especially where these measures were not retroactive.

The operational context was, at yet, insufficient to command a legislative response to better control planning for urban quarries. Most quarries were still small operations in the 1950s.[410] However, advancements in procurement technology led to the amalgamation of quarry sites and their streamlined management and operation, allowing the practice to take place more efficiently and on a larger scale than ever before, creating quarried landscapes greater in size than any previously found in Melbourne. Friend notes a decrease in the number of stone quarries from 46 in 1961 to 40 in 1971, with output increasing from 200,000 million tonnes to 310,000 million tonnes in the same period.[411]

It is difficult to ascertain whether consolidation of operations led to better planning outcomes; it is certainly easier to adequately plan for the existence of a smaller number of quarries, and fewer surrounding residents would be affected by the practice. However, their increased size and the extent of encroachment would create difficulty in allowing for the continued expansion given the pace of extraction, and sites of a greater scale would prove more challenging to remediate.

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[408] Ibid.

[409] Ibid, 37.

[410] Ibid, 103.

[411] Ibid, 103.

4.3 Redefining the mining sector

The 1958 *Mines Act* also considered stone under the ownership of the Crown rather than the landholder.[412] The *Act* defines 'earth' as inclusive of any rock, stone, quartz, clay, sand, soil, and mineral; this is not altered from its initial publication within the *Mines Act 1890*.[413] 'Mineral', in turn, is considered to include a range of substances, from silver, uranium, tungsten and ores, through to bauxite, silica, and coal, but most relevantly for this study, clays, basalt, granite, and sand. The definition of mining itself spans the scope of quarrying activity and describes the most fundamental components of this activity: 'disturb bore remove cart carry wash sift smelt refine crush or otherwise to deal with any earth by any mode or method whatsoever for the purpose of obtaining gold or minerals.'[414]

On this basis, the quarry—and even the clay or gravel pit—was considered a mine, and was thus subject to the *Act*. There was no differentiation between these industrial sectors despite variety in form: mining traditionally involved steep shafts within the earth, whilst excavation more broadly created large, open-cut voids. The relatively minimal impact of mine shafts may explain why the after-use of such sites is discussed only briefly within the *Act*. These spaces are described as 'disused' and, unsurprisingly, little is said in addressing or regulating them: at best, the Chief Mining Inspector could observe a site to constitute a 'danger to the public' and serve its owner, lessee, or licensee a notice to fill the site, construct a fence, or to 'cause the source of danger to the public to be removed.'[415] The failure to adhere to the issued notice would find the lessee, licensee, or owner of the site to be charged with an offence—non-compliance with regulations of the *Act*—and prescribed works to be carried out at their expense. Again, the absence of any further discussion

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[412] *Extractive Industries (Amendment) Bill 1980* (Vic).

[413] *Mines Act 1890* (Vic) Part 1.—Mining on Crown Lands, 389, 2493.

[414] Ibid, 389.

[415] *Mines Act 1958* (Vic), Subdivision 2.—Regulation of Mines, 537.

of regulatory frameworks for the quarries, active or disused, is remarkable given the growth in the sector over the previous decades.

An Inquiry was initiated in 1957 by the SDC[416] which investigated the inclusion of extractive industries within the *Mines Act*.[417] The report asserts that the *Mines Act* had, 'by progressive amendment … taken on an inconsistent and complex character.'[418] At the time of the Inquiry in 1958, the Mines Department, local municipality, and MMBW each possessed powers over extractive industrial sites and operations. The Inquiry sought to centralise these powers as other state government entities also expressed some degree of control over quarrying operations. This was viewed by quarrying firms as unnecessarily rigid. The *Local Government Act* was amended in 1954 to disallow the exertion of by-law powers by local government with view to centralise the power of permit rejection with the minister. Again, this was relevant only to operational quarries, having no impact on quarries established prior to the implementation of legislation, or those which had ceased operating without remediation.

The *Act* was intended to address gold and precious metal mining taking place underground, rather than open stone, clay, or sand quarries; further still, the former activity would take place far beyond the metropolitan realm, whilst the later would predominantly occupy the suburban fringe. The

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[416] The SDC was a Parliamentary body capable of inquiring into matters relating to the State's economic activities. The broad array of inquiries is best exemplified with reference to the undertakings of the Committee in the 1960s: the handling of oats ("Oats, Barley Inquiry to be Held," *The Age*, March 20, 1962, 10); underground water resources ("Stock Prefer Bore Water, Inquiry Told," *The Age*, June 14, 1962, 7); the relocation of the oil industry to Westernport Bay in 1946, and the development of port facilities in 1965 ("Siting of Oil Storage Tanks," *The Age*, November 19, 1964, 12; "Probe ordered on needs of Westernport Bay," *The Age*, June 22, 1965, 6); land settlement and irrigation in the Millewa region ("Opening Of Crown Lands For Irrigation," *The Age*, February 11, 1965, 15); and the touristic potential of the Gippsland Lakes ("Lakes tourism inquiry," *The Age*, May 21, 1966, 11).

[417] SDC, *1958 : Victoria : Report of the State Development Committee on Extractive Industries* (Melbourne: W. M. Houston, Government Printer, 1958); SDC, *1964-65 : Victoria : Report,* 13.

[418] Planning for quarries under this Act was greatly complicated by the location of the site, which would determine the Responsible Authority (SDC, *1964-65 : Victoria : Report*, 13). The DoM could overrule these other entities (SDC, *1964-65 : Victoria : Report*, 15).

report also asserted the claim that land suitable[419] for extractive industry was being 'built over,' with the city's growth contributing to an urban creep disallowing the continued operation, and further expansion, of urban quarry sites.[420] Such issues arose in numerous sub-sectors, including sand, clay, and limestone quarrying, utilised in foundries, brick, and cement manufactories respectively. Two factors motivated the Inquiry. It was realised that clay reserves were diminishing, which drove the Minister of Public Works Thomas Maltby to establish an advisory committee in 1955. In 1956, the despoiling of agricultural land through the removal of soil for domestic purpose resulted in a state government-led conference for the discussion of extractive industries.[421] The Committee consulted approximately one hundred witnesses on the matter of extractive industry, and analysed legislation from unspecified states and countries.[422] The recently-enacted *Town and Country Planning Act 1958* did not address the planning of extractive industry, nor its impacts.[423] Resulting from this, the Committee identified a number of primary issues: zoning, buffer zones, depth limits and boundaries, health and safety, and the provision of adequate roads were highlighted as integral to the future of extractive industry in Melbourne.[424] Also specified was the relatively short-term nature of the land-use: that it was 'of necessity, temporary in character, and once restored, the sites could be put to any other desirable use.'[425] Rehabilitation was a new concept as historically, quarry operators—and those commandeering industrial operations more generally—had little consideration for environmental or aesthetic factors. This highlighted the need for support in the remediation of

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[419] The continued need for *urban* quarries in particular is created by the weight of the material and the feasibility of moving it by truck: Friend notes that road tonnage limits put in place by the Country Roads Board made the use of larger trucks impossible, limiting the movement of quarried material to a distance of approximately 36 kilometres (Friend, *Quarrying in Victoria*, 11). The location of quarries thus coincides with two factors; proximity to the site of use or processing, and where materials of a good standard are available. As such, the complete relocation of the sector to extremely rural deposits would be impossible.

[420] SDC, *1958 : Victoria : Report.*

[421] SDC, *1958 : Victoria : Report.*

[422] *Extractive Industries (Amendment) Bill 1980* (Vic).

[423] *Town and Country Planning Act 1958* (Vic).

[424] *Extractive Industries (Amendment) Bill 1980* (Vic).

[425] Ibid.

quarried sites, whether through ‘elasticity of zoning,’ the establishment of a fund for remediation, or reimbursement of the operator for any costs or losses incurred.[426] The report and Terms of Reference guiding the inquiry considered restoration as close to ‘as is reasonable to its pre-extraction state,’ with an independent Mining Warden to act as a mediator.[427]

The Committee proposed that the Department of Mines, hereafter DoM, oversee extractive industrial practices, suggesting a more streamlined approach. However, despite the DoM assuming full control of such operations, the granting of a permit for extractive industry would still remain subject to the views of other stakeholder government entities, such as the Department of Crown Lands and Survey, the Forests Commission, Country Roads Board, TCPB, MMBW, the Local Government Department, and the Soil Conservation Authority.[428] This was especially relevant where quarries were proposed in state forests, warranting involvement of the Forests Commission; likewise, the SCA would interject if a quarry was proposed within a reservoir catchment area.[429] Although these two instances are inherently rural in nature, the Committee’s desire to oversee such a centralisation of power reflected not only the complex urban governance necessary for the establishment and operation of a quarry—permits and zoning were both particular concerns—but also those numerous authorities making use of quarried materials.

Similar conflicts were apparent in the differing views of the MMBW and local municipalities, the latter experiencing the impacts of quarrying acutely. Local municipalities were responsible for maintaining a good quality of life for local residents. The *Local Government Act 1958* prescribed municipalities with powers enabling the ‘regulating or controlling of quarrying or blasting

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[426] SDC, *1958 : Victoria : Report of the State Development Committee,* 7.

[427] Ibid, 8.

[428] Ibid.

[429] Ibid, 9.

operations.'[430] Earlier iterations of the *Act* in 1928 and 1938 imbued municipalities with greater power to prohibit quarrying operations. Local governments objected to quarrying, manifesting in the creation of by-laws and planning schemes. Municipalities additionally varied in their approaches to extractive industry, with some banning the practice, and others recognising its economic importance and contribution to urban growth. This was addressed within planning schemes, but had potential to conflict with the intentions of the MMBW. As one example, the post-war planning scheme of the City of Broadmeadows identified quarrying as a 'non-conforming' land-use which would be eradicated from the municipality within two decades.[431] This area, however, was marked for extractive industry by the MMBW given the presence of quality stone and clay deposits. Other issues concerned the retroactive powers of municipal by-laws.

Owing to poorly-controlled post-war subdivision development, more urban quarries had been encroached upon than ever before. Older subdivisions may also have been planned but not executed until much later, in the case of the Newport Quarry. Where this situation took place, the municipality could not deny any permit to a landholder for the construction of a residence within an existing approved subdivision. Such conflicts were hoped to be resolved with the introduction of centralised powers with reference to extractive industrial operations.

4.4 Developing the *Extractive Industries Act 1966*

Little was resolved in the following decade, with pressure mounting on the state government to better plan for extractive industry within the metropolis: it is noted in the 1958 Select Committee *Report* that numerous unnamed municipalities were unwilling to accomodate extractive industries.[432] Where municipalities did permit quarrying, these councils proved lax in their

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[430] *Local Government Act 1958* s.197(1)(xxxv).

[431] Friend, *Quarrying in Victoria*, 49.

[432] SDC, *1958 : Victoria : Report*, 12.

enforcement by-laws.[433] Many municipalities were said to have 'failed to exercise effective control.'[434] This reflected the complex realities of hosting extractive industrial practices; municipalities displayed some discomfort with the sector, and a corresponding intent to remedy related issues. The burden felt by municipalities culminated in a 1963 conference which a mere 40 councils, of the state's 208, attended.[435] Having included the proceedings of the conference as an appendix to her work, otherwise unavailable elsewhere, Friend outlines in detail that 112 municipalities contained quarries as of 1961, with 126 quarry holes in metropolitan Melbourne; 45 of these were bluestone quarries. The attending municipalities discussed issues such as fencing; non-occupational fatalities, including drownings; damage caused by fly-rock; adequate buffers; damage to roads, both by quarrying as well as trucks; mess and dust; and, most significantly, the increasing burden of worked-out quarries which had not been rehabilitated. In these instances, municipalities were to reclaim the quarry site: the results of the 1963 survey showed that 348 quarry holes were reclaimed by local governments, compared to a figure of only 68 by quarrying firms. Municipalities felt that adequate management at all points of the quarry's lifespan could not be provided by the Mines Department. Municipalities saw the Department as supportive of the industrial sector for its economic contributions, but less so the needs and quality of life of local residents.

Perhaps evident in the nature of select reported issues—fly-rock and dust in particular—some municipalities had not adequately monitored the extent of residential development, allowing the construction of homes within such close proximity to quarries that conflict between the two land-uses would be generated: 'Critics of quarry owners,' one journalist wrote, 'ignored the fact that the

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[433] "Councils Fail on Quarry Safety," *The Age*, March 7, 1964, 3.

[434] Ibid.

[435] Friend, *Quarrying in Victoria*, 132.

quarries now surrounded by houses were there first when the localities were still open country.'[436] These circumstances forged the belief held by the Crushed Stone Producers' Association and Australian Clay Products that the future regulatory frameworks concerning extractive industry should no longer occupy the realm of local government, but rather, be exclusively coordinated by the DoM. Coordinated and consolidated planning was to prevent issues of urban encroachment. This contends with the view of the Victorian Graziers' Association which saw the existing complexities and inconsistencies as resulting directly from the intrusion of the DoM into an industrial sector vastly different to mineral mining. The Clay Products and Crushed Stone groups were said by Vernon Wicker Officer, of the Graziers' Association, to exert 'a quite remarkable degree of Government interference with the property rights of landowners, with an equally notable desire to be freed themselves from community responsibilities.'[437] Officer described the state of affairs as entirely insufficient:

> The department's submissions display such a narrowness of specialist viewpoint as to disqualify it from being the sole authority to control the industry. Similarly, evidence from local government bodies demonstrates a degree of narrow parochialism which must, at times, conflict with the public interest.[438]

Under the *Town and Country Planning Act 1961*, councils and the MMBW—as a Responsible Authority—were given the power to grant or refuse permission to conduct operations of extractive industry. Further still, in the case of Crown land, a Mineral Lease would be granted from the Governor in Council 'on the recommendation of' the Minister of Mines. The local municipality could additionally enact a by-law which would override the Mineral Lease. Appeals were to be

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[436] "Councils Fail on Quarry Safety."

[437] "Owners in land wrangle," *The Age*, March 13, 1964, 12.

[438] Ibid.

made to the Minster for Local Government, final and binding, rather than the DoM or the MMBW.[439] The *Local Government Act 1958*, in contrast, did not contain any provisions for appeal to the Minister against municipal by-laws prohibiting extractive industrial activity.[440] Further inconsistencies arose in the case of quarries established on freehold land prior to the establishment of both municipal by-laws and the *Town and Country Planning Act.* These quarries could operate outside of all the aforementioned legislative contexts: no permit, no Mineral Lease, and no consent from the MMBW were needed. These quarries are unidentifiable—no details are provided in terms of location, firm, or licence number—therefore no examples of such operations can be provided.

The Victorian Graziers' Association vocalised perhaps the most powerful community-based objection to the *1958 Act*. The Association argued that the applicability of the *Mines Act* for the acquisition of building materials and resources was 'not appropriate,' warranting more specific legislation to address 'basalt, rock, sand, gravel and clay.'[441] Similar sentiments were also expressed by the Victorian Dairy Farmers' Association, the Victorian Wheat and Woolgrowers' Association, and the Victorian division of the Australian Primary Producers' Association.[442] However, such discussion arose from the Graziers' Association's desire to clarify that their members could in fact claim ownership upon 'the common substances of the earth, from the grass roots down,' rather than in response to the perceived need of an Act specific to extractive industry.[443] Although it cannot be ascertained whether this bore any influence upon the development of a later *Act* for extractive industry, pressures mounted in the following years warranting legislation to better address urban quarrying. Post-war industrial and urban growth maintained an inextricable link to quarrying—basalt, crushed finely, was used in road-making and building—and sites for the acquisition of the

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[439] SDC, *1964-65 : Victoria : Report*, 13.

[440] Ibid.

[441] "Graziers Seek Action on Mining Rights," *The Age*, November 1, 1961, 8.

[442] "Graziers Call for Clear Freeholds," *The Age*, October 16, 1963, 3.

[443] Ibid.

material required location, ideally, in close proximity to the metropolis but also in regions of sufficient material quality.[444] Given these conditions, the output of urban quarry sites was at its peak.[445] Further still, the suburban development made accessible through the use of the material could ultimately encroach upon the quarry site, decreasing its longevity. This resulted in the need to consolidate operations, allowing quarrying at a select number of sites where high-quality materials could be readily accessed and distributed, without immediate urban pressures warranting the minimisation of intense industrial activity. One newspaper report suggests quarries over larger areas of land, and at a shallow depth, were 'wasteful' compared to operations much deeper yet smaller in surface size.[446] The consolidation of operations not only commanded higher-quality planning to accommodate more intensive extractive industrial processes, but also created a large number of exhausted or inoperative sites awaiting remediation. The *Mines Act 1958* provided no guidance on how this remediation could be achieved.

A mounting crisis became clear in the re-establishment of a SDC enquiring into extractive industry beginning in 1961.[447] Throughout the history of extractive industrial operations in Melbourne a core quandary continually arose:

> Extraction of extractive substances has taken place for many years from deposits located as close to markets as possible. Continued population growth has extended urban development (particularly in Melbourne) up to and around older established working quarried

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[444] There is a perceived correlation between urban growth and the demand for quarried resources, given their value in building and engineering works. The production of gravel and crushed stone—figures which do not differentiate between basalt and other stones, but nevertheless include it—increased from a total of 33 megatons in 1961 to 63 megatons by 1971; Friend notes this is an annual growth rate of 5.6% (Friend, *Quarrying in Victoria*, 85). In terms of the use of stone for roads—an indicator of urban growth, but also the maintenance and widening of existing roads—crushed and broken stone increased from a production volume of 15,805,000 tonnes in 1972-3 to 17,682,000 tonnes in 1974-5, albeit decreasing slightly to 16,885,000 tonnes in 1975-6, perhaps reflecting a downswing in subdivisions or road investment.

[445] *Extractive Industries (Amendment) Bill 1980* (Vic).

[446] "Quarries Ruining Land, Inquiry Told," *The Age*, August 8, 1963, 6.

[447] SDC, *1964-65 : Victoria : Report*.

> economically preventing their extension and resulting in their ultimate abandonment. Establishment of similar workings in present outer areas could eventually become restricted by other types of development, thus further reducing availability of these resources unless protective measures are introduced. This is inevitable because information on the occurrence of extractive materials is available at present only in general terms. Usually it is not sufficiently precise to enable areas to be adequately defined for planning purposes.[448]

This makes clear one key fact: that, prior to the specification of the *Extractive Industries Act* in 1966, the planning of extractive industrial sites was not comprehensively legislated for. Were quarries to be restricted by encroachment or sterilisation, it would comprise a 'loss' to the state by virtue of the resources inaccessibility.[449] In May 1963, Minister for Mines Wilfred Mibus stated that a survey locating the 'best' quarry sites in Melbourne would be 'inevitable,' particularly as the findings of such a survey would have to correspond with planning schemes already put in place; 'If quarries were not located at convenient places, transport costs would add very greatly to the cost of the materials extracted.'[450] The Mines department made clear that new legislation would be warranted to most effectively implement a new system of 'uniform control' for the licensing of quarry operations.[451] Other proposed legislative interventions would provide the means for objections and appeals to be made to an independent board, in addition to a sinking fund for the remediation of quarried land. Further geological analysis of the state's mineral and stone deposits would also allow for better planning as the accidental encounter of competing land-uses could be mitigated through informed and 'effective' town planning.[452] In relation to the Committee's inquiry

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[448] SDC, *1964-65 : Victoria : Report*, 12.

[449] SDC, *1958 : Victoria : Report*, 6.

[450] "Quarry Site Survey "Must Come," *The Age*, May 1, 1963, 8.

[451] "Govt. to Examine Quarry Industry," *The Age*, July 22, 1963, 9.

[452] "Govt. to Examine Quarry Industry."

into extractive industry, both the Crushed Stone Producers' Association and Australian Clay Products Limited claimed that the industry's needs had been long neglected by town planners.[453] The main issue cited was that by-laws and planning schemes were insufficient to address the 'reality that extractive minerals could only be won where nature had placed them.'[454] Attempts by municipalities to enact by-laws to eradicate quarrying would only serve to problematise the fulfilment of the city's growing need for extractive resources: 'It might be said of the industry that its products were wanted—but not its presence.'[455] Both extractive industry bodies argued that appropriate controls would best be achieved with a dedicated *Act* of legislation to remedy conflicting governance of the past. The *Town and Country Planning Act 1961*[456] would be amended to unify the provision of licences for extractive industry with the issuing of town planning permits, allowing quarry sites to become subject to Town Planning Appeals.[457] This mechanism of appeal came through the creation of the Town Planning Appeal Tribunal, established in 1968 by amendment to the *Town and Country Planning Act 1961*.[458]

Enshrining such a streamlined regulatory approach in legislation was hoped to resolve the 'hampered' development of the industry as a consequence of 'conflicting views and overlapping authority.'[459] The 1964-5 SDC report called for the application of 'principles of modern town planning having due regard to the need for siting quarries' to keep the quarry 'available for exploitation' whilst simultaneously avoiding 'unjustified interference with the comfort and living

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[453] "Industry Neglected, Quarries Claim," *The Age*, September 7, 1963, 7.

[454] Ibid.

[455] Ibid.

[456] Under the *Town and Country Planning Act 1961*, so long as a quarry was located within an Extractive Industrial Zone, it did not require a permit. This would be remedied with the *Extractive Industries Act 1966*.

[457] *Extractive Industries (Amendment) Bill 1980* (Vic).

[458] This became the Planning Appeals Board in 1980 (Alan March, *The democratic plan : analysis and diagnosis* (London: Routledge, 2012).

[459] "Industry Neglected, Quarries Claim."

conditions of people in the area concerned, or amenities generally.'[460] Contending with this, the sector was considered indispensable to the state, and 'the economic development of the community.'[461]

4.5 Addressing quarry re-use in the 1966 *Act*

The reclamation of quarried land proved difficult to legislate for in the 1966 *Act*. Historically, quarry sites had been filled with refuse—high-quality outcomes for such sites had not yet been seen, with the institution of public open space, in a number of circumstances, the most extensive of such efforts. The *Extractive Industries Act 1966* was incapable of forcing quarry operators or site owners into ensuring that land would be reclaimed to the extent that it could be used by the community. Although the *Act* was comprehensive in addressing the issues stemming from operational quarries, its attempts to coordinate the after-use of such sites appears minimal at best, and merely suggestive of a potential outcome rather than dictating any particular method or framework for achieving a new post-industrial form.

Powers pertaining to the operation of quarries, rather than their planning, were centralised with the DoM and TCPB, but those relating to its after-use were far more nebulous. Consequently relevant responsible authorities would gain the power—albeit a weak instrument—to oversee the provision of licences and permits for extractive activity, creating conditions upon which quarrying would be contingent. Upon this same basis, the 1966 *Act* would ensure that the future of the quarry site beyond extraction be considered, providing a means by which the operator could plan for its reclamation rather than rendering the site subject to the ebbs and flows of ad hoc urban development. No longer would such sites simply become, for example, opportune tip sites: 'It is

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[460] SDC, *1958 : Victoria : Report*, 7.

[461] SDC, *1964-65 : Victoria : Report*, 12.

considered most desirable that the final reclamation of the quarry site is planned before lease[462] or licence[463] issue and may be ensured as a condition of the lease or licence and, if need be, by a suitable bond.'[464] It is curious that the report specifies 'reclamation' as a term 'considered to more accurately portray the intention of the Act to have quarry sites treated so that they are not a permanent blight on the landscape and a useless area of land than the term "restoration".'[465] However, 'restoration' was utilised in the *Extractive Industries Act* 1966; at this time, 'reclamation' was employed by the Department of Minerals and Energy in its documentation. Friend wrote that the scale of some quarry sites has totally prevented any reclamation, noting this treatment as exceptionally limited by the scope of operations.[466] Quarries established well prior to the 1966 *Act* would be extremely difficult to resolve in this sense as the insufficient regulations of that time failed to command any foresight into the site's post-industrial form. Both the Crushed Stone Producers' Association and Australian Clay Products Limited argued against the imposition of a levy upon quarrying firms for the funding of their reclamation.[467] Both groups also opposed the acquisition of exhausted quarry sites by government, instead positing that such sites would continue to be a valuable asset to the firm owning the land due to the process of reclamation.

The 1966 *Act* notes two modes of reclamation: progressive, and final.[468] Progressive reclamation entailed the restoration of the quarry throughout its working life with ongoing contributions to a

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[462] A lease refers to land leased from Crown.

[463] A licence refers to the acquisition of a resource where substance belongs to a private landholder. The Mines Department had no authority where land was freehold in this respect. The possession and retention of a licence was subject to renewal on the basis of satisfactory activities on the site.

[464] A much later document produced by the Environment and Natural Resources Committee in 1994 clarifies a key weakness of the bond programme, however, in that it relates solely to the rehabilitation of the site to 'a safe and reasonable condition rather than for a specific end use. The bond therefore has no relationship with eventual post-landfill rehabilitation' (Environment and Natural Resources Committee, *Planning Issues for Extractive Industries* (Melbourne: L. V. North, Government Printer, May 1994), 117.); *Extractive Industries (Amendment) Bill 1980* (Vic), 5.

[465] *Extractive Industries (Amendment) Bill 1980* (Vic), 5.

[466] Friend, *Quarrying in Victoria*, 74.

[467] "Industry Neglected, Quarries Claim."

[468] *Extractive Industries Act 1966,* s. 19(2), s. 20-23.

fund reflecting the size of the site and its output. Final reclamation entailed enforcement of reclamation activities by the municipality, ensuring necessary works would be carried out to return the land to an appropriate state; where this was not undertaken, the municipality could escalate the case to the Supreme Court and the land would be transferred to the municipality's ownership, thus placing the financial burden on the municipality; this would no doubt cause considerable financial detriment to local government. Friend notes that these aspects of the *Extractive Industries Act 1966* were too complex to enforce; although municipalities could sell the land following its remediation, this rarely provided the council with any financial benefit.

Recognising the weaknesses of the 1966 *Act*, Friend notes that amendments to the *Act* were considered to ensure better-quality outcomes for quarry sites, with special conditions attached to licences; the payment of bonds; and frequent reviews of adherence to reclamation guidelines.[469] The overarching sentiment appears to be that any efforts undertaken to restore or reclaim quarry sites would be best done during the life of the quarry in small, concentrated, and well-considered efforts, rather than being left to the end of the site's life where it would constitute a much larger project. This issue was compounded by the fact that the legislation was not retrospective, unlike the comparable *South Australian Mining Act 1975*, which necessitated payments into a restoration fund.

4.6 Developing tighter controls

The extractive industrial sector resented excessive government intervention.[470] This was well-received, however, by the Graziers' Association, which welcomed the new perspective on extractive industry and felt it delivered 'justice' to the landholder.[471] The focus on 'justice,' however, pertained little to *urban* landholders, instead finding relevance in the rural context where the notion of miner's

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[469] Friend, *Quarrying in Victoria*, 79.

[470] "Tighter quarry control," *The Age*, May 13, 1968, 6.

[471] "Mines Report Welcomed," *The Age,* November 19, 1964, 7.

rights proved more pertinent to exploratory digs on privately-owned farmland.[472] The example of Enfield farmer, Percy Drever, was provided; a brick manufacturing firm excavated Drever's land in search of material which the firm had been granted the right to obtain.[473] Any compensation was paid to the Crown in the form of royalties, rather than to the owner of the land.[474] The Country Party pushed for the resolution of Drever's situation as it indicated that almost any owner of farmland could be subject to such a 'raw deal.'[475] In addition to this, the Country Party also strongly supported changes to the definition of 'mineral' in the Act.[476] Although Drever's circumstance was considered anomalous, it demonstrated the weaknesses in archaic mining legislation. As discussions of the SDC's report continued in Parliament, further inconsistencies were highlighted, noting that the classification of land as 'mining condition' under the *Land Act* evidently intended to concern underground mining, rather than extractive industry per se.[477]

Talk of the *Extractive Industries Act* in October 1966 had a significant impact on the establishment of new urban quarries; this occurred despite the *Act* not coming into effect until May 1968. Boral's Albion Reid Pty. Ltd. operation found it difficult to obtain permits for new quarry sites in the weeks immediately prior to the passing of the bill, leading to speculation that quarrying may have to take place well outside Melbourne.[478] This was hypothesised as resulting in 'an onerous burden' placed on the community by way of increasing material costs, as quarried basalt would be utilised for public roads ultimately funded by taxpayers or local council rates.[479] The proposed operation in question would take place in Epping, within the Shire of Whittlesea on Melbourne's northern

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[472] "Redress for an injustice," *The Age*, November 19, 1964, 2.

[473] "Repay Invaded Farmer': Mr. Bolte," *The Age*, November 19, 1964, 1.

[474] "Farmer Bought Land for £250," *The Age*, November 20, 1964, 3.

[475] "C.P. Wants Action on Farm Quarry," *The Age*, February 17, 1965, 3.

[476] Ibid.

[477] "Farm 'Injustice' Condemned," *The Age*, November 23, 1964, 9.

[478] "Boral sales rise to $76m," *The Age*, October 13, 1966, 11.

[479] "Epping quarrying 'would ruin a delightful scene' — Appeal told," *The Age*, November 5, 1966, 7.

fringe.[480] The application submitted by Albion Reid was rejected by the MMBW, to which Albion Reid appealed to the Minister for Local Government, Rupert Hamer. The proposed site was to supply bluestone aggregate for urban roadworks; however, Whittlesea argued that the region was already inundated with quarrying, and that the establishment of any more sites would undermine the ability of the Epping township to develop. This was despite the firm's insistence that it maintained a 'good neighbour policy,' minimising dust and noise.[481] William Kaye, QC, represented Albion Reid in the appeal, and highlighted the compelling contradiction at the core of the matter: that 'proper planning' was necessary to situate quarry sites appropriately, in areas where supply proved of 'necessary quality,' 'well away from existing or proposed residential development,' but not so distant as to 'involve long hauls'.[482] In this instance, a concentration of quarrying activity—such as that proposed in Epping—would be ideal. Elsewhere on the urban fringe, in the eastern suburb of Upwey, local community members met to oppose the rezoning of land for extractive industry on a similar basis; that the area already contained three quarries within a three-kilometre radius.[483] This concentration of quarries, locals feared, would 'despoil' the landscape. Similar objections arose in Dromana, a beachside settlement on the Mornington Peninsula south-east of Melbourne, to a proposed quarry at Arthur's Seat, which residents feared would make Dromana 'virtually a mining town.'[484] The peri-urban development of quarries envisioned by extractive industrial firms in response to *Extractive Industries Act 1966* did little to address the collective anxiety felt by affected residential communities. Moreover, the concern displayed for the wider community bearing an increase in transportation costs is difficult to appreciate as legitimate, given the sheer disregard for the impact felt by semi-rural locales in the concentration of quarrying activities. Instances of

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[480] Ibid.

[481] "RMC move for stone deposits," *The Age*, November 23, 1965, 8.

[482] "Epping quarrying 'would ruin a delightful scene."

[483] "Quarry rezoning protest," *The Age*, January 25, 1968, 9.

[484] "Dromana people opposed hill quarry site," *The Age*, May 31, 1969, 18.

community opposition and reactions to development consequently began to play a dominant role in shaping the post-industrial outcomes of quarried landscapes, evident across the two case studies employed in this thesis.

4.7 The *1966* Act in practice

The *Extractive Industries Act 1966* was passed on the 20th of December of that year, and came into force on Wednesday the 15th of May, 1968.[485] The *Act* defined "Extractive industry" as the 'extraction from land down to a depth of more than six feet below the natural surface of the land of stone for commercial purposes.'[486] This definition would also include land adjacent to the site of extraction where the material is manufactured or treated. A "Quarry" is further defined as a 'pit or excavation' or 'any other opening in the ground made for exploring for stone,'[487] as well as any site defined as such within the *Government Gazette*. In remedying the consideration of stone as a mineral, per the *Mines Act 1958*, "stone" is redefined in the *Extractive Industries Act 1966* as 'basalt granite limestone or rock of any kind … slate gravel clay … sand earth soil or other similar materials but does not include any substance mentioned in the interpretation of "mineral" in section 3 of the *Mines Act 1958*.' In addition to this *Act*, small-scale extraction operations were permitted under the *Forests Act 1958*, and under the *Soil Conservation and Land Utilisation Act 1958*. The only entities exempt to the requirements under the 1966 *Act* were statutory authorities and local government.[488] These bodies could contract private firms to quarry their sites, however. Although these firms were still subject to regulations outlined within the 1966 *Act*, the exemption of municipalities and statutory authorities was viewed by the industry more broadly as 'unfair.'[489]

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[485] "Tighter quarry control."

[486] *Extractive Industries Act 1966* (Vic), s. 2, 627.

[487] *Extractive Industries Act 1966* (Vic), s. 2, 628.

[488] Environment and Natural Resources Committee, *Planning Issues for Extractive Industries* (Melbourne: L. V. North, Government Printer, May 1994), xiii.

[489] Ibid*,* 6.

The licensing system was a major component of the *Extractive Industries Act 1966* and evidently reflected the findings of the SDC. A license would only be provided in order to carry on an extractive industrial activity on private land for a maximum period of fifteen years.[490] This was allowed to a depth of 15.2 metres, or 50 feet; land below this depth would still be considered Crown land and thus require an Extractive Industry Lease. Where the individual wishing to obtain a license did not own the land in question, the permission of the landholder in writing and the consent of the Minister of Lands would both be needed.[491] A licence would not be necessary where the extractive industry had already been permitted under the *Town and Country Planning Act* 1961, although those already operating an extractive industrial firm would be allowed six months to obtain such a Licence from the Mines Department.[492] A permit for carrying out that land use would still be required from the municipality.

Additional permission would be required if the industry were to take place within a catchment area, requiring consent from the Soil Conservation Authority. Exploration for stone was also curtailed, disallowed on land already built upon, as well as schools, hospitals, cemeteries, parks and plantations, and 'other valuable improvements.'[493] The establishment of a licensing system wherein multiple parties would provide consent or approval created a punitive regulatory framework, and a lack of adherence to the conditions of the licence would result in its revocation.[494] This created an ideal basis for the enforcement of operating conditions more conducive to a post-industrial outcome appropriate for the site's context.

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[490] *Extractive Industries Act 1966* (Vic), s 2, 629.

[491] Firms wishing to apply for an Extractive Industry Licence would also place an advertisement noting the Notice of Application in the Age ("Notice of Application for Extractive Industry Licence," *The Age*, September 16, 1968, 18). The advertisement would include the approximate size of the allotment, the name of the firm undertaking extractive activity, the site's boundary, and the local Parish. It is remarkable that such an advertisement also included the means for objection: any individual wishing to oppose the granting of a licence could make their views clear to the Board of Works under the *Town and Country Planning Act 1961; Extractive Industries Act 1966* (Vic), s 3(2), 630.

[492] "Extractive Industries Act," *The Age*, May 16, 1968, 6.

[493] *Extractive Industries Act 1966* (Vic), s 26, 643.

[494] *Extractive Industries Act 1966* (Vic), s 3(2), 630.

A wide range of regulations for quarries were outlined within the *Act*: these included limitations on blasting times; the strength and number of explosives used, as well as their storage; precautions taken to limit injury to individuals—both employees and the broader public—and damage to property; the accumulation of water or gas; 'unsanitary conditions'; and suppression of both noise and dust.[495] Emerging environmental consciousness saw these effects transcend their impact on residential areas, bringing about a new dimension of conflict, where quarrying was seen to additionally impact sites of ecological significance. The impacts of quarrying are not only in dust, vibration, and noise but also the pollution of waterways, damage to flora and fauna, and erosion.[496] Consequently, surveys of stone or extractive operations were also not permitted in a manner damaging to the environment 'to a greater extent than is necessary.'[497]

Adequate supervision of the site was also flagged: a site supervisor or manager would ensure the operation of the quarry within the terms of its licence. Most relevant to this thesis, however, is the novel consideration of the site's after-use. This began with the advocacy for the 'progressive restoration' of the site during its working life, with funds for this sequestered in advance. Throughout its working life, the quarry must also be managed in a fashion which decreases its potential danger to the public; this responded to the danger not only posed by exhausted urban quarries, but also in the absence of the proper enforcement of regulations by local municipalities resulting in poor fencing and urban encroachment (see Figures 4.1, 4.2).[498] As such, one section of the legislation was devoted to the 'Reclamation of Land' which addressed the restoration of extractive industrial sites by 'filling levelling grading or other restoration work … as is reasonable.'[499]

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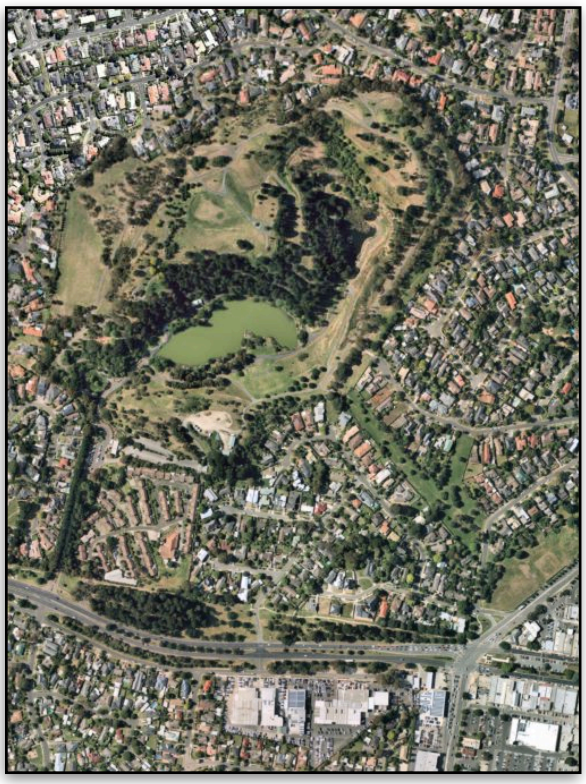
[495] *Extractive Industries Act 1966* (Vic), s 18, 637; s 18, 638.

[496] Friend, *Quarrying in Victoria*, 15-17.

[497] *Extractive Industries Act 1966* (Vic), s 31, 644.

[498] "Councils Fail on Quarry Safety."

[499] *Extractive Industries Act 1966* (Vic), s 20, 639.

Figures 4.1 [left], 4.2 [right]: A undated photograph, likely of the late 1960s or early 1970s, depicting urban encroachment upon a gravel quarry in Berwick, on Melbourne's south-eastern urban fringe (Friend, *Quarrying in Victoria*, 116).

A satellite image depicts the Berwick gravel quarry in its present-day form, a public open space known as Wilson Botanic Park (Nearmap, 2019, nearmap.com).

This would be enforced by the relevant municipality; notice would be given to the landholder to carry out such works pursuant the *Extractive Industries Act 1966*. If this did not take place, the land would be rendered subject to a Supreme Court deliberation to ascertain whether the notice had been complied with; alternatively, the parcel could be transferred to the municipality to undertake its own reclamation activities under the *Local Government Act 1958*.[500] Firms leasing land from the Crown for extractive industry would have the lease revoked. In both instances, the municipality would assume the responsibility to remediate the land—'filled levelled or graded'—with some compensation from the Extractive Industries Land Reclamation Fund, paid into by licence holders

[500] *Local Government Act 1958* (Vic), no. 5203, s 19, 44.

and royalties from leaseholders.[501] This is arguably one of the most progressive inclusions within the *Act* as it demonstrates a clear consideration of the future of extractive industrial sites.[502]

4.8 Changes to the *1966 Act*: reflexivity and responsiveness

Further amendments were made to the *Act*, the first in 1980. This reflected the diminishing number of urban quarrying operations, resulting from the licensing and regulatory conditions imposed by the *Extractive Industries Act 1966*. Three years prior to the amendment of the *Act,* operational bluestone quarries included the following:

Quarry operator	Location
Barro Group	Sunshine Avenue, Kealba Spring Plains Road, Werribee
Blue Metal Quarries Proprietary Limited	Cooper Street, Epping
Boral Resources (Vic) Pty. Ltd.	Princes Highway, Berwick Riding Boundary Road, Deer Park Harvest Home Lane, Epping Sunbury Road, Bulla 'Fowler's Quarry', Florence Street, Niddrie 'Bayview', Quarry Road, Narre Warren North 'Regal', Duke Street, Braybrook
Consolidated Quarries Limited.	Sunbury Road, Bulla Old Geelong Road, Brooklyn
Construction Materials (Aust.) Pty. Ltd.	McKimmies Road, Bundoora
Holcim Australia	Wests Road, Werribee
Kontrachet Pty. Ltd.	McArthurs Road, Altona North
Mountain View Quarry Pty. Ltd.	'Wheelahan's Pit', Duke Street, Sunshine North

[501] *Extractive Industries Act 1966* (Vic), s 25, 642.

[502] The legislation also concerned the establishment of an Extractive Industries Advisory Committee. This suggests an increased emphasis on governance with view to higher-quality land-use outcomes in the future. This Committee would conduct geological surveys; report findings to the Minister; investigate extractive industrial operations; ascertain the suitability of the land-use for a given area, given planning schemes; and recommend further regulations to be enforced under the *1966 Act* (649). The committee would be comprised of the Director of Geological Survey and the State Mining Engineer, or individuals nominated by them where necessary, as well as a number of 'special members' if conducting an investigation or compiling a report.

Quarry operator	Location
McGrath Sand & Stone Co. Pty. Ltd.	Duke Street, Sunshine North
Pioneer Quarries (Vic) Proprietary Limited	Cooper Street, Epping
Riverview Quarries P/L	Avondale Heights
Stanley Quarries P/L	Market Road, Brooklyn
Unknown operator	Bunting Road, Brooklyn

Table 4.1: Operational urban bluestone quarries, compiled utilising the 1977 *Melway* street directory.

Although there was a decline in the number of functioning quarries, there was simultaneously an increase in production and output due to advancements in procurement technology.[503] However, the need to control industry more tightly emerged; this included an increased capacity for governance over reclamation following the exhaustion of a quarry.[504] A new clause introduced to the legislation would address the impact of quarrying upon the landscape, as well as its impact on public services and amenity, through damage to roads or excessive noise and dust from blasting.[505] Rather than operating on the basis of permission, the amendment to the Act emphasised a new approach of rejection—where markets were seen as adequately supplied, further applications to quarry would be refused. This can be interpreted as a mechanism to remove the quarry from the metropolitan area. An additional clause was also proposed to remedy the inability of quarry operators to meet licence conditions which were put in place to protect members of the public from the effects of quarrying. Rather than stating the conditions to be met within the terms of the licence, a new approach would verify the ability of the licensee to do so prior to the issuing of the permit.[506] These conditions were relevant to the function of the quarry during its working life but were also ultimately conducive to

[503] The stable number of men employed within the 'hard rock' sector—1,773 in 1958, ad 1,682 in 1963 and 1973—coupled with an increase in the number of hard rock quarries—131 in 1958, 163 in 1963, and 183 in 1973—highlights the impact of technology in making the sector more labour efficient (Friend, *Quarrying in Victoria*, 8); *Extractive Industries (Amendment) Bill 1980* (Vic), 1-2.

[504] *Extractive Industries (Amendment) Bill 1980* (Vic), 2.

[505] Ibid, 3.

[506] Ibid, 4.

the re-use of the site, if only through the curtailment of ad hoc or inappropriate operations. A separate clause was also proposed to extend discussion of reclamation as per the *Extractive Industries Act 1966*, which had stated that the municipality would be responsible for the reclamation of a quarry site. A new clause would address this as it was felt to be 'cumbersome and financially disadvantageous' despite the funding system put in place to provide compensation to local government.[507] In order to reduce costs incurred to any party, the new clause proposed a system wherein the final after-use of a quarry site would ultimately be determined during its operational years, stipulated as a condition within the licence for extraction, and guaranteed with a bond if necessary. A distinction is also made between the terms 'reclamation' and 'restoration,' with the former preferable as it best conveyed the intentions of the *Act* in determining a resolution for a 'permanent blight on the landscape and a useless area of land.'[508] Furthermore, a follow-on of this clause ensured that reclamation could be initiated with permission from the Minister, as opposed to the municipality alone. This demonstrates a new degree of involvement of state government in determining the after-use for a quarry site, hitherto a local planning concern.

An amendment to the *1966 Act* was made in 1984.[509] This further addressed the reclamation of quarry sites with a number of clauses. A new section for the *Act* was proposed which detailed the lodging of bonds set, by the responsible Minister, to ensure the reclamation of quarry sites. An additional clause remedied a past weakness of the *Act* which did not provide any means for the suspension of a licence in the instance that the licensee failed to adhere to its conditions. A further clause robustly addressed the issue of reclamation by bolstering its regulatory basis: in addition to bonds paid as security, plans and proposals would also be necessitated to demonstrate the after-use

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[507] Ibid, 5

[508] *Extractive Industries (Amendment) Bill 1980* (Vic), 5.

[509] *Extractive Industries (Amendment) Bill 1980 : Explanatory Memorandum : 1984* (Vic).

of the site.[510] Bonds would fund rehabilitation even if abandoned by an operator due to bankruptcy or the loss of consent from the landholder in the case that the site was leased.[511] Another amendment to the *Act* in 1989 permitted the relevant Minister to respond to recommendations made by an Extractive Industries Board in determining the status of a licence, further removing the governance of quarrying and the after-use of sites from its initial local government context.[512] The *Extractive Industries Regulations Act 1989* was put in place in the same year and outlined the regulatory requirements for operational quarries, including requirements for site management, and explosive and machinery use, but not covering work plans or rehabilitation activities.[513] Instead, this was addressed in the *Mineral Resources (Sustainable Development) Act 1990* containing a section on rehabilitation. The legislation would establish a legal framework for this.[514] Licence provision would be reliant on a work plan for rehabilitation the site, as well as contributions to a bond, and the payment of royalty fees where applicable.[515] The work plan would be prepared and instituted by the licensee, with the bond to be returned pending the Minister's satisfaction that a rehabilitation had been achieved. Fines could also be given where licensees failed to rehabilitate their site. Where a site had been decimated so severely that it could not be rehabilitated, compensation would be payable to the Crown if the land were leased from it.[516] Similarly, compensation would be payable to a private landholder given a loss of amenity, opportunity, or a decrease in market value.[517]

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[510] Ibid, 3.

[511] Peter Day Consulting, *National Competition Policy Review of the Extractive Industries Development Act 1995, Extractive Industries Regulations 1989 and Extractive Industries Development Regulations 1996 : Report* (Blackwood, SA: s.n., October 2001), 32.

[512] *Extractive Industries (Amendment) Bill 1989 : Explanatory Memorandum* (Vic).

[513] *Extractive Industries Regulations 1989*, version incorporating amendments as at 3 August 1999.

[514] *Mineral Resources (Sustainable Development) Act 1990* (Vic), s 2, 2.

[515] *Mineral Resources (Sustainable Development) Act 1990* (Vic), s 26, 50.

[516] *Mineral Resources (Sustainable Development) Act 1990* (Vic), s 85A, 171.

[517] *Mineral Resources (Sustainable Development) Act 1990* (Vic), s 29, 169.

4.9 Beyond the era of the urban quarry

A Parliamentary report was compiled by the Environment and Natural Resource Committee and published in 1994, titled *Report on Planning Issues for Extractive Industries*. This began under the Kirner government as the Natural Resources and Environment Committee, and continued following election of the Kennett government two years later, under the similarly-named Environment and Natural Resource Committee. Sixteen witnesses had provided evidence in thirty-seven submissions, in addition to the inspection of extractive industrial sites at Wollert, Craigieburn, Sunshine, Oaklands Junction, Heatherton, Dromana, and Donnybrook. All of these sites, with the exception of Craigieburn, Heatherton, and Sunshine, were located outside the metropolitan boundary. However, they were highly divergent in their locations north, west, and south of the central city.

Submissions were sought through an advertisement placed in the *Age*.[518] Seven public hearings were held with a total of forty-three witnesses providing evidence; four extractive industrial sites were also inspected at Dromana, Dingley, Berwick, and an unspecified site in south-east Melbourne. The report focused on a range of issues including the protection of stone resources within proximity to metropolitan Melbourne (see Figure 4.3), allowing its continued use; the distribution of quarries; constraints to extractive industry projected for the following 50 years; the provision of buffer zones; and the 'sterilisation' of the land in question as a consequence of quarrying activity. It addressed the adequacy of the *Extractive Industries Act 1966* in terms of informing a legislative framework capable of enforcing the recommendations proposed in the 1994 *Report*. The encroachment of land uses incompatible with urban development was identified as a core issue affecting the future of urban quarrying, underpinning the recommendation that buffer zones be established internally within the site—on land owned by the quarrying firm—rather than on land external to quarrying operations, to a minimum distance of two hundred metres, dampening

518 Environment and Natural Resource Committee, *Inquiry into planning issues for extractive industries : background information* (Melbourne: Parliament of Victoria, 1992), 1.

the effects of blasting, noise, and dust on surrounding development.[519] The quarrying firm would additionally hold the right to object to development proposals adjacent to the site's boundary, and it was proposed that the Department of Energy and Minerals, superseding DoM, act as a referral authority when planning permits were sought for development within five hundred metres of extractive industry. The Committee felt that public awareness should also be enhanced through the inclusion of clear cartographic depictions of Extractive Industry Zones within local planning schemes.[520]

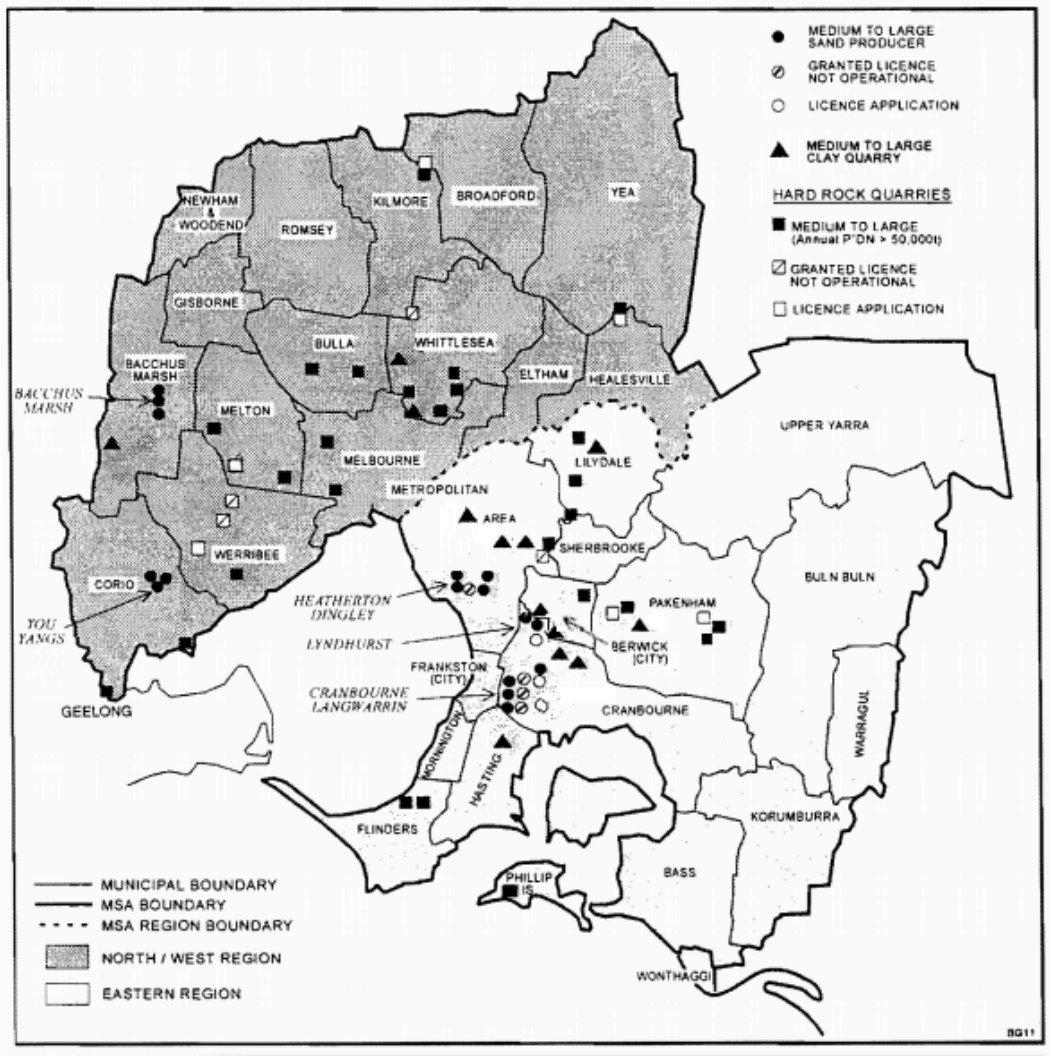


Figure 4.3: The distribution of urban hard rock quarries confined to its western aspect (Environment and Natural Resources Committee, *Hard rock quarries*, 1994*,* in Victorian Parliamentary Committee Report, *Planning Issues for Extractive Industries in Victoria*, 16).

[519] Ibid*, x*iv.

[520] Ibid.

Perhaps the most significant recommendation of the Committee came in its view that the *Extractive Industries Act* should be 'retired' although key tenets of the legislation were recommended to be retained within the *Mineral Resources Development Act 1990*, which took place.

Alongside this, the Committee recommended that town planning take a greater role in the allocation of licences for extractive industry and, in particular, consider extractive industry a distinct land-use warranting discussion of its suitability for a given place. This was anticipated to provide 'greater certainty of process,' and would also ensure that proposals for extractive industry licenses would be given a hearing. Harnessing the powers of the *Planning and Environment Act 1987* as they did, planning schemes were determined on both state and municipal bases, the latter enforced by municipalities. This previously discussed zoning system effectively designated areas of land for specific uses whilst denying others. The terminology employed in this system—'prohibited', 'permitted', 'consent use', and 'as-of-right'—would frame zoning as a series of regulations to be met as a component of acquiring a permit to operate.[521] Quarrying could thus be prohibited entirely; allowed upon application for a land-use permit; or allowed with specific conditions met. The terms of the *Planning and Environment Act 1987* would also allow for amendments to the planning scheme where municipal planning schemes had historically not allowed extractive industrial land-uses, lending a sense of flexibility and responsiveness to the legislation.

The application of the *Act* would also invoke the *Environment Effects Act 1978* to address the environmental impact of proposed development, allowing public response and ministerial inquiry, ultimately determining the viability of the proposal. An Environmental Effects Statement would be published in the city's major newspaper publications, inviting comment. A cohesive overview of the numerous stages involved in the approval of an application for extractive industry reveals the extent

[521] Ibid, 6.

to which close governance of the land-use had grown since the inception of the 1966 *Act*.[522] Such robust governance may have stemmed the extent of land-use conflicts ultimately contributing to the difficulty in locating an appropriate after-use for the urban quarry, albeit late in the piece.

4.10 Finessing statutory controls

There was a marked increase in the number of legislative mechanisms employed to ensure the appropriate and context-sensitive functioning of urban quarries within the 1980s and 1990s. It is difficult to ascertain whether this increased regulation of quarrying was in response to market conditions—namely the extent of demand and production—as the 1994 *Report* utilised two broad data sets consisting of the North-West Region and Eastern Region, which expand well beyond the city limits. The depicted North-West Region stretches from Geelong, 100 kilometres south-west of Melbourne, to Woodend, 105 kilometres north-west of the city, and Yea 200 kilometres to the north.[523] No further distinction is made between quarries located in urban or rural areas, arguably a major weakness of the *Report*. On this basis, no theorisation can take place. A detailed summary of the locations and materials located in the appendix of the report proves helpful, however. Of those licences granted at the time of publication in 1994, only six basalt quarries were located within metropolitan Melbourne: two quarries in Keilor, operated by firms McGrath and Barro; two quarries in Sunshine, operated by Boral and CSR; and two quarries in Campbellfield operated by Pioneer Concrete. A greater number of bluestone quarries were located within peri-urban and rural locales surrounding the city, concentrated largely within the areas of Werribee, Berwick, Melton, and Whittlesea.[524]

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[522] Ibid, 84.

[523] Ibid, 16.

[524] Ibid, 158.

As a consequence of its purpose in informing legislation, the *Report* takes on a nuanced character in the analysis of constraints on extractive industrial practices. These are not purely economic and environmental in nature, but also social: a major limiting factor for urban quarries.[525] Considerations of urban growth are key, and a sub-section of the report is devoted to this, as it presents a considerable challenge for the securing of extractive industrial land where competition is felt from urban expansion.[526] Existing growth on the urban fringe is viewed as 'sterilising' land consisting of high-quality stone, effectively preventing the extraction of that material permanently; as such, this growth should be curtailed so to minimise this 'sterilisation.' The Environment and Natural Resource Committee considered this an oversight to be remedied in future determinations of the city's growth patterns, and argues that growth must be 'steered' away from areas where extractive resources were known to exist.[527] The encroachment of the city upon existing quarries would also be to the detriment of the site's after-use as the common solution of tipping would be incompatible with residential use, as noted in one submission to the Committee.[528] Tipping, particularly in these peri-urban and urban locales, would create unpleasant odours, attract vermin, and generate traffic and noise.

The undertakings of the Committee highlight the absence of investigations into urban quarrying in decades prior: although future development issues were being anticipated, there was an absence of detailed discussion to this degree on the urban quarry, likely contributing to the contested and complex post-industrial outcomes discussed in Chapter Eleven of the *Report*, 'End-Use.'[529] This topic was included in the *Report* due to its presence in an unspecified 'large' number of submissions to the Committee. The chief concern in the community pertained to the rubbish tip as a mode of

[525] Ibid, 33.

[526] Ibid, 35.

[527] Ibid, 36.

[528] Ibid, 39.

[529] Ibid, 113.

resolving the quarry site; this solution was deemed an 'unsatisfactory final reclamation' in the report as it merely served to prolong the unpleasant effects of quarrying in another form. Although tipping could be perceived as an ideal interim use by landholders and refuse disposal groups, ultimately facilitating the rehabilitation of a site and allowing its use for recreation or parkland, poor management would only prolong tips' lifespan, and fail to achieve the desired final outcome. The Committee stated it could not contend that putrescible waste tipping was ideal—rather, in its consideration, it comprised a '"worst case" end-use'—and that the rehabilitation of a quarry site could be undertaken without using waste or refuse for fill.[530] It additionally stated that the end-use of a quarry was generally considered 'only in the abstract' during the approval process, its inclusion within the terms of the Extractive Industry Licence only given 'token attention' with 'very little control or certainty.'[531] The full condition is outlined as follows:

> Within 90 days of being so requested in writing … the licensee shall lodge a satisfactory proposal for the final reclamation of the licensed area. The final proposal shall include timetables and programmes of any proposed landfill operations and for final removal of all plant, buildings, equipment, stockpiles and rubbish from the site in order to leave the area in a neat and tidy condition.

The proposal for the re-use of the tip could be altered without public notification, contrary to the transparent nature of land-use planning more generally, given that any amendments to the planning scheme or legislation must be made known to the public.[532] Recommendations outlined in the Report suggested a more comprehensive strategic planning approach to the resolution of quarry sites, motivated by the interests of refuse disposal groups as well as the community more broadly.

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[530] Ibid, 114-5.

[531] Ibid, 114.

[532] Ibid, 115.

These sites would become the ongoing responsibility of the Responsible Authority best poised to manage the site, a vague recommendation at best. In order to permit works enabling the quarry's after-use, the EIL would need to be cancelled, further highlighting the insufficiencies of the existing 1966 *Act.* Under this legislation, simultaneous quarrying and filling could not take place, a best-practice approach that would decrease the time taken to remediate the site and thus reduce the burden of re-use on the local community.[533] Again, however, the 1994 *Report* and recommendations were made too late for some sites: it is acknowledged in the *Report* that a number of urban bluestone quarries have been left in a state 'not useable by the community,' and difficult to rehabilitate.[534]

The recommendations of the 1994 *Report* were enshrined within the *Extractive Industries Development Act 1995*, superseding the 1966 *Extractive Industries Act*. The consideration of urban quarries in the 1995 *Act* shifted from concerns relating to their operation to the rehabilitation of these sites.[535] The 1995 *Act* states that one of its main purposes is to ensure 'the rehabilitation of quarried land to a safe and stable landform,' with the later clarification that it must be 'visually acceptable.'[536] Section 17 of the 1995 *Act* addresses rehabilitation plans for quarry sites in far more detail than the 1966 *Act*, albeit with demonstrable weaknesses outlined in a consultant report authored by Peter Day: the bond system is viewed as a barrier to entry for smaller quarry operators, disrupting the flow of capital.[537] Clauses 31 through to 37 in the 1995 *Act* encouraged the rehabilitation of the quarry during its operation, with a Rehabilitation Plan necessary for areas exceeding two metres in depth and five hectares in surface area. This would include the detailing of

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[533] Ibid*,* 116.

[534] Ibid*,* 117.

[535] Peter Day Consulting, *National Competition Policy Review,* 1.

[536] *Extractive Industries Development Act 1995* (Vic), s 20, 1785.

[537] Peter Day Consulting, *National Competition Policy Review*, v.

concepts for its after-use, considerations of landscaping and terraforming for stability and safety, and proposals of the logistics entailed in rehabilitating the site.[538]

Special characteristics of the landscape would also be taken into account alongside the need to protect native flora or fauna.[539] The applicability of this to sites of a specific size overlooks smaller quarrying operations. However, the limited number of urban quarries still functioning at time of publication, 2001, occupied much larger sites given the consolidation of quarrying operations in decades prior. Their location on the former urban fringe allowed for their expansion over a number of decades. These sites, and their after-use, are noted in the table below, with landfill sites operational in 2019 highlighted in red:

Quarry operator	**Location**	**Operational in…**			**After-use**
		1977	**1994**	**2018**	
Barro Group	Sunshine Avenue, Kealba	Y	Y	N	Proposed private landfill.
	Spring Plains Road, Werribee	Y	Y	Y	Continued operation.
Blue Metal Quarries Proprietary Limited	Cooper Street, Epping	Y	N	N	Public landfill (City of Whittlesea Tip). Filled and presently operated by Aurora Construction Materials. Stone is sourced elsewhere and processed on site.
Boral Resources (Vic) Pty. Ltd.	Princes Highway, Berwick	Y	N	N	Redeveloped as public open space in 1992, Wilson Botanic Park.
	Riding Boundary Road, Deer Park	Y	Y	Y	Remediation during operation —simultaneous landfill (purchased from Boral in 2015 by Cleanaway). Presently 'Melbourne Regional Landfill.'
	Harvest Home Lane, Epping	Y	Y	Y	Continued operation.

[538] *Extractive Industries Development Bill 1995 : Explanatory Memorandum* (Vic), 3.

[539] *Extractive Industries Development Act 1995* (Vic), s 32, 1792.

Quarry operator	Location	Operational in…			After-use
		1977	1994	2018	
	Sunbury Road, Bulla	Y	N	N	Remediation during operation—simultaneous landfill (BTQ Group Pty Ltd). Closed in 2018 for failing to meet EPA guidelines.
	'Fowler's Quarry', Florence Street, Niddrie	Y	N	N	'Valley Lake' housing estate.
	'Bayview', Quarry Road, Narre Warren North	Y	N	N	Used as regional tip managed by City of Berwick and utilised by five other municipalities. Filled and remade as public open space, Bayview Park.
	'Regal', Duke Street, Braybrook	Y	N	N	Under ownership of Pace Development, partially-completed housing estate.
Consolidated Quarries Limited.	Sunbury Road, Bulla	Y	Y	N	Private landfill (Hi-Quality Group).
	Old Geelong Road, Brooklyn	Y	N	N	Previously public landfill (City of Sunshine Tip). Presently private landfill (Cleanaway Brooklyn).
Construction Materials (Aust.) Pty. Ltd.	McKimmies Road, Bundoora	Y	N	N	Private landfill (GB Landfill Pty.).
Holcim Australia	Wests Road, Werribee	Y	Y	Y	Remediation during operation—simultaneous landfill. Previously operated by CSR Building Products. Public operation by Wyndham City Council.
Kontrachet Pty. Ltd.	McArthurs Road, Altona North	Y	N	N	Private landfill (Masalkovski Group).
Mountain View Quarry Pty. Ltd.	'Wheelahan's Pit', Duke Street, Sunshine North	Y	N	N	Under ownership of Pace Development, partially-completed housing estate.
McGrath Sand & Stone Co. Pty. Ltd.	Duke Street, Sunshine North	Y	N	N	Under ownership of Pace Development, partially-completed housing estate.
Pioneer Quarries (Vic) Proprietary Limited	Cooper Street, Epping	Y	Y	Y	Remediation during operation—simultaneous landfill. Privately operated by Alex Fraser Group.
Riverview Quarries P/L	Avondale Heights	Y	N	N	Shallow gravel operation. Graded and remade as public open space.

Quarry operator	Location	Operational in…			After-use
		1977	1994	2018	
Stanley Quarries P/L	Market Road, Brooklyn	Y	Y	N	Private landfill (Cleanaway Brooklyn) c. 1992. Filled and capped. Site now closed.
Unknown operator	Bunting Road, Brooklyn	Y	Y	N	Private landfill (Western Land Reclamation Pty Ltd (WLR) and Sunshine Groupe). Suspended in 2018 for failing to meet EPA guidelines.

Table 4.2: Quarries and their after-uses, compiled following site visits.

Urban concerns identified in Day's discussion necessitated a rethinking of after-use outcomes for quarry sites. He notes that demand, technology, management, landowners, and extraction techniques can each affect the viable outcomes for quarry sites.[540] The degree to which a quarry is worked out, for example, is one factor which can facilitate or problematise its after-use as a park or intermediary tip. The local community is another major factor identified in this thesis, capable of mediating site outcomes; however, where this factor is dominant, after-uses are generally skewed towards more environmentally and socially-conscious land-uses, as exemplified by this thesis.

4.11 Strengthening frameworks for quarry rehabilitation

The rehabilitation of a quarry site is subject to the *Environment Protection Act 1970* which broadly governs the rehabilitation of industrial land. This addresses common after-effects of industrial activity such as pollution, noise, waste disposal, and resultant environmental hazards.[541] The total failure to rehabilitate a site is not discussed in this thesis given that no such site exists in urban Melbourne; even the long-stagnant Sunshine North quarry complex, in the middle-ring western

[540] Peter Day Consulting, *National Competition Policy Review*, 29.

[541] *Environment Protection Act 1970* s 62(A).

suburbs of Melbourne, has been subjected to numerous development proposals and is now the site of a housing estate not dissimilar to the Niddrie case study.

Day identifies only two negative effects of the failure to rehabilitate.[542] The first is that an abandoned quarry would pose a hazard. The second is more detrimental to the landholder, however, lacking the flexibility to develop an abandoned site, particularly within a short-term period to best capitalise on market conditions. The former issue could be remedied with signage and fencing, but the identification of the landholder or lessee responsible for doing so would pose a challenge. Resolving the complex status of what constitutes 'abandoned' is problematic in the sense that the rehabilitation bond system exists to displace the burden of rehabilitation from the community—via the state—onto the landholder. However, despite the view that the landholder is fundamentally responsible, the Minister continues to possess the power to rehabilitate an abandoned quarry site if necessary, particularly where no action has been taken. This exacerbated the already-difficult circumstance of abandonment by clouding the division of responsibilities and removing any incentive for rehabilitation. The firm would incur a debt to the Crown in such circumstances, a criminal offence in and of itself, however; a more robust punitive action than a Ministerial order to undertake rehabilitative works.[543]

Although beyond the temporal scope of this work, new directives for the rehabilitation of quarry sites were discussed in a Regulatory Impact Statement published in December 2009 by a new responsible body, the Department of Primary Industries. This anticipated proposed regulatory framework—the *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2009*—considered that the 1995 *Act* would be repealed on January 1, 2010, the *Mineral Resources (Sustainable Development) Act 1990* taking its place to regulate both mining and extractive

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[542] Peter Day Consulting, *National Competition Policy Review*, 33.

[543] *Extractive Industries Development Act 1995* (Vic), s 36, 1795.

industries. The existing regulatory framework linked to the 1995 *Act*, *Extractive Industries Development Regulations 2007*, would also expire in 2010, warranting the proposal of new regulations in the Statement.[544] Although the new regulations were to remain largely the same, some changes were proposed such as the inclusion of a community engagement plan within work plans, and greater regulation of occupational health and safety, perhaps acknowledging the community-led conflicts of the past. The need to better address these aspects comes as a consequence of urban encroachment, highlighted early in the Statement. This is more relevant to operational quarries on the urban fringe, however, rather than those urban quarries which had historically experienced this, which are acknowledged in the concluding chapter of this thesis.

However, relevant to historic urban quarries—and most especially those not rehabilitated, whether at all or merely to an inadequate state—is the discussion of what takes place on such sites. The Statement includes a small section on the 'Failure to rehabilitate' and considers carefully the risk of trespassing where quarries are in close proximity to settlement.[545] Their visibility may entice curious members of the public to access the site through inadequate or poorly-maintained fencing.[546] This is seen as problematic for both operational and abandoned quarries, but much more likely in the case of the latter, as operational sites are held to strict licence conditions. Abandoned sites may also have been rehabilitated in the past to an outmoded framework. The statement notes the 1983 case of a teenage girl who drowned in a flooded quarry hole.[547] International precedents are also cited to demonstrate the risk of quarries to the public: one incident in Britain, in 2007, where a girl playing in a quarry was killed by a large stone, and a 2009 accident in North America whereby a teenage boy fell while climbing rocks in a quarry, sustaining severe injuries. Although

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[544] *Extractive Industries Development Regulations 2007* (Vic)

[545] Department of Primary Industries*, Mineral Resources (Sustainable Development) (Extractive Industries), December 2009, Regulations 2009 Regulatory Impact Statement* (Melbourne: s.n.), 43.

[546] Ibid, 44.

[547] Ibid, 45.

these events are not common, the Statement notes the 'consequences are high' if disused quarries and ease of access coexist.[548] In order to mitigate the potential risk of death or injury on such sites, the landscape must, it says, be reformed to return the landscape to a 'safe, stable' state in the interests of public safety and amenity.[549] The Statement did not distinguish the number of quarries which have not undergone rehabilitation, only noting that there were 910 sites state-wide necessitating rehabilitation, with 240 sites rehabilitated to a 'legacy' state failing to meet modern standards.[550] The Statement also notes that bonds to a value of $64,883,648 were held by the state government at time of publishing, a sum inadequate to allow for the rehabilitation of *all* disused quarry sites across Victoria. Greater intervention by the state government through the strengthening of the regulatory system is thus the core interest of this Statement, and those changes to legislation guided by it. The establishment of a more robust legal framework to ensure the licence holder undertakes rehabilitative activities would reduce the fiscal burden on government whilst simultaneously overcoming the inadequacy of market mechanisms. This is enshrined within contemporary legislation—the *Mineral Resources Development Act 1990* and the related *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2010*—which emphasise rehabilitation, community engagement, and penalties for failing to comply with statutory requirements.[551]

Although comprehensive, such legislation came far too late to curtail the extent of urban bluestone quarrying operations in Melbourne's western suburbs, as well as to comprehensively coordinate the rehabilitation and re-use of quarry sites in line with community values and expectations.

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[548] Ibid, 47.

[549] Ibid, 49.

[550] Ibid, 52.

[551] *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2010* (Vic), schedule 1, 20.

4.12 Chapter conclusion

Exploring the legislation and policies coordinating the establishment and operation of quarries provides a context for how urban planning for quarries took place. What it further reveals, and what is particularly compelling, is the almost complete neglect of coordinating the after-use of quarry sites for approximately one hundred and fifty years following settlement. Both legislation and strategic policies were more concerned with the potential sterilisation of extractive resources than the identification of an appropriate post-industrial use. Determining an after-use for quarried land was consequently not a well-coordinated or planned effort, whether undertaken by state or local government; rather, convenience determined the use of these sites for tipping, discussed within the following chapter. Mechanisms to control extractive industrial operations have been implemented too late to mitigate many undesirable effects on Melbourne's urban landscape. Consciousness of urban encroachment has only been enshrined within legislation in recent decades, well beyond the operational years of urban bluestone quarries, failing to curtail the uncomfortable relationship between extractive industrial and residential land-uses.

The inadequacy of legislation, coupled with weak strategic planning, resulted in a strong reliance upon landfill to resolve the large voids remaining after bluestone extraction. The historical basis for this is explored within the following chapter.

Chapter 5 Tipping as a default after-use for quarrying

5.1 Chapter introduction

The disposal of refuse has long burdened cities, with effluent, smell, and the threat of disease colouring the tip as an undesirable land-use. Yet, the act of rubbish disposal was also vital for the resolution of difficult landscapes. This chapter explores the historic context for tipping in Melbourne. Following the completion of quarrying operations, the urban landscape would leave a void. Although self-evident, the size of such sites increased in tandem with the further development and intensification of extractive industrial operations. These sites were particularly well suited to the reception of refuse, filling and restoring them to their original level. The urban tip was consequently a common land-use particularly in sub-regions of Melbourne where extractive industries existed. This chapter discusses the changes in their acceptance, or rejection, amongst community members, revealing shifting attitudes towards undesirable development.

The exacerbating factors of inadequate town planning policies and legislation pertaining to tip development and management are noted. Additionally understood is the response of government to residents opposing urban tips, recognising both the necessity of ensuring adequate and accessible spaces for refuse disposal whilst recognising and acknowledging the views of the constituency. This chapter serves to prime further discussion of the case study sites discussed in this thesis—Newport and Niddrie—both of which each owe their present state to the whole or partial rejection by the community of tipping following quarrying. The 1971 SDC *Report* on the disposal of refuse noted: 'the present and future availability of sites for controlled tipping is inextricably linked with the operations of extractive industries.'[552] This close connection necessitates historic analysis of tipping as a prominent default after-use for the quarry site, often a precursor to the development of public

[552] SDC, *Progress report of the State Development Committee on the disposal and/or destruction of garbage and other rubbish* (Melbourne: C. H. Rixon, Government Printer, 1971), 31.

open space; or, where absent in the instance of local community opposition to tipping, the context for a more creative and sensitive development solution.

5.2 Urban waste in early Melbourne

In the first six decades of Melbourne's existence, a considerable amount of household and commercial waste was produced. Its disposal often took place in an ad hoc and uncontrolled manner, in swampy or otherwise uninhabitable environs, or in desolate locales, or on undeveloped land. Noxious industries produced unpleasant by-products, and households nightsoil; unregulated waste disposal prompted the 1888 Royal Commission into Melbourne's sanitation. Commissioners undertook tours of Adelaide and Sydney to derive some insight into the methods employed in neighbouring colonial capitals.[553] Of interest were slaughterhouses, noxious industries, modes of sewerage disposal, and the collection and treatment of refuse. Tips were said to be 'vacant and usually low-lying ground within the metropolis.'[554] The Commission's stance, so early in the city's existence, recommended the abolition of tips, exhibiting a preference for destruction through incineration, evidently informed by the Commission's visit to Sydney, where this method was widely employed. Yet the suggested shift away from tipping fundamentally came to naught, initiating instead a century-long tension between the urban tip, adjacent communities, and the inadequacy of governance and town planning instruments in resolving these conflicting land-uses.

The Melbourne *Age* had established itself as the city's paper of record in 1854. In one of the earliest articles published in this newspaper on this topic, the tip is highlighted as a hallmark of an unsanitary city, albeit one which allowed for the 'filling up [of] hollow and swampy ground for building purposes.'[555] Such sites were seen as 'fever beds,' their ongoing putrefaction at odds with

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[553] Royal Commission to Inquire Into and Report Upon the Sanitary Condition of Melbourne, *Sanitary Condition of Melbourne : Progress Report* (Melbourne: Robert S. Brain, Government Printer, 1889), viii.

[554] Ibid, x.

[555] *The Age*, February, 7, 1889, 4.

the vision of the Central Board of Health, legislated into existence in 1855, to 'place this metropolis in the front rank of sanitary cities.'[556] The Board cited a lecture delivered in Bombay, India, on the practice of remediating landscapes through tipping: that the 'levelling up' of terrain through such means 'cannot be too strongly condemned.' The emergent awareness of the urban tip as an inappropriate practice spurred the Board on to ask its inspectors and officials to approach the land-use with increased vigilance, with an additional motivating factor of prosecuting and fining inspectors 'neglecting their duty': 'This ought to induce an impulse of efficacy all along the line.'[557] The article surmises this with a cautionary tale. This not only clarified the Board's new approach, but also acts as a metaphor foreshadowing the state of town planning, for both quarry and tip alike:

> In the old nursery story the pig remains obstinate until forced to move by the biting of the dog, who in his turn has been roused to action by a preceding train of agencies.[558]

An early bluestone quarry on the fringe of the city, known amongst founding residents of Melbourne as 'Fitz Roy Square,' proved controversial as residents of East Melbourne began to utilise it as a tip; this site was reclaimed and incorporated into the Fitzroy Gardens in 1864, reputedly designed by James Sinclair, who had previously undertaken design work in the Imperial Gardens of Tsar Nicholas I in St Petersburg two decades prior. [559]

Few progressive measures had been adopted to stem the impact of urban tipping in Melbourne's suburbs. The city's first brickworks, located proximate to the present Kings Domain gardens on St. Kilda Road, had become a tip site in the last decades of the nineteenth century: a surprisingly

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[556] Ibid.

[557] Ibid.

[558] Ibid.

[559] Recent research suggests the Fitzroy Gardens were in fact the product of work by Clement Hodgkinson (Georgina Whitehead, "Clement Hodgkinson: Naturalist and Landscape Gardener" (presentation, Clifton Hill, VIC, August 25, 2009), Collingwood Historical Society, http://collingwoodhs.org.au/wp-content/uploads/clement-hodgkinson.pdf); Mary-Louise O'Callaghan, "A home in wonderland," *The Age*, November 30, 1982, 21.

central location for such an 'eyesore,' yet necessary to alleviate the aesthetic impact of clay quarrying so close to both the city and its 'finest approach.'[560] Restitution of past quarrying activity thereby took place not only in the 'reclamation' of the site through tipping, but also in the placement of vegetation so to beautify the space following the discontinuation of operations, and the subsequent re-use of the land for more harmonious purposes.[561]

5.3 Developing a dependency upon tipping

The city's 'sins against sanitation' contextualised the township as one with poorly-enforced mechanisms and infrastructure necessary to ensure a high level of hygiene. Internationally, tips were not viewed in a positive light, and Melbourne was no exception, particularly in light of the city's suburban boom period of the late nineteenth century. Strong opposition to urban tipping was apparent in the United States of America, and this was cited in communications of the Victorian Central Board of Health in discussions of local tips.[562] This included the statement that: 'it seems unaccountable that the City of Melbourne and the suburban municipalities should continue year after year to outrage the principles of true sanitation by forming "tips".'[563] An opinion piece published in the *Age* in 1890 denounced municipal tips for their inclusion of 'decaying animal and vegetable matter, which when accumulated… quickly becomes most offensive and gravely dangerous to public health.'[564] The anonymous author cites in comparison the '"Municipal Square Mile" of Calcutta', India, and its 'offal-loving insects.' Although the author did not suggest that Melbourne's tips were of this same poor standard, they concluded: 'The principle is the same in

[560] *The Age*, November 2, 1899, 4.

[561] Ibid.

[562] "Melbourne, Wednesday," *The Age*, August 10, 1887, 4.

[563] Ibid.

[564] "The Desiccators Sites Questions," *The Age*, June 7, 1890, 4.

Calcutta and in Melbourne. The lesson is that municipal tips should be swept off the face of the earth, and the one thing to supply their places is desiccators.'[565]

From the 1850s through to the conclusion of the nineteenth century, the Government's Department of Sewerage and Water Supply had sought to improve public health standards through the creation of a water supply network, drawing from the Yan Yean catchment; the MMBW had concurrently preoccupied itself with sewerage and drainage infrastructure, largely in response to thyroid and like water-borne diseases.[566] Perhaps, in comparison to these vital forms of infrastructure, the tip suffered from an absence of attention: novel solutions did little to alleviate the pollution and similar unpleasantries experienced by nearby residents, and more frequently addressed the inadequate disposal of nightsoil rather than household, commercial, or industrial refuse.[567] Inspections conducted by officers of the Board of Public Health only presented recommendations to municipalities to remedy some inadequacy in their tipping activities. In the inner-eastern suburb of Richmond, dominated by secondary sector industry and small homes for the working class—and, in a significant portion of the suburb, slum environs—refuse on the street, blown about by wind, was so significant that two rubbish tips were ordered closed.[568] Evidently there was little impetus to instil particular controls upon tip sites that, sixteen years later, the quarry-tips of Richmond had yet to rectify 'obnoxious odours.'[569] Destructors were built over the following decade in many Australian cities, with refuse burnt in large kilns, rather than buried in the ground; these were also

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[565] Desiccators, like quarries, were subjected to urban conflict. Prior to the development of sewerage infrastructure, 'nightsoil,' or human waste, had been collected nightly and disposed of outside of the city; desiccators were proposed as solution, albeit with minimal uptake given opposition. Desiccator machines were utilised to beat waste substances into powder for use as fertiliser, negating the deposition of nightsoil. This process was abandoned by the early twentieth century (Elizabeth Jean Taylor, "The 'desiccator difficulty': surprise, indignation and the local politics of planning for sanitary technology in nineteenth century Melbourne," *Planning Perspectives* 34 (2019: 1-23, doi: 10.1080/02665433.2019.1578252).

[566] Similar undertakings by the Board of Works in London were said by Professor William Henry Warren, engineer of the Board of Works, to have decreased the death rate in English and subsequently cause a decline in incidences of communicable diseases (*The Age*, January 25, 1892, 4).

[567] RCIIRUSCM, *Sanitary Condition of Melbourne : Progress Report : Appendices*.

[568] "A Destructor for Richmond," *The Age*, February 7, 1890, 7.

[569] "Richmond Rubbish Depot," *The Age*, April 21, 1906, 14.

referred to as incinerators. This method of refuse 'disposal' attracted ire not dissimilar to the tip itself: in one letter written to the Adelaide *Advertiser*, 'RATEPAYER' argues that 'the soot and ashes float over the whole adjacent neighbourhood, and when one realises of what that residue is composed the visitation is doubly unpleasant.'[570] Similarly, A. L. Calder wrote to the same publication arguing that the destructor was presented as 'the essence of purity' to the public, given the absence of putrefaction and its associated aesthetic and olfactory unpleasantries; yet, its situation within an urban setting also brought about a sense of discomfort.[571] Similar problems were apparent in Sydney where the city council decreed that, rather than installing a destructor, rubbish should be 'deposited, mixed with soil, a considerable distance from the city by tram or rail' until technology could be bettered.[572]

Public health and sanitary concerns further led the development of new methods of waste disposal, responding to past problems resulting from the absence of infrastructure in early colonial settlements.[573] Fear of typhoid additionally forced some rethinking of the open-air tip; the disposal of infected mattresses in the Denmark Hill precinct of Camberwell was believed to spread illness not through the final location of the material but rather, in cartage through the suburb en route to disposal.[574] West of the city, adjacent to the Maribyrnong River, cattle roamed freely in tip-sites. This was said to reflect poorly on the BPH in that it had failed to ensure that the milk cows, 'which waddled in the filth of the tips,' would not be sold to the public.[575] Similar issues were apparent in South Yarra where cows grazed at a 'filthy rubbish tip,' seen to contribute to supposedly 'filthy

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[570] *The Age*, August 24, 1910, 15.

[571] *The Adelaide Advertiser*, May 8, 1908, 7.

[572] "Disposal of city garbage," *The Age*, January 24, 1899, 5.

[573] Open-air tips were especially problematic in the Australian context given the high average temperatures in summer expedited the decomposition of organic matter (*The Age*, January 25, 1892, 4).

[574] *The Age*, March 21, 1890, 5.

[575] "Northern approaches to the city," *The Age*, January 30, 1902, 6.

milk'—that is, of a poor quality or taste—later sold on to customers.[576] It was seen as the responsibility of health authorities to control such matters. These issues, however, were minimal compared to those experienced in Sydney at the time.

In a 2002 University of Adelaide doctoral thesis, Phillip Nicholls explored the contrasts apparent between Sydney and Melbourne in terms of the preferred methods of waste disposal.[577] Tipping initially took place in The Rocks, albeit in a manner indicating it to be opportune and ill-considered: night soil was similarly disposed of on vacant land, or into the sea. Whilst the former method was resolved with the implementation of a sewerage system, the latter continued, alongside the rapid uptake of the incinerator. The bubonic plague had taken hold in Sydney a number of times at the cusp of the twentieth century and had prompted consideration of new methods of disposal not entailing the use of landfill, which would have been accessible by rats. As such, the common use of the destructor—or incinerator—in Sydney contrasts with its comparative absence in Melbourne. Nicholls again has formed a timeline of the adoption of this method of refuse destruction which contextualises its use and lack thereof: the technology had significant uptake in the United States and United Kingdom, with up to 180 and 300 incinerators respectively. Melbourne had a total of five incinerators throughout the early to mid-twentieth century, in Spencer Street, Melbourne; Dynon Road, West Melbourne; South Melbourne; Fitzroy; and Prahran. These were based on the findings of the City Surveyor of Prahran, William Calder, who had undertaken an international tour in 1907 to identify best-practice methods of refuse disposal.[578] In the 1930s, renewed enthusiasm arose for the incinerator which came from Walter Burley Griffin's involvement in the Reverbatory Incinerator and Engineering Company. Griffin was the architect of twenty incinerators, of which

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[576] "News of the Day," *The Age*, December 29, 1910, 6.

[577] Nicholls, "A Review of Issues," 132-150.

[578] Ibid, 167.

sixteen were constructed nationally.[579] Nine of these were in New South Wales. Melbourne differed significantly to Sydney in that its sanitary crisis predominantly was one of water, sewerage, and drainage; Sydney's experience of the bubonic plague, in contrast, prompted the incineration of refuse as the most ideal method for rubbish disposal despite its markedly increased cost. In the late 1920s and early 1930s, a total of thirty incinerators were built in Sydney (see Figure 5.1).



Figure 5.1: Pyrmont Incinerator, 1938 (City of Sydney Archives, CRS 43).

Epidemics in nineteenth-century Melbourne provided the impetus for large-scale sewerage infrastructure provision by the MMBW: typhoid and similar diseases were addressed by responsive sewerage infrastructure construction programmes, such as that undertaken in London, Adelaide, and Sydney.[580] Yet, threats to public health from tips did not command such a response.

5.4 Early criticism of urban tipping

> Melbourne ought to be one of the healthiest of cities. … A little prudence and foresight on the part of the civic authorities in the past would have spared us may of the ills we have

[579] Ibid, 168.

[580] Buxton, Goodman, Moloney, *Planning Melbourne.*

now to bear.[581]

— Dr. Dan Astley Gresswell, 1892.

The issue of the urban tip attracted the ire of Dr. Dan Astley Gresswell, medical inspector of the BPH. Gresswell had been appointed in 1889 to oversee the development and enforcement of the *Public Health Act 1889*.[582] This *Act* provided the basis to convict landholders or individuals responsible for noxious activities where they comprised 'a nuisance' or were 'injurious to health.'[583] Gresswell's experience in the medical and sanitary sciences placed him in good stead to critique the presence of tips in Melbourne, as well as the city's poor sanitary standards more broadly. He compiled a report published in the *Age*.[584] It contained a number of salient observations on the dangers of tipping in close proximity to, or within, inhabited areas. He stated that the 'common tip … must be abolished,' and in lieu of this mode of refuse disposal, rubbish must instead be 'destroyed by fire.'[585] The tip was described as a 'belated and disgusting system of making acres and acres of open cemetery in the vicinity of population' fostering large numbers of vermin capable of spreading disease; a 'risk that should not be tolerated for one moment.'[586] Nevertheless, with this risk came the remediation of the landscape, 'reserves such as parks, swamps, and lands which needed to be raised for making streets and building sites.'[587] Edinburgh Gardens, in Fitzroy, and

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[581] *The Age*, January 25, 1892, 4.

[582] Dan Astley Gresswell, *Board of Public Health : Report on the Sanitary Condition and Sanitary Administration of Melbourne and Suburbs* (Melbourne: Robert S. Brain, Government Printer, 1890), 6.

[583] *Public Health Act 1889*, 18.

[584] Diana Dyason, "Gresswell, Dan Astley (1853–1904)," Australian Dictionary of Biography, n.d., http://adb.anu.edu.au/biography/gresswell-dan-astley-6481; "The "Tip" Nuisance," *The Age*, February 27, 1902, 6.

[585] "The "Tip" Nuisance."

[586] The use of the term 'cemetery' is fascinating given the perspective of the Board on these spaces was not dissimilar to their view of tips: that is, the metropolitan cemetery was considered equally dangerous to public health as the common tip, warranting its closure and removal from urban areas on sanitary grounds ("Local News," *The Age*, August 14, 1914, 5).

[587] Gresswell, *Board of Public Health : Report,* 11.

swampy land in North Melbourne, were both said to have benefited from this and were subsequently developed as public open space.

This risk was heightened at the turn of the century during which typhoid proved common. The bubonic plague had recently been identified in Sydney with five cases near Pitt Street.[588] Previous outbreaks in Melbourne in 1900 had resulted in the redirection of organic matter to the destructor, but this practice had been discontinued, with regular tipping resumed by 1901. As a component of the Gresswell report, Assistant Medical Inspector to the Board of Public Health[589] Dr. William Perrin Norris had been instructed to write on his observations of a private tip located in West Melbourne. Norris had attended the tip site between 9 pm and 11 pm on the 24th of February, 1902; he observed putrefying animal and plant matter—scraps of fruits and vegetables, sheep skins, and rabbit heads—scattered indiscriminately across deposits covering vast acres, abutting the Moonee Ponds Creek and its confluence with the River Yarra. Scrap metal and tin housed large numbers of vermin including, but not limited to, cockroaches and rats. This had brought large numbers of rat catchers to the site who received payments from the local municipality for each rat captured and killed, between 200-400 per week; however, Norris states, the vermin proliferated 'faster than they can be destroyed.'[590]

Norris followed this visit with an excursion to the municipal tip utilised by the City of Melbourne. The two tips did not differ significantly, with a 'sickening effluvia emanating' from the municipal site; a bordering nearby sewer ditch was filled with the myriad fluids of decomposition. Little other use could be found for the rotting organic matter that contributed greatly to the unpleasant smells and sights of the tip. Scavengers would pick saleable elements from the refuse: paper mills acquired

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[588] "The Bubonic Plague : The Outlook in Sydney," *The Age*, February 27, 1902, 6.

[589] The Central Board of Health was replaced with the Board of Public Health in 1889. The Board is hereafter referred to as the BPH.

[590] "The "Tip" Nuisance."

rags, and bottles and metals were sold to the 'marine store,' an early incarnation of recycling seen as part of a 'rational and sanitary system of disposal.'[591] Another municipal tip in Kensington exhibited similar issues, also draining into the nearby Moonee Ponds Creek. The conclusion derived from these observations was that the spread of disease could not be adequately controlled, necessitating the use of a destructor to burn organic materials, or the covering of refuse with a mixture of lime and tar followed by a layer of earth. The issue was discussed at meetings of the Melbourne City Council on the day of publication, with tipping the recurrent 'King Charles head'[592] that 'obtruded itself at unexpected junctures' during municipal talks.[593] Increases to town rates were proposed in order to subsidise stricter garbage disposal systems and improve adherence to these measures, with a destructor already installed but uneconomical. The council aldermen collectively argued against funding the renewed operation of a destructor—owing to the perceived need to reduce rates—stating that they believed the tips to be largely composed of 'old iron and tin scraps.' Councillor Pleasance countered his colleagues' view, however: 'Was it iron that the health inspectors saw running about?'[594]

Gresswell continued his campaign against the Melbourne's tips throughout the following month. Articles on the matter were consistently featured in the *Age* in which Gresswell clarified he 'had the issue at heart.'[595] The destruction was not only observed in his study and experience as best practice in England, but also Europe and America more broadly; Gresswell knew of no other city with such a sizeable populace that continued to rely upon tipping for the disposal of refuse.[596] Further still, the City of Melbourne's practices functioned as instructive examples to smaller municipalities

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[591] Ibid.

[592] A Victorian era term akin to *idée fixe.*

[593] "The Garbage Nuisance," *The Age*, March 1, 1902, 12.

[594] Ibid.

[595] "Disposal of garbage," *The Age*, March 27, 1902, 6.

[596] Ibid.

elsewhere in the metropolis. International precedents continued to be discussed in 1904, following Gresswell's death, by his successor Dr. Burnett Ham.[597] Ham cited examples of tips in Germany where the disposal of refuse had been 'reduced to a fine art or an exact science,' with goods remade as toys or other objects; by association, in Adelaide, a compressor had been installed in order to condense metal materials into cubes with a hydraulic press, which could then be stored and exported to Germany.[598] There was a growing awareness amongst public health advocates that the ills of the tip could become economically valuable: the furnace within a destructor, for example, could produce enough steam to generate electricity through a turbine, potentially lighting the city. By 1911, the destructor was considered an ideal solution for all municipalities in Melbourne and regional cities of Bendigo, Ballarat, and Geelong. An order was made by the BPH to ensure that, by 1914, all municipalities would cease to deposit rubbish in open tips; few of the 32 municipalities in question complied with this order, citing the economic burden of instituting and maintaining a destructor.[599] Despite strong directives from the Board, tips continued to operate: there was little legislative basis or economic incentive to force municipalities to cease these activities. The issues witnessed over a decade prior in the City of Melbourne tips continued to take place; one located in Holmes Road, within the northern suburb of Moonee Ponds, was termed 'The Rattery' by nearby residents who agitated for the Board to visit the site and observe the dangers it posed.[600] In outlying Dandenong, a tip was reportedly in such an unsanitary condition that it was 'sickening,' and it was suggested an employee should be installed to enforce the disinfection of organic materials prior to disposal.[601]

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[597] "Death of Dr. Gresswell," *The Ballarat Star*, December 12, 1904, 1.

[598] "News of the Day," *The Age*, August 13, 2010, 10.

[599] "News of the Day," *The Age*, May 30, 1913, 8.

[600] "Essendon "Rattery," *The Age*, August 8, 1914, 4.

[601] "An Insanitary Rubbish Tip," *The Age*, February 25, 1915, 8.

Many residents felt that they should be rewarded for tolerating land-uses so unpleasant. In St. Kilda, the proposal to create an amusement resort noted that residents believed that they had 'suffered the nuisance of the tip' for so long that they should 'have the full benefit of the reserve when it was transformed into an attractive resort.'[602] This demonstrates an early expression regarding entitlement to a newer, more pleasant land-use through the quiet tolerance of its preceding use—a sentiment which rears its head in later redevelopments of quarry and tip sites. Progress Associations, established in suburban areas, began to vocally oppose the continued operation of tips, with the West St. Kilda Progress Association prompted by the complaints of local residents to create a petition urging the local council to abolish the tip.[603] Another example was an Association established in South Caulfield in order to close the tip adjacent to Princes Park, following the failure of the local council to respond to a previous community-led movement.[604] In the case of St. Kilda, however, local government maintained an inconsistent perspective on sites blighting the suburb: although councillors were eager to describe a rubbish tip as a 'blot on St. Kilda', residents asked, 'By whom was "the blot" created if not by the Council?'[605] Previous administrations may have made decisions which successors may decry, yet still find necessary—fifteen years later, no solution had been found. The establishment of a destructor was said by local councillors to be difficult due to the absence of a suitable site for it, given strong opposition from members of the community proximate to potential destructor sites.[606] This took place against a background of enthusiastic development along the city's shoreline, with swamps in Elwood filled for the subdivision of the area for housing.[607] In Port Melbourne, the 'foul smells' of stagnant water in lagoons were

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602 "News of the Day," *The Age*, September 9, 1904, 4.

603 "The St. Kilda Tip," *The Age*, May 11, 1916, 8.

604 *The Age*, November 12, 1925, 6.

605 "News of the Day," *The Age*, September 18, 1917, 4.

606 "St. Kilda's Rubbish Tip," *The Age*, May 7, 1919, 10.

607 "News of the Day," *The Age*, March 31, 1905, 4.

considered a threat to public health requiring the infilling of lagoons by use as rubbish tips.[608] This demonstrates a general trend of terraforming unpleasant or unusable land surrounding the city for purposes more cognate to its emergent metropolitan character; an ongoing quality of the tip and evidently a rationale for its continued existence in urban environments throughout the remainder of the twentieth century. World War I provided the impetus to further the extent to which goods were recycled: wartime efforts and the scarcity of goods led to the establishment of a 'thrift department' of the Australian Red Cross.[609] Volunteers intercepted goods otherwise destined for rubbish tips, including tin, bottles, newspapers, and any objects otherwise salvageable; the funds were then directed to the war effort. Broken glass proved particularly lucrative, and Richmond City Council, in one instance, sold the rights to salvage broken glass for £6 and 1 shilling per week.[610]

5.5 Mismanagement and mis-use

In the early 1920s, very little in the way of proactive measures were in place to curtail the extent, and impact, of the urban tip. Repeated scenarios arose across the city, from Brunswick to Camberwell, Brighton, and Dandenong,[611] where inquiries made by local councils amounted to resolutions that the health inspector should report to the health committee.[612] In West Preston, a bluestone quarry-turned-tip gave off so much 'smoke and stench' from the self-ignition of refuse that it had come to be known as 'Preston's Volcano.'[613] A resident of the Burwood district also

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608 "Port Melbourne Lagoon," *The Age*, February 16, 1918, 15.

609 "The Red Cross : A Splendid Record of Work Done,", *The Age*, October 2, 1918, 11.

610 "Money in Broken Glass," *The Age*, October 8, 1918, 6.

611 In the context of suburban growth, it was opined by a nameless author in the Age ("Our suburb," *The Age,* October 18, 1924, 21) that the city is 'an octopus whose tentacles keep growing … In the flight of suburbs some of them are pulled up by a swamp, some by sand hills or bush, and some that we could name rush speedily past rubbish tips and hold their aristocratic noses.' The same author continues: 'Run away from it as we please, it keeps pursing us.' With a land-use so necessary as the tip, there is little doubt that suburban areas could exist without a means to dispose of refuse, particularly given strong objections to the destructor. The underlies the distribution of tips throughout the city, both in suburbs traditionally working-class and those well-off.

612 "Brunswick Rubbish Tips," *The Age*, September 27, 1921, 8; *The Age*, October 16, 1924, 7.

613 "An objectionable tip," *The Age*, December 2, 1925, 15.

complained of 'vile odor' emanating from their local tip.[614] Burning was presented as a far more effective and sanitary solution, although a municipal tip in Clifton Hill gave off 'stench, smoke and fumes' from burning rubbish.[615] These instances exemplified the circumstances present in inner- and outer-suburbs alike.[616]

The indirect and bureaucratic approach of health inspectors fundamentally delayed any efforts to lessen the unpleasant side-effects of rotting refuse, let alone placate a population no doubt greatly irritated—if not harmed—by unpleasant smells and vermin. The former issue appears to have garnered little attention from the Health Commission, far more concerned by the rat problem; the actual public health effects of residing close to decomposing materials were rarely addressed.[617] In line with this, councils were ordered to remove rats from tip sites under regulations gazetted in 1921.[618] Were municipalities to shirk this duty, they would be prosecuted. Inspectors of the Health Commission were required to ensure satisfactory tip conditions; however, municipalities such as Port Melbourne simply responded to the claims of the inspector with their own view that the number of rats was 'not numerically abnormal,' indicating that measures enacted by the Commission were weak and incapable of forcing a resolution by the local council.[619]

Conflict additionally arose between councils where one reportedly felt 'abominable' effects of tipping within the jurisdiction of another; Footscray complained that the City of Melbourne tip on Dynon Road was of such low standard that it warranted inspection by the BPH (see Figure 5.2).[620]

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[614] "A municipal tip nuisance," *The Age*, June 23, 1921, 9.

[615] "An Offensive Municipal Tip," *The Age*, July 19, 1933, 12.

[616] "Prahran municipal "TIP"," *The Age*, May 12, 1887, 6; "Complaints About Tip," *The Age*, July 8, 1936, 15; "A Hawthorn Tip Complaint to Health Authorities," *The Age*, March 10, 1931, 9; "An Offensive Tip," *The Age*, April 11, 1935, 12.

[617] "News of the Day," *The Age*, October 18, 1921, 6.

[618] "Rat Infested Rubbish," *The Age*, September 28, 1921, 9.

[619] "The Port Melbourne Tip," *The Age*, November 4, 1921, 10.

[620] "A Rubbish Tip," *The Age*, March 11, 1925, 15.

Melbourne countered this claim with the assertion that they did not in fact operate a tip in that location, but rather, managed another tip site nearby in the West Melbourne swamp which was 'properly conducted.'[621] Likewise, a tip belonging to the City of Coburg, located on Moreland Road, was so poorly supervised that refuse was blown about into the Brunswick council area, warranting complaint from the North-east Brunswick Progress Association.[622]



Figure 5.2: West Melbourne Rubbish Tip (F. Oswald Barnett, Housing Investigation and Slum Abolition Board, 1935, State Library of Victoria).

A theme continuously emerges of inquiries into tip sites in metropolitan Melbourne: it is evident that the problems stemming from the tip fail to force the hand of state or local government to better control, or fully eradicate, the urban tip. What issues are identified—and which stem from the presence of large collections of organic and inert waste—are not addressed. Externalities which pose issues warranted recourse, however. Rats were one example, and people—particularly youth—were blamed for problems such as tip fires. A Footscray site was said to require better fencing to prevent young boys from igniting refuse for fun.[623] Similar problems were apparent in the eastern

621 "A Rubbish-Tip Nuisance," *The Age*, March 12, 1925, 15.

622 "Council's Tip Offends," *The Age*, October 15, 1926, 12.

623 "Boys to be Fenced Out of Rubbish Tip," *The Age*, July 2, 1925, 12.

suburb of Kew.[624] Similarly, decades later in an unspecified rubbish tip in North Fitzroy, the occurrence of four fires within as many weeks was attributed to spontaneous combustion, 'small boys at work,' or a vigilante who wished to demonstrate the hazard of urban tipping as well as their dissatisfaction with the tip's close proximity to housing.[625] A fascinating alternative history of the tip can be gleaned from newspaper reports of child scavengers, shootings, and tip fires.[626] Children frequently utilised tip spaces for exploration and play, highlighting both the ease of access to these sites as well as the entertaining qualities of the unusual landscape and accrual of refuse which formed such a contrast from more typical— rigid or controlled—urban spaces.[627] This demonstrated the quarry-tip to be an informal—liminal, fringe, and marginal—space, onto which the average citizen may trespass and carry out any activity of their choosing: it is also an environment which visibly communicated adventure to children, beyond the watchful eye of parents.[628] The very same qualities, however, allowed it to take on a much more unsavoury purpose. Documented assaults and murders also took place in quarries and tips, undoubtedly reflecting the undesirable character of such spaces; the infrequency of visitors, coupled with ease of access outside working hours, permitted criminal activities to occur largely unnoticed. Corpses were sometimes located by children exploring these sites.[629]

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[624] "Fires in Kew Tip," *The Age*, May 9, 1927, 17.

[625] Sunken land from quarrying and tipping operations affected surrounding residences. This was an issue entirely ignored by municipalities such as Brunswick, which claimed to have no control over the sale of land in such areas ("Brunswick Residential Sites," *The Age*, August 15, 1925, 14); "Mystery Fires at Tip—Residents' Resentment," *The Age*, December 13, 1950, 3.

[626] "Fruit on Rubbish Tip," *The Age*, March 8, 1938, p. 8; 'Old Victorian Schooldays', *The Age*, January 17, 1939, 13.

[627] "Boys Find Roll of Notes," *The Age*, July 11, 1950, 8; "9-lb BOMB found by group of boys," *The Age*, July 12, 1950, 5; "Boy, 4, Incinerated After Fall Into Burning Rubbish," *The Age*, June 6, 1957, 3.

[628] The use of the site by children fits with Rupprecht's assertion that transitory spaces caught between decline and revival can provide children "the chance to challenge themselves and to experience nature" (Christoph Rupprecht and Jason Byrne, "Informal urban greenspace: A typology and trilingual systematic review of its role for urban residents and trends in the literature," *Urban Forestry & Urban Greening* 13, no. 4 (2014): 603, doi:10.1016/j.ufug.2014.09.002). This is, understandably, met with much anxiety from parents.

[629] "Expected Here," *The Age*, January 2, 1950, 3; "Committed on Murder Charge," *The Age*, January 18, 1950, 4; "Car Tracks Clue in Rubbish Tip Death," *The Age*, January 26, 1950, 4; "Two Guilty in Case of Body Dumping," *The Age*, July 28, 1950, 7; "Demanded Money With Menaces," *The Age*, January 12, 1957, 3.

Residents of Fitzroy North stated that the local tip—less than two hundred metres from housing—attracted flies, rats, birds, and dogs, which 'fought and scratched for edible matter.' Fitzroy's City Engineer attempted to alleviate this dissatisfaction with the proclamation that the tip was merely a temporary—three year—land-use, pursuant to the conversion of the site: 'The quicker we fill it up … the quicker it can be made into parklands.'[630] The proposal of such a desirable land-use stymied criticism of the tip, with the Fitzroy Council maintaining that 'in view of the purpose it will ultimately serve … residents should be prepared to put up with the inconvenience for a short period,' akin to the events in St. Kilda.[631] This process of remedying a quarry as a tip was also advantaged by the absence of quarries in other municipalities: those lacking in suitable sites consequently utilised the tips established by other city councils, expediting the process of filling them so to achieve the desired after-use more rapidly, and with less intrusions upon nearby residents. However, public sentiment towards tips evolved from acceptance of this unpleasant necessity to outright discomfort and agitation. In the case of the tips occupying the low-lying marshlands of West Melbourne, residents of North Melbourne, as well as those travelling through the area via train, began to regard the tips as 'eyesore[s]' or 'attendant evil[s].'[632] Again, the inadequacies of the CoM and the BoH are highlighted in that both entities did no more than implore nearby households to take action to 'prevent the breeding of rats and flies,' an impossible directive. Further inaction was identified in Caulfield with residents calling for a 'healthy, progressive movement, such as the erection of a destructor' so that rubbish tips—'out of date, filthy in extreme, and only fly-incubating areas and rodent-breeding grounds, [which] should be abolished'—could be eradicated within the area.[633]

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630 "Mystery Fires at Tip—Residents' Resentment."

631 "Transformation," *The Age*, December 26, 1950, 2.

632 "A Foul Spot in North Melbourne," *The Age*, December 4, 1926, 22.

633 "Proposed Caulfield Destructor," *The Age*, March 18, 1927, 7.

In areas which lacked quarried land, tips were often co-located with parkland, or other spaces, generally low-lying, similarly perceived as under-utilised by the municipality. The diminishing tolerance for this practice is revealed in the protests to the South Melbourne city council during its attempts to establish a second tip site within Albert Park in the late 1920s.[634] The Albert Park Trust operated the facility in a manner that would eventually see the land levelled and raised, through the selling of sand and filling-in with refuse ultimately providing them with significant financial gains.[635] These profits were purported to fund the later establishment of the park as a recreational resort. Local residents argued that tipping would only compound problems in terms of smoke, odours, and the wastage of public open space through its immediate use for rubbish rather than recreation. This was seen as a 'gross misuse' of public land, and particularly offensive to residents who had long tolerated the existing tip. Residents sought to communicate with the Minister of Health to override the council's decision to extend the tip, and in its place, create public parklands of a high enough quality to possess a 'compensating atmosphere.'[636]

The Town Planning Association also voiced its opposition to the tip through its secretary, William Gates, who stated the Association's view that the land be preserved as parkland, given its location within such a populated area. The Association additionally questioned the legality of urban tipping, perhaps the first such instance of a collective body—and particularly one invested in planning matters—seeking to query the legislative basis of this noxious land-use.[637] The matter of Albert Park was resolved with relatively little fanfare: a private trust had purchased part of the rubbish tip and spent considerable funds on remediating the land for use as a golf course, congruent with the desirable land-uses—as open or recreational space—outlined within the 1929 MTPC *Plan*.[638]

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[634] ""Tip" in Albert Park," *The Age*, September 2, 1927, 11.

[635]"Neglected Parks," *The Age*, December 21, 1928, 8.

[636] "The Albert Park : A Tragedy," *The Age*, September 23, 1927, 10.

[637] *The Age*, September 28, 1927, 12.

[638] "Trustees Action Questioned," *The Age*, November 23, 1946, 5.

The Association had only been established in 1914 to enshrine planning practices albeit fundamentally predicated upon visions and ideals of the Garden City Movement. Town planning associations were tied to this time period, acting as early attempts at organising a movement or body for the representation of a particular vision for a place. Despite the relative infancy of the planning movement, as well as its deep roots within similar planning associations in the United Kingdom, the early decades of the twentieth century were crucial to the establishment of planning as a science-based discipline, in addition to progressive reforms and legislation to better control the development of suburbs, towns, and cities.[639] These associations often forged the path for later town planning institutions as established by their home state—that is, as an arm of state government—with the establishment of legislation enabling these bodies with the power to act upon matters of town planning.

Despite the establishment of the Association over a decade prior to its commentary on the tip, a surprise visit by the Minister for Health, William James Beckett, revealed its conditions as 'not conducive to health,' further reiterating the notion of the tip as being a public health concern rather than a matter of good—or healthful—planning.[640] Whilst the link between town planning and health is inextricable, the Minister's view was concordant with the relatively recent designation of town planning as a field of study in its own right; further still, the framing of the tip as an issue endangering public health may have spurred on progressive action far more than any discussion of it as a problematic land-use.

5.6 Comparisons with other Australian cities

During this time, elsewhere in Australia, more progressive undertakings were being discussed to rid

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[639] R. Freestone, "A National Narrative," in *Urban Nation: Australia's Planning Heritage*, ed. Robert Freestone (Melbourne: CSIRO Publishing, 2010), 8-9.

[640] *The Age*, October 27, 1927, 10.

cities of refuse. A federal conference was held in Perth to raise the issue of public health engineering in the context of rubbish disposal.[641] A novel example was made of Canberra, where waste was proposed by William Elmshurst Potts of the Federal Capital Commission to be sorted into three categories: organic waste for pig feed, ashes, and waste for burning.[642] Critics objected to the proposal on the basis that it was already seen as difficult to arrange for householders to dispose of rubbish in one lot, let alone to separate on the basis of varying qualities; the availability of destructors was also doubted. In Perth, rubbish was utilised to fill low-lying land, predominantly with paper and tin, which brought with it the additional benefit of eradicating mosquito breeding grounds. The reclaimed land was then allowed to settle, to be developed as parklands, gardens, and playgrounds—not unlike the terraforming activity taking place in the swamps and wetlands of Melbourne, and certainly possessing far more common appeal than the unsightly tip, or the costly destructor. A representative of the northern suburb of Northcote, Mr. V. J. Bradley, stated that his municipality 'endeavoured to purchase all old clayholes … and fill them with garbage and clean filling. By that means it had converted wastelands into playgrounds and recreation reserves.'[643] Although representatives of the councils of Prahran and Brunswick argued it could not be used for building—the risk of subsidence was too high—such land had potential as open space, particularly in dense areas lacking public space. Nevertheless, the filing of quarry and clay holes with refuse took place. In many instances these tips were operated by the municipality which had either purchased a privately-operated quarry to fill, or utilised its own quarries which had previously served the purpose of providing material for civil engineering works.[644]

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641 "City Health Problems," *The Age*, September 21, 1927, 14.

642 "Refuse at Canberra," *The Age*, September 21, 1927, 14.

643 "City Health Problems."

644 "In the Suburbs : Rubbish tip fires," *The Age*, August 11, 1928, 19.

Filled quarry sites, given their inability to host any kind of construction without special engineering, by default created areas of parkland where there had otherwise been no foresight to establish such landscapes. Examples of this included:

- The Domain Parklands, as previously noted.[645]
- Yarraville, where a small quarry had been filled to ready the site for its eventual revegetation as a public garden.[646]
- Clifton Hill, with the decade-long remediation of Yarra Bend.[647]
- Parts of Princes Park, Carlton.[648]
- Toorak Park, at the turn of the twentieth century.[649]

During the opening address of Garden Week in 1931, the Mayor of South Melbourne, Cr. W. A. Wright, was applauded on declaring that 'some of the most beautiful gardens around Melbourne were on sites which formerly were rubbish tips.'[650] Numerous examples of this exist, in themselves varying considerably in terms of the importance ascribed to the tip and the resulting reservation of land through its operation and filling. Previously a racecourse, Elsternwick Park was reserved for recreational purposes during the premiership of Sir Thomas Bent in 1901; however, congruent with the aforementioned assertion, the presence of a tip allowed for the later development of a children's playground in parkland otherwise dominated by facilities for hockey, tennis, football, and cricket.[651]

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[645] "Gardens in Literature," *The Age*, April 6, 1940, 8; "St. Kilda Road : Development from Bush Track," *The Age*, May 19, 1945, 9.

[646] "League of Youth : Branch Activities," *The Age*, December 3, 1935, 3.

[647] "Yarra Bend National Park," *The Age*, March 1, 1937, 10.

[648] "A Lucky Tip," *The Age*, August 17, 1944, 2.

[649] "V.C.A. [Victorian Cricket Association] Attitude," *The Age*, September 14, 1939, 4.

[650] "Official Opening : Education and Gardening : Work of Council and Government," *The Age*, March 25, 1931, 13.

[651] "Children'sPlaygrounds," *The Age*, March 28, 1930, 11.

5.7 Co-operation and restitution

Perhaps the first example of a Melbourne municipality offering its quarry to be used as a tip by another lies in the example of Richmond City Council, who, for a fee, allowed the City of Prahran the right to tip.[652] This proved problematic, however, with Prahran's use of the tip 'obnoxious' and harming local residents by way of pollution and vermin; residents sought restitution from Richmond who admitted that they had deferred control of the tip to Prahran.[653] Similarly, quarries located on the border of the Melbourne and Brunswick required the cooperation of both municipalities for their remediation following tipping; one anonymous resident wrote to the *Age* to say that the tip had become a 'menace' and that only a 'co-ordinated plan to clear up this area' would resolve its neglected state.[654] These two instances demonstrated the need for a singular approach to remediating quarry and tip sites, conducted and governed by a single organisation to ensure appropriate and responsive land-use outcomes. A tip located on Footscray Road, within the jurisdiction of the City of Melbourne, could not have its issues addressed until the ownership of the land was ascertained; the Railways department and Lands department equally possessed controls over the land which prevented Melbourne from undertaking efforts to curtail its rat population.[655] The inability to ascertain ownership also prevented attempts to curtail illegal dumpers: this was the predominant issue on the Footscray Road site. Although ownership continued to be unclear, fencing and gates were installed by the municipality, and council health inspectors were put in place to prosecute offenders.[656]

Similar problems were identified in Newport where roadside land and empty allotments across from the Johnston Street tip—the eventual location of Newport Lakes—attracted illegal rubbish dumping

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[652] "Richmond Rubbish Tip," *The Age*, September 7, 1937, 14.

[653] "Rubbish Dump Complaints : Richmond Council Seeks Control," *The Age*, August 15, 1946, 4

[654] "Neglected Area," *The Age*, December 26, 1946, 2.

[655] "Action Delayed on Rubbish Tip," *The Age*, May 17, 1950, 4.

[656] "Rubbish Dumpers Break Barbed Wire," *The Age*, July 19, 1950, 7.

for which the council health inspector could only issue prosecution notices.[657] The *Age's* reportage led to the municipality taking action on the issue, denoting the role of the media in bringing light to such problems; a shift away from the demonstrated apathy led one resident, J. E. Jordan of Newport, to write thanking the *Age*, given the outcome of the coverage provided the resolution for which residents fought but had achieved little hitherto.[658] However, such issues still plagued the metropolis five years later—reflecting not only the cost of legally disposing of waste at a municipal tip, but also the absence of tips in certain municipal areas.[659]

5.8 Strategic approaches to the urban tip

In much clearer terms than the 1929 MTPC *Plan*, the MMBW's 1954 *Report* briefly discussed tipping as a means of reclamation; it stated that 90% of rubbish in the city was disposed of through such means, as opposed to incineration.[660] Tipping was emphasised as allowing 'low-lying land, quarries and clay holes to be reclaimed … Useless and unsightly areas can thus be made of value to the community,' highly relevant to what had been undertaken in Albert Park a decade prior, but also in the low-lying marshlands of West Melbourne.[661] Although the 1954 *Report* acknowledged the suitability of 'ample' spaces for tipping—'where garbage can be so disposed for at least 100 years'—the Board advocated coordination and close management to prioritise areas where reclamation was deemed 'most desirable from the community standpoint' to be 'reclaimed as soon as possible,' particularly in inner-suburbs abundant in extractive industrial spaces and, concurrently, lacking in open and recreational space due to the historic dominance of industry.[662] However,

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[657] "Newport Street Rubbish Tip Plagued With Rats," *The Age*, May 19, 1951, 3.

[658] "Rubbish Tip "Cleaned Up," *The Age*, May 29, 1951, 2.

[659] "Rubbish Dumps Cause Concern in Outer Suburban Areas," *The Age*, June 8, 1956, 9.

[660] MMBW, "Other Community Services," in *Melbourne Metropolitan Planning Scheme 1954 : Report*, ed. MMBW (Melbourne: McLaren & Co. Pty. Ltd), 87.

[661] Ibid.

[662] Ibid

despite this being a clear directive of the MMBW, the issues stemming from urban tipping as terraforming became readily apparent in suburbs such as Kew where the interim scenario of accommodating refuse was not welcomed.[663]

By the 1950s, the effects of tipping were well-known to the general public and municipalities given the reportage of this within the media; as such, ratepayers in the area opposed a new tip marked for a site between the Chandler Highway, Yarra River, the Kew Golf Club, and Kew Cottages. Residents of the area presented a petition to the Kew council which was then published in the *Age* as fourteen reasons why such a land-use was not appropriate for the area. Considerations included flooding; the value of the land for agricultural use; the issue of rats and flies; air pollution; refuse as a fire hazard; the consideration of tipping as an archaic method of refuse disposal; and the aesthetic implications rendering tipping a 'disgraceful misuse of the land.'[664] Fifteen hundred signatures were received within mere hours to support the notion that a tip was an inappropriate land-use for the area.[665] This stemmed, in part, from the poor experiences of residents elsewhere in Kew who experienced foul smells and pests from a tip in Willsmere Road. A tour of this tip by the Minister for Health, Bill Barry, led to his assessment that the river tip should not go ahead, and that the site should be used for grazing.[666] However, adhering to the sentiment of tipping as an archaic land-use —and hinting at support for the use of destructors and incinerators—Barry further stated that he did not support the use of refuse to fill in sites of atypical form, whether low-lying marshland or quarries: "Even lids on dirt cans don't keep rats out of lanes."[667] Despite the Minister's opinion,

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[663] "Hostility to Plan for New Kew Tip," *The Age*, December 23, 1953, 5.

[664] *The Age*, December 23, 1953, 5.

[665] "Angry Kew Residents," *The Age*, December 23, 1953, 2.

[666] "Govt. "No" Likely to Kew Tip Plan," *The Age*, December 24, 1953, 4.

[667] "Govt. "No" Likely to Kew Tip Plan," *The Age*, December 24, 1953, 4.

unhygienic tipping practices continued, even in relatively wealthy suburbs such as Brighton East where tipping was seen as a means to an end following quarrying.[668]

By the mid-1950s, the establishment of any tip warranted an application by the municipality to the Commission of Public Health, so to undertake an 'Offensive Trade.'[669] Movements to eradicate tips from the urban landscape escalated: in Hawthorn, residents strongly opposed the purchasing of a quarry site by the council to act as a second tip for the municipality, as a consequence of a past history of tip mismanagement.[670] The sole legislation coordinating the establishment and management of tips was the *Health Act*, which framed tipping as an unlawful activity where it was deemed to pose a risk to public health. This Act was later updated in 1958 to enshrine municipal control of tip sites. Section 48 of this *Act* outlined the following provisions relating to municipal control; however, their enforcement was vested in the Commission of Public Health:

> (1)The council of every city or town shall and the council of every borough or shire may and (when required by the Commission of Public Health) shall undertake or contract for the efficient execution of the following works within its municipal district or any specified part of its municipal district :—
>
> (a)The removal of house and trade refuse and other rubbish from premises and the collection thereof ;
>
> (b)The sweeping cleansing and watering of streets (including foot pavements) and the collection and removal therefrom of all refuse and rubbish ;
>
> (c)The disposal of refuse and rubbish aforesaid so as not to be a nuisance or dangerous to health ;

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668 "Brighton's Rubbish Tip," *The Age*, April 15, 1955, 2.

669 "Public notice," *The Age*, May 24, 1954, 7.

670 "Q.C. Calls Tip a Health Risk," *The Age*, February 9, 1956, 10.

(d)The providing in proper and suitable places of receptacles for the temporary deposit and collection of refuse and rubbish ; and

(e)The providing of suitable places works buildings plant machinery and appliances within or (with the sanction of the Governor in Council) outside of its municipal district for the inoffensive disposal or destruction of refuse and rubbish.

Municipalities evidently held a vested interest in the acquisition of quarry sites for tipping, and this is particularly true for Hawthorn, where extensive clay deposits led to the establishment of numerous brickworks warranting resolution upon their closure. This would not only absolve the municipality of the numerous difficulties in ensuring the safety of quarrying operations but also provided a convenient means for refuse disposal. In the case of Hawthorn council, the acquisition of a clay pit for tipping was viewed as more convenient than the council's destructor.[671] Tipping would also provide the council with a revenue stream given the absence of tips in inner-suburban locales: by the late 1950s, tips in Caulfield and Fitzroy had long been filled and remade as parks, necessitating use of tips operated by adjoining city councils such as Hawthorn, Brunswick, Footscray, Essendon, and Northcote.[672] The value of such an arrangement lay in the hastened reclamation of quarry holes so to resolve such a burden on the municipality. The need to resolve the long-tolerated Dynon Road tip was raised by the Health Commission after thirty-three years of sub-par hygiene practices: like other tips, the site was depicted as archaic and not becoming to a city of an increasingly modern character, particularly in the lead up to the 1956 Olympic Games which

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[671] "Q.C. Calls Tip a Health Risk."

[672] In the case of Caulfield, the absence of a tip led to rubbish dumping on private land and adjacent roads; the Caulfield city council claimed it was 'powerless' to stop illegal dumpers as they 'work at night and at week ends when nobody is about' ("Vermin Menace Health," *The Age*, March 27, 1965, 6). This was said to stem from the absence of an official tip within the municipality and the subsequent difficulty—or rather, a lack of convenience—in accessing the nearest tips in Oakleigh and Cheltenham; "Rubbish Dumps Cause Concern in Outer Suburbs Areas," *The Age*, June 8, 1956, 9; "Migrants Most Dumpers of Rubbish," *The Age*, June 9, 1956, 3.

spurred on the beautification and modernisation of the city.[673] However, the necessity of refuse to harmonise the landscape was acknowledged: 'pleasant green rests on sordid foundations.'[674] The rapidity of filling, covering, and reclaiming quarried land was thus identified as the primary measure in ensuring a modern and hygienic standard for tipping, forming the suggestion that perhaps it was not the activity itself that proved harmful, but rather, the extensive period of operations and poor management over time. This had spoilt the perception of tipping for reclamation:

> It is insanitary and should not be tolerated in a modern city the size of Melbourne. It may be argued that open disposal is a cheap and efficient way of reclaiming waste land. Melbourne, in fact, owes much to the method. Some of its parks and gardens are built on old rubbish tips. But these tips were in use when the city was a much smaller place and there were no alternatives. No community should be asked today to suffer the nuisance and hazard to health of an open tip.[675]

The critical perspective proclaimed in the *Age* would reframe urban tipping as an unfortunate and undesirable—and ideally, *temporary*—land-use, to be closely-monitored with coordinated efforts by multiple entities: that is, concerned municipalities and the Health Commission. In this sense, it can be posed that the post-war modernisation and urban growth—'our phenomenal development'—led to more critical assessments of noxious land-uses and the subsequent suggestion of measures to curtail unpleasant effects, with strong consideration of how the community would be affected.[676] However, as undesirable as these effects were, in the case of the Dynon Road tip the City of

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[673] J. Gold and M. Gold, "Athens to Athens: the Summer Olympics, 1896-2004," in *Olympic Cities: City Agendas, Planning and the World's Games*, 1896-2012, eds. John Gold and Margaret Gold (Oxfordshire: Routledge, 2007), 32; "Action Needed at Dynon Road Refuse Tip," *The Age*, June 27, 1957, 2.

[674] "Action Needed at Dynon Road Refuse Tip."

[675] "Dudley Flats Rubbish Tip Should Go," *The Age*, January 20, 1958, 2.

[676] "Abolish the Rubbish Tips," *The Age*, June 29, 1957, 2.

Melbourne chairman of the Public Works Committee, Sir Harold Gengoult Smith, stated that the only alternative would be to retain the land as a swamp, as it could not be feasibly remediated by any other method.[677] This took place in light of proposals to move the Saleyard to the outlying area of Derrimut, well beyond the western suburban fringe, a proposal rejected by Victorian Premier Sir Henry Bolte in 1961.[678] It appeared that Melbourne's west was slowly beginning to shed its noxious character, perhaps not in practice, but surely in envisioning a future without stigma.

With the early and enthusiastic global adoption of destructors and incinerators, it appears that the predominant driver of tipping in Melbourne was not the refuse itself, but rather, the normalisation of anomalies of the landscape: its geologic, hydrologic, and topographic qualities seen as warranting remediation and reclamation.[679] The discontinuation of tipping in the region of Dynon Road and Dudley Flats would only take place if the landscape was deemed sufficiently remediated; rather than adopting new methods of destruction, the City of Melbourne sought to continue tipping by jointly purchasing a Brunswick quarry from the Hoffman Brick firm with the City of Brunswick.[680] With two municipalities utilising one site as a tip, it could be filled and remediated within three decades: still a long period of time for the local community. Elsewhere in the city, as in the case of Oakleigh Council, controls were placed on the calibre of refuse—nothing putrescible—and the quality of fencing, along with the full-time employment of an attendant to monitor the covering of rubbish with fill.[681] These controls responded to regulations established by the Health

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[677] In addition swamps and quarries, river flats and valleys also received this treatment: in North Balwyn, a 140-acre tip was proposed in the vicinity of Bulleen Road and Orion Street in order to elevate the landscape ("Beauty Before Garbage," *The Age*, September 28, 1961, 2). Tipping was one-third of the cost of a rubbish destructor ("Tip Proposal Not Finally Decided," *The Age*, October 3, 1961, 3). This land was adjacent to the Yarra River flats and its salubrious character led to strong opposition from local residents, who utilised the area for recreational endeavours ("Mayor Faces Angry Crowd Over Rubbish Tip Plan," *The Age*, October 2, 1961, 5); "Public Must "Put Up With City Tip"," *The Age*, January 21, 1958, 5.

[678] "Saleyard, Abattoirs Will Not be Removed from City," *The Age*, September 7, 1961, 5.

[679] "Incinerator for Garbage," *The Age*, August 15, 1958, 2.

[680] "Council to Buy Quarry," *The Age*, May 27, 1959, 14.

[681] "11-Acre Tip Approved for Oakleigh," *The Age*, May 11, 1960, 3.

Commission.[682] Although such measures were created and enforced by the Health Commission, it continued to confuse prevention, cause, and outcome: in North Balwyn, the Commission endorsed the creation of a tip virtually abutting a residential area, yet simultaneously created public health campaigns for the eradication of blow-flies.[683] A 'war against flies' was endorsed in September 1964 to which twenty-nine municipalities responded in support of the eradication of environments conducive to the breeding of flies; however, this predominantly focused on individual households rather than municipal tips, with efforts to reduce the fly population largely concerning the appropriate disposal of refuse in domestic bins, maintenance of poultry sheds, and the storage of manure in containers.[684] The purported need for 'good housekeeping' did little, if anything, to address the municipal tip, instead placing the onus on 'public consciousness—and conscience.'

5.9 Introducing the 'landfill'

This era also marked the emergence of new vernacular: the 'landfill.' The term did not enter common usage until the 1960s, with the first instance of its publication in the *Age* occurring in October 1961.[685] The term literally described the activity as a means of remediating the landscape, in contrast to the 'tip.' This was pertinent in the case of the North Balwyn proposal where 'land-fill' was supported for its 'eliminating [of] "eye-sores" within the city generally … [which] will make this attractive area more accessible to ratepayers.'[686] Perhaps the sudden employment of this term was to avoid the unpleasant associations with tipping, which could have been linked to more archaic manifestations in swampy reaches of the metropolis, as opposed to sophisticated, controlled, and comparatively hygienic operations of the mid-twentieth century. Still, the discussion of 'land-fill' by

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[682] "Commission Approval for Tip Site," *The Age*, March 15, 1961, 7.

[683] "Sewage and Tip Flies," *The Age*, October 16, 1963, 2.

[684] "War on an old and dangerous foe," *The Age*, September 15, 1964, 2.

[685] "Tip Proposal Not Finally Decided," *The Age*, October 3, 1931, 3.

[686] "Mayor City of Camberwell Neville Lee, 'Garbage and Reclamation'," *The Age*, October 9, 1961, 2.

Camberwell's mayor, Neville Lee, did little to allay the concerns of local residents, who doubted the sanitary qualities of the 'modern' landfill.[687] To shift public opinion, an educational advertorial was published in the *Age* in November 1961 seeking to inform the public on the nuances of the landfill, as distinct from tipping.[688] It was created by the Victorian division of Industrial Sales and Service Pty. Ltd., a firm with considerable involvement in local and state government by way of supplying materials and machinery, such as trucks, cement, and tools.[689] There is little doubt that ISAS would have held some interest in advocating municipal landfills. The advertisement stated that the 'sanitary landfill method', utilising a 'Drott machine', would 'solve disposal problems': 'Sanitary Landfill is to DIG — COMPACT — COVER.'[690] Key points included the elimination of pests; low costs relative to to those of incineration; and the reclamation of previously 'waste of useless land,' allowing its conversion 'into parks and recreation areas … the appearance of the area enhances surrounding property values.'[691] The focus of the brief column, a product being sold by ISAS, was a Drott Bullclam Shovel, the first machine of its kind allowing for the compaction of refuse. Cities in America were cited as particularly progressive in their uptake of the machinery, and more locally, it appeared to have been—quietly—in use in Geelong, Ballarat, and a small number of outer-suburban municipalities, since late 1957. Geelong's municipal surveyor, Ian McDonald, contributed a glowing review following its first twelve months of the shovel's use:

> In my opinion this is the answer to economic and effective garbage disposal without smoke, smell, rats or flies, and the possible danger to life from smouldering fires and other hazards. The one operator is handling the garbage, trash and trade waste from 50,000 people in three

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687 J. Miller, "Dissatisfaction," *The Age*, October 11, 1961, 2.

688 "Garbage Controversy," *The Age* November 4, 1961, 7.

689 SGV, *Victoria Government Gazette* : *November 30, 1949* (Melbourne: Published by Authority, 1949); *Victoria Government Gazette*, *October 25*, *1950* (Melbourne: Published by Authority, 1950).

690 "Garbage Controversy."

691 SGV, *Gazette*, *November 30, 1949*; *Gazette*, *October 25, 1950.*

> Municipalities and at the same time is creating a valuable asset for the City by converting a low-lying flooded area into a major recreational ground.[692]

In Heidelberg, a middle-ring municipality north-east of the city centre, the Drott machine was also used successfully, allowing for the reclamation of land for recreational purposes. An unnamed spokesman for Heidelberg celebrated the absence of complaints from community members.[693] Other municipalities saw the success of these efforts and followed. Broadmeadows was cited by ISAS as one example. It anticipated the filling of land adjacent to the Merri Creek and Hume Highway, most likely the present-day site of the Bolinda Road Resource Recovery Centre, to be compacted over time and 'turned into valuable grounds, which can be used for sporting activities or beautification in the form of parks and gardens.'[694] The uptake of the Drott was swift: the City of Nunawading opened tenders for the item within three weeks of its advertisement in the *Age*, soon followed by other municipalities.[695]

The most significant event to take place in terms of the legislation of rubbish tips and related activities came with the amendment of the *Local Government Act* in 1966 to allow municipalities to charge for the use of rubbish tips.[696] This was recommended by Rupert Hamer, Minister for Local Government, who anticipated it would provide councils with the financial incentive to open tips to the public over weekends, resolving one motivator of illegal dumping. This was informed by the Municipal Association which represented the interests of suburban councils. Although many municipalities did charge a fee for the disposal of refuse in a council tip, this was not supported by

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[692] "Garbage Controversy."

[693] Ibid.

[694] Ibid.

[695] "City of Nunawading Tenders," *The Age*, November 25, 1961, 58.

[696] "Deterring the Dumpers," *The Age*, April 12, 1966, 2.

any legislation; councils offering this service were in fact doing so illegally.[697] Likewise, some councils did opt to open tips during weekends, but again, no legislation endorsed this. Providing a legal basis for ensuring ease of access to tips would disincentivise residents from dumping refuse illegally as an accessible tip would likely prove easier to access than a vacant allotment or roadside; the perpetrator would no longer have to drive to locations out of sight, or at night time, to dump rubbish. However, as acknowledged in an *Age* editorial, this approach was only one small effort in a series of necessary interventions to control the issue of rubbish in Melbourne:

> Something more substantial than a casually permissive amendment of the Local Government act [sic], and something more persuasive than polite Ministerial hints, is needed to prod municipalities into a more realistic attack on the plague of rubbish dumping.[698]

This substantial intervention came by way of a declaration: 'Keep Victoria Tidy.'[699] The Minister for State Development, Jim Manson, sought the assistance of fifty members of the Australian Advertising Agencies Association in order to formulate an effective anti-litter advertising campaign, largely through public education. Although this reflected the issue of littering rather than tipping—a statewide problem affecting not only urban areas but also beaches, forests, and parks—removing barriers to legal tipping were viewed as an integral supporting element of the campaign. This marked the beginning of what would be a revolutionary decade for the legislating for, and planning of, waste disposal in metropolitan Melbourne. An initial significant step took place in the refocusing of discourse away from the health of the populace: now, in tandem with public health, environmental health was also a primary concern, and the environmental impacts of tipping

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[697] "Bill will make rubbish tip fees legal," *The Age*, April 12, 1966, 3.

[698] "Deterring the Dumpers."

[699] "More vigorous drive against litter," *The Age*, July 11, 1966, 6.

previously not acknowledged in legislation were included the enactment of the *Environment Protection Act* in 1970.

The first comprehensive investigative report on refuse disposal and associated sites was conducted in 1971, addressed in a SDC progress report on the *Disposal and/or Destruction of Garbage and Other Rubbish*.[700] This was prompted by Premier Henry Bolte in light of the diminishing number of spaces suitable for tipping, concurrent with increasing levels of waste disposal. This report showed that the disposal of refuse had been historically mismanaged as a consequence of 'åfragmentary control and piecemeal planning,' necessitating immediate revisions to existing rubbish disposal and recycling programs in anticipation of population increase leading up to the turn of the century.[701] Additionally noted was that the exhausted quarries which would provide space for tipping were not appropriately located to allow for such a use, in part reflecting the terms of re-use outlined within the *Extractive Industries Act 1966*. The suggestion most relevant to extractive industrial sites, of the thirty-three recommendations outlined in the progress report, was that strategic and statutory planning mechanisms should be altered to support the clear demarcation and advertisement of exhausted quarry sites as future tip sites.[702] This would alleviate potential land-use conflicts precluding their development, ultimately extending the presence of tipping in urban Melbourne, and removing barriers to legal modes of waste disposal which could otherwise result in littering and rubbish dumping. This would also negate the need to employ more costly disposal methods utilised in other states and countries. The 1971 report notes these this as a 'world-wide' problem, elsewhere addressed through 'incineration, composting or pulverization.'[703]

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[700] SDC, *Progress Report : Garbage and Other Rubbish*, 11.

[701] Ibid, 5-6.

[702] Ibid, 8.

[703] Ibid, 10.

Incineration is repeatedly highlighted as an alternative to landfill and as such, is explored in this report, a consequence of its large-scale uptake in Europe, North America, and Japan, and, more locally, New South Wales.[704] Initial capital investment and operating costs were cited as the primary barriers to the adoption of incineration—$4,300,000 in 1971, approximately $44,290,000 adjusted for inflation at time of writing—which, in light of still-available spaces for tipping, made this option far less viable than it proved in countries where space for tipping was lacking entirely. Composting, compacting, and pulverising tip-bound materials reduced the volume of refuse and prolonged the life-span of the tip. Transfer stations were additionally suggested so that materials could be sorted and treated appropriately.[705] Maximising the potential of each quarry site was envisioned as the goal of quality town planning and informed research and forecasting so to ascertain the level of refuse generated by the population and the capacity of existing and future tips. It is unfortunate that it is only briefly, and with very little elaboration, discussed that:

> [as] reiterated by overseas experts … local conditions are the prime factor in determining what types of disposal methods it is desirable to employ. Thus, whilst incinerators may ideally suit the needs of one urban complex, sanitary landfill operations … may be more suitable and economic for another urban community.[706]

How exactly the conditions and characteristics of the local community influence the outcome of a quarried site, and the potential for tipping operations to take place, is not discussed further in the report. This adheres to the aim of this thesis in identifying how the social, economic, political, or temporal qualities of a particular area or local community ultimately serve to facilitate, reform, or disallow development outcomes in exhausted quarry sites.

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[704] Ibid 11.

[705] Ibid, 16.

[706] Ibid, 30.

5.9.1 *The advent of recycling*

Simultaneously, a steel recycling awareness programme was initiated, reflecting the value of utilising municipal tips and landfills for non-recyclable materials. This recycling programme, 'The Can People,' was launched in 1971, and was sponsored by steel, cannery, and recycling firms such as BHP Limited, Simsmetal, J. Gadsden Australia, the National Can Company, United Packagers, and M & T Chemicals, a subsidiary of the American Can Company.[707] Steel and aluminium cans were estimated to comprise a total of eight percent of household waste, and in recovery could be re-used in BHP steel furnaces and ingots. Plastics posed a similar quandary, both in the declining number of suitable landfill sites, and in the exhaustion of existing ones. Although plastics were estimated as 4% of total household refuse in 1972, the popularity of plastic shopping bags, plastic sheets, and even thermoplastic materials in architectural use—famed modernist architect Robin Boyd's Fishbowl was noted as one example of a building which 'may never be destroyed' even following its demolition—would only grow in the following decades, whilst landfills were being fulfilled and closed.[708]

The recycling of paper would similarly warrant advertisement in the *Age*, with Australian Paper Manufacturers and Associated Pulp and Paper Mills encouraging the use of recycled paper and cardboard in new products, negating destruction of forest and simultaneously saving useable materials from landfill.[709] The overarching message which emerged from these print media features was one of combating wastefulness—it was evident that the ease of disposal had imbued a broader societal attitude of thoughtless use and disposal. Trade liberalisation during the Whitlam era spanning 1972 through to 1975 underpinned increasingly broader networks of economic exchange which in turn brought about a new culture of acquisition: goods were available more readily and

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[707] "Advertisement," *The Age*, August 26, 1971, 5.

[708] "Economics of Survival," *The Age*, December 14, 1972, 16.

[709] Hugh Rogers, "Paper industry growth rate assured," *The Age*, July 29, 1974, 63.

cheaply than ever before, by a more affluent and image-driven society.[710] Growing affluence was equated with growing levels of waste, and in turn, a growing metropolis: one where land 'otherwise unsuitable for development' could be reclaimed with new purpose.[711]

5.10 Governance and emergent controls

Against a progressive background of recycling and preservation, urban tips maintained a contributed presence. The need to refine legislation also arose in the prior decade in relation to the acquisition of permits for tipping, with Judge Dunn of the County Court criticising the Oakleigh City Council for its refusal of a permit for a private tip which had already been granted a permit by the Metropolitan Board of Works under the *Town and Country Planning Act 1958*.[712] A municipally-granted permit was deemed necessary given the land-use would involve the undertaking of an 'offensive trade,' invoking the *Health Act* 1958 which forced the private tipping firm to obtain municipal permission. The rationale given by the municipality concerned its inability to control the working of the tip given it was to be privately operated; the municipality further envisioned this would impede upon the development of the area surrounding the tip in the future, particularly if this were to be of a residential character, demonstrating foresight.[713] This conflict between the Board of Works and local government was later identified as problematic, however, in the establishment of a tip site in Footscray.[714]

Pollution stemming from the site was identified as a significant issue by the municipality, which was essentially powerless to resolve the problem; councillor Matt Harris, also an employee of the

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[710] Michael Emmery, "Australian Manufacturing: A Brief History of Industry Policy and Trade Liberalisation," Economics, Commerce and Industrial Relations Group, published 19 October 1999, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp9900/2000RP07.

[711] "Coping with 35m tons of waste," *The Age*, July 30, 1974, 14.

[712] "Rubbish tip laws criticised by Judge," *The Age*, February 25, 1967, 6.

[713] "Planners rule against Italian club," *The Age*, June 16, 1978, 6.

[714] John Messer, "Tip-side meeting pinpoints pollution," *The Age*, March 23, 1970, 8.

State Electricity Commission, highlighted that the decisions made by the MMBW would override those of the municipality, encumbering these areas with a land-use undesired by councillors and residents alike. These issues were addressed in the recommendations of the final report of the SDC, published in 1973.[715] The report stated that uniform legislation, the enforcement of controls on both publicly and privately-operated tip sites, and more vigorous enforcement of the *Environment Protection Act* by the EPA, should all take place in order to streamline tip operations and ensure their adherence to prescribed frameworks. This meant that, despite the context of increasing environmental awareness, the landfill could continue to be the predominant mode of rubbish disposal in Melbourne, *if* appropriately managed.

The reclamation aspect of tipping and landfill practices further lent itself to the continued existence of the urban tip, in a 1975 study conducted by the Northern Waste Disposal Steering Committee, to be the only method of waste disposal which could prove economically feasible by virtue of the usable land 'created' in the wake of tipping.[716] Although predicated solely on the estimated value of the land following its remediation—rather than any other measure of economic success, or even community satisfaction—the gains to the community achieved by this significantly outweighed incineration and composting, as these modes of disposal could not contribute large tracts of recreational space.

This only validated the existing approach being undertaken by all municipalities in Melbourne: that is, despite the pursuit of recycling programmes for select materials, all councils either possessed, or utilised, a sanitary landfill site.[717] There was, however, a push to centralise these operations, diminishing their impact on the city through a set of much larger, consolidated tip sites: this was

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[715] SDC, *Final Report of the State Development Committee on the Disposal and/or Destruction of Garbage and Other Rubbish : With Particular Reference to the Disposal of Industrial Wastes* (Melbourne: s.n., 1973), 10.

[716] Richard Goodwin, "Tips still best for garbage, says study," *The Age*, August 26, 1975, 11.

[717] Anna Latreille, "Garbage into gardens," *The Age*, January 26, 1977, 19.

advocated by the EPA which, late in the 1970s, sought to engage municipalities in this effort.[718] Consolidation also took place with respect to municipalities which, under the *Local Government (Regional Refuse Disposal) Bill 1978*—informed by the discussed 1971 SDC progress report—acquired the legislative basis upon which to 'join together to make long term plans for the disposal of refuse on a regional basis,' alleviating the historically piecemeal basis of planning for tips, and supplanting it with a 'whole city' and 'whole region' perspective conducive to higher-quality planning outcomes.[719]

5.11 The growing problem of industrial waste

> Everybody wants the products, but nobody wants the waste.[720]
>
> — John Jack,[721] 1979.

With attention paid to the issue of domestic refuse, the latent problems of industrial effluents and by-products only began to raise concerns in 1972. Appropriate sites were identified in Broadmeadows and Brooklyn, but quickly discounted due to their proximity to population. Reclamation, sharing both the means and outcome, was also noted in the 1971 MMBW *Planning Policies*. This was considered in the context of existing SEZ zoning, where 'a possible after use for urban purposes is envisaged': rather than the inner-city, however, this report commanded focus on the areas of Thomastown, a northern outer-suburb, and Dingley, thirty kilometres south-east from the Melbourne CBD.[722] The reclamation of these areas—quarried for both bluestone and clay, and

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[718] "Garbage into gardens."

[719] *Local Government (Regional Refuse Disposal) Bill 1978* : Explanatory Notes (Vic), 1.

[720] "Waste plan 'like using a sledgehammer on a nut'," *The Age*, July 27, 1979, 5.

[721] Jack provided media commentary as chairman of the Inter-Departmental Inquiry into Waste Disposal and Department of Premier and Cabinet deputy secretary in 1979.

[722] MMBW, *Planning Policies for Metropolitan Melbourne*, 84.

clay alone, respectively—is considered 'essential' and heavily reliant on a comprehensive plan for their re-use, which the MMBW advocated in conjunction with local municipalities, quarrying firms, and the DoM. Absent is close consideration of the outcomes desired by local residents. In formulating this framework for extractive industrial sites, the Board argued that plans for reclamation should be considered in the issuing of a licence for extractive operations, formalising a sense of foresight conducive to quality land-use outcomes.[723] These two instances demonstrate some consideration on the part of government not only for extractive industries, but also their reclamation; however, given the inclusion of public utilities and sanitary infrastructure—drains and sewerage—the tip, and especially the urban landfill as an emergent concept, was largely neglected in strategic policy.

In 1978, a state government report was authored by an interdepartmental committee.[724] Eight million litres of waste was said to be stored within drums in industrial sites around Melbourne, with no adequate or appropriate means of disposal given the toxicity or flammability of the material. A potential landfill site for these materials was explored in Dargile, near the central Victorian township of Heathcote, but this was abandoned in response to community opposition.[725] Reflecting the mounting nature of the problem—approximately 1.5 million litres of industrial waste was said to be generated each year—the state government solution of placing this in landfill was proposed as a 'one-off operation,' with subsequent responsibilities laid entirely upon the relevant private manufacturing firms. A 'toxic' waste facility was already in existence in Tullamarine but its limited lifespan was acknowledged. Incineration of wastes was once again proposed with the use of a Dutch incineration ship, the *Volcanus*, purpose-built for the destruction of hydrocarbons; on-site

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[723] MMBW, *Planning Policies for Metropolitan Melbourne*, 85.

[724] "End sought to city's waste peril," *The Age*, May 24, 1978, 6; Geoff Strong, "Effluent won't waste away," *The Age*, July 23, 1979, 5.

[725] R. A. Wild, "The Chronology of the Dargile Dump," in *Heathcote : a study of local government and resident action in a small Australian town*, ed. Ronald Arthur Wild (Sydney: George Allen & Unwin, 1983), 64-5.

incinerators were also considered for co-location with manufactories.[726] The restraint practiced by the Victorian state government was weakened by the publication of a later report on the disposal of industrial waste: findings demonstrated that the issue was so severe that it would necessitate the Hamer government funding and establishing landfill in addition to an incinerator or similar method of destruction.[727] Fears of toxic materials leaking into groundwater were allayed by plans to seal the waste within an inert structure of plastic or clay prior to burial. An ideal approach identified through state government investigations culminated in the incineration of these materials before disposal as landfill.

Locating an appropriate site for this method relied upon two factors: the existence of a void or cavity in the landscape, and its isolation from local community members who would no doubt object to an undesirable land-use. An ideal site was selected through a recommendation of the EPA: Avalon. The locality—fifteen kilometres directly north of Geelong, and fifty kilometres south-west from Melbourne—was not only readily accessible by road, but also unpopulated, as a consequence of the use the adjacent area of Point Wilson for aviation and military explosives testing until the mid-twentieth century.[728] A shallow but extensive pocket of bluestone quarries had been operated in the Avalon foreshore area by Mountain View Quarries since the 1970s providing an appropriate site for the disposal of incinerated chemical wastes.[729] The area had been the focus of a proposal for the relocation of similarly undesirable land-uses: in 1979, Imperial Chemical Industries selected it for the development of a 766 hectare petrochemical storage facility.[730] Its proximity to two major population centres whilst remaining isolated proved suitable for such a purpose, evident in the later

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[726] "Waste plan 'like using a sledgehammer on a nut'."

[727] "Rubbish plans go up in smoke," *The Age*, May 21, 1980, 5.

[728] Commonwealth of Australia, "Point Wilson, Victoria," Department of Defence, published 2017, www.defence.gov.au/id/_Master/docs/NCRP/VIC/1315PointWilsonVic.pdf.

[729] Victorian Minister for Planning, *Mountain View Quarry Extension : Assessment under Environment Effects Act 1978* (Melbourne: s.n., 2009).

[730] ICI Australia, *ICI Point Wilson : plan of development* (Melbourne: ICI Australia Ltd., 1979); Prime Minister of Australia, *For Press : ICI Australia Limited - Investment in Petrochemical Expansions* (Canberra: 7 February, 1979).

proposal for the relocation of Coode Island chemical storage facilities to Point Wilson and the adjacent Point Lillias peninsula in 1993.[731]

The need for an incineration-landfill complex was 'virtually decided' by the Minister for Conservation Vasey Houghton, who clarified that, although it did not have to be at Avalon, there were 'no engineering problems and no environmental problems connected with it' beyond the 'ill-informed opposition' from residents of Geelong and Lara, as well as the Lara Environment Action Group.[732] The Group believed that the proximity to Corio Bay could lead to contamination of Melbourne and Geelong by air, groundwater, and sea, highlighting that the gradient of the landscape sloped towards the bay, exacerbating the risk of pollutant run-off.[733] However, both the Australian Conservation Foundation and EPA agreed that the risks were outweighed by the sheer necessity of such a facility, and that protest would always happen. Plans for the facility were only thwarted through later analysis of the site: it was conceded that its 'flow pattern' towards the Bay would render the land-use unsuitable. Although the protests of residents and the Lara Environment Action Group were not acknowledged in the final report on the matter, the fears presented by members of the public demonstrated the value which lay in trepidation and local knowledge.[734]

By 1986, numerous proposals for 'toxic' landfill in Broadmeadows, Brooklyn, Dargile, and Avalon had failed to proceed as a consequence of the controversy which arose, led by members of the

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[731] Victorian Safer Chemical Taskforce, *Bulk liquid hazardous chemical storage : Coode Island - West Point Wilson information kit* (Melbourne: Department of Business and Employment, 1993); Bronwen Beechey, "Outrage at Coode Island back flip," *Green Left Weekly*, July 2, 1997.

[732] Andrew Bolt, "Waste plant: no decision time set," *The Age*, January 9, 1982, 10.

[733] Similar community movements also arose in response to the situation of landfill operations near to watercourses: in Kangaroo Ground, a semi-rural locale 25 kilometres north of Melbourne, a tip abutting the Yarra River tributary Watsons Creek was opposed by residents due to the precedent of groundwater contamination where suburban tips were locate din Northcote, Keilor, Broadmeadows, and Brunswick (Fiona Athersmith, "Residents fight shire over plan for tip next to Yarra watercourse," *The Age*, December 5, 1986, 16). The Eltham Shire council sought to quell this conflict through reassurances that a well-managed tip would cause no harm to the environment. The tip did not proceed.

[734] Parliament of the Commonwealth of Australia, *Hazardous Chemical Wastes : Storage, Transport and Disposal : First Report on the Inquiry into Hazardous Chemicals* (Canberra: Australian Government Publishing Service, 1982); Fritz Balkau and John McDill, "Finding tips for chemicals: Don't try to con the public," *Royal Australian Planning Institute Journal*, 19, no. 3 (1981): 99-101.

community; however, the problem of industrial waste persisted, and a means of disposal had to be identified.[735] The MMBW put forth the concept of a 'waste disposal park,' the location of which would be determined exclusively through public consultation, utilising established precedents from Europe and North America to create a highly-controlled and informed method for the disposal of chemical, oil, organic, and solvent wastes. MMBW highlighted that disposal of wastes outside of Victoria—proposed for the nuclear test site Maralinga, South Australia—should not occur as 'the waste is generated in Victoria and should be treated and disposed of here.'[736] A number of criteria were presented to assist in the identification of an appropriate site within the state—the site could not be near to any residential area, agricultural land, water catchments, or mined areas; possess any contraindicating hydrological or geological characteristics; have no ecological, cultural, historical, or archaeological significance; and lack proximity to sewers, freeways, railway lines, and any area with potential for development.

Despite these considerations, the Board acknowledged that any decision made on the matter would result in vocal community opposition, citing the example of an established landfill site in Dutson Downs—an unpopulated Central Gippsland locale over 250 kilometres east of Melbourne—which had been earmarked for nuclear waste disposal.[737] This proposal was termed the Industrial Waste Project.[738] A temporary facility was advertised in November 1986, which would occupy the existing Tullamarine tip site previously operated as landfill by Cleanaway, until the completion of the

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[735] Peter Roberts, "$20m to clean up waste hazard," *The Age*, February 7, 1986, 1.

[736] "Board of Works rejects Maralinga as possible waste dump site," *The Age*, February 21, 1986, 16.

[737] The site did receive small amounts of nuclear waste from a nearby Esso gas plant; however, the development of the site sought to store radioactive materials produced in the course of industrial, scientific, or medical activities Department of the Premier and Cabinet Victoria, *Relocation of Radioactive Residuals Store : Environmental Effects Statement : November 1984* (Melbourne: s.n., 1984). This would take place in a purpose-built structure on the existing landfill site; Tim Lamacraft, "Gippsland's Dutson Downs waste facility transforming organic waste into compost," *ABC News*, December 1, 2014. https://www.abc.net.au/news/rural/2014-12-01/food-green-commercial-waste-turned-into-compost/5929926.

[738] *The Age*, October 9, 1986, 6.

permanent facility in 1990.[739] However, this was ultimately abandoned entirely, with an agreement forged between the Victorian and New South Wales State Governments to construct an industrial waste incinerator in Corowa, also subject to community objection and protest.[740]

5.12 Prolonging the life of the tip: recycling

Municipal engineer Roy Boyd, as the 1981 Research Fellow for the Foundation of the Technical Advancement of Local Government Engineering in Victoria, compiled a report titled *Recycling of Refuse and After Use of Tip Sites*. To inform this work, Boyd toured of three American cities—San Francisco, New Orleans, and Chicago—along with a visit to Europe, all within 1979. His findings showed that local conditions were of great importance in determining the viability of recycling, and that overseas practices in particular had little bearing on the Australian context. Further still, conditions differed both between states and between cities, 'making it almost impossible to "transplant" a viable recycling scheme from one Municipality to another.'[741] It can be reasoned that a similar sentiment would apply to the disposal of refuse. Boyd's interest in recycling reflects a vision for the increased longevity of urban tips through the removal of high-volume recyclable components in domestic refuse such as glass, metal, paper, and plastic.[742] The physical separation and processing of these goods would allow only putrescible fill in tips, whilst simultaneously returning refuse to a raw material form. Private sector-led recycling efforts are discussed such as charity drives, as well as those coordinated by local municipalities in other states. Glass collection programs are also noted as the material is especially valuable in its re-use for road and building aggregate, terrazzo flooring, bricks and building panels, insulation, and as a filler component for

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[739] "Temporary Industrial Waste Treatment Facility Project," *The Age*, November 26, 1986, 67.

[740] Leith Young, "State's waste to be sent to incinerator in NSW," *The Age*, January 25, 1989, 17; Sharon Beder, "Hazardous Waste: An Intractable Problem," *The Bulletin*, July 30, 1991, 92-96.

[741] Roy Boyd, *Recycling of Refuse and After Use of Tip Sites* (Melbourne: Foundation for the Technical Advancement of Local Government Engineering in Victoria, 1982), 4.

[742] Ibid, 7.

paint and plastic; such a diverse array of recycled products lends to Boyd's compelling case for recycling.[743] Boyd's enthusiasm for identifying these programs warrants mention of Hobart as particularly progressive in this regard, with household waste from kitchens and gardens recycled for soil fertility; toys, clothing, books, appliances, and furniture salvaged and given to charities and kindergartens; even worn carpets were donated to the Canine Defence League (see Figure 5.3).



Figure 5.3: Recycling in Hobart (Roy Boyd, *Recycling of Refuse and After Use of Tip Sites*, 1982, 33).

Lesser efforts, such as that of the City of Ararat, also found success: 'scavengers' pay the municipality for the right to salvage materials which they then sell to interested parties, although high costs of transporting problematise the re-use of materials such as paper.[744] Scavenging constitutes an early attempt at recycling, informal and largely subject to the efforts of the individual contractors or licensee, particularly in the absence of a dedicated recycling program.[745] Although the scavenger approach proved effective in this sense, it was also deemed 'slow' and 'unsightly.'[746]

[743] Ibid, 14.

[744] Ibid, 35.

[745] Ibid, 43.

[746] Ibid, 47.

Transfer stations were increasingly encouraged to remedy such weaknesses, and were established at tip sites in increasing numbers. The separation of goods would take place within the home, rather than at the site itself; goods to be recycled could then be stored neatly within a purpose-built structure, awaiting their re-use. The transfer station model would allow for more efficient tip operations, both in terms of economic efficiency as well as space, as compaction and bailing reduced the volume of un-recycled refuse. Examples cited by Boyd include sites in Preston, Knox, and Nunawading, all newly-built facilities in middle-ring suburbs of Melbourne.

In his extensive discussion of recycling, Boyd fails to highlight one considerable weakness of this view: that doing so would not expedite the fulfilment of the tip, but rather, prolong the tip's presence within the urban realm. Although considered recycling programs—with established social and environmental benefit—were evidently designed to most effectively balance large volumes of incoming refuse with a limited number of viable tip sites, the existence of the urban tip would continue to fuel community discord. Visions for the post-tip landscape would be effectively postponed. It is beyond evident that Boyd's emphasis on recycling reflects what appears to be a collective municipal anxiety that suitable sites within close proximity—or within the metropolitan boundary at all—would cease to exist, rather than addressing the sentiment amongst local residents that such modes of land-use were no longer suitable for predominantly residential areas. Moreover, these vastly different priorities demonstrate the ongoing disjunction between the interests of local government and its constituents.

5.13 Formalising opposition to tipping

The case study analyses in this thesis demonstrate that the vast majority of development outcomes for quarry sites are shaped through community activism, rather than adherence to strategic and statutory planning requirements by the quarry or tip operator. The demise of the urban tip illustrates

this well, and smaller-scale examples are discussed here prior to more robust discussion later in the piece.

In Diamond Valley, a peri-urban locale on the northern fringe of Melbourne, opposition from local residents reflected a lack of transparency, where land was slated for tipping by the local Shire.[747] An anti-tip group formed to criticise the municipality for failing to notify residents; the municipality argued that this was not done 'because of the undue anxiety it would cause residents and the blight on planning that might have resulted.' The community collectively argued that, in lieu of tipping, the municipality should investigate and implement alternative methods of waste disposal used internationally, such as incineration. Elsewhere in Melbourne, members of the Western Suburbs Environment Centre sought to oppose the re-use of quarry sites in Jones Road, Brooklyn, as tips on account of the robust bird population which had settled there after years of disuse; a recreational 'moonscape' to visitors—generally trail-bike riders—the environment also proved hospitable to bird life and native flora.[748] Yet another inconsistency amongst planning stakeholders was identified as the MMBW—the owner of the Jones Road quarry—had invested significant sums in the restoration of the nearby Kororoit Creek, which had long suffered as a consequence of expansive industry in Melbourne's west, and stood to yet again decline in light of proposed tipping activities. The City of Sunshine, which sought to create and operate the tips, failed to represent the interests of its citizens, who opposed the quarry given its prospective environmental impact. Despite the escalation of the matter to the Planning Appeals Board, tipping went ahead; at time of writing, the site is occupied by a large tip, now covered, and a number of smaller waste disposal operations in their final years of use. The need for such an expansive tipping precinct was eminently clear given reports of each citizen of Melbourne 'producing' an average of 700 kilograms of rubbish per year.[749] This led the

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[747] "One couple's dream land is one council's idea site for a rubbish tip," *The Age*, June 13, 1986, 17.

[748] Gayle Austen, "Shy night heron decides media debuts are not for the birds," *The Age*, January 27, 1987, 5.

[749] "Tip of a throwaway society," *The Age*, August 26, 1988, 3.

Minister for Planning and Environment, Tom Roper, to state that 'everybody wants a tip within convenient reach but far enough away not to depress property values.'[750] This dilemma ultimately served as the impetus for the establishment of a parliamentary committee—the Natural Resources and Environment Committee—to investigate methods of refuse disposal and waste management, particularly given the existence of many suitable sites in metropolitan Melbourne which had been left static as a consequence of community activism and intervention.

The Committee's report, *Waste Management in the Greater Melbourne Area,* was published in 1990.[751] Rather than proposing the committee discover new and more socially-appropriate modes of refuse disposal, Roper saw the efforts of the committee as a necessary step in reviving the confidence of the public in tipping: 'To overcome the concern some communities feel about tips, the Government hopes to establish new, tighter environmental controls and more efficient management of tips.'[752] Tips would be managed as if they were a 'finite resource,' emphasising the need to conserve the life-span of tips through recycling programmes, better administration and management, and closer attention to the quality of operations.[753] This would also alleviate the increasing costs of tipping on account of the relocation of tip sites well outside of the city, which bore implications for freight charges reflected in council rates.[754]

Additionally, power would be vested in existing Regional Refuse Disposal Groups under the 1994 amendment to the *Local Government Act 1989*, which would better allow the public to participate in waste management issues.[755] A Metropolitan Waste Management Council would also be established,

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[750] "Tip of a throwaway society."

[751] Natural Resources and Environment Committee, *Waste Management in the Greater Melbourne Area* (Melbourne: s.n. 1990).

[752] "Tip of a throwaway society."

[753] NREC, *Waste Management*, xiv.

[754] "Landfills under pressure," *The Age*, May 29, 1991, 60.

[755] *Local Government (Amendment) Act 1994* (Vic), s 31, 2365.

which would—as a component of managing tipping and recycling more broadly—regulate the reclamation of tip sites, as empowered by the *Environment Protection (Resource Recovery) Act 1992*.[756]

5.14 'The Rule of Diminishing Resources'

> [The] law of garbology: the Rule of Diminishing Resources says the more rubbish, the fewer the landfill sites, the further away they are.[757]
>
> — Geoffrey Maslen, reporter at *The Age*, 1993.

Initial attempts at instilling a greater sense of control came in the application of new policies by the EPA.[758] These emerged from numerous invitations for public comment on the formulation and drafting of a State Environmental Protection Policy on the matter of tip management and siting.[759] These policies would command the submission of a tip management plan by operators—private or municipal—outlining the efforts undertaken to improve the quality of operations, ranging from fencing through to dust, rubbish compacting, and the use of methane gas, produced by decomposition, for electricity.[760] Additional measures would involve charges and taxes for use under a 'user pays' system, not unlike that noted in Seattle, USA, where the rate of rubbish disposal fell by two-thirds following the introduction of increased household charges.[761] Sorting would also

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[756] *Environment Protection (Resource Recovery) Act 1992* (Vic), s 4(50a), 877.

[757] Geoffrey Maslen, "Rubbishing Australia," *Good Weekend*, July 10, 1993, 180-186.

[758] John Kiely, "Better riddance to bad rubbish," *The Age*, February 4, 1990, 3.

[759] *The Age*, May 13, 1989, 22.

[760] Although this is not a core interest of this thesis, the use of methane or biogas presents a fascinating avenue for further investigation of filled tip sites and their ongoing legacy and purpose (Craig Thomas, "How tips can be a turn-on," *The Age*, October 13, 1993, 23).

[761] Ross Peake, "Commission figures destroy common myths of recycling," *The Age*, May 29, 1991, 65.

take place through the implementation of designated waste and recycling bins.[762] This would prolong the life of existing tips given that approximately 90% of tipped refuse was compostable, or recyclable materials such as paper, plastic, glass, food, and green waste: '…it is becoming more economic to re-use materials than to look for old quarries to fill up.'[763]

The Chairman of the EPA, Brian Robinson, stated that much of the refuse—at least two thirds of the total refuse produced by the populace—simply did not belong in tips, and could be disposed of through alternate means. This reasoning was in-step with the perspective on recycling internationally, particularly in Europe, North America, and Japan, where quarries-turned-tip sites were not abundant.[764] This forced the hand of those countries, and their citizens, to directly engage with programmes prompting behavioural change to prolong the life of existing tips, and minimise the need for tip sites in the future. In drawing a comparison between North American and Australian rubbish disposal habits, it was found that the per capita production of waste in the United States exceeded that of Australia by one tonne; however, and in part making clear the unenthusiastic uptake of recycling programmes, we 'still have plenty of holes in the ground.'[765] In Victoria, the encouragement of recycling would serve to alleviate concerns for where refuse would go, given that the authority halted plans for eight tips in the region of Dingley, Cheltenham, and Springvale on account of community opposition, and merely extended the lifespan of existing quarries, whilst future-proofing potential tip sites on the urban periphery.

The need to reeducate Victorians was heightened: a behavioural shift would be needed to alter the consumption and disposal habits of those who had grown accustomed to an urban tip both

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[762] "Tip of a throwaway society."

[763] Jenny Brown, "Recycling is a word that keeps coming up when we talk of our garbage," *The Age*, June 27, 1989, 19.

[764] Peter Pringle, "American's rubbish revolution," *The Age*, July 29, 1989, 11.

[765] James Button, "Consumer is a dirty word," *The Age*, August 15, 1990, 11.

physically and economically accessible.[766] Without this, the disposal of household refuse in metropolitan tips would be almost impossible. It was theorised in the *Age* that, by 2000, only three tips would remain in use on the urban periphery—in Werribee, Sunshine, and Melton—declining from 34 in the 1970s, and 21 in 1990. Of the five tips in existence in 1996, Campbellfield and Brooklyn were anticipated to close by 2000.[767] This was optimistic: by 1999, the Altona tip was closed and readied for its re-use as public open space, however, the Brooklyn, Campbellfield, Kealba, and the peri-urban Epping tips remain in use at time of writing, and share the common characteristic of being located outside of residential areas. The operation of small, shallow tips in sand quarries in Dingley and Clayton South continued until 2016, with operators finally bowing to the pressure of neighbours: although adjacent agricultural and industrial land-use served as a buffer zone for much of the site—likely underpinning its continued use—odours and seagulls created a disturbance leading to the closure of these operations.[768]

Although quarrying had ceased in many urban locales by the late 1990s, heightened community opposition to tipping—discussed within case studies outlined in this thesis—prevented their use for this purpose. Tony James of the Municipal Association of Victoria stated that the city had 'simply run out of holes in the ground' to use as tips; conversely, it can be argued that the issue reflected the absence of *usable* locations.[769] This brought about discussion of the 'NIMBY'—'Not in my back yard'—which municipalities sought to cast blame upon for their 'shackling' of sites which could be used for rubbish disposal.[770] City Engineer for Whittlesea, Rob Becker, surmised the situation:

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[766] "Getting rid of the garbage," *The Age*, August 16, 1990, 13.

[767] Jane Wilson, "Councils, EPA clash over waste disposal," *The Age*, August 19, 1990, 5.

[768] "Clayton South, Clarinda and Dingley Village odours," Environment Protection Authority Victoria, published April 8, 2019, https://www.epa.vic.gov.au/our-work/current-issues/landfills/clayton-south-clarinda-dingley-village-odours.

[769] Jane Wilson, "Councils, EPA clash over waste disposal," *The Age*, August 19, 1990, 5.

[770] Ibid.

> The days when you could find an old quarry and put up a temporary office and a few signs and say it was a tip are long gone. Now it's a real challenge.[771]

The EPA concentrated its efforts on promoting recycling, enshrined by a report from the Parliamentary Natural Resources and Environment Committee: landfill was now proclaimed a finite resource, and a 'last resort,' to be managed through incentivised and integrated municipal and State government approaches to recycling and waste management.[772] A plan put forth by the Victorian Government incorporating actions leading to behavioural change was titled *Recycle 2000*.[773] The Kirner Government proposed a target of halving the rate of waste disposed of in landfill by 2000, coinciding with the estimated remaining lifespan of the city's metropolitan tips.[774] This plan detailed the need for community education to increase the level of participation of householders in sorting refuse prior to its collection by council, placing it in a dedicated bin or crate; households had previously placed recycled waste into a 'bottle bag,' which saw low participation rates.[775]

The use of alternate methods of disposal as noted in European precedents—particularly incineration—was not favourably viewed by the EPA for household waste disposal. The EPA maintained the perspective that Melbourne was uniquely advantaged by abundant spaces suitable for tipping. Such sites would have their lifespan extended to the utmost extent, if only to keep costs lower.[776] Compared to Sydney, where destructors and incinerators were used to a far greater extent, the

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[771] Ibid.

[772] "Revolution makes landfill last resort," *The Age*, December 3, 1990, 40.

[773] Peter Schumpeter, "One bin for all purposes," *The Age*, May 29, 1991, 60.

[774] "Ross Peake and Kay Ansell, "Government sets targets for waste," *The Age*, June 6, 1991, 10.

[775] Schumpeter, "One bin."

[776] "Landfills under pressure," *The Age*, May 29, 1991, 60.

annual costs of refuse disposal in Melbourne were considerably cheaper per tonne: $63.47 in Melbourne, compared to $94.98 in Sydney.[777]

The *Recycle 2000* plan was enshrined in legislation through the creation of the *Environment Protection (Resource Recovery) Bill*, which sought funding for waste collection and disposal programmes throughout compulsory contributions by municipalities.[778] The 'broad aim' of this bill, as described by the EPA, would be the reduction of 'waste going to landfill by 50%.'[779] The supported *Recycle 2000* scheme would entail a levy of $2 for every tonne of waste disposed of by a municipality within a municipal tip; community members and commercial firms would pay $3 per tonne.[780] The funds accrued through this levy would be received by the EPA in order to fund two entities—the Recycling and Resource Recovery Council, and the Waste Management Council—respectively composed of industrial, community, and government representatives, and local government representatives, to implement strategies for the reduction of industrial waste in the instance of the former, and domestic waste in the latter.[781] Also funded by this levy was a later incarnation of the *Recycle 2000* plan, *EcoRecycle Victoria*, implemented in 2000 and focused largely on auditing household waste and encouraging composting so to divert greater amounts of putrescible waste from landfill.[782]

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[777] Ibid.

[778] Peter Schumpeter, "Strategy eases strain on tips," *The Age*, June 10, 1992, 58.

[779] Although this target was not achieved, the clear statement of this vision had prompted behavioural change in the community to a significant degree, normalising the practice of recycling (Auditor-General of Victoria, *Performance Audit Report No. 65 : Reducing Landfill : Waste management by municipal councils* (Melbourne: Government Printer for the State of Victoria, 2000), 4). This also allowed for the creation of future strategies, such as the EcoRecycle campaign *Towards Zero Waste,* implemented in 2003 (Public Accounts and Estimates Committee, *Fifty Fifth Report to the Parliament : Report on the review of the Auditor-General's performance audit report no. 65 - Reducing landfill : waste management by municipal councils* (Melbourne: Government Printer for the State of Victoria, 2004), 15). "Public workshops recycling legislation," *The Age*, March 26, 1992, 10.

[780] There was some agitation over this proposal as the Municipal Association of Victoria felt that any levy-related funds paid by a Council would be best paid directly towards the development of recycling facilities (Kay Ansell, "Changes could wreck recycling: greens," *The Age*, May 21, 1992, 9). In the case that municipalities operated their own landfills, they would be 'paying themselves,' a premise seen as inefficient and not conducive to best-practice recycling methods.

[781] Schumpeter, "Strategy eases strain on tips."

[782] "Garden state hopes the rot will begin to set in," *The Age*, March 18, 2000, 20.

A national plan to encourage recycling was also adopted in 1992, encouraging the redirection of glass and plastics to recycling facilities instead of landfill.[783] During this time, efforts were also undertaken in Sunshine, Northcote, and Narre Warren to harness the methane produced by decomposing putrescible fill in closed tip sites.[784] Although more robust discussion of the economics of recycling is beyond the scope of this thesis, it should also be acknowledged that significant amounts of recyclable refuse were not recycled. Materials were either surplus to the extent that municipalities placed them into landfill regardless, or they were stockpiled locally prior to their exportation for overseas processing—historical repetition can be seen in the restriction of recyclable imports from Australia into China, a major issue for Melbourne's municipalities today, which has led to the stockpiling of waste in warehouses.[785]

In a sense, the circumstances of waste disposal have come full circle, once again occupying a position above-ground not dissimilar to the piles of refuse dotting Melbourne's marshes at the turn of the twentieth century.

5.15 Contamination and toxicity

> We're running out of holes that nobody minds that we fill.[786]
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> — Dr. David Evans, University of Melbourne, 1995.

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[783] Ross Peake, "Strategy to increase recycling," *The Age*, February 8, 1992, 16.

[784] The Narre Warren and Sunshine plants continue to operate to this day, in addition to a number of similar undertakings in the heavily-quarried—and heavily-landfilled—urban fringe suburbs of Ravenhall, Broadmeadows, Clayton, Springvale, and Wyndham (NREC, *Waste Management*; Alternative Technology Association, "Methane from the Tip," *Soft Technology: Alternative Technology in Australia*, 26 (July 1987): 15-16).

[785] Hugo Kelly, "Struggling to cope with recycling boom," *The Age*, August 30, 1994, 15; Peter Fray, "Plastic, plastic … and more plastic," *The Age*, July 25, 1993, 8; Jenni Downes and Elsa Dominish, "China's recycling 'ban' throws Australia into a very messy waste crisis," *The Conversation*, April 27, 2018, https://theconversation.com/chinas-recycling-ban-throws-australia-into-a-very-messy-waste-crisis-95522.

[786] Evans co-authored a study on landfill, conducted by the School of Chemistry at the University of Melbourne, Parkville. The report, which was unable to be located, asserted that a 'growing backlash against landfill' would force the hand of state governments to locate new solutions for putrescible and industrial household waste (Caroline Milburn, "Dumps failing in waste war: study," *The Age*, November 25, 1995, 7).

Following on from these programmes, the nature of the landfill problem changed remarkably in the mid-1990s. Landfills already in existence approached completion, while a small number of decommissioned quarries remained stagnant in urban areas where tipping could not take place. Additionally, a shift in the constitution of waste took place, with household and putrescible waste outweighed vastly by building fill.[787] Underlying this was the broader economic and political climate of Victoria: the Kennett government had undertaken a number of major infrastructure projects to remake Melbourne in the image of an international city of commerce and tourism, leading to a boom in the construction sector.[788] This tied in to a national crisis warranting greater consideration of the disposal of construction by-products. Voluntary agreements were sought with development and construction firms which had come to contribute significant amounts of building fill to landfill; in Victoria alone, with the success of citizen-focused recycling programmes over the previous decade, 44% of landfill in 1995 was constituted of building fill and like remnants of construction and demolition, despite the potential to recycle such materials.[789] Exacerbating this was the construction of the M80 Ring Road—outlined in the 1969 *Melbourne Transportation Plan* as freeway corridors F3, F5 & F7—which had begun in 1989, warranting significant earthworks which had made use of the quality landfill and earth generally utilised in remedying urban quarry

[787] Building fill was comprised of, but not limited to, concrete, asphalt, and timber, with these forming sixty percent of the 3.5 million tonnes of waste received by metropolitan landfills in Melbourne in 1998 (Brett Foley, "What happens to the waste?," *The Age*, February 11, 1998, 41).

[788] Bob Birell and Earnest Healy, *Melbourne's High Rise Apartment Boom* (Melbourne: Monash University, Clayton, 2013), 10, https://tapri.org.au/wp-content/uploads/2016/02/birrell-healy-high-rise-boom-sept-2013.pdf.

[789] "Now, anything can be recycled," quipped Cathy Walker of the *Age* (June 29, 1997, 23). Walker bemoaned that the "trip to the tip is no longer the simple, quick, cathartic exercise it once was," due to high costs, and the time and responsibility entailed in separating recyclable waste; Caroline Milburn, "Construction companies in pact to reduce waste," *The Age*, November 25, 1995, 29; Hugo Kelly, "Building an empire from a rubble pile," *The Age*, May 19, 1994, 3; Rex Booker, "HIA in talks on dumping," *The Age*, August 31, 1996, 177.

sites.[790] A clay quarry site in Burwood is highlighted in the *Age* as an example of a site unable to be developed due to lack of clean fill—the site has only recently, at time of writing, become viable for commercial and residential development.[791]

The majority of fill available during this time was considered 'contaminated' as a consequence of containing asbestos, chemicals, or heavy metals—described with terminology including, but not limited to, 'hazardous,' 'toxic,' and 'dangerous.'[792] Stratifying fill into degrees of toxicity reflecting the risk of its disposal was envisioned to increase costs for more hazardous materials whilst decreasing those for minimally-hazardous waste. The depiction of waste as 'toxic' led to significant community uproar, such as in the case of Werribee, beginning in 1997.[793] A bluestone quarry operated by CSR on the south-western outskirts of the suburb had been earmarked to receive waste classified as hazardous, prompting the establishment of a group, Werribee Residents Against Toxic Dump, led by a Werribee resident and anti-war-turned-community activist, Harry van Moorst.[794] The phrase 'toxic dump' was an emotive one which captured the attention of the community, particularly in contrast with the terminology employed by industry: 'contaminated soil.'[795] The response from CSR did little to placate residents: it argued against the 'misinformation disseminated,' noting that such a facility had already existed in Tullamarine which had also

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[790] Although fill was produced by excavations for the Crown Casino and Citylink projects, this 'acid sulphate' soil did not adhere to standards set in August 1998 by the EPA for clean fill and as such, was deemed 'hazardous' (Tania Ewing, "EPA papers uncover the dirt on toxic landfill," *The Age*, December 14, 1998, 3). However, prior to the institution of new regulations in August 1998, the soil was not considered hazardous, and did not necessitate specialised disposal. Consequently, this soil disposed of in quarry and landfill sites throughout Sunshine, Albion, Altona, Werribee, Brooklyn, Tullamarine, Rockbank, Bulla, and Laverton, as well as in landscaping for a new housing development, Sanctuary Lakes, in Point Cook.

[791] "Pipe factory ready for housing as the east looks to industrial sites," *The Age*, December 2, 1995, 195; "Burwood Brickworks," *Frasers Property*, published 2019, https://www.fraserspropertyforestry.com.au/vic/burwood-brickworks.

[792] Royce Millar, "EPA plan to put toxic soil into suburban landfill," *The Age*, February 14, 1999, 4.

[793] Tim Winkler and Leonie Wood, "CSR defends toxic dump," *The Age*, July 17, 1997, 7.

[794] van Moorst was also involved in the community opposition to Niddrie quarry in the 1990s, as well as in the present-day movement against the expansion of the Ravenhall tip. ("The tough task of taking care of the toxics," *The Age*, August 18, 1997, 27). His previous activism as a student during the 1960s focused on anti-war sentiment in light of the Vietnam War. He has resided in Werribee for over twenty-five years and is presently the director of the Western Region Environment Centre ("MY WYNDHAM: Harry van Moorst, Werribee," *Star Weekly*, March 4, 2014, https://www.starweekly.com.au/classifieds/1797580-my-wyndham-harry-van-moorst-werribee/).

[795] Royce Millar, "EPA plan to put toxic soil into suburban landfill," *The Age*, February 14, 1999, 4.

attracted ire. In an open letter to dispel conjecture, John Lockett, Executive General Manager of CSR Construction Materials, wrote: 'The proposal is not a "toxic dump", but a carefully designed and engineered prescribed waste landfill.'[796]

Such phrasings led the EPA to later announce a method of classifying waste in more specific terms, to 'ensure that the appropriate treatment or management or requisite amount of protection is applied more strategically.'[797] However, the issue of the Werribee landfill proved far more problematic than a mere matter of vernacular: it also highlighted the ability of the Victorian planning system to approve a planning permit in the instance that a local government had rejected it, exposing the power of the Planning Minister to override and overpower existing decisions. Rob Maclellan, Minister for Planning—key to the saga pertaining to Niddrie, as will be seen—announced that he could make a 'parallel decision' to approve the CSR landfill, and that the municipality of Wyndham could similarly approve it, 'or take perhaps what might be an easier political road.'[798] Bernadette George, president of Environment Victoria, lambasted Maclellan, stating that state government support for the Niddrie and Werribee landfills was not 'good planning.'[799] The scheme's opponents' emphasis on the notion of 'poor planning' continued as van Moorst attended a speech delivered by Maclellan at the Law Institute of Victoria, seeking to deliver a writ authored by the residents fighting the CSR plan. The writ asserted that the planning minister's approval of the landfill, and any amendments to the planning scheme which would allow it, would be unlawful.[800] Perhaps reflecting the disempowerment of the municipality, the City of Wyndham sought intervention from the Federal Minister for Environment Robert Hill.[801] In the following months, CSR engaged in a

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[796] CSR Limited, "An Open Letter to all Victorians about Werribee," *The Age*, April 5, 1998, 2.

[797] Millar, "EPA plan to put toxic soil into suburban landfill."

[798] Gareth Boreham and Karen Lyon, "Outage as toxic waste dump gets the go-ahead," *The Age*, May 1, 1998, 3.

[799] Karen Lyon, "Maclellan's toxic dump decision under fire," *The Age*, May 2, 1998, 13.

[800] Karen Lyon and Tim Winkler, "Excuse me minister, here's a writ from Werribee," *The Age*, May 7, 1998, 9.

[801] "Councillors call for intervention from Canberra," *The Age*, May 9, 1998, 13.

public relations campaign of advertising and initiating community meetings, attempting to alter public sentiment towards the development. Over fifteen thousand residents formally opposed the landfill which led to two months of mediation ordered by the Supreme Court, ultimately resulting in the City of Wyndham purchasing the land from CSR in a buy-out arrangement.[802]

With CSR formally abandoning its plans for the Werribee quarry site, Premier Jeff Kennett stated that the company was 'totally inept and incompetent … In the end, they simply didn't have the stomach for seeing it through.'[803] Although this victory proved monumental for Werribee residents, enshrining the power of collective activism, it did not abate the issue of industrial waste disposal, resulting in talks to extend the existing operations at Tullamarine; further still, the Werribee quarry could continue to be used for clean landfill. Kennett additionally called for greater community involvement in the selection of landfill sites, which resulted in the establishment of a bipartisan committee to work alongside government, private firms, and local communities: founding members of the committee included Caroline Hogg, a Labor party member; Harry van Moorst; and Brian Boyd, an industrial officer of the Trades Hall Council.[804] This committee later went on to release a report in April 2000 which defined the matter of landfill siting as 'contentious' but failed to make recommendations for prospective landfill sites, warranting the creation of a taskforce to examine this matter in the following year.[805]

The saga of the Werribee landfill additionally fuelled the creation of environmental policy in the lead-up to the 2000 State Election.[806] The Opposition Leader, Steve Bracks, criticised the handling

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[802] Sandra McKay and Geoff Strong, "Kennett blasts CSR over dump," *The Age*, November 17, 1998, 6.

[803] "Dump plan switch fury," *Herald Sun*, 9 May 1998, 12.

[804] Penny Fannin, "Doctors warn on toxic waste site," *The Age*, January 7, 1999, 6; Clare Kermond, "Hunt widens for toxic sites," *The Age*, February 4, 1999, 8.

[805] Bill Birnbauer, "Union threat to disrupt major projects," *The Age*, December 18, 2000, 3.

[806] The production of industrial waste was addressed with a campaign by the EPA to reduce the level of 'hazardous wastes' destined for landfill by 50%, not dissimilar to the household-focused recycling campaigns embarked upon earlier that decade. A full-page advertisement detailing these new regulations was placed in the Age by the EPA (EPA, "To significantly reduce waste we've started with the worst offenders," *The Age*, May 11, 1999, 9).

of Niddrie and Werribee, stating that the Kennett government had valued wealth over health: 'We'll make sure we have sensible industrial waste management in this state, not simply dumping on communities, and that's what the Kennett Government's done.'[807] Following the successful election of the Bracks government, a major policy shift was announced on the 8th of December, 2000, cementing a commitment to disallowing any development of landfills for receiving hazardous waste, citing community opposition: a new approach would be warranted.[808]

5.16 'Victims of history'

> … western suburbs residents are victims of history.[809]
>
> — Gabrielle Costa, reporter at *The Age*, 1997.

By the late 1990s, the contentious issue of tipping in metropolitan Melbourne had settled firmly in two locales, Niddrie and Werribee. The basaltic northern and western aspects of the city were abundant with quarried sites of varying scales, but quarries were now within close proximity of residents willing to raise issue with undesired land-uses. This provides some basis, in conjunction with the historical narrative presented in this chapter, for tracing the unfolding story of development in the collective rejection of landfill as an urban land-use. As such, the case of Werribee, given its peri-urban location, is discounted, and a focus on Niddrie is established: it is a case study which reveals numerous aspects of the Victorian statutory planning system, as well as the politicisation of planning, and the influence of community objection in mediating development outcomes, whilst

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[807] Gabrielle Costa, "Bracks lays out green schemes," *The Age*, August 30, 1999, 6.

[808] "Waste policy may be hazardous," *The Age*, December 19, 2000, 10.

[809] Gabrielle Costa, "West fights against 'land of tips' image'," *The Age*, September 1, 1997, 25.

also cementing the period which marked the tip as a land-use no longer appropriate for suburban Melbourne.

Strategic policies developed in recent decades sought to enshrine the emphasis on recycling: in the *Melbourne 2030* plan, landfill was only introduced as a 'least preferred option' to recycling and more sustainable modes of waste management.[810] This is reiterated in the 2008 document *Planning for all of Melbourne*, which again endorsed the redirection of refuse from landfill to recycling programmes.[811] Absent in these directives is the connection between landfill and land-use. This weakness is remedied, albeit in a very succinct fashion, in the 2014 *Plan Melbourne*: it is stated that the recovery of waste is 'critical in a land-use context' as recycling serves to 'minimise the need to find suitable landfill sites to store waste as the city grows, and reduce the transport task of moving waste across the city.'[812]

Landfill is no longer undertaken within Melbourne's urban realm, largely as a consequence of public opposition. It is now a land-use activity deemed appropriate for, and relegated to, areas beyond the urban fringe. However, as the metropolis grows, residential development and the bluestone quarry-tip will continue to meet. One example of this is the Rockbank-Ravenhall tip complex, thirteen kilometres west of Deer Park, the last western suburb before Melbourne's outermost metropolitan boundary. This quarry has been intensively worked for a period of thirty years in tandem with its use as the Melbourne Regional Landfill, beginning in 1998.[813] The landfill is still operated to this day, however, the encroachment of development—particularly the suburb of

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[810] SGV, *Melbourne 2030*, 40.

[811] SGV, *Planning for All of Melbourne,* 23-24.

[812] SGV, *Plan Melbourne,* 142.

[813] Adrian Rollins, "That's a hole lot of waste," *The Age*, November 6, 1997, 19.

Caroline Springs, three kilometres north of the landfill site—has resulted in a community campaign, 'Stop the Tip.'[814]

The website of the operator, Cleanaway, emphasises that the tip was in operation well prior to the establishment of housing estates in the area; however, recent planning applications made to expand the site have prompted further outcry from residents who had long tolerated unpleasant odours. Furthermore, the expansion of the existing landfill is anticipated to endanger the further development of the urban fringe, particularly in Mt. Atkinson, Truganina, and Rockbank, revealing a repetition of the issues historically faced in urban areas where quarrying and tipping took place. This particular instance sits outside of the temporal scope of this work, however, it presents a fascinating case for future analysis, and comprises one aspect of the discussion within the concluding chapter of this thesis.

5.17 Chapter conclusion

The disposal of rubbish in Melbourne throughout the city's history has consistently made use of irregular terrain: low-lying or undulating land, or quarried voids. Topographical and geological characteristics, in addition to formative approaches towards hygiene in the city's first hundred years, have resulted in a remarkable dependence upon the use of tips or landfills, in contrast to compaction and incineration approaches applied elsewhere in Australia. This chapter makes clear the link between extractive industry, the resultant quarry site, and the subsequent necessity of locating a facility for waste disposal, culminating in a symbiotic relationship between these sectors. Drawing upon the 'law of garbology,' a mounting crisis is traced through an increased rate of waste production corresponding with the increased regulation of extractive industry and its growing

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814 Clay Lucas, "Massive expansion of Ravenhall tip approved despite developer-led campaign," *The Age*, June 9, 2017, https://www.theage.com.au/national/victoria/massive-expansion-of-ravenhall-tip-approved-despite-developerled-campaign-20170609-gwo1mg.html; Joseph Dunstan, "Future of Victoria's biggest tip in the balance as western suburbs prepare for legal fight," *ABC News*, September 9, 2017, https://www.abc.net.au/news/2017-09-09/future-of-victorias-biggest-tip-in-the-balance/8873832.

discordance with urban development.[815] Although tipping was supported by municipalities and state government alike, as a convenient and profit-generating interim use, communities increasingly vocalised their distaste for such ventures. This came despite the typical after-use of the tip site as public open space *de rigueur* with a 'compensating atmosphere.'[816] The changing nature of waste disposal is also highlighted with respect to growing community awareness of the environment and behavioural change programmes led by government which highlighted the importance of recycling. From an institutional perspective, however, this reflected increasing anxiety in relation to the poor availability of tipping facilities and the need to prolong their lifespan. This chapter makes clear that state governments and municipalities sought to continue the practice of landfill contrary to the wishes of affected communities, sparking criticism, protest, and activism—movements which are largely absent from narratives of development, and which highlight grave oversights in the planning of these undesirable land-uses. Two case studies follow this chapter, which remedy this absence with the illustrative examples of Newport and Niddrie.

[815] Maslen, "Rubbishing Australia," 180-186.

[816] "The Albert Park : A Tragedy," *The Age*, September 23, 1927, 10.

Chapter 6 Newport Lakes

6.1 Chapter introduction

> The landscape around here is very flat, you don't get a long view. But when you go into the lakes you see water and these red cliffs. The industrial landscape is obliterated.
>
> — John Kirby, student, 1985.[817]

When John Kirby described a quarried landscape in the western suburb of Newport, the future of the site was in question. Newport had been heavily industrialised for most of its existence, with housing supplied for workers in local industry: many residents worked at the railway yards, in Williamstown's dockyards, at the Newport Power Station, or in Altona's refineries.[818] Suburban developments would abut problematic sites such as briquette storage facilities or, pertinently for this research, bluestone quarries. Residents, generally working-class, shouldered this burden, tolerating pollution, dust, and debris as symptoms of necessary (and necessarily proximate) industries. Such unpleasant activities took place unabated for over a century, their discontinuation often forced by exhausted residents. Protests took place locally in response to the Newport Power Station modernisation in the 1970s, with the underlying notion that noxious activities were no longer welcome in the area; strong concerns for social and environmental justice emerged amidst community unrest with a clear emphasis upon urban nature, or failing that, the reduction of pollution.[819] Exemplifying this shift in social and environmental consciousness is the Newport

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[817] Kirby was a student of landscape architecture at the University of Melbourne, having undertaken a thesis in 1981 on Newport Lakes which is, at present, inaccessible. Kirby provided public commentary on the topic, however (Kathy Kizilos, "Residents fearless may become pools of garbage," *The Age*, May 28, 1985, 17).

[818] Lee, *Railway*; Sandercock, *Property, Politics, and Urban Planning,* 216; David Wilson, "Altona homes in doubt," *The Age*, November 13, 1976, 8.

[819] Sandercock, *Property, Politics, and Urban Planning*, 216; M. Fletcher, "Dismantling a Garden City," in *Digging People Up for Coal: A History of Yallourn,* ed. Meredith Fletcher,(Carlton: Melbourne University Press, 2002), 181.

Lakes park complex, located in the north-western area of Newport adjacent to Altona North and South Kingsville. The site operated for over a century as a bluestone quarry. Its present-day form demonstrates compromise: a portion of the site was developed as nature-oriented open space, whilst the remainder was repurposed for a municipal tip en route to creating recreation and playing fields. This chapter traces the evolution of Newport Lakes situated within broader characteristics of the urban realm, understanding community sentiment not only towards the quarry site in its operational years, but also its stagnation and eventual transformation.

The re-use of the quarry site can be traced to the 1975 grant gifted by the Whitlam Government to the City of Williamstown to purchase a portion of the active quarry site for re-use as a regional tip.[820] Williamstown had been pressured to establish this tip as surrounding municipalities had exhausted and remade their existing tips, had no suitable sites, or could not operate their own. The uptake of tipping in the western portion of the site provided a financial basis for the remediation of the remainder of the site, and was integral to the success of this civic project. Accordingly, funds from tipping allowed the municipality to purchase the remainder of the site in late 1980. The groundwater lakes were to be used for fishing, recreation and conservation. Additional investments had been made by council in landscaping a portion of the site, making it hospitable to native waterbirds and birds of prey; large basalt cliffs and deep pools of water were an accommodating deviation from the otherwise flat western suburbs.[821] It was hoped that the Council's successful management of the site, applying a plan created by consultant engineering firm Scott and Furphy,[822] would be an 'extraordinary venture' that would 'win much praise in this decade and the wider

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[820] "Lakes of Williamstown," *The Western Times*, June 23, 1982, 2.

[821] Kizilos, "Residents fearless may become pools of garbage."

[822] Scott and Furphy had also produced a development report for Yarra Valley Metropolitan Park in 1980 (Melbourne: MMBW, Metropolitan Parks Division, 1980); the 1979 'Outer ring - Diamond Creek to Ringwood study' (Melbourne: Road Planning Liaison Committee, 1979); and the 1974-5 Flinders Island planning scheme (Hobart: Scott & Furphy Consulting Group, 1974-1975) amongst a large number of municipal planning studies and technical landscape reports.

acclaim of posterity.'[823] Indeed, the Newport Lakes parklands today provide a much-celebrated reprieve from suburbia, a dynamic 'bushland oasis' allowing for a multitude of uses.[824] Through the use of archival material and newspapers, a history of this process is constructed which makes clear the complexities of developing of a bluestone quarry site where tipping is simultaneously undesirable to the community, yet necessary.

6.2 Site context

Soon after European settlement it became known that stone was accessible and high quality in Newport. Quarrying took place as early as 1868 in an area initially known as Goose Flats and Hall's Paddock.[825] Today, Newport Lakes consists of three quarry holes across a site of 80 acres, ten kilometres from central Melbourne (see Figure 6.1).[826]

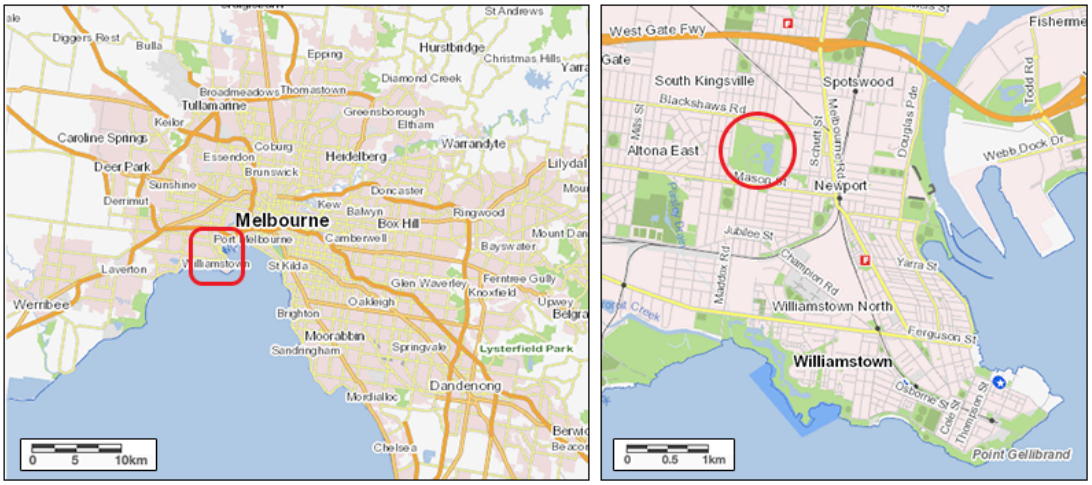


Figure 6.1: The location of Newport and its quarry complex, now a park (Department of Environment, Land, Water and Planning, *Mapshare*, 2019, https://mapshare.vic.gov.au/mapsharevic/).

[823] "Lakes of Williamstown."

[824] Hobsons Bay City Council, "Newport Lakes," n.d., https://www.hobsonsbay.vic.gov.au/Community/Parks-Conservation/Newport-Lakes.

[825] "Blasting at the Newport Quarries," *The Age*, September 29, 1884, 5.

[826] This site was also known as the 'old Newport quarry' ("Lakes of Williamstown."). It was owned by the Pioneer quarry firm in the late twentieth century.

Early extractive ventures were initially privately-owned, operated by firms with a lease on the site. Although historical aspects of the site will be discussed in relation to their specific operators, the overall site—and the name 'Newport Lakes'—refers to the area bounded by Margaret, Graham, Perry, and Bruce Streets.

The City of Williamstown came to own a total of 18 hectares, of which 5.5 hectares were purchased by the council in 1924 for quarrying and then leased to Pioneer Quarries in the 1950s on an extractive royalties basis. It was evident within ten years that the site was almost completely worked out. Negotiations then began with the MMBW to rezone the land from Light Industrial to Public Open Space. The council made open space its primary objective, and tipping second. The eventual creation of open space would, it was surmised, be of benefit to the surrounding residential area.[827] Despite the industrial nature of the suburb, quarrying was met with some hostility, as a letter to the editor of the *Age* in 1884 shows: it detailed 'the careless manner in which blasting operations are carried on in the quarries at Newport, there being no warning given when shots are fired.'[828] The writer continued: 'Children passing to school and people on business are liable at all times to be injured or killed by falling stones.' The quarry was later advertised for sale in December of 1886, with real estate agents Clarke and Bradley stating their 'desire to call special attention to the above very valuable quarry property.'[829]

The municipality later established a quarry in this area in 1925 to utilise bluestone for construction and road metal; mismanaged, it proved unprofitable.[830] The stone was later used for crushed metal and screenings—fine pebbles—for housing and landscaping, as well as rock fill and brick sand, the latter being of dismal quality in comparison to brick-making materials found in the city's immediate

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[827] P. E. Bishop, John Connell Consulting Group, correspondence to Councillors, May 24, 1982, PROV, VPRS 11565/ P0001/73.

[828] "Blasting at the Newport Quarries."

[829] *The Age*, December 4, 1886, 14.

[830] "Loss on Municipal Quarry," *The Age*, November 13, 1926, 18.

northern and eastern suburbs.[831] The materials procured were crucial for the construction of local roads and gutters, as well as sea walls in adjacent suburb of Williamstown, redressing the difficulty of quarry management and operation. Other quarry holes in Newport, such as a site located on Paine Street, exemplified the quandary presented by a large hole in the landscape. By 1938 residences constructed nearby prevented the continued working of the quarry, and the municipal engineer suggested its re-use as a tip. While he conceded that 'it might be argued that it would be a nuisance if used in this way… it had to be admitted that the quarry was a nuisance at the present time, and if it were filled the land could be put to good use.'[832] The south-western portion of the site was operated by T. Pavey Constructions, and it later became known as Pavey's Hole. In 1956, explosives used for rock-blasting began a fire which endangered surrounding factories.[833] Further difficulties arose in October 1960 when residents began to vocalise their objections to the continued operation of the quarry: T. Jaskewycs, a local resident, accumulated twenty-seven Percy Street residents' signatures, protesting the noise issue in the area, to forward to the Mines Department and Council.[834] Most of the twenty-six residences on Percy Street had been built since the Second World War, demonstrating encroachment upon the existing quarry (see Figure 6.2). As well as noise, residents' concerns included broken windows and plasterboard, dust, and explosions emanating from blasting activity. The Chief Inspector of Mines, Mr. Hadden, stated fencing was to be replaced around the site, a move supported by councillors who recalled witnessing children trespassing in the quarry and 'pulling each other up [quarry walls] with ropes.'[835]

Children were not the only unlawful users of the site, however: a non-fatal shooting had taken place in the winter of 1964. Ian Ramsay Campbell, of Altona, had a dispute with fellow quarry truck

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[831] *The Age*, June 27, 1945, 2.

[832] "Use for Newport Quarry?" *Williamstown Chronicle*, April 16, 1938, 1.

[833] "Firemen go into Blazing Magazine," *The Age*, December 29, 1956, 4.

[834] "Council Acts on Complaints of Noise, Damage of Quarry Blasts," *The Age*, October 4, 1960, 6.

[835] Ibid.

driver, South Yarra man Nicholas Alefantis, who was injured but survived.[836] The quarries were now leased by the City of Williamstown to a range of contractors, who did not respond adequately to the concerns of residents. The contractors simply noted a number of instances wherein blasting took place after-hours due to delays caused by broken equipment, and did little to alleviate any issues reported by residents.[837]

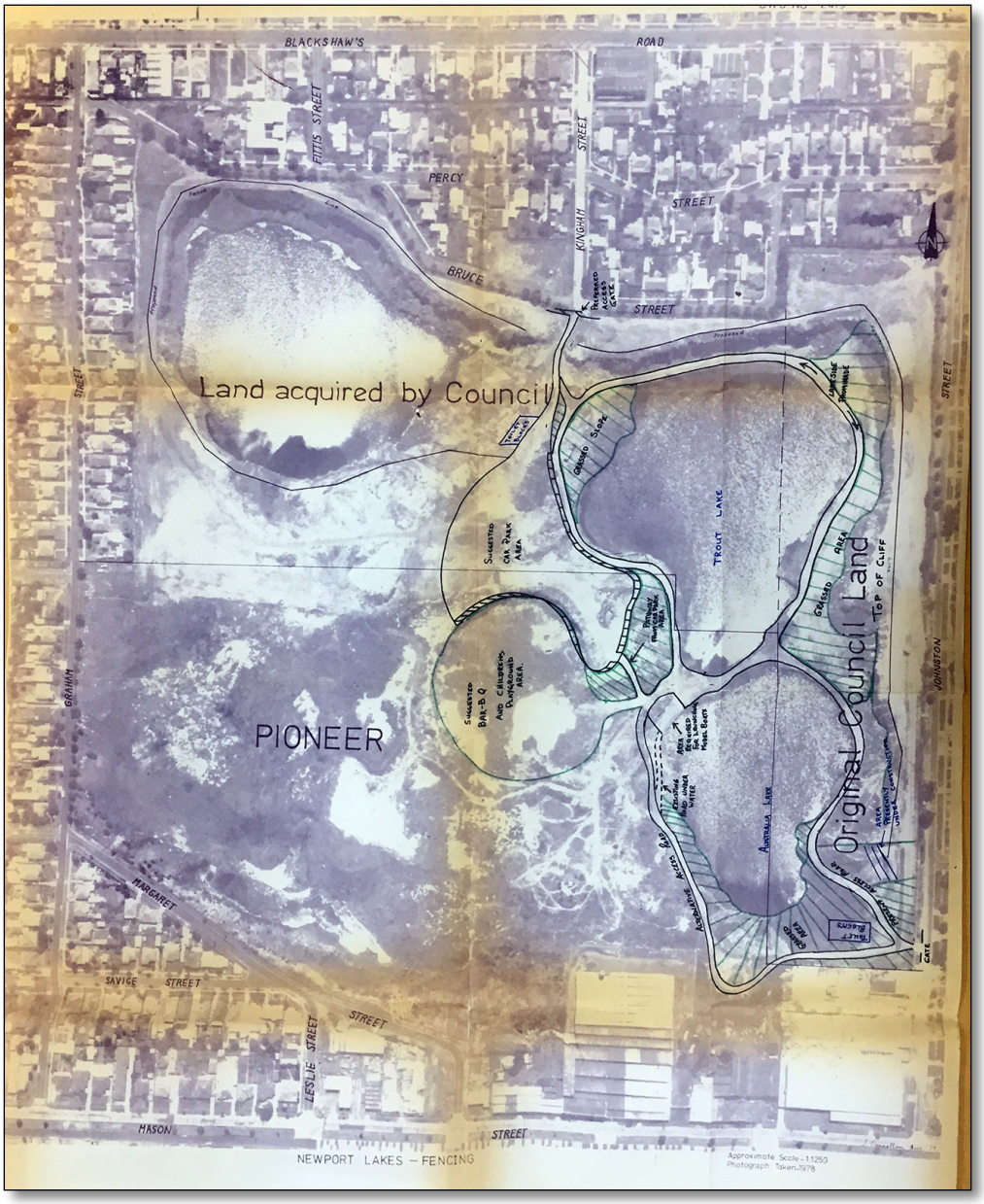


Figure 6.2: The proximity of houses to the Newport quarry complex, with segments marked for potential recreational use (Quarry map, n.d., in VPRS 11565/P0001/73, N 8/1, 'Newport Quarry,' Public Record Office Victoria).

[836] "Shooting Count: Man for Trial," *The Age*, July 2, 1964, 6.

[837] "Council Acts on Complaints of Noise, Damage of Quarry Blasts," *The Age*, October 4, 1960, 6.

6.3 The need for urban tips

An integral factor determining the re-use of the Newport quarry was that adjoining—or even distantly located—municipalities lacked their own tipping facilities. In June 1977 representatives of the Cities of Altona and Essendon expressed concerns.[838] Mr. Ron Cameron, speaking for Essendon, requested that the City of Williamstown consider purchasing machinery to pulverise and compact garbage, thus prolonging the lifespan of the Newport tip. By association, representatives of these municipalities did not vocalise their support for the Newport Lakes project. It would require a commitment by the City of Williamstown to provide room for a projected figure of 1.5 million cubic yards of refuse elsewhere. This was compounded by concerns that tips within the adjacent City of Sunshine were close to completion.[839] This prompted the City of Williamstown to establish a recycling depot within the municipality, specifically for bottles, glass, and aluminium cans, but not putrescible household waste.[840]

Tipping in the Newport site was not an easy undertaking. The proximity of housing made access problematic, and the popularity of weekend tipping introduced traffic problems into an otherwise quiet residential area. The small size of the tipping face reduced the speed with which garbage could be thrown into the void, creating long wait times—and lines of traffic—that culminated in 'frayed tempers.'[841] Exacerbating this was the use of the Newport tip by residents of the Cities of South Melbourne, Footscray, and Altona, in addition to those in the Williamstown municipality. Consequently, the City of Williamstown entered into talks with Pioneer Quarries to create a mound on their land, creating another interface with the tip from which refuse could be disposed. This was

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[838] City of Williamstown, *Record of proceedings of a meeting with representatives of the Western Region Commission convened at the Williamstown Town Hall to discuss future development proposals for the Newport Quarry area, Meeting of June 23*, 1977, PROV, VPRS 11564/P0001/12.

[839] J. Thompson to Trevor Sloan, July 22, 1977, PROV, VPRS 11564/P0001/12..

[840] Sloan to John W. Mitchell, letter to The Steel Can Group, October 10, 1977, PROV, VPRS 11564/P0001/12.

[841] Environment Director's Report, *Newport Lakes 4/12/1978*, 858, PROV, VPRS 11565/P0001/73.

an initial registration of interest in Pavey's Hole; the Council additionally wished to move their tipping operations onto part of that site for the disposal of non-putrescible fill. Some councillors felt that this site was appropriate for rubbish dumping, and that this would increase the lifespan of the tip by three years, although other suggested that tipping should cease as soon as possible, demonstrating the difficulty in balancing the necessity of rubbish disposal with the fostering of increased amenity.[842]

Unmet demands for tip access resulted in the dumping of rubbish around the perimeter of the site.[843] This proved difficult to curtail, particularly on weekends, as unsupervised tipping was permitted. As a result, costs were incurred in cleaning the site; additionally, fires were lit, with the smell and smoke affecting nearby residents. This also reduced the ability of the fire brigade to respond to fires within the community as their time and effort was focused instead on putting out tip fires, at an estimated average cost, for a single fortnight, of $1,400.[844] Sunday tipping in the north-western hole was discussed and it was decided by the municipality that this would no longer take place, in order to reduce costs as well as the number of incidents. The council requested that Pioneer Quarries permit the disposal of refuse in Pavey's Hole but the company refused; residents of the City of Williamstown were advised that tipping would 'likely' cease entirely on the 19th of February 1979.[845] Despite the continued use of the quarry for refuse disposal, the municipality made clear that tipping would lead to the creation of public open space in the future; progress towards this was not linear, however.[846]

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[842] Ibid.

[843] City of Williamstown, *Minutes of Meetings of the City of Williamstown on Newport Lakes, Item 2.A*, April 26, 1979, PROV, VPRS 11964/P0001/13..

[844] City of Williamstown, *Environment Director's Report,* February 12, 1979, PROV, VPRS 11565/P0001/73.

[845] Ibid.

[846] S. Hayden of Newport to Sloan, 8 August 1979, PROV, VPRS 11565/P0001/73.

6.4 An opportunity for development

Pioneer Quarries' refusal to allow the City of Williamstown to utilise any part of Pavey's Hole became apparent when plans were released for the development of a housing estate on the site. The Pioneer housing development would be of a cluster home typology that would 'capitalise on the topography of the existing terrain.'[847] This development would consist of 350 housing units in a mix of villas, townhouses, flats, and community facilities, with 'specialised housing' for the retired and elderly [fig. 5].[848]

These plans were from Peter Tsitas and John Griffiths in 1974, commissioned by Pioneer. The site was also considered for light industrial subdivision but this would not be complementary to the eventual use of part of the quarry as parkland, and the topography of the site would make it unsatisfactory for the large footprint of factory floors. Conversely, the development of housing and parkland was considered in this report to be 'well placed, appropriate to the area, timely and generally of benefit to the municipality and community.'[849] 'Leisure [and] pleasure' were hoped to redefine a site so plagued by its association with rubbish and rats.[850] Homes would sit atop stable portions of the site, with the remainder landscaped in a pleasant manner (see Figure 6.3). The proposal stated that:

> The area surrounding the site is almost completely residential and one could therefore hardly argue that a park is not more appropriate than either the site's original use, quarrying, or its alternative use, garbage disposal. In respect of the housing development, it would again be

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[847] John Griffiths, *City of Williamstown and Pioneer Concrete Services Limited : The Newport Quarry Development : Briefing and Position Paper* (Melbourne: P. A. Consulting Services, 1979), 6.

[848] Ibid.

[849] Ibid.

[850] "HOUSING VISION," February 11, 1976 *Williamstown Advertiser*, in VPRS 11565/P0001/73, N 8/1, 'Newport Quarry,' PROV.

difficult to imagine a more appropriate use for what might otherwise remain a visual wasteland and eyesore in a residential area.[851]



HOUSING VISION

What's quarry future?

Leisure, pleasure . . . rubbish and rats?

The 84 acres of Newport quarry could become Melbourne's most unusual housing cum leisure area before long . . .

. . . . If Williamstown Council doesn't use it as a regional rubbish dump.

The council bought part of the quarry with a Whitlam Government grant of $330,000 to bring its share of the hole to 42 acres, one half.

The other half is owned by Pioneer Concrete.

After buying the land, council commissioned town-planning consultants Peter Tsitas and Partners to investigate the quarry for passive recreation.

That was in February last year. In September, Pioneer Concrete commissioned the firm to make a study of its half of the quarry — for cluster housing.

"With the development of all the quarry this way, the area would be a really exciting and unique thing for the west," Mr. Tsitas told the Advertiser.

However, so far the council has done nothing more towards the firm's plan.

Another meeting will be held with a council committee this week.

The Town Clerk, Mr. John Mosley, said recently the quarry, under the conditions of the Federal Goverement grant, would have to be used for tipping.

The council applied for the money saying that the 84 acres could be used by all western region councils as a dump.

BELOW: As it could be.

68 6911 (6 lines) WILLIAMSTOWN Price: 3c

Advertiser

Publicising Williamstown, Newport and Spotswood

No. 5483 Registered for posting as a newspaper category "B" Wednesday, February 11, 1976

Figure 6.3: A local newspaper article concerning the housing development ("HOUSING VISION," February 11, 1976 *Williamstown Advertiser*, in VPRS 11565/P0001/73, N 8/1, 'Newport Quarry,' PROV).

It was estimated that approximately 1000 residents could be housed, with 250 of those being elderly (see Figure 6.4). This would generate a considerable amount of rates for the municipality—47% of which was considered 'unrateable'[852]—and the development was also seen to resolve issues such as ageing housing stock elsewhere in the region, new and younger demographics, and the high

[851] Ibid, 10.

[852] The municipality contained a significant amount of Federal and State government-owned post-military, post-industrial, and in-use industrial sites, which did not owe rates (Richard Yallop, "Emotions flare behind Williamstown's calm," *The Age*, August 18, 1984, 19.

proportion of 'aged people.'[853] Tsitas recalls that councillor Adelia Bernard had lobbied Jim Cairns, Deputy Prime Minister in the Whitlam government, to locate a novel after-use for the site. Canada's Butchart Gardens, located in Victoria, British Columbia, functioned as a precedent. Tsitas' education and work as a town planner in postwar London also gave him close familiarity with concepts of urban renewal and clustered housing, particularly in Blackheath:

> We turned the disturbed areas into landscaped pockets, and these [houses] would be on solid ground. This produced an interesting organic form. There would be walkways through this, entry points that come in so they're not totally enclosed, so there would be an invitation for others to meander through this area. There was a lot of dependence on walkways, that was the theme: physical or recreational activity throughout. I always had this vision that a compact community had its benefits as it allowed closer interaction, cohesion, a community could thrive and become a healthier community, a more enlightened community, instead of encouraging parochialism and selfishness and things like that. These were the ideas anyway. No fences, open planning, a bit like Canberra, but the idea was there - to have open gardens.[854]

Newport residents considered the proposal in a positive light, as Tsitas surmises:

> The community reception at the gathering down at the site was very enthusiastic. They were hungry for ideas. They were curious, they were aware of the neglect that was around them, in an area such as this - totally abandoned, neglected, quarried. What's going to happen later on, what's going to happen now? Here comes an idea giving them a vision for the

[853] Ibid.

[854] Peter Tsitas, interviewed by Victoria Kolankiewicz, Melbourne, 12 March 2019.

future. That was great - it was unexpected … They were expecting to fill the holes, reclaim the land, maybe compact it and turn it into unimaginative open space.[855]

The proposal would ensure that tipping would not take place in Newport. Other councils were opposed to discontinuation of tipping on the site, and Williamstown itself would become 'dependent upon the goodwill of the municipalities who are more abundantly provided with suitable sites.'[856]

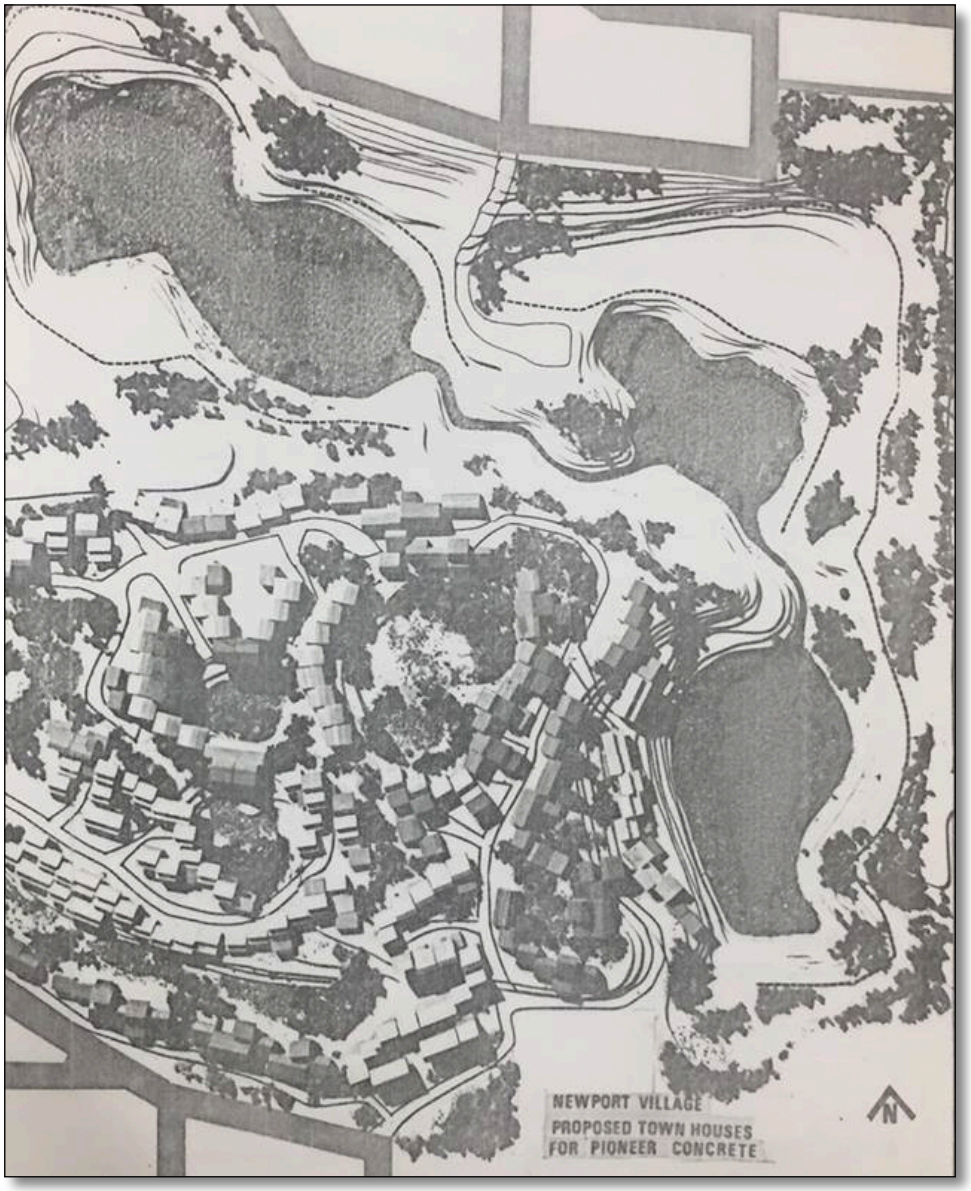


Figure 6.4: Proposed Newport Village (City of Williamstown and Pioneer Concrete Services Limited, *Newport Village : Proposed town houses for Pioneer Concrete,* 1979, PROV).

[855] Tsitas, interview.

[856] Griffiths, *City of Williamstown*, 19.

An alternative option to tipping, baling—not dissimilar to compaction— was being proposed for the Williamstown Rifle Range, now the protected Jawbone Marine Sanctuary.[857] Another site identified for this purpose was a 16.8 hectare block in Williamstown North owned by H. C. Sleigh Ltd., bordered by Kororoit Creek Road, Maddox Road, Challis Street, and a railway line. The Sleigh site had previously been used as a shallow quarry and tip; it later became an agistment property and pony club. This site was not favoured as its reuse for waste disposal would mean a decrease in the amount of usable industrially-zoned land in the area, decreasing the number of employment opportunities. Residential areas were relatively close to this site despite its prior industrial use, warranting landscape buffering that would involve high maintenance costs to the municipality. The Rifle Range proposal was envisioned as far more beneficial to the community, allowing the housing development at Newport Lakes to take place, and making use of a marshy landscape otherwise unsuitable for large-scale industrial development. Also problematic was the lack of funds to expedite the development process, and uncertainty about if or when tipping would cease. Pioneer was unwilling to invest in a housing scheme if tipping was to occur adjacent to the site, as this 'socially and environmentally undesirable' use was at odds with the proposition.[858] Discordant zoning also had to be resolved to allow the housing scheme to progress. Other issues included the delay in opening the West Gate bridge, due to its collapse in 1970 during construction, and the lack of employment opportunities in the surrounding area. While the impact of these would arguably be minimal in contrast to the premise of continued tipping in Newport, the two undertakings would have ensured a different future for the area.

As this proposal came to light, Williamstown ceased tipping in the face of issues raised by scattered rubbish, fires, traffic and the ambit housing proposal. Councillors at Altona were displeased with

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[857] The bailing process involves compacting refuse with machinery, followed by wrapping the compacted cube with plastic or similar material (William Rathie and Cullen Murphy, *Rubbish!: The Archaeology of Garbage* (Tucson AZ: University of Arizona Press, 2001), 202).

[858] Griffiths, *City of Williamstown*, 18.

these circumstances, and an article published in the *Footscray and Western Suburbs Observer* suggested that Altona believed that Williamstown had misappropriated funds received from the Federal Government to purchase one quarry hole in the Newport site: this had been done under the agreement that the site would be used for tipping well into the future.[859] Of the three quarry holes, one was already owned by the City of Williamstown outright, Pavey's Hole by Pioneer Concrete, and the third acquired by the City of Williamstown with government funding of $330,000.

The conditions for purchase were such that the quarries would be made available for use as tips, pending the schemes decided upon by the Western Region Refuse Disposal Committee. Altona Council had an interest in the matter given that the Newport Quarry was expected to service the Altona municipality following the completion of tips in that council area; however, the City of Williamstown told Altona that tipping would no longer take place 'due to lack of finance' and that it would indeed cease on 18 March 1979. While eliding strict confirmation, two Williamstown councillors made it clear that the redevelopment of the site was to take place: the Pioneer Quarries proposition in particular would provide additional revenue in the form of council rates, and the increase in population would benefit retailers in the area.[860]

As it became clear the era of tipping was coming to an end, further suggestions were made for the area's future. One resident wrote to the Town Clerk suggesting the Butchart Gardens again as a template worth considering on the basis of tourist attraction.[861] This prompted the Mayor of Williamstown, Jeffrey Bird, to write to the Chief Executive of Butchart Gardens with the following request:

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[859] "Town accused on tip funds," *Footscray and Western Suburbs Observer*, June 14, 1979, 1.

[860] "Town accused on tip funds."

[861] S. Hayden of Newport to Sloan, 8 August 1979, PROV, VPRS 11565/P0001/73.

> We have a very similar quarry in our City and are hopeful of achieving an end result something like you have.
>
> May we have say 6 copies of [a promotional] publication so that they can be shown to people. If you have any other material which you think may be useful perhaps a copy of that as well. For instance, if the accounts and annual report are public they may be helpful.
>
> This matter is fairly urgent as we have some agitation to make the quarry a garbage tip.[862]

Any response to this was not recorded. Similar enthusiasm was evident in correspondence from the Town Clerk to the Minister for Planning, the Hon. L. S. Lieberman. The Clerk, Trevor Sloan, stated that the Council had 'before it an exciting urban development concept which it believes not only fits well with the Government's strategy, but would also provide a much needed impetus to and catalyst for regeneration within the City of Williamstown.'[863] This would create a 'much needed regional park for passive recreation and substantial housing complex at the former Newport quarry site.' Relevant correspondence was also forwarded to the Minister for Local Government, and no firm decision was made on the Pioneer proposal—which did not eventuate.

6.5 An urban fishery proposal

In the interim period, the lakes were identified as ideal for angling (see Figure 6.5). The Williamstown and Newport Angling Club, in conjunction with the City of Williamstown, stocked the lakes with rainbow trout and redfin, a total of 2000 fish.[864] The Council permitted *Age* journalist

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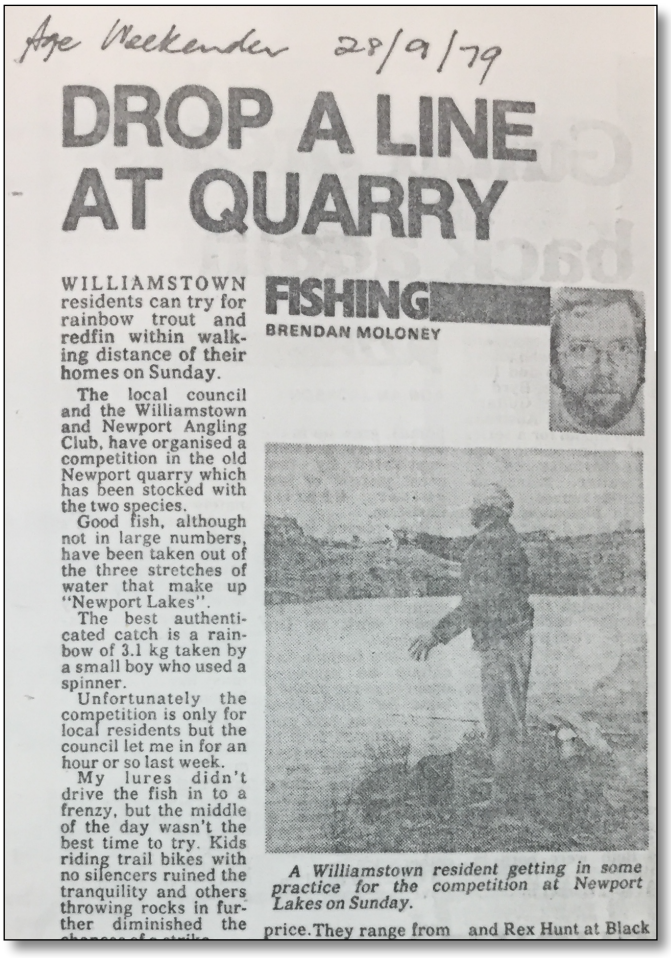
[862] Mayor Jeffrey Bird to The Chief Executive, Butchart Gardens, Victoria B. C., September 14, 1979, PROV, VPRS 11565/P0001/73.

[863] Sloan, Town Clerk, to Hon. Louis Lieberman, Minister for Planning, August 23, 1979, PROV, VPRS 11565/ P0001/73.

[864] Sloan to Brendan Moloney of *The Age*, 7 September PROV, VPRS 11565/P0001/73.

Brendan Moloney to access the site for one hour prior to writing an article on an inaugural fishing competition. Moloney stated that the fish were not responsive but:

> …the middle of the day wasn't the best time to try. Kids riding trail bikes with no silencers ruined the tranquility and others throwing rocks in further finished the chances of a strike. Even with these distractions, the old quarry is quite impressive. The water is clean and once the surrounds are landscaped properly, an eyesore will be turned into a great asset for the area.[865]



Age Weekender 28/9/79

DROP A LINE AT QUARRY

WILLIAMSTOWN residents can try for rainbow trout and redfin within walking distance of their homes on Sunday.

The local council and the Williamstown and Newport Angling Club, have organised a competition in the old Newport quarry which has been stocked with the two species.

Good fish, although not in large numbers, have been taken out of the three stretches of water that make up "Newport Lakes".

The best authenticated catch is a rainbow of 3.1 kg taken by a small boy who used a spinner.

Unfortunately the competition is only for local residents but the council let me in for an hour or so last week.

My lures didn't drive the fish in to a frenzy, but the middle of the day wasn't the best time to try. Kids riding trail bikes with no silencers ruined the tranquility and others throwing rocks in further diminished the

FISHING

BRENDAN MOLONEY

A Williamstown resident getting in some practice for the competition at Newport Lakes on Sunday.

price. They range from and Rex Hunt at Black

Figure 6.5: Newspaper coverage of the fishing event ("DROP A LINE AT QUARRY," September 28, 1979 *Age Weekender*, in VPRS 11565/P0001/73, N 8/1, 'Newport Quarry,' PROV).

The competition took place the following weekend, with 250 attendees from a diverse array of Melbourne suburbs—from Werribee to Sandringham—though only one fish was caught.[866] This did

[865] Brendan Moloney, "Drop a line at the quarry," *The Age Weekender*, September 28, 1979.

[866] E. Truman (Williamstown & Newport Angling Club) to J. T. Sloan, October 4, 1979, PROV, VPRS 11565/P0001/73.

build enthusiasm amongst those present, however, for the eventual creation of a larger recreational and park complex. The complementary use of the lakes by a model boat club was also suggested.[867] The Western Trailable Yacht Club was also contacted on the matter. The Town Clerk proposed that the use of the lakes be supported by the creation of a permanent clubhouse, parking for cars and trailers, and a launching ramp. This was evidently an attempt to reinforce human presence on the site, negating any perceived stagnancy or abandonment that might attract less desirable uses. This would also displace some responsibility from the council in that the club would undertake activities to provide car parking. The proposal for model boating was approved in December 1979 following an application from the Model Boat Club made on the 15th of November. Permission was later granted for the use of the lakes for a period of twelve months by the Model Boat Club alone; no correspondence is noted from the Trailable Yacht Club. However, the initial vision of establishing permanent fixtures upon the site did not manifest in anything concrete. Lin Woods, the secretary of the Model Boat Club, wrote to the municipality with a request that, given the weight of the equipment, members be allowed to drive into the quarry hole and park next to the lake. Woods also requested that the access route to the lake be improved alongside the provision of a 'permanent fenced off area … with a view to the public using the area at a later date we feel that toilets and a car park would be necessary.'[868] In response, the Council asked that members of the Model Boat club park outside the site.

The interest demonstrated by the City of Williamstown in stocking the lakes with fish became the concern of the Freshwater Fisheries division of the state government's Arthur Rylah Institute for Environmental Research. Charles Barnham, Liaison Officer for the Institute, wrote to Williamstown in July 1980, stating that his division 'maintained an active interest in the potential of these waters,

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[867] Sloan, City of Williamstown, to Lin Woods, Secretary of the Western Districts Model Boat Club, February 12, 1980, PROV, VPRS 11565/P0001/73.

[868] L. Woods to Sloan, May 3, 1980, PROV, VPRS 11565/P0001/73.

and would most certainly give serious consideration to development of a fishery providing that safe, free access is available to the public.'[869] Barnham also wrote to the Victorian Piscatorial Council, stating that the Division was actively considering the establishment of a trout fishery. He believed that the lakes were the 'only expanse of water within the metropolitan area which was free enough from pollution to raise trout.'[870] This would involve the assistance of angling clubs to establish fishing facilities and conduct working bees to make the site suitable. Its success would bring about a resurgence of the ''Huckleberry Finn' days,' offering experienced and novice fishermen—and especially youth—the opportunity to develop an interest in freshwater fishing.[871] Given the absence of trout-fishing opportunities in Melbourne and its wider metropolitan area, the quarry provided a unique opportunity. This is reflected in the view of John Anderson, honorary secretary of the Yarraville Angling Club & Fish Protection Society, who wrote in a letter to the Mayor and Council in July 1980 that it was 'particularly fortunate for the youth of the area who have at their doorstep something which is almost non-existent throughout the rest of Melbourne.'[872] The cooperation of the Department of Youth, Sport and Recreation was also sought as a means to acquiring funding for the construction of toilets and fencing, in addition to beautification. In June 1979 the City applied for a loan of $20,000 to fence the Newport Lakes site after two nearby residents, a young boy and an older male, fell to their deaths in separate incidents.[873] The death of the child had public liability

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[869] Charles Barnham, Liaison Officer, Freshwater Fisheries division, Arthur Rylah, to Town Clerk, City of Williamstown, July 16, 1980, PROV, VPRS 11565/P0001/73.

[870] Ministry for Conservation, Freshwater Fisheries Division, *Recreation and Leisure Consultative Committee Report* (Melbourne, s.n., July 21, 1980), PROV, VPRS 11565/P0001/73.

[871] Charles Barnham, Arthur Rylah Institute, to G. C. Ryan, Hon. Secretary, Metropolitan Division, Victorian Piscatorial Council, July 29, 1980, PROV, VPRS 11565/P0001/73; D. J. Wood, Acting Town Clerk to Fishing Clubs 'as indicated in file', the Victorian Piscatorial Council, and the Western Districts Model Boat Club, October 3, 1980, PROV, VPRS 11565/P0001/73.

[872] Ministry for Conservation, *Recreation and Leisure*, PROV.

[873] "Loan No. 75," *The Age*, June 6, 1979, 25; Barnham, Arthur Rylah, from Sloan, June 22, 1983, PROV, VPRS 11565/P0001/73.

insurance implications which would affect potential public use.[874] This was funded under the *Local Government Act 1958*, and little progress was made in developing the site further for the remainder of the year.[875] Despite perceived risk, an additional request for a grant of $15,000 was made from a fund established for the state's 150th anniversary celebrations, to create a picnic-barbecue area adjacent to Johnston Street.[876] These efforts amounted to little, and Barnham noted in a letter to Sloan in May 1983 that upon his visit to the site, public access appeared restricted, problematising its status as a recreational fishery.

6.6 Recreation and creativity in the quarry

The discourse surrounding the various proposals for Newport Lakes piqued the interest of the Melbourne residents well outside of the area, who saw potential in its creative and considered re-use. John Kirby was one such individual. Kirby was studying a Master of Landscape Architecture at the University of Melbourne which necessitated a final project,[877] which he saw as mutually beneficial for both himself and the City of Williamstown. His cited a concern that ideas for urban parks are 'sadly… rarely implemented, especially in the Western suburbs of Melbourne, which has [sic] few parks.'[878] Kirby's interest concerned the planning phase of the project as a means to the development of a brief for the site, as well as a necessary condition underlying the successful implementation of these plans.

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[874] A four-year-old boy, Bruce James Vincent Staffrace, died after falling down the quarry cliff face, and a claim for $100,000 was made under the Public Liability Insurance of the Municipality by the child's mother (City of Williamstown, *Chief Executive Officer's Report to Council Meeting, Monday 7th October, 1985, Newport Quarry — Insurance Question*, PROV, PROV, VPRS 11964/P0001/13.).

[875] Digby Crozier, Minister for Local Government, to the Hon. Ben Thomas, MLC, Legislative Council, October 2, 1980, PROV; Section 569B(8C) of the *Local Government Act 1958.*

[876] William Kaider, City Engineer, to Bill Dunn, *Victorian 150th Anniversary Celebrations*, June 28, 1983, PROV, VPRS 11565/P0001/73.

[877] This could not be located in the Faculty of Architecture, Building and Planning Library.

[878] John Kirby, document prepared for Michael Long, Councillor, City of Williamstown, September 1980, PROV, VPRS 11565/P0001/73.

Cynthia Mann was also fascinated by the quarried landscape.[879] She led the Why Not Theatre group, comprised of amateur actors, based in Carlton.[880] Beginning in the Oakleigh Technical School in 1972, it received funding from the Victorian Ministry for the Arts. The troupe focused on drama for '"ordinary non theatrical people,' a 'theatre for exploration, open to all who are interested.'[881] A description of one performance in the *Age* provides an indication as to why Mann felt the Newport site held unique potential. The review described an elaborate performance wherein a Malvern dinner party was interrupted by two guests, leading to a wild chase through Kooyong in a pair of limousines.[882] A 'policeman' met the guests at a tennis court and handed them a small plastic pig before the pursuit continued to Albert Park, where 'slovenly waiters' served fish heads; the policeman then returned, bundling the confused couples into their cars, finally redirecting them to the Why Not theatre in Carlton where 'The Real Inspector Hound,' a 'Dial-a-Play,' was performed by an amateur cast of Preshil School students. A teacher from Preshil, Dermot Lyttle, described the demographic for the performance as 'Upper middle-class people with a taste for the absurd.'

Mann wrote to the City of Williamstown as her company had identified the Newport Lakes site as a suitable for the performance of a play. The play was proposed to have a 'Roman theme' and would involve 120 people over a five-hour period. The theatre company had received a recommendation from the Town Clerk of the City of Northcote, Mr. McLean, who suggested that Williamstown's Recreation Officer, Adrian Ryan, be contacted. Mann notes that she had visited the Lakes for two and a half hours and felt 'it would be ideal.'[883] She continued: 'I am very aware of the possibility of infringement on the general public through our activities. The activities of the day would be centred

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[879] Cynthia Mann, Why Not Theatre, to City of Williamstown, February 1981, PROV, VPRS 11565/P0001/73.

[880] B. Garner, "Attracting an Audience : Theatre," in *Carlton: A history*, ed. Peter Yule (Carlton: Melbourne University Publishing, 2004), 175.

[881] Ibid.

[882] Peter Smark and Barbara Fih, "Dinner, with a soupçon of the absurd," *The Age*, July 9, 1980.

[883] Cynthia Mann, *email correspondence,* May 14, 2019.

in the small quarry site east of the two main lakes, away from the area generally used by the public.'[884] Sloan responded to her inquiry on the 27th of February that 'Council offers no objection,' but recommended that Mann contact Mr. B. Heath, Superintendent of Parks and Gardens, 'relative to accessibility to the site.' The performance went ahead; however, unlike other events by the group, no Newport performance is mentioned in the cultural pages of the *Age.* Mann has since clarified that the event was designed for a group of four friends as a birthday celebration, actually centred on a theme of ancient Greece.[885] The 'dramatic and evocative setting' of the quarry site suited the performance and contributed to it being a 'pretty spectacular' occasion.[886]

The polite permission asked of the municipality by Mann was not sought by others. Trail-bike riders in particular created a nuisance that would result in patrolling council officers, so to 'remove the nuisance of motor cycles using the Newport Lakes reserves.'[887] The problem had previously necessitated police assistance, particularly on weekends, although 'it would appear that … these measures have failed to affect the desired result.'[888] Youths were also swimming in the lakes, causing concern for council—it was decreed that water quality testing would be undertaken to ensure a good standard. Another angling competition was held on the 24th of January, 1981, but not one fish was caught. A scathing letter to the Town Clerk from E. Truman of the Williamstown & Newport Angling Club and Fish Protection Society stated: 'It was a waste of Council's money and the time and preparatory effort of members of the Apex Club and Williamstown & Newport Angler's Club, exacerbated as it spoilt a long weekend.'[889] As a result, water testing was

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[884] Ibid.

[885] Ibid.

[886] Ibid.

[887] City of Williamstown, *Minutes of Council Meeting, Meeting of 16 February 1981*, Item D199, PROV, VPRS 11964/ P0001/13.

[888] Ibid.

[889] Truman of the Williamstown & Newport Angling Club and Fish Protection Society, to Sloan, Town Clerk, City of Williamstown, March 17, 1981, PROV, VPRS 11565/P0001/73.

undertaken, and it was found to acceptable under World Health Organisation recommendations, although another sample taken from the westernmost quarry hole found the presence of E. coli.[890] The water of the western, southern, and northern quarry holes each had appropriate levels of heavy metals such as iron, copper, zinc, and lead.[891] This was certified under Schedule A of the *Analyses (Health Act) Regulations 1967*. Problems continued to mount for recreational use of the lakes as the Model Boat Club was no longer able to access the site during wet or poor weather.[892] Later analysis undertaken in 1985 determined that any issues of water quality in the two eastern quarry holes would likely have occurred from the filling of Pavey's Hole, estimated to finish in 1986.[893] These issues were linked to the brackish qualities of water, a result of eutrophication. Remedying this would come at a high cost that would problematise the achievement of beautification elsewhere in the complex.[894] The most direct consequence was that, despite significant work, the lakes could not support the aquatic life necessary for recreational angling.

A clear vision had been established in a proposal developed for the site in 1982, by the Scott and Furphy Consulting Group (see Figure 6.6). The Group consulted in a broad range of disciplines, from architecture, engineering, planning, to landscape architecture in public and private settings. The Group's landscape division was melded with a strong engineering and planning background which suited the complexity of the Newport Lakes site. Landscape architecture was considered by the firm as a field with 'a strong natural science base … concerned with the systematic evaluation of land to determine its capability of suitability for a possible future use.'[895] The Group worked with

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[890] R. J. Davis, Chief Health Surveyor, *Report to the General Committee 6th April, 1981 : Water Quality Newport Lakes* (Melboure: s.n., 1981), PROV, VPRS 11964/P0001/13.

[891] Ibid.

[892] Wood, Acting Town Clerk, to Mrs. L. Woods, *Model Boat Club*, June 16, 1981, PROV, VPRS 11565/P0001/73.

[893] Chief Executive Officer of the City of Williamstown, *Late Report, item 12. Newport Lakes — Public meeting 7/4/86* (Melbourne: s.n., 1986), PROV, VPRS 11565/P0001/73.

[894] City of Williamstown, *Preliminary Report, Sanitary Landfill Operations, Newport Lakes, Job No. 1199* (Melbourne: s.n., November 1985), PROV, PROV, VPRS 11964/P0001/13.

[895] Scott and Furphy Consulting Group, *Newport Lakes* (Melbourne: s.n., 1982), VPRS 11565/P/0001, 3.

auxiliary staff including a geologist and botanists to create a solution most appropriate to the site in question. Scott and Furphy had demonstrated a modern, community-focused practice. Their other projects included both urban and landscape design, such as the Campbell Streetscape in Swan Hill; a civic centre, plaza, and station entrance for the City of Ringwood; Ringwood Lake; Victoria Road Park, for the City of Malvern; Fraser Reserve in Brunswick; and the Coombabah Water Quality Control Centre on the Gold Coast. Closer to Newport, the firm was also responsible for a master plan for Cherry Lake, located approximately five kilometres away in Altona: this included a playground, exercise trail, and planting in what had previously been a race track and flood retarding basin. Scott and Furphy also designed a range of masterplans for recreational or play areas in existing parks, including Royal Park in Parkville, Paisley Park—again in Altona—and Westerfolds Park in Templestowe.[896]

Scott and Furphy acted as the consulting firm for the National Capital Development Commission for various Canberra waterway studies, in addition to the MMBW and local municipalities for the Moonee Ponds, Gardiners, and Mullum Mullum Creeks.[897] The most significant project undertaken in both size and scope was a development plan for the one thousand-hectare Yarra Valley Metropolitan Park. The firm was also experienced in conservation studies, and its work in Oatlands, a historical township 85 kilometres north of Hobart, involved close consideration of the public, requesting public submissions and involvement in the preparation of land-use proposals. All of these projects reveal considerable experience and the skillset necessary to develop the Newport quarry. The Scott and Furphy plan was adopted in principle by the Council in 1982.[898]

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[896] Ibid.

[897] Ibid.

[898] Sloan to R. Ingram, Scott and Furphy Engineers, June 22, 1982, PROV, Melbourne.

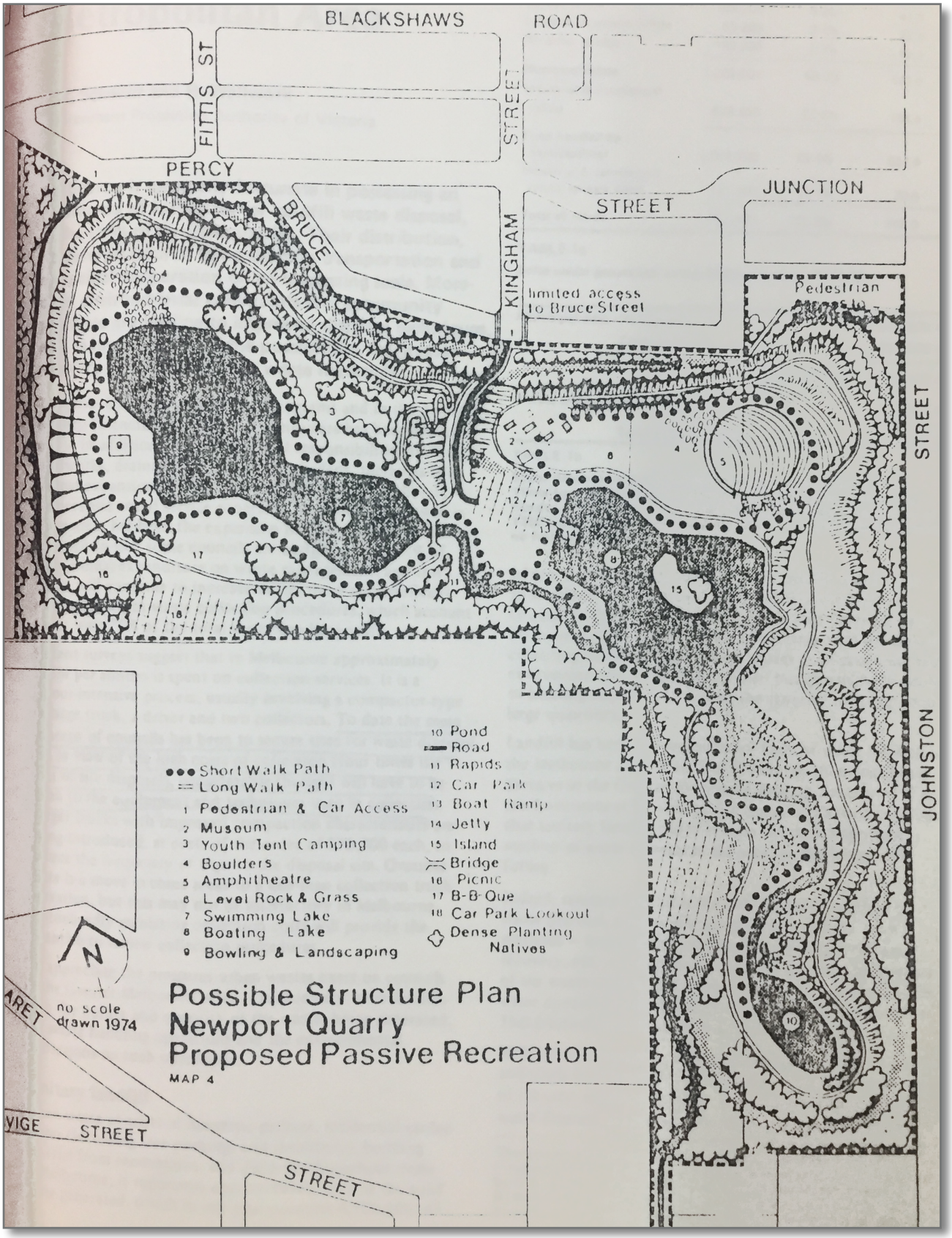


Figure 6.6: The Scott and Furphy plan (Scott and Furphy Consultants, *Possible Structure Plan*, 1982, in VPRS 11565/P/0001, Unit 0004, Location V/AL/105/04/06, PROV).

Also entertained, but not adopted, was a far more elaborate plan by the John Connell Consulting Group, described as 'a sort of watery Disneyland' (see Figure 6.7).[899] P. E. Bishop, representing the group, had written to William Kaider, engineer for Williamstown, in April 1982. He remarked that the Group had been 'alerted to the potential of a recreational park in the inner-Melbourne suburbs in our discussions with the Ministry for Tourism and the Department of Youth Sport & Recreation.'[900]



Figure 6.7: Front cover of a proposal by John Connell Consulting Group, depicting an array of recreational activities (John Connell Consulting Group, *Forest Lakes Recreation Park*, 1982, PROV, VPRS 11565/P/0001).

Bishop believed that the Newport site offered an opportunity unlike anything else in the vicinity of Melbourne, and introduced his concept, 'Forest Lakes,' as a development encompassing an urban forest, public parkland, and commercially-viable recreation facilities (see Figure 6.8).

[899] "Lakes of Williamstown."

[900] John Connell Consulting Group, P. E. Bishop, to Kaider, City Engineer, City of Williamstown, April 19, 1982, PROV, VPRS 11565/P/0001.

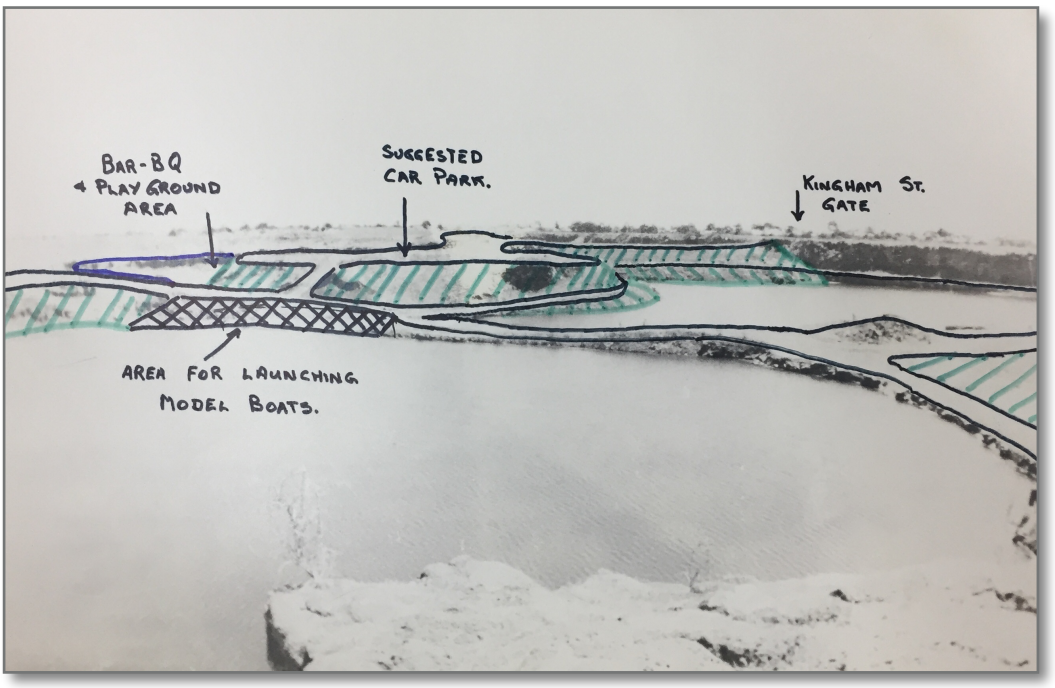


Figure 6.8: Facilities of the proposed passive recreation development (Scott and Furphy Consultants, *Facilities*, 1982, in VPRS 11565/P/0001, PROV).

This would maintain the same ethos established by council—that the site should resemble natural parkland—whilst introducing 'low-key' activities. The proposal put forth also accommodated the prospect of tipping in that it would 'be possible to continue dumping non-toxic hard waste on the site but in a controlled matter to create land forms which will complement the recreation developments.'[901]

Potential activities accommodated by this proposal included grass skiing, toboggans, water slides, white-water kayaking, a raft course, rock-climbing, and fishing amenities.[902] The proposed facility would not only attract park-goers but also sporting and school groups, and serve as a venue for children's parties. A family restaurant would be operated by a private entity on the site. Bishop cited the interest of the Department of Tourism in creating an 'inner-suburban recreation park.'[903] A

[901] John Connell Consulting Group, *Forest Lake Recreation Park : A Proposal to Develop Newport Lakes for the City of Williamstown* (Melbourne: John Connell & Associates, 1982), 1.

[902] Ibid.

[903] Ibid, 2.

consultant from The International Group, based in Ohio, considered the site 'invaluable' on the basis of its cliffs and lakes, and Bishop cited similar, unnamed, ventures in the United States as precedents for the development. The proposal concluded that the park would allow easy access to alpine-style sports 'for those who cannot afford to go to the Victorian Alps.'[904]

6.7 Tipping: tolerance, or compromise?

No response was given to this proposal from the municipality, which had already expressed its commitment to the Scott and Furphy plan. Bishop contacted councillors over one month later to emphasise that his firm believed the development of the Urban Forest concept to be 'paramount,' and that commercial interests in the site 'need only be sufficient to meet the necessary financial support to contract and operate the urban forest concept and its extension elsewhere in the district.'[905] A report citing Butchart Gardens was attached, once again, as a model for Newport Lakes. A comprehensive analysis of the tipping capabilities of the site was also undertaken to justify the project. The Newport Lakes, as a tip, would be capable of receiving 211,500 cubic metres of non-putrescible rubbish, which could only be dumped below the water table. A total volume across the western and some part of the east lakes would be 784,977 cubic metres. The estimated cost would be $3.50 per cubic metre in the north-west lake and $6.90 per cubic metre in the eastern lake.[906] In contrast, tipping per cubic metre in this latter half of the site would be twice the cost of tipping in the municipality of Sunshine. Niddrie Quarry was noted as a larger quarry capable of accommodating 7,000,000 cubic metres of fill.[907] Access to the Niddrie site was unproblematic and

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[904] Ibid, 2

[905] Bishop, John Connell Consulting Group, to Councillors, May 24, 1982, PROV, VPRS 11565/P0001/73.

[906] Ibid, 7.

[907] Ibid, 8.

the quarry located within close proximity to major arterial roads.[908] The road built to carry traffic from the quarry, The Avenue, would also be capable of supporting truck traffic during tipping, 'therefore creates very little offence as the number of houses it has to pass is small.' In addition to this, 'due to the shape of the land,' piled rubbish would not be visible to surrounding homes until it reached a level fifteen feet from the 'top.'[909] It remains unclear how these facts were to support the alpine park project, aside from demonstrating that the John Connell group had undertaken a significant amount of research in forming the proposal.

Residents began to grow frustrated at the slow development of the Newport site. Local resident Warren Judd wrote to the Town Clerk in July, 1982, proposing that the lakes be 'filled to 2/3 or 3/4 capacity with refuse, and developed/landscaped as a sunken-gardens effect as in Queen Elizabeth Gardens in Vancouver, Canada.'[910] Judd argued that the depth of the quarries proved intimidating to visitors and that its partial filling would attract passive recreational use. Judd wrote to the City of Williamstown again in September following the tragic death of an infant earlier noted: he reinforced that the quarry holes be filled as per the Canadian precedent, landscaped with rockeries and lagoons suitable for all ages, to prevent similar incidents.[911] In the midst of little-to-no development over the following two years—despite the fact that, in May 1982, the municipality had sought a loan for $85,000 to develop the site further—Judd continued to write expressing disappointment in the Council's failure to acknowledge public interest in the lakes, and that community meetings undertaken were lacklustre.[912] Additional communication from Judd reinforced the reality that enthusiasm for the project appeared lost and that the Council should 'consider getting a new direction, inspiration and a more professional approach' to the area in creating 'exciting recreational

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[908] Ibid, 7.

[909] Ibid.

[910] Warren Judd to Sloan, July 20, 1982, PROV, VPRS 11565/P0001/73.

[911] Judd to the Sloan, September 1, 1982, PROV, VPRS 11565/P0001/73.

[912] "Loan No. 89," *The Age*, May 17, 1982, 12; Judd to Sloan, May 2, 1984, PROV, VPRS 11565/P0001/73.

prospects.'[913] By this point, although adopted by the council only two years prior, the Scott and Furphy plan had amounted to little. Judd advocated that the council return to this vision for the site.

Despite the improvements in recent years, the municipality once again returned to the premise of tipping, much to the displeasure of local residents who for years had anticipated the development of parkland. Carolyn Biele, of nearby Newcastle Street, wrote to councillors. She stated that the proximity of houses alone should disallow the establishment of a tip, and that pollution would affect surrounding residents, and children in particular; she continued to state that seepage would occur to the eastern lakes and that the tip would be 'aesthetically offensive.'[914] Biele was most especially concerned by the fact that, when purchasing her home only two years earlier, council engineers had reassured her that tipping would not take place.[915] This likely reflected the ongoing deliberations of Council, which had yet to determine the site's end-use. A February 1984 meeting, for example, saw former City of Williamstown Mayor, Geraldine Schutt,[916] vote with another councillor, Dr. Mary Burbidge, against the tipping proposal which other councillors exhibited support for; although this formalised interest in its redevelopment as parkland, it did little to sway the remaining caucus, and deliberations continued.[917]

Biele also noted the possibility of property values declining. She concluded that the community was wrongly perceived to tolerate such unpleasant land-uses as their position 'on the wrong side of the tracks' gave residents a marginal character: 'They are tired of being considered a dumping ground,

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[913] Judd to Sloan, May 2, 1984, PROV, VPRS 11565/P0001/73.

[914] Carolyn Biele of Newcastle Street to Councillors of the Williamstown City Council, May 4, 1984, PROV, VPRS 11565/P0001/73.

[915] Ibid.

[916] Schutt's stance against tipping reflected her own affinity for nature: that it could exist as a slice of bushland in an otherwise highly-urbanised area, devoid of such landscapes (Nicole Precel, "Bond beyond time," *Star Community News*, August 10, 2010, https://starcommunity.com.au/star/10-08-2010/bond-beyond-time-in-memory-of-diane-wises-contribution-to-the-newport-lakes-park-will-be/). The role of Schutt, who passed away in 1996, has been memorialised with a plaque placed upon a rock at the entrance of Newport Lakes—fittingly, bluestone—recognising her impact; Schutt's partner, Diane Wise, organised this, and following Wise's death in 2008, funds were bequeathed to the Friends of Newport Lakes to construct benches throughout the park.

[917] Friends of Newport Lakes, n.d., http://friendsofnewportlakes.com.au/1980s.php.

both literally and figuratively, for all the problems beset by being a resident in the west.'[918] Another resident, David Ball, wrote to the Mayor with the fear that tipping would be 'environmentally destructive' and 'unsightly,' and attract vermin, at the expense of native wildlife.[919] The need to develop the site as a park, and quickly, was emphasised now more than ever, culminating in the establishment of the Newport Action Group; amusingly abbreviated as NAG.[920] The Group accused council of acting illegally, and stated that the proposed tip would be appealed.[921] Tipping would be limited to the north-western quarry hole, approved by the MMBW on the basis of three conditions: that site access would take place on Margaret Street, that water samples were taken, and that the quarry hole be filled rapidly prior to the expiration of the permit in 1990.[922] The latter condition was shared by the council and other municipalities lacking their own tips. A landscaped buffer would also be established along the site's northern and western aspects.

6.8 Fresh ideas for urban nature

A new proposal was made for Newport Lakes in the third quarter of 1987, on the site of Pavey's Hole. A community farm project was included in the planning of the site, and a list of activities were submitted to the the Newport Lakes Working Party. The group anticipated remediating an area of 1.5-2.5 hectares for this purpose.[923] It was anticipated that the farm would be complete by 1988, and that it would create an agriculturally-oriented environmental centre with community involvement and recreation. The group envisioned the farm established upon 'unused urban land for

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[918] Ibid.

[919] David Ball to Mayor, City of Wiliamstown, June 13, 1985, PROV, VPRS 11565/P0001/73.

[920] Judd to Sloan, August 15, 1985, PROV, VPRS 11565/P0001/73.

[921] George Murdoch for NAG to Mr. D. J. Wood, Acting Chief Executive Officer, City of Williamstown, July 8, 1985, PROV, VPRS 11565/P0001/73.

[922] K. H. Burr, Director of Planning, MMBW to Sloan, January 22, 1985, PROV, VPRS 11565/P0001/73.

[923] *West Community Farm Project Inc., Newsletter no. 2 : Spring 198*7, PROV, VPRS 11565/P0001/73.

the welfare of the community' and that it would facilitate inclusion amongst ethnic groups, youth, and the unemployed.[924] A meeting took place in late August on the matter, and the Newport Lakes Working Party resolved that this should be located 'as close to the nursery as possible,' however, detailed plans would need to be submitted first on the matter of costings and other requirements.[925] The farm did not proceed, likely due to the sentiment amongst local residents and council who wished to 'see the area developed as a parkland' with tipping 'to be complete in the quickest time.'[926] The continuation of tipping was desirable in that it would continue to generate income for the City of Williamstown, whilst funding the eventual beautification. The rate of tipping was thereby equated with expedited remediation. A city engineer's report in March, 1988, shows the income generated by the tip as estimated at $769,000, but in actuality this amounted to $371,157.[927] The costs of beautifying Pavey's Hole were much lower than estimated, however—$105,372, rather than $210,000—whilst the Eastern Lakes would cost $20,918 compared to a $100,000 estimate. These lower costs did not represent savings, merely a slower rate of development. Works to be undertaken at this point in time included water sprinklers and reticulation for the Pavey's Hole site, and hydro-seeding, tree planting, and new soil for the Eastern Lakes.[928]

Despite a broad range of grand visions, the City of Williamstown sought to renege on the premise of transforming the quarried landscape into a series of open spaces hosting native flora and fauna. It had worked on the site for close to four years with no achievement of the established visions. A proposal was made which entailed the filling of one lake as a tip, argued by Kirby as indicative of

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[924] City of Williamstown, *Minutes of Ordinary Meeting of Council - Folio 2266 Newport Lakes Working Party, Meeting of 24 August 1987*, PROV, VPRS 11964/P0001/13.

[925] Ibid.

[926] City of Williamstown, *Minutes of Public Meeting, Meeting of 13 August*, 1987, PROV, VPRS 11964/P0001/13.

[927] City of Williamstown, *City Engineer Report to General Committee, March 28 1988, Item 6. Development of Newport Lakes* (Melbourne: s.n.), 3, PROV, VPRS 11964/P0001/13.

[928] Ibid.

the council's desire to fill the entire site with refuse.[929] This was a well-founded fear with numerous municipalities permitted by Williamstown to utilise Pavey's Hole as their municipal disposal site. Furthermore, pollution from nearby industrial sources problematised the full remediation of the quarried site: stocked fish died from the alkalinity of the water.[930] Pavey's Hole was to be filled by 1986 and planting complete by 1987, at which point the north-west quarry hole would also be filled to the height of the water table. The main focus of the municipality was to complete the tipping process as soon as possible, although the high costs of tipping in other municipalities proved a concern, as well as the projected loss of income for the City of Williamstown. As the north-western hole had been laid with sufficient clean fill, it was decided that this comprised the 'only practical solution,' as fees generated by tipping would ultimately fund the beautification of the site and soften the dangerous quarry walls, essential to allowing public access once again.[931]

The municipality considered this approach 'having it both ways', in that residents would benefit once tipping ceased after approximately three years. A submission was moved in a council meeting in the same month to seek 'Bicentennial funding for the full and safe development of the Newport Lake area as an urban forest, lakes and recreation areas and further that the Officers report on any other possible sources of funding.'[932] A public meeting was called to discuss the proposal on the 28th of May, 1986, by Mayor John Madigan. A pamphlet was circulated to residents with a summary of relevant issues (see Figure 6.9).

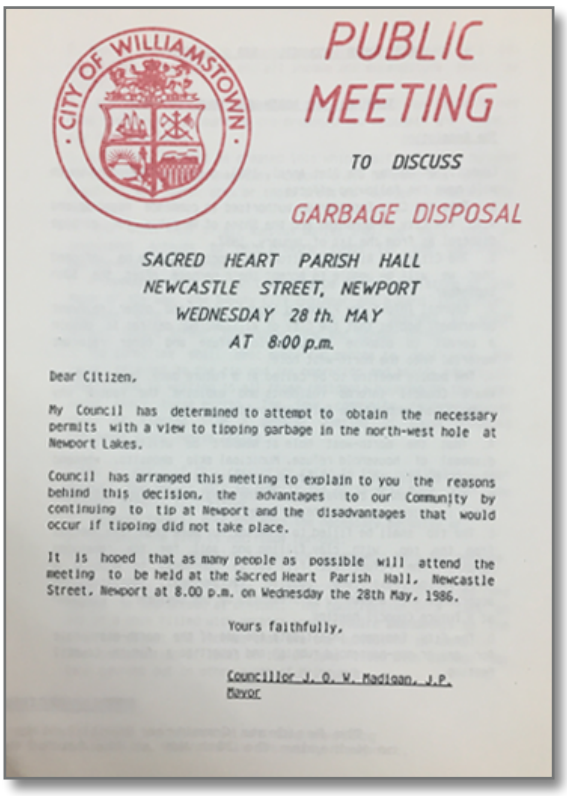
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[929] Kizilos, "Residents fearless may become pools of garbage."

[930] Ibid.

[931] City of Williamstown, *Newport Lakes — Public meeting : Chief Executive Officer's Late Report, item 12,* April 7, 1986, PROV, VPRS 11964/P0001/13.

[932] City of Williamstown, *Minutes of Ordinary Meeting of Council —Ordinary Business Circulated with the Agenda, Folio 1207,* Meeting of 21 April, 1986, PROV, VPRS 11964/P0001/13.



CITY OF WILLIAMSTOWN

PUBLIC MEETING

TO DISCUSS

GARBAGE DISPOSAL

SACRED HEART PARISH HALL
NEWCASTLE STREET, NEWPORT
WEDNESDAY 28 th. MAY
AT 8:00 p.m.

Dear Citizen,

My Council has determined to attempt to obtain the necessary permits with a view to tipping garbage in the north-west hole at Newport Lakes.

Council has arranged this meeting to explain to you the reasons behind this decision, the advantages to our Community by continuing to tip at Newport and the disadvantages that would occur if tipping did not take place.

It is hoped that as many people as possible will attend the meeting to be held at the Sacred Heart Parish Hall, Newcastle Street, Newport at 8.00 p.m. on Wednesday the 28th May, 1986.

Yours faithfully,

Councillor J. O. W. Madigan, J.P.
Mayor

Figure 6.9: Notice of public meeting distributed to local residents (City of Williamstown, *Public Meeting to discuss Garbage Disposal*, 1986, in VPRS 11564/P0001/12 Public Newport Quarry 1973 to 1976 General Correspondence Subject Files, Public Record Office Victoria).

The document outlines the stance maintained by the Council: that, on the 21st of April, 1986, a resolution was passed to commence negotiations with the Cities of Sunshine and Werribee in locating a suitable site for the disposal of refuse.[933] The Cities of Altona, Richmond, and Port Melbourne were to discontinue the disposal of their municipal waste in the Newport quarries. The north-western quarry hole would be used exclusively by the City of Williamstown as a tip for household rubbish, skip deposits, and other forms of dry rubbish.

The culmination of this would be the eventual filling of the quarry hole and capping with clay, contouring the site in such a way that it would support passive recreational facilities in line with the visions and plans put forth by the council. This also included a proposal for an ornamental lake which does not presently exist on the site. The use of the north-eastern quarry hole would be considered for similar purposes by the city engineer. The funds acquired through tipping would be

933 Jack Madigan, Mayor, *City of Williamstown, 'PUBLIC MEETING to discuss GARBAGE PROPOSAL' to be held at Sacred Heart Parish Hall, Newport, Wednesday 28 May, 8 pm*, Pamphlet endorsed by Councillor Madigan, April 1986, PROV, VPRS 11964/P0001/13.

placed in an account, with half of the amount accrued to be utilised in beautification of the site. A community consultation committee would meet every two months to discuss the tip and its progress, although this would only entail four residents, the deputy city engineer, a councillor, and the Mayor. It is also noted that the 'construction of lakes on top of land filled with garbage has been carried out in other parts of Melbourne' but specific examples of this are not named.[934]

Perhaps in an effort to alleviate the anger felt by residents, particularly those assured that tipping would not take place, a brief timeline provided clarified that the site was purchased in 1974 by the municipality using money obtained from the Commonwealth Government's Area Improvement Programme. The quarry was intended to be used as a tip at this juncture. A difficulty in locating sufficient funding is cited as a factor delaying the creation of passive recreation space, in addition to the risks inherent in the site:

> Problems are now being experienced in obtaining insurance for the area, with a result that Council has been forced to close the area to the public and to keep it closed for recreational purposes in recent years. Development of the "Lakes" for public recreation without the filling of at least the most dangerous hole is impractical. Council has now been forced to consider other options.[935]

It was also clarified what procedures exist in establishing a municipal tip. Consent would first be obtained in line with Section 49 A of the *Health Act* (obtained by the City of Williamstown), in addition to a Land Use Permit under the *Town and Country Planning Act*. Council had obtained a licence to tip under Section 20 of the *Environment Protection Act*, albeit subject to appeal. The intentions of this meeting reflected the council's anxiety that residents would be successful in the appeal. This was clarified in a letter to Fr. Cameron of the Sacred Heart Church, explaining to

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[934] Ibid.

[935] Ibid.

residents 'the advantages to the Community by continuing to tip at Newport and the disadvantages that would occur if tipping did not take place.'[936]

Appeal hearings commenced on the 6th of August, 1985, much to the relief of residents, but were subsequently adjourned later that month. Dissatisfaction continued. At a meeting held on site on the 26th of June, 1986, NAG's Elizabeth Gooding requested that sludge which had been deposited in the quarry hole ('North West Lake') be removed by the council and SEC. She also asked that the water be purified; that councillors Jack Madigan and Lucy Plata resign; that the council cease tipping, and disallow other municipalities from doing so; begin work on converting the quarry to a park immediately; and make the eastern half of the site accessible to the public for recreational use.[937] In response to this, the municipality stated that it would only utilise clean fill in the north-western hole under the rationale of improving the site's safety and for its eventual re-use as a recreation area; this would 'negate the need for the removal of the sludge.'[938] Additional effort was made by the City to create a working group, in which two residents would be involved. Nominations were received from Phillip Cameron of Graham Street, who noted that he had lived in the area for 18 years, and councillor Lucy Plata, whose resignation had previously called for by NAG. Attached to municipal correspondence was advertising material pertaining to her campaign, endorsed by the Hon. Joan Kirner, Minister for Conservation and Forests. This material noted Plata's stance which appeared totally contrary to the Council's tipping activities perhaps demonstrating responsiveness to the community. She advocated:

> the PRESERVATION and continued DEVELOPMENT of NEWPORT LAKES as a major RECREATION AREA. This means that WE ARE TOTALLY OPPOSED TO ANY

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[936] Correspondence to Fr. Cameron of the Sacred Heart Church from D. J. Wood, Administrative Services Co-ordinator, 15 May, 1986, PROV, PROV, VPRS 11565/P0001/73.

[937] NAG, *Minutes of Meetings of the NAG, Meeting of 22 June*, 1986, PROV, Melbourne, VPRS 11964/P0001/13.

[938] Ibid.

> DUMPING OF RUBBISH in the NEWPORT LAKES AREA. WE PLEDGE OUR SUPPORT to the NEWPORT ACTION GROUP IN THEIR FIGHT TO SAVE THE LAKES and URGE NEWPORT RESIDENTS TO ATTEND the **PUBLIC MEETING** TO BE HELD AT WILLIAMSTOWN COUCIL (Supper Room) **ON JULY the 24th** at 7.00 p.m.[939]

Given previous calls for her resignation, it is unclear whether her support for the project had been ongoing, or whether this demonstrated a change of heart.

The appeal process was discussed following its completion in a municipal meeting on the 10th of November, 1986. The Planning Appeals Board had resolved the matter in favour of the Council, allowing the plan for tipping in the north-west quarry hole to take place for sanitary land fill. However, twenty-nine conditions had been imposed in relation to the Land Use Permit for the site, and eleven conditions on the EPA Licence granted to the council. The PAB recognised that:

> The Newport Lakes area has the potential of being a parkland of unusual attractiveness providing a passive recreational, environmental and social facility of the utmost significance to the whole community … It would be wrong, in our view, for the citizens of the Western Suburbs to loose [sic] a recreational and environmental asset of such significance as the Eastern Lakes when, with a little bit of imagination and engineering ingenuity, together with good landscaping and proper management, a parkland area of almost Statewide significance could be created.[940]

The PAB noted that any proposals to beautify the north-western quarry hole following tipping could not act as a 'trade off' in light of any plans to fill the easternmost lakes, should this outcome even be

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[939] Advertising material, Keima Press, Pier Street, Altona, July 1985, PROV, VPRS 11964/P0001/13.

[940] City of Williamstown, *Minutes of Ordinary Meeting Of Council – Folio 301, City Engineer's Report, Meeting of 10 November 1986*, PROV, VPRS 11964/P0001/13.

considered.[941] PAB also stated that the council take a strong stance against illegal littering and dumping of refuse outside the quarry fences and gates, and that resources should be allocated—in the form of council enforcers—to ensure no visible symptoms of tipping beyond the boundary of the site. Furthermore, PAB noted that the Council had previously kept cleanliness to a high standard, motivated by the controversy surrounding urban tipping. Overall, PAB found little to prevent tipping from proceeding, noting the difficulty experienced by Williamstown in obtaining insurance for the site. The risks present in the site were not considered by the Board as a compelling rationale for the creation of a tip, however, it acknowledged that quarry cliffs and trespassing are 'not rare in Victoria,' and that these issues are 'probably not dissimilar to management problems for all sorts of dangerous places throughout the State.'[942]

One condition of particular interest is that the PAB recommended that local residents act as 'watchdogs,' monitoring the impact of tipping on the surrounding area.[943] This would be enshrined in the establishment of a Citizens' Advisory Committee. The culmination of these actions was envisioned to keep council operating within the bounds of the licence conditions, and an initial meeting would be held in February 1987. A letter was circulated to residents noting the commencement of the CAC, which would consist of at least two local representatives, a representative of a voluntary conservation association, and a staff member from the City of Williamstown knowledgable in the technical aspects of tip operation.[944] Kaider, City Engineer,

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[941] Ibid.

[942] Ibid, 64-65.

[943] City of Williamstowm, *Minutes of Ordinary Meeting of Council – Chief Executive Officer's Report, Folio 471, Meeting of 8 December 1986,* PROV, VPRS 11964/P0001/13.

[944] 'Residents' were defined by the City of Williamstown as those residing within an area bounded by Blackshaws Road, the western side of Oxford Street, the northern aspect of Mason Street, and the eastern side of Gordon Street (*Minutes of Ordinary Meeting Of Council – Folio 408, City Engineer's Report,* H 37, Meeting of 24 November, 1986, PROV, VPRS 11964/P0001/13); Letter sent to residents from William Kaider, City Engineer, City of Williamstown, 16 June, 1987, PROV, VPRS 11565/P0001/73.

wrote to objectors to the tip requesting their involvement due to their prior interest in the matter.[945] As non-voting members, the Committee would also include a councillor from the City, a representative of the Responsible Authority—not clarified—and if necessary, a staff member from the EPA. As requested in the conditions of tipping by the Board, the Committee would informally monitor the operations of the tip; their assessments would influence management decisions made.

6.9 Creating Newport Lakes

Planning for the re-use of the north-western quarry hole was well underway prior to tipping. It was determined that the site would be capped with clay of a sufficient depth—1.8 metres—that trees could be established around the perimeter of the site. Landscaping would remain sensitive to the native flora of the region, not only replicating scrub and eucalyptus forest to ensure a sense of continuity and congruence, but also to act as an educational tool for school and community groups.[946] The educational aspect of the site would be bolstered through the creation of an interpretive trail. Other suggested uses included a campsite, open-air theatre, and community orchard and garden. The campsite would also entail opportunities for groups to learn bush skills and crafts, also incorporating elements of Australian folklore, whilst the gardens could be used for horticultural education and training.[947] A golf driving range was suggested but rejected as it would create a hazard to surrounding houses.[948] Jackie Critchley, Western Region Landscape Architect, prepared a concept plan for the area which included the creation of an amphitheatre and the

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[945] William Kaider, City Engineer, City of Williamstown, form letter to residents, 16 June, 1987, PROV, VPRS 11565/P0001/73.

[946] Max Zelman, Assistant Regional Manager, *Resource Conservation - Melbourne Region, to City of Williamstown,* April 13, 1987, PROV, VPRS 11565/P0001/73.

[947] Ibid.

[948] City of Williamstown, *Councillors Written Reports of Minutes of a meeting of the Newport Lakes Working Party held on Thursday May 21 1987,* May 25, 1987, PROV, VPRS 11964/P0001/13.

retention of swampy land in this section of the park.[949] Pavey's Hole would be beautified by sixteen people employed under the Community Employment Program to remediate the area, at a cost of $281,452, of which the council would provide $89,613.[950] The remainder would be provided by a grant from the CEP Program. The objective of this was described: 'To landscape and beautify an old tip site known as Pavey's Hole and adjacent area and establish a nursery.'[951] It was envisioned that Pavey's Hole Park would be suitable for games such as cricket and football, as well as a children's playground and BMX track, diversifying the activities possible in the park. Further remediation efforts would focus on the eastern quarry lakes, with the suggestion that clean fill be used to soften the sheer drop of the basalt cliffs, done so in the interests of safety. Landscaping would be facilitated here, reinforcing a buffer zone between houses and the site. The fulfilment of the Pavey's Hole project was complete by late August, 1987.

A total of 42 residents attended a public meeting in August, 1987 where it was confirmed that the Council was 'determined to see the area developed as a parkland.' The north-western tip would be 'complete[d] in the quickest time.'[952] Residents still feared that the council would renege on the creation of parkland in order to use the land for tipping. In a meeting in June 1987, it was stated by a councillor that:

> One of the residents enquired as to what guarantee Council would give that it will not apply in the future for permits to use the eastern lakes for tipping. It was indicated that no such guarantees could be given because it was impossible for the present Council to commit a future Council to that sort of decision; however, the present Council in proceeding to plan for development of the area and, later in actually developing the area, could undertake

[949] Ibid, 2.

[950] Ibid.

[951] Ibid.

[952] City of Williamstown, *Minutes of Ordinary Meeting of Council - 1987 Folio 2268 Public Meeting - Thursday, 13th August, 1987, Meeting of 24 August,* 1987, PROV, VPRS 11964/P0001/13.

> various actions which would make the possibility of future use of the eastern lakes for tipping much less likely.[953]

Perhaps in response to the uncertainty felt by residents, the Council accelerated the development of proposals for the site, based on—but not directly acknowledging—the project previously proposed by Scott and Furphy. In an engineering report published on the 3rd of August, 1987, it was outlined that 'it is highly desirable to commence work on landscaping the eastern lakes as rapidly as possible if they are not eventually to be used as garbage tips,' although council's sentiment remained one of uncertainty.[954] The task seemed enormous: not only would the cliffs warrant stabilisation and filling, but lakes would also be established 'for both people and birds.'[955] Maarten Hulzebosch, council foreman, undertook these landscaping works on the site and shaped it in accordance with his vision, inspired by the revegetation of Tower Hill Reserve in rural western Victoria.[956] He had long maintained an interest in indigenous landscapes and vegetation, and sought to create a site which not only accommodated native flora and fauna, but was also capable of providing visitors with a unique experience. He began working at Newport Lakes in the early 1990s, communicating his intentions to the municipality: 'I was not doing too much harm and I could deliver a landscape that was quite cheap too… they were happy and after a while they left me alone.'[957] This new phase for the site was communicated to the local community, which reciprocated with enthusiasm to which Hulzebosch was responsive:

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[953] City of Williamstown, *Minutes of Ordinary Meeting of Council Folio 1762, Newport Lakes Working Party*, Minutes of meeting 24 June 1987, PROV, VPRS 11964/P0001/13.

[954] City of Williamstown, *City Engineer's Report : Newport Lakes Committee - 3rd August, 1987*, PROV, VPRS 11964/P0001/13.

[955] City of Williamstown, *Newport Lakes : Issues : Engineer's Report*, August 3, 1987, PROV, VPRS 11964/P0001/13.

[956] Hulzebosch, interview.

[957] Ibid.

> We often organised open days so when we were developing the council would have open days and advertise it, and we'd get mini buses and take people around. The area was still closed and we'd take the public around and have a sausage sizzle. The local people were always informed and we'd talk to them and they'd say, 'why don't you do this or that?'
>
> Generally, we created what they wanted. Everybody wanted to get rid of the tip and that is fair enough but the tip was there from day one—we had a quarry and everybody wanted to get rid of the quarry, and in those days you needed a hole to have a tip, and the fact that we didn't fill in *those* holes as tips satisfied the public. We had Pavey's Hole in the corner and when that was finished people knew that was the end of it, so they had something to look forward to.[958]

A sense of risk was inherent in the site, as the City of Williamstown would remain legally liable to ensure the safety of site visitors. M. W. Sheehan of the FAI Insurance Group had written to the council a number of years prior, stating they could:

> … only but stress to the Council the necessity of keeping the prime object of safety when providing facilities to the public. If this requires eliminating areas which would be classified as 'adventures' to the not yet matured public, we ask that the work be completed accordingly.[959]

This would prevent injury or death from falls or loose rocks, but also prevent landslips from the erosion of the cliffs, spoiling the landscape. A further intention to reduce the depth of the quarry lakes to between three and four metres—through draining and filling—would decrease instances of

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[958] Ibid.

[959] M. W. Sheehan, Group Manager for Victoria, FAI Insurance Group, to the Manager, MAV Insurance Broking Services, August 3, 1987, PROV, VPRS 11964/P0001/13.

drowning. This would also, it was rather morbidly pointed out, negate the need for special search equipment in the event of a death. These efforts would allow the municipality to obtain public liability insurance for the site, once again making it available for public access. These considerations would have resulted in a site which 'would've just had lots of lawn and half-dead trees. It could've been anywhere.'[960]

Hulzebosch ensured the retention of the rock-faces despite the risk: 'To me, what makes Newport Lakes attractive is that you have elements that are not 100% safe.'[961] Hulzebosch aimed to create a landscape where the exposed rock-face could be kept intact, but terraced for safety. A further consideration was funding: council had previously noted that it could not expedite the process of remediating the site, as desirable as such an outcome would be to long-suffering local residents. Kaider noted in correspondence that: 'It is also anticipated that money for the project will be restricted and detailed development will occur over an extended period of time.'[962] Funding, generated from the use of the adjacent tip including fees paid from both individuals as well as municipalities, necessitated a frugal budget over a long duration. This minimised risk whilst still ensuring a good quality urban open space.

Balancing safety with the need for adventure, native flora and fauna, and the efficient budgeting proved a challenge. Hulzebosch states that the land-use outcome could not be replicated today:

> The landscape that I proposed was in my opinion the most effective and probably the most cost-effective as well … we obviously had to empty the lake and do the terracing, and Council would've liked to see the terracing come up higher but I didn't want to lose that rock wall, but basically I obviously had a budget, funded by the tip. If soil came in—a

960 Hulzebosch, interview.

961 Ibid.

962 William Kaider, City Engineer for the City of Williamstown, to The Secretary, Ministry for Planning and Environment, August 11, 1987, PROV, VPRS 11565/P0001/73.

> truckload of soil—I would put somebody looking at it, and it looked half-decent it would go [to a] revegetation site and if it was crap it'd go in the tip. … If it would happen today you would have landscape architect companies designing it and it needs to be approved so that whole part was by-passed. I had some plans and presented some ideas but they were very different times. … To create a landscape in a hole would cost you millions. If you wanted to create it today, you'd have a real problem.[963]

Hulzebosch collected native and indigenous flora for planting, which would amplify the site's atypical topography and allow the visitor to 'go into Newport Lakes and picture yourself not in the suburbs.'[964] Lookouts were provided in addition to seating, potable water, toilet blocks, entrances, car parking facilities, and a road for vehicular access. Trails for both cyclists and pedestrians had to be established, too, as well as facilities for barbecuing and picnicking. This was markedly different to the earlier proposals for the subtle commercialisation of the space: instead of water-based activities and a 'low-key wildlife park,' the Newport Lakes design would encourage visitor encounters with the existing lake and the animal life attracted by the vegetation. The notion of balance continued with the recognition that different members of the public would have different needs with respect to open space. Hulzebosch spoke of his vision:

> The idea was I'd create this bit of nature and on the other side of the road you'd enter on two big lawns and in the middle I'd create an arboretum with all these different trees, pines and cypresses. The idea is, and it still should be, you can go in here to experience nature but on the other side it's a normal park, so if people want to kick a footy you can go over there. We tried to cater for different people. So this is the different type of recreation, you can jog

[963] Hulzebosch, interview.

[964] Ibid.

> on the tracks, wander around, go bird-watching, and people that want a different kind of recreation that not necessarily mixes well can just go there. You've got this site that accommodates so many different people.[965]

As Newport Lakes was developed, the City of Williamstown was incorporated into the broader municipality of the City of Hobsons Bay following the amalgamation of councils under the Kennett Government in 1994. Newport Lakes park was finally completed in 1996, creating the only 'urban bushland park' in Melbourne within a former bluestone quarry.[966] In its celebrated present-day form (see Figures 6.10, 6.11) it serves as a testament not only to those who had endured and protested tipping, but Hulzebosch's creative and informed vision for the site:

> This is not Einstein stuff, it's incredibly simplistic. You just need the OK to do it and you need somebody that wants to finish it off—don't bother them.[967]



Figure 6.10: The varied landscapes of Newport Lakes. Clockwise: basalt 'stepping stones' across flooded quarry; filled tip now a grassy lawn; a wetland enclosed by escarpments; remnant basalt wall (images authors own).

[965] Ibid.

[966] "Newport Lakes Maintenance," *The Age*, February 17, 1996, 29.

[967] Hulzebosch, interview.

So successful was the project that even the local primary school sought to align itself by name: previously Newport Primary School, it adopted the name Newport Lakes Primary School in 2000, stating that:

> This latest proposed change is also reflecting the change in the area - the most apparent feature of the area is the Newport Lakes that has been developed from a old quarry [sic] and land fill area. The resultant feature is well known throughout the area and has brought a new, positive attention to the area. School Council sees this development as a positive one for the school and wishes to be more closely related to its western neighbour.[968]

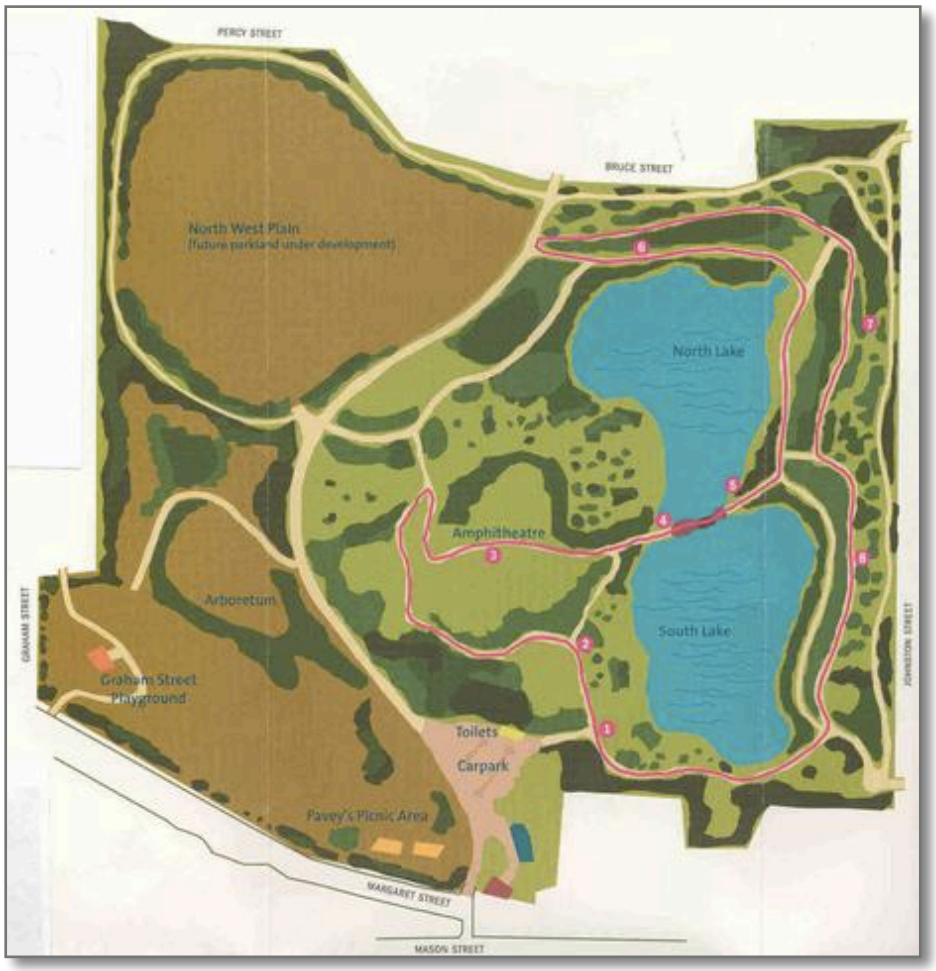


Figure 6.11: The map indicating the final development outcome of the quarry site (Travers, Lisa, *Newport Lakes water crossing and map*, 2002, accessed 4 May 2017, www.picturevictoria.vic.gov.au/site/hobsons_bay/cityofhobsonsbay/8740.html).

[968] Office of the Registrar-General and the Office of Titles, *Newport Lakes Primary School (GPN 289)* (Melbourne: s.n., 2000).

6.10 Chapter conclusion

The transition from a quarry to a tip site was made difficult by the proximity to houses and the ensuing opposition from residents, many of whom had tolerated the unpleasant effects of bluestone quarrying. Despite this, municipal rubbish disposal was a necessary task as the waste generated by residents had to be disposed of *somewhere*, in an efficient and low-cost manner. Further complicating re-use of the quarry site was the necessity of rubbish disposal to fill remnant voids, allowing a more pleasant after-use. What the historical narrative of Newport Lakes demonstrates is that the process of recreating such spaces is an exceptionally long-term one, often wrought with much angst for local residents. This follows decades of unease amongst those who lived in the area, and the uncertainty—and speculation—inherent in locating an appropriate new form for the space, one aligned with the visions of council and residents alike. The suggested developments for the space remained conscious of the need for recreation, and at times favoured activities that would generate income. Had the entirety of the site attracted tipping, there is no doubt that the outcome would have differed significantly, as government grants alone would not be sufficient for open space development of this calibre. Likewise, had tipping and its associated fiscal contributions not taken place, it is likely that such a sensitive remaking of the quarry would not have occurred, in favour of a more commercial approach. Perhaps the most fascinating feature of the eventual solution for the site is the fine balance between tipping and natural treatment, resulting in a parkland split between flat, grassed recreational space, and a varied lake environment containing small basalt cliffs, native flora and fauna, and rambling trails. This environment is not possible without the decimation of the landscape associated with quarrying and tipping, revealing a positive outcome of land-uses ordinarily perceived as destructive and unpleasant. The end-use outcome was fundamentally shaped by local actors. Sustained agitation and vocal opposition over a period of almost two decades was crucial in steering the City of Williamstown towards a novel solution.

Chapter 7 Niddrie Quarry

7.1 Introduction

Highlighted throughout this research is the resolution of the quarry site through tipping. This method seeks to restore the land to its "original" state while providing a means of low-cost refuse disposal within close proximity to the populace. Despite this clear purpose, toleration of the tip by surrounding residents, as both an intermediary land-use, and a remedy for the quarry problem, did not continue beyond the 1980s. This reflected an increasingly mainstream concern for environmental and social justice, coupled with a novel movement to redevelop historically unpleasant or noxious industrial sites for residential purposes. This form of brownfield development emerged in Melbourne's western suburbs, exemplified in the large-scale redevelopment of the Newmarket sales yards and abattoirs, and the William Angliss meat works site in Footscray. This marked a new era in which these newly undesirable fixtures of suburbia could be removed and remade in accordance with the surrounding residential area, with select aspects memorialised. Collin Dunstone's thesis on community involvement in determining brownfield land-use outcomes countenances this, but does not fully explore the urban bluestone quarry or tip in this respect.[969]

The Niddrie Quarry site is of particular interest as it ends the era of tips proposed to resolve a heavily-worked landscape in a predominantly residential area. The landfill sagas of the 1980s and 1990s highlight a number of weaknesses in the Victorian planning system, beginning with urban encroachment in the 1960s. Initially, it can be discerned that the poor planning of post-war subdivisions allowed the encroachment of residencies upon the quarry site, where the impacts of extractive industrial activities were acutely felt by residents; this expedited the closure of the quarry as it was not only disruptive to surrounding residents, but also constrained by surrounding

[969] Collin Robin Dunstone, "Local Community Involvement in the Planning, Design and Development of Previously Developed Land" (PhD diss., Royal Melbourne Institute of Technology, 2013), 286.

development precluding its expansion and the establishment of buffer zones to mitigate ill-effects. These same qualities also informed community opposition to tipping, and most intriguingly, later encroachment was employed as a strategy to prevent the re-use of the site as a tip. The ensuing conflict between local government, residents, and the state government in the 1990s revealed numerous inadequacies rendering it vulnerable to political whim. These weaknesses were overcome through protest and activism by an informed and empowered local population, politicising the matter and rendering it subject to changes in government. In this sense, the local community served as the most powerful force in shaping the final land-use outcome for the site, where planning policies and political will alone failed to do so, harnessing their expertise and lived experiences in the context of a crucial state election. The case study of Niddrie can be extrapolated from a conflict centred on land-use to a strong precedent on the cessation of urban tipping as a common, viable practice in Melbourne.

7.2 Site context

Niddrie is located approximately 16 kilometres north-west of the Melbourne CBD (see Figure 7.1). The area was settled and used for grazing of cattle and sheep in the mid-nineteenth century; the tough basaltic soil precluded other agricultural pursuits. The Napier, Stevenson, Fox, and Brown families long held large tracts of land in the area immediately abutting what was to become the quarry site. Perhaps reflecting the relatively late settlement of the area—in contrast with Essendon and Keilor nearby, of which the former was a late nineteenth century boom suburb, and the latter a rural township en route to gold diggings—Niddrie has been known by a range of names including West Keilor, West Essendon, Keilor, Keilor East, and Avondale Heights, reflecting the blurring of boundaries dividing Shires and municipalities over time.[970] Residential development did not take place to a significant degree until the post-war era, in which the expansion of the population saw

[970] Kolankiewicz, "Henry Krongold."

many European migrants settle in speculative housing estates on the city's fringe.[971] The absence of residential development in the first three decades of the twentieth century, in conjunction with abundant, good-quality basalt, determined the site to be well-suited to quarrying activity.

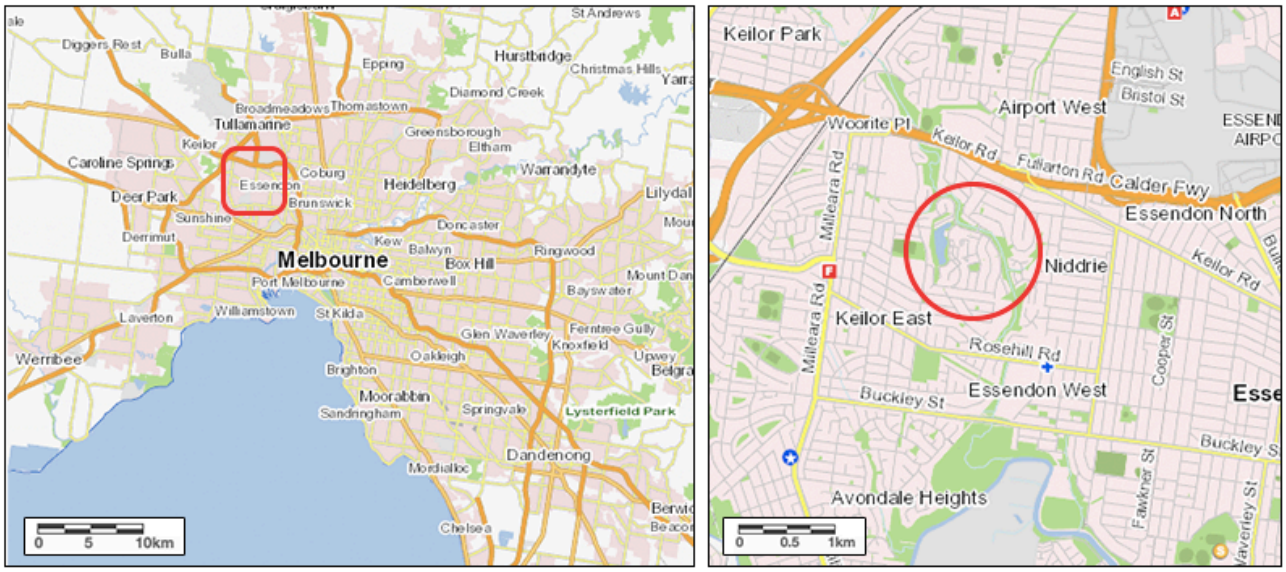


Figure 7.1: The location of Niddrie and its quarry complex, now a housing estate (Department of Environment, Land, Water and Planning, *Mapshare*, 2019, https://mapshare.vic.gov.au/mapsharevic/).

The excavation of the Niddrie quarry, initially known as Fowler's Quarry, began in 1927. This was well before any residential subdivisions were established in the area. It was acquired by Reid's Quarries Limited in 1936 and primarily supplied bluestone for use in bitumen 'hot-mix' asphalt. This material was supplied in large volumes to the Country Roads Board, but also to private firms undertaking the construction of new housing estates.[972] The 112 hectare site was purchased by Boral in 1965. It was operated for a further ten years before its closure when the supply of high-quality stone was exhausted, clarified by John Malempre, former site manager.[973] Although the exhaustion of bluestone proved the primary factor in the closure of the quarry, the proximity of surrounding residential development precluded expansion of the site: the resources beneath these homes was

[971] Ibid.

[972] "Details Of The Company And Its Operations," *The Age*, December 1, 1961, 12.

[973] John Malempre, interviewed by Victoria Kolankiewicz, Melbourne, 19 March 2019.

effectively sterilised, and the stone unable to be extracted. The construction of these new housing estates had begun in the immediate post-war era and increased greatly in pace and scale over the following two decades, including but not limited to the Lincolnville, Milleara, and St. Bernards estates (see Figure 7.2).[974]

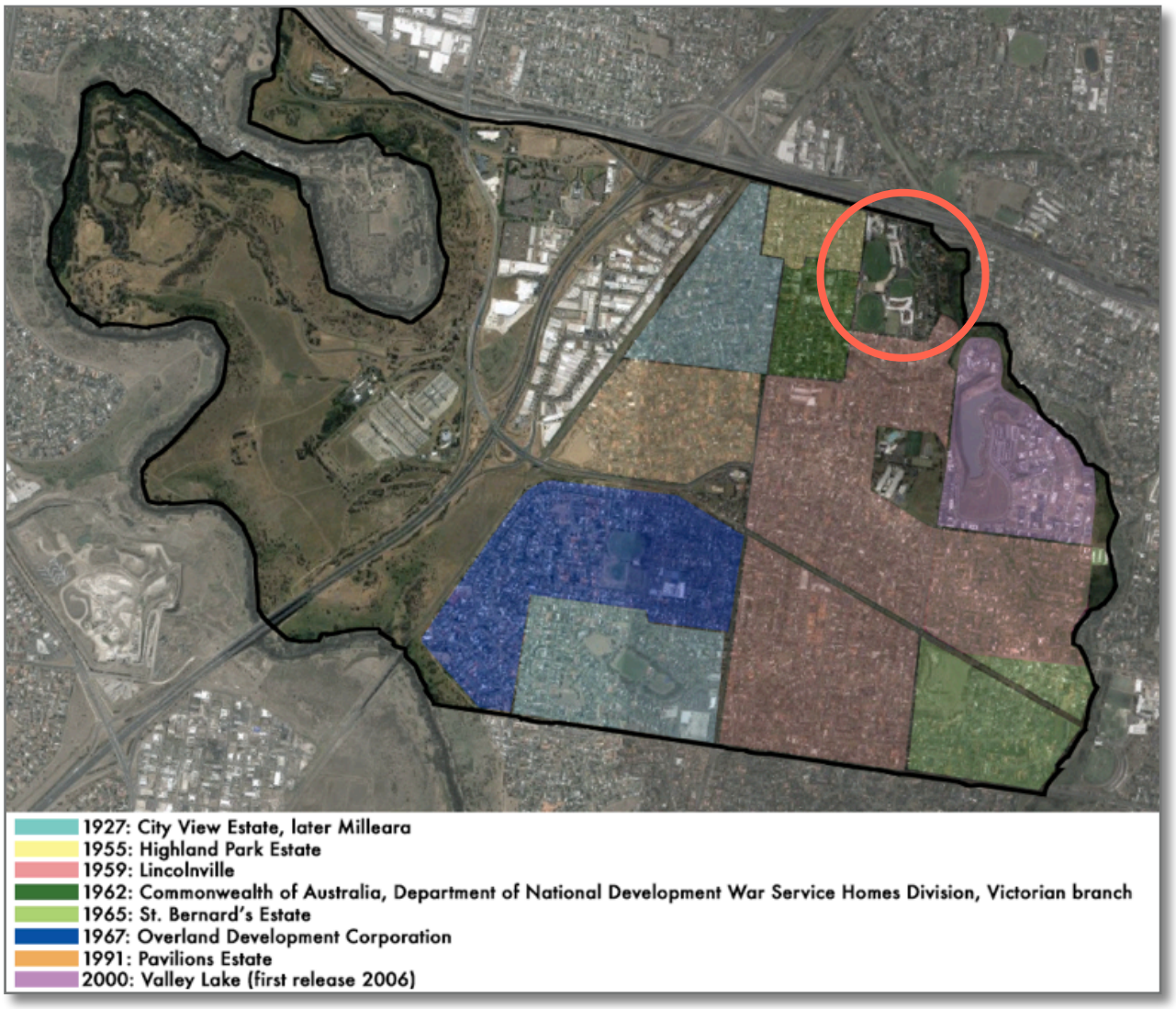


Figure 7.2: Post-war subdivisions of Avondale Heights and Niddrie, Niddrie Quarry circled (Kolankiewicz, "Henry Krongold," 7).

In each instance, farmland was purchased by developers and subdivided in a manner ensuring high returns to the development firm; landholders were then met with issues spanning the poor provision

[974] Kolankiewicz, "Henry Krongold," 240.

of services through to the construction of a State Electricity Commission transmission line through the centre of a boulevard, creating visual interference.

This tract of suburban development also took place at a time when extractive industry was not yet governed or legislated for in any meaningful way, as it was still considered a sub-sector of the mining industry and inadequately monitored or held to particular operational standards. The uncomfortable closeness of competing land-uses alone primed the site for an unfolding conflict between industrial and residential development. Rather than depicting the quarry as a discordant and inappropriate land-use to be removed from its urban setting, the scenario must be viewed as an instance of residential encroachment upon historic extractive activities as a consequence of poor governance and planning.

This thesis highlights these factors as precursors to the difficulties faced in locating a new use for the site in the 1990s, following two decades of stagnation and abandonment. Tipping was anticipated to remedy the scarred topography, yet those same factors which led to the closure of the quarry—community objection and proximity—similarly justified the community's view that tipping was not an appropriate land-use in a residential area. However, tipping *was* permitted by planning policy and legislation, necessitating the establishment of a powerful anti-tip movement led by local residents. The use of Niddrie as a case study site demonstrates a development outcome shaped most comprehensively by community objection and activism, rather than through the mechanisms of town planning and governance.

7.3 The impact of urban encroachment

> When travelling over Melbourne by aeroplane, one is struck by the scars in the landscape. Quarrying work has been carried out without any consideration for neighbouring property

> owners or tenants. Land has been acquired at ridiculous prices by companies which mine for basalt and other stone, and for sand. The right to undertake these works should be forfeited.[975]
>
> —Arthur Mansell MLC, 1967.

When rural politician Arthur Mansell encountered Melbourne from the air, he was struck by the uncomfortable interface between extractive industry and other land-uses. By the 1960s, suburban estates were well-established in the Niddrie area, some estates expanding in multiple stages as a consequence of their popularity. However, this placed many residents within close range of the Niddrie quarry, rendering them vulnerable to the long-reaching effects of extractive industry. The encounter between urban and industrial operations created an uncomfortable closeness where the activities of industry which may have previously gone unnoticed were now acutely felt by residents (see Figure 7.3). This matter was raised in Parliament in September 1968 by the Member for Deer Park, Jack Ginifer, whose electorate included the areas of Albion, Avondale Heights, Deer Park, Niddrie, and Sunshine North; all, to some degree, marked by extractive industrial activities.[976]

> I bring to the attention of the House representations which have been made to me concerning the amount of dust being emitted from a quarry adjacent to Noga-avenue in East Keilor. The problem associated with this quarry is not one normally associated with quarrying activities, when dust may be coming from a faulty crusher where the dampening operations are not successful. In this case the problem is caused by the tremendous heaps of overburden around the perimeter of the quarry. With the approach of the drier months and the prevailing winds, large amounts of dust are being blown onto homes adjacent to the

[975] LCV, *Hansard* (Melbourne: Government Printer, December 5, 1967), 2901.

[976] SGV, *Victoria Government Gazette : November 25, 1968* (Melbourne: Published by Authority, 1968), 3842.

> quarry. I should like the Minister of Mines, who is in charge of extractive industries, to have a survey made of the problems associated with this quarry.
>
> Such a survey would be to the advantage of the Education Department because it is proposed to build the Keilor Heights High School adjacent to the quarry. If preventive work is not undertaken, this school may be subjected to a heavy dust cloud. The residents of the area greatly appreciated the action taken by the former Minister of Mines when excessive blasting was occurring at the quarry some eighteen months ago and rocks were being blown out onto the street. As a result of representations made by me on this matter in the House, action was taken by the then Minister, and I hope the present Minister can do something to assist in the prevention of excessive dust nuisance on this occasion.[977]

The following month, Ginifer again highlighted the plight of Niddrie and Avondale Heights residents:

> The second occasion on which air pollution came to my notice concerned the areas of East Keilor, Niddrie, and Avondale Heights. Many homes, infant welfare centres, schools, and so on were clouded with dust blown on to them by the prevailing winds from nearby quarries. No matter from where the pollution carries, whether it is from industrial complexes, rubbish tips, or extractive industries, air pollution is a real and growing problem in large sections of the metropolitan area. This is particularly true in areas where industrial workers live in order to be close to their employment.[978]

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[977] LCV, *Parliamentary Debates (Hansard)* : *September 10, 1968 to October 23, 1968* (Melbourne: Government Printer, 1969), 146.

[978] LCV, *Hansard : October 15, 1968* (Melbourne: Government Printer, 1968), 990.



Figure 7.3: An aerial image of the Fowler Quarry site in Niddrie, undated but most likely captured in the late 1960s or 1970s (Friend, *Quarrying in Victoria*, ii).

The speech delivered by Ginifer in Parliament was, in part, in response to a petition put forth by members of his electorate, who felt that the nearby extractive industrial operations were not being appropriately monitored or managed. Of interest is the statement that residents had long accepted the land-use as an 'unavoidable sufferance,' and that this previously tolerable land-use had

'worsened,' particularly with respect to the growing local area. The letter, authored by local resident P. W. Everest, elaborated:

> We, the undersigned, petition for immediate action to eliminate pollution of the atmosphere resulting from excessive blasting and earth moving activity at the Fowler Quarries. Although blasting and general quarrying work in the area has been accepted by us on unavoidable sufferance for some years, the situation has worsened considerably since the erection of 20-feet high earthworks along the northern boundary of Noga-avenue East Keilor. Our position is now intolerable. Very heavy blasting is carried out twice and sometimes three times a day. The size of the explosions is such that enormous dirty yellow clouds blanket the area, accompanied by the most sickening smell. Dust fall-out from these clouds penetrates into every room in the surrounding houses, and this certainly makes house cleaning an impossible chore. Furthermore, the blasting shakes every house to its very foundations. We feel that in this rapidly developing area, the sizes of the charges are far too heavy to ensure complete safety and peace of mind.
>
> We therefore request that the council takes positive action as soon as possible to correct this impossible situation.[979]

In response to this, Ginifer opined that the *Extractive Industries Act 1966*, and any amendments to it, would curtail these unpleasant impacts upon surrounding residents, and allow for proper government control over extractive industrial operations.[980] However, Ginifer also noted that the

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[979] LCV, *Parliamentary Debates (Hansard)* : *October 29, 1968 to November 28, 1968* (Melbourne: Government Printer, 1969), 1480-81.

[980] Ibid.

mere existence of these 'provisions and regulations' would do little to ensure quarry operations were being undertaken in a sensitive manner:

> I think the problem is that insufficient inspectors are employed to police the activities of quarrying firms and the other problems associated with extractive industries. That is one problem I bring to the notice of the House in the hope that some positive action may be taken to improve the control and policing of this matter in these areas.[981]

In a subsequent sitting of Parliament in November 1968, the Honorable Archibald Todd—representing the Melbourne West Province in the Legislative Council—queried the Minister of Agriculture, Gilbert Chandler, and the Minister for Education, Lindsay Thompson, with respect to the Niddrie quarry and the potential to institute restrictions upon its operations.[982] A report produced by the State Mining Engineer the prior week on the 11th of November recommended this approach be enforced by the City of Keilor, allowing the fulfilment of quarrying at Niddrie to extract whatever quality stone remained 'with a minimum degree of nuisance.'[983]

Although the implementation of these recommendations were communicated to the quarry firm, an expansion of operations was still sought. Considerable opposition arose in response to this proposal in September 1969 where an application was submitted to the Secretary for Mines for an extractive industry licence which sought to extend operations into an area of 115 acres, entirely surrounded by residential development, and zoned for alternative uses. Although some part of this land was zoned for 'Extractive Industry,' other portions of it were zoned for 'Reserved Living,' 'Public Open Space,' 'Residential C,' and 'Proposed Secondary Road,' resulting in a quarry site directly adjoining

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[981] Ibid.

[982] LCV, *Hansard : November 19, 1968* (Melbourne: Government Printer, 1968), 1965.

[983] Ibid.

residential development in Noga Avenue, a community centre and swimming pool in Quinn Grove, and the Keilor Heights High School, as well as consuming some portion of the roadway in The Avenue, Niddrie.[984] The portion zoned Extractive Industry adjacent to Noga Avenue had previously been established under the direction of the State Mining Engineer as a buffer zone, with large sections of dumped soil intended to minimise the impact noise, vibrations, and fly-rock upon adjoining residences.

The notion of tolerance was again reiterated from the perspective of the local community; it became evident that nearby residents had anticipated the closure of the quarry much earlier than had actually transpired, given the rapid development of the area. Some residents had also placed faith in communications from the Secretary of Mines to the Town Clerk of the City of Keilor on the 28th of October, 1968, which stated, in reference to the soil buffer zones, that:

> It is anticipated by the Company that quarrying will cease within some two years, when your Council is empowered, under the *Extractive Industries Act* … to order the removal of the dump for the purpose of reclaiming the quarry excavation, should you desire to take this course.

Ginifer stated that residents held great faith in the letter, and consequently did not conceive of an alternative outcome wherein the quarry operations would continue for the better part of a decade. Were the 115 acres of land granted for extractive industrial use, the quarry would continue to operate for a further seven years. In response to these events, one local resident, Harry Hitchman of 140 Hotham Road Niddrie, wrote to Ginifer, who included the letter in his Parliamentary address:

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[984] LCV, *Parliamentary Debates (Hansard)* : *September 9, 1969 to October 15, 1969* (Melbourne: Government Printer, 1970), 168-169; Legislative Assembly, *Hansard : March 14, 1979* (Melbourne: Government Printer, 1970), 3789.

> It was with horror and amazement that we heard from the local press that Reid's quarries have applied for extra ground in this area to continue work as quarrying, taking in land reserved as open space, and encroaching right up to existing houses. We have suffered for eighteen years the blasting, dust and racing trucks, and have looked forward to the day when this would cease in so densely a populated area.

Ginifer consequently sought justice for his constituents through the pursuit of the Minister of Mines for a more nuanced and 'detailed' analysis by the Extractive Industries Committee into the continued operation of the Fowler quarry. Little came of this, perhaps owing to the sentiment displayed by Samuel Merrifield, Member for the Doutta Galla Province which covered an extensive jurisdiction including, from west to east, Essendon, Moonee Ponds, Brunswick, Parkville, Carlton, Fitzroy North, and from Flemington in the south to Essendon North where it immediately adjoined the boundary of the Niddrie quarry.[985] This region was heavily quarried for both basalt and clay, and sustained a large number of brickworks throughout the nineteenth and early twentieth centuries. Although Merrifield, as an elected representative, was to represent the views of his constituents, his perspective on the encroachment of urban development upon quarrying were decidedly in favour of the historic land-use:

> …the disadvantageous effect of quarrying has not always been the fault of the quarry master. Too often surrounding landholders have subdivided their land in the full knowledge that a quarry was in existence, and the people who have purchased the land have complained about the operations of the quarry.[986]

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[985] DCLS, *State of Victoria, map of Doutta Galla (Metropolitan) Electoral Province, Legislative Council* (Melbourne: State of Victoria, 1939), State Library of Victoria.

[986] LCV, *Parliamentary Debates (Hansard)* : *November 20, 1969 to March 4, 1970* (Melbourne: Government Printer, 1970), 2002.

When the *Extractive Industries Act 1966* was enacted in 1968, it was envisioned that legislative controls would better coordinate the activities of quarry operators, resulting in decreased tension between these firms and the local community, and subsequently, the continued—although highly reduced—use of the quarry. Throughout the late 1960s and early 1970s considerable opposition to quarrying continued: residents complained of noise, dust, loss of amenity, traffic, vibrations, and flying rock debris, framing these as dangers to the public.[987]

Well prior to the closure of the site, the situation in Niddrie was cited as precedent in reference to a later proposal by the Housing Commission of Victoria. This development proposal, for the establishment of an estate comprising 2000 homes in the peri-urban south-eastern suburb of Narre Warren, would be adjacent to the southern boundary of a quarry site in the neighbouring suburb of Harkaway. A. J. Oliver, the managing director of the quarry group Albion Reid Pty. Ltd., wrote to the Secretary for Mines on the 24th of February 1971, to state that:

> We are most anxious to avoid a repetition of the unfortunate situation that was allowed to occur at our Fowler Quarry (Application No. 245) through residential development extending unchecked to the quarry boundary.[988]

It was during this period that Boral, the operator of the Fowler quarry, was granted a licence for continued operation despite the opposition from the Niddrie and Keilor East communities. It was envisioned that stricter enforcement of the conditions of the licence would resolve the issues reported by surrounding residents, balancing their quality of life with the need for continued access to 'an important community resource,' effectively allowing for the final vestiges of bluestone to be

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[987] EIAC, *Extractive Industries Act 1966 : Report of Extractive Industries Advisory Committee to the Hon. The Minister of Mines, Extraction of Basalt : Niddrie, 11 October 1972* (Melbourne: Government Printer, 1972), 1.

[988] A.J. Oliver to Secretary for Mines, 'Application for E.I. Licence No. 231 : Narre Warren Quarry', February 24, 1971, 1, PROV, VPRS 11559/P0001/130.

extracted.[989] The quarry was finally exhausted in 1975: only poorer-quality material could be accessed, which would be mixed with aggregate for use in road surfaces.[990] The site had also become completely constrained by residential development surrounding it on all sides. John Malempre, employed on the site at the time, stated that:

> It got encroached fairly early on, the houses … they were coming all the way down and basically it got to the stage where it was only sort-of marginally viable. Boral kept it to work it out.[991]

Compensating for the inability to expand operations, extraction had been undertaken to such a significant depth—of approximately 40 metres, below the water table—that groundwater flooded the lowest reaches of the quarry hole.[992] The matter was raised in a municipal meeting to identify a future for the site, where it was proposed by local residents that the site should be re-used as parkland, rather than for tipping.[993] This would be a difficult process as no pre-emptive actions had been undertaken to facilitate the rehabilitation of the quarry: 'there was a little bit [of tree planting] done up near the entrance, that's about it.'[994]

7.4 Dormancy and early proposals

The potential receipt of waste in the site was highlighted in a report by consultants Maunsell & Partners in 1976, the year following the closure of the site.[995] No immediate decision was made and

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[989] EIAC, *Extractive Industries Act 1966 : Report*, 1.

[990] Malempre, interview.

[991] Ibid.

[992] Ibid.

[993] "Niddrie quarry to close : It could become park," *Keilor Messenger*, February 4, 1975.

[994] Malempre, interview.

[995] Maunsell & Partners, *Report on extractive industries and waste disposal in the Western region* (Melbourne: Maunsell and Partners Pty. Ltd., 1976).

it lay dormant for approximately ten years, likely attracting informal, undocumented use—a phenomena later discussed in reference to the intermediary period awaiting the resolution of the 'toxic tip' saga of the 1990s. It is fascinating that a long-tolerated yet much-opposed land-use could cease and be followed by what is arguably an equally-undesirable land-use. Were the quarry inappropriate for an urban area, it was likely that the tip would be equally unwelcome: yet, moves continued to impose this land-use on the site. An initial proposal for a putrescible waste tip was made in 1981.[996] This was met with great concern by residents, who feared it would negatively impact the health and quality of life of the local community, noting 'smell[s], health problems, rats invading private houses nearby and danger to aircraft.'[997] An anonymous resident wrote to the Keilor *Messenger* voicing the broader community's frustration:

> Why should we be expected to put up with the smell, dust, increased traffic and lowering of property values? After putting up with the quarry for years, surely we are entitled to some consideration and respite?[998]

The municipality had begun to approve development on the very edge of the quarry as a passive effort to problematise any proposals of tipping.[999] In December of that year, Jack Simpson, the Member for the Legislative Assembly for Niddrie, took to the streets of Niddrie to ascertain the sentiments of the local community in greater detail; over three hours he collected 1125 signatures opposing the tip.[1000] The community maintained this position despite the prospective end-use of the land for recreation and public open space. Remediating the site in this manner would still impose undesirable conditions on residents, who would have endured tipping for a decade, estimated on the

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[996] "Letter to the editor : 'Keilor quarry'," *Keilor Messenger*, November 24, 1981.

[997] "Letter to the editor," *Keilor Messenger*, April 15, 1986.

[998] Ibid.

[999] Jos van den Berg and Helen van den Berg, interviewed by Victoria Kolankiewicz, Niddrie, March 8, 2019.

[1000] "Letter to the editor."

basis of ten municipalities contributing waste. Ultimately, this initial tip proposal proved unsuccessful, not directly in response to local community opposition, but as a consequence of the close position of the site to two airports, Tullamarine and Essendon. The disposal of household garbage was deemed unsuitable as the quarry was located directly beneath flightpaths for both airports, and it was anticipated that putrescible waste would attract seagulls en masse.[1001]

The issue arose again with a proposal by the demolition firm Whelan the Wrecker in November 1985.[1002] This was made at the behest of Boral, which had contracted the company to make use of the quarry to dispose building materials and non-putrescible waste. This was not dissimilar to Whelan's existing use of a quarry in Brunswick for similar means. In contrast to the estimated ten year lifespan of a putrescible waste tip, the Whelan proposal would result in operations over a longer period of time, as only hard waste could be disposed of. The anticipated volume of refuse would be approximately 4.4 million cubic metres over fifteen to twenty years, eventually elevating the quarried land to its original contour. Simpson feared that residents would be 'lulled into a false sense of security' by the materials to be accepted by the proposed tip: 'This conjures up visions of bricks, mortar and timber, but there are many items around building sites which readily qualify as offensive materials … these materials will create the same nuisance as the original proposal would have posed.'[1003] Again, the proposed tip was framed as a resolution of an atypical landscape, as it was 'proposed to rehabilitate the site in a manner which would allow recreational uses and a mixture of residential, commercial and institutional development.'[1004] Simpson stated that the community's opposition to tipping had held firm since the 1981 proposal: 'The residents said 'no, it's not on' then and I am sure they haven't changed their minds since.'[1005]

[1001] Rosemary Mullaly, "Move to put bicentennial garden in quarry," *The Age*, April 28, 1986, 15.

[1002] Aileen Muldoon and Kathy Cleary, "Monster tip" angers people," *Community News*, December 16, 1986.

[1003] "MPs push for quarry gardens," *Keilor Messenger*, April 15, 1986.

[1004] "Proposed landfill operation at Niddrie Quarry," *The Age*, November 29, 1986, 9.

[1005] "MPs push for quarry gardens."

Alan Griffiths, the Labor representative for the Federal division of Maribyrnong, hoped that residents would not only continue to oppose tipping on the site but also contribute their own visions and ideas on what use would be appropriate for the space. Griffiths and Simpson proposed a garden project, citing international precedents of brownfield re-use in the United Kingdom and Canada. As was the case with Newport Lakes, Butchart Gardens served as a model for Niddrie. The gardens had been visited by Jack Simpson, during his tenure as Member for Niddrie in the late 1970s. Simpson and Griffiths hoped a similar effort in Niddrie would generate over forty full-time positions in gardening and auxiliary roles.[1006] This mode of re-use for the quarry thus allowed not only for the beautification of the site through revegetation, but would also provide some economic benefit for the local area. The Niddrie Quarry Action Group supported this but also raised other ideas, including an outdoor education centre, a training area for rescue organisations, abseiling facilities, canoeing and scuba diving, a health resort, and a freshwater crayfish farm.[1007] A press release authored by Griffiths and Simpson was published on the 27th of April, 1986, which put forth the site as integral to the proposal for Victoria, colloquially known as 'The Garden State,' to be accredited as a candidate for the International Garden Festival (see Figure 7.4).[1008] The quarry was identified as 'the strongest contender for accreditation' on the basis of its unique topography, the vista from the site—allowing the visitor to clearly see the Melbourne city skyline—and its location 'in the heartland of Victoria's post-war migration communities.'[1009] The quarry would provide the ideal venue for the exhibition of 'the national gardens of all our great ethnic communities … a suitable acknowledgement to the contribution they have made to our State and to Australia.'[1010] Its

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[1006] Mullaly, "Move to put bicentennial garden in quarry."

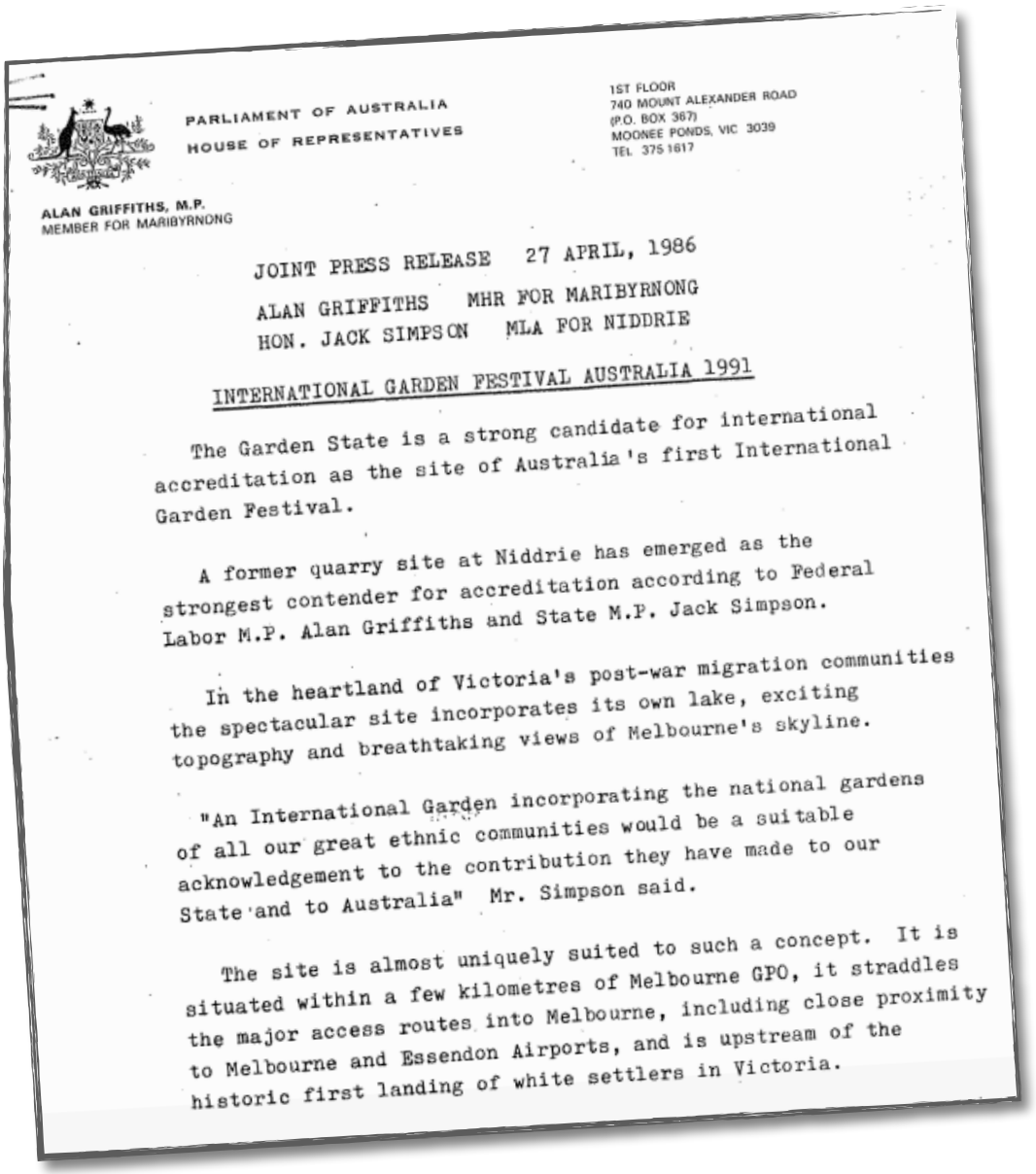
[1007] "Niddrie Quarry : A Recreational Centre for the People or a Pollution Burden for the future?," Niddrie Quarry Action Group & Friends of Steele Creek, published May 10, 1997, http://dingo.vut.edu.au/~westweb/environment/niddrie/index.htm.

[1008] Jack Simpson and Alan Griffiths, *Statement from Member for Niddrie* (Melbourne: s.n., April 27, 1986), 1.

[1009] Ibid.

[1010] Ibid.

location near freeways and airports would also allow ease of access for visitors. The Federal Minister for Arts, Heritage and Environment, Barry Cohen, and the State Minister for Tourism, Race Mathews, strongly supported the move.



PARLIAMENT OF AUSTRALIA
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ALAN GRIFFITHS, M.P.
MEMBER FOR MARIBYRNONG

JOINT PRESS RELEASE 27 APRIL, 1986

ALAN GRIFFITHS MHR FOR MARIBYRNONG
HON. JACK SIMPSON MLA FOR NIDDRIE

INTERNATIONAL GARDEN FESTIVAL AUSTRALIA 1991

The Garden State is a strong candidate for international accreditation as the site of Australia's first International Garden Festival.

A former quarry site at Niddrie has emerged as the strongest contender for accreditation according to Federal Labor M.P. Alan Griffiths and State M.P. Jack Simpson.

In the heartland of Victoria's post-war migration communities the spectacular site incorporates its own lake, exciting topography and breathtaking views of Melbourne's skyline.

"An International Garden incorporating the national gardens of all our great ethnic communities would be a suitable acknowledgement to the contribution they have made to our State and to Australia" Mr. Simpson said.

The site is almost uniquely suited to such a concept. It is situated within a few kilometres of Melbourne GPO, it straddles the major access routes into Melbourne, including close proximity to Melbourne and Essendon Airports, and is upstream of the historic first landing of white settlers in Victoria.

Figure 7.4: Press release (Griffiths, Alan, *International Garden Festival Australia 1991*, April 27 1986, Parliament of Australia).

Griffiths brought the matter to Parliament in an attempt to advocate an alternative use for the quarry, reiterating that it would be 'an appropriate site for an international garden festival.'[1011] Curiously,

[1011] PCA, *Hansard : APPROPRIATION BILL (No. 1) 1986-87* (Canberra: Parliament of Australia, October 15, 1986), 2009.

the argument constructed by Griffiths deviated in part from his salubrious visions. Rather than highlighting the compelling rationale for a garden festival site, Griffiths echoed concerns of the previous debacle—despite this proposal pertaining to the use of the tip for 'hard refuse,' rather than putrescible waste—'it ought not to be used for this purpose' due to the potential attraction of seagulls regardless of the constitution of the deposited material. He continued:

> I have sought and obtained the intervention of the Department of Aviation in the planning process to ensure that the argument is put that it ought not to be used for this purpose. I have done this because of the demonstrable danger presented by carrion birds attracted to such a tip to the quite intense air traffic emanating from both Tullamarine and Essendon airports.

It is unclear whether Griffith's concerns genuinely lay with the potential danger to aircraft; given this argument was vital to the rejection of the first tip proposal, Griffiths may have anticipated it to be equally compelling in this instance. Discussions to begin the 'hard rubbish' tip were effectively stalled for a matter of months, and the opposition to this proposal led to the preparation of an EES by Whelan the Wrecker, reiterating the end-use of the site through its eventual filling and rehabilitation (see Figure 7.5).


ENVIRONMENT EFFECTS ACT 1978

ENVIRONMENT EFFECTS STATEMENT

COMMENTS INVITED BY 13TH FEBRUARY 1987

PROPOSED LANDFILL OPERATION AT NIDDRIE QUARRY

Whelan the Wrecker Pty. Ltd. has prepared an Environment Effects Statement (EES) for a proposed landfill operation at the former Boral Quarry at Niddrie. The quarry would be filled with about 4.4 million cubic metres of non-putrescible wastes and covering material over a period of 15 to 20 years. It is proposed to rehabilitate the site in a manner which would allow recreational uses and a mixture of residential, commercial and institutional development.

Access to the landfill operation would be only via The Avenue, Niddrie. Other roads in the vicinity may be used for access to the mixture of proposed activities on the site following rehabilitation of the land.

Figure 7.5: An Environmental Effects Statement as published in *The Age* ("Environmental Effects Statement," *The Age*, November 29, 1986, 20).

Despite the existence of a strong precedent in Butchart Gardens, this bold proposal did not take place, likely due to the contractual obligation between Boral and Whelan, especially as Griffiths and Simpson wished to solicit the donation of the land from Boral for this purpose. The absence of support from the state government, likely a consequence of the poor economic climate, may have also contributed as Griffiths indicated there was Federal support for a feasibility study into the idea.[1012] Helen van den Berg, local activist, described the impact of this on the community:

> It made them frustrated because if Williamstown have got it [Newport Lakes], why haven't we? So there was this sense that we don't matter. We'd already lost it. If you've got one person [Griffiths] here, with a bit of vision, that is essentially from the Labor party, if he couldn't get it and then down the road in a blue-ribbon Labor seat that's in a wealthier area —they get it! How come we don't? We don't matter. You shouldn't ever accept 'can't.'

> People were quite deflated - and then there was silence. Somebody suggested we write to the Council and ask them and that's when we found out that 3.5 million cubic litres of soil were needed to fill the quarry, and so we were sitting in council the night that they agreed to change the local laws so that could become zoned for low-level contaminated fill, so they took it out of residential [zoning] and we were just sitting in the background there watching it happen.[1013]

Comments were invited on the Statement in December 1986, and planning permits were lodged under the *Town and Country Planning Act 1961*, which would empower the Minister for Planning

[1012] Jacinta Miller, 'Tip plan dumped in favor of parks,' *Essendon Gazette*, 22 February 1989.

[1013] van den Berg and van den Berg, interview.

to determine the application with public submissions in mind.[1014] Over six hundred residents responded to the Statement, and over twelve hundred objections were made.[1015] A protest caravan and stalls were set up on Keilor Road, Niddrie; two thousand homes were letterboxed; and petitions and objection letters were sent to the Office of the Planning and Environment Ministry.[1016] [1017] The Keilor Council also voted to unanimously oppose the proposal.[1018] Residents were emphatic that they would not tolerate dust, smells, or truck movements in the area, and maintained fears that birds would collide with aircraft and cause a plane crash given that Whelan could not ensure that putrescible and building waste would not be mixed.[1019] The local community was already concerned by an unrelated fatal incident in July 1978, where six members of the Gulle family had been killed when a plane departing Essendon Airport malfunctioned and crashed into their home.[1020] Myles Whelan, director of Whelan the Wrecker, countered that vermin—of both land and air—would not be attracted by the contents of the proposed tip, and that the firm's activities would not result in any danger to life through interference with aircraft. Despite this protestation, the Minister for Planning and Environment, Jim Kennan, refused the Whelan proposal.[1021] Griffiths stated that this was testament to the power of protest: 'It really shows what people can do if they are prepared to get off their backsides and work for the advantage of their own communities.'[1022]

[1014] "Environmental Effects Statement," *The Age*, December 5, 1986, 9.

[1015] Aileen Muldoon, "Quarry fight: It's on again," *Community and Real Estate News*, August 11, 1987.

[1016] Aileen Muldoon, "New bid for quarry as dump blasted," *Community News,* December 9, 1986.

[1017] Kevin Brianton, "Campaign hots up on Niddrie Quarry," *Community News*, January 20, 1987.

[1018] "Keilor says NO to Niddrie tip," *Keilor Messenger*, February 3, 1987.

[1019] Gayle Austen, "Tip birds could cause air disaster, says pilots' chief," *The Age*, January 30, 1987, 6.

[1020] "Ahead, a new life full of memories," *The Age*, July 13, 1978, 5.

[1021] Aileen Muldoon, "Dump plan dumped," *Community and Real Estate News*. June 23, 1987, 1.

[1022] Muldoon, "Dump plan dumped."

Discussions continued on the future of the quarry, and residents were increasingly confident that it would be re-used as public open space.[1023] Plans were developed for this under the ownership of Whelan which would have incorporated residential, recreational, commercial, and educational developments capitalising on the natural features of the site.[1024] Accordingly, Amendment L7 to the Keilor Planning Scheme was approved by the Minister for Planning and Urban Growth on the 16th of January, 1991, which would see the land occupied by the Niddrie Quarry rezoned from Extractive Industrial Zone to Reserved Living, and the land closest to Steele Creek a Stream and Floodway Zone.[1025] Overburden would be evenly distributed throughout the site to facilitate its development, still under the ownership of the Whelan group of companies.[1026] Whatever relief this afforded nearby residents was short-lived.

7.5 A second tipping proposal

> This proposal makes the Grand Prix look like a picnic.[1027]
>
> —NQAG flyer, 1996.

Five years later, with no works having been undertaken on the site, the Minister for Planning Robert Maclellan approved Amendment L6 to the Moonee Valley Planning Scheme, which altered the site-

[1023] "Editorial : A win for the community," *Community and Real Estate news*, June 23, 1987.

[1024] Jacinta Miller, "Tip plan dumped in favor of parks," *Essendon Gazette*, February 22, 1989.

[1025] SGV, *Government Gazette 2 : January 16, 1991* (Melbourne: Published by Authority, 1991), 92-3.

[1026] Peter Strachan, "Quarry re-zoned : Housing likely for derelict site," *Advocate*, February 20, 1991.

[1027] NQAG, *flyer* (Melbourne: Helen and Jos van den Berg, 1996).

specific controls relative to Niddrie Quarry that would now 'facilitate the rehabilitation of the land.'[1028] Helen van den Berg said of this amendment that:

> We knew when this happened that this was going to be a fight that could be won. Jos [her husband] and I put out 220 leaflets to people immediately around the quarry, and sixty-five people came. Now, we just went to each other, 'this is won.' We're used to - when you're looking at peace and justice issues - you get between one and three percent. Sixty-five, out of two hundred and twenty, is winnable.[1029]

Previous controls more sensitive to the local area had taken place under the Labor Kirner state government between 1990 and 1992. The defeat of Labor at in the 1992 state election, and the subsequent empowerment of the conservative Liberal Kennett ministry, saw a notable shift in the degree to which state and local governments cooperated, underlying the move by Maclellan distinctly in opposition to community sentiment.[1030] This took place through the amalgamation of local government areas, creating larger municipalities containing bigger populations over a broader area. New concerns also arose with municipalities moving beyond traditional areas of governance —'roads, rates and rubbish'—to address contemporary concerns.[1031] Pat Power, the Member for Jika Jika, stated that this cooperation was especially lost in the realm of 'conservation strategies, recycling and waste management ... the contrast between the periods before and since 1992 is that the notion of partnership, dialogue, and working things out in a more even-handed way no longer applies.'[1032]

[1028] SGV, *Government Gazette 11 : March 21, 1996* (Melbourne: Published by Authority, 1996), 751.

[1029] van den Berg, interview, March 8, 2019.

[1030] LCV, *Environment Protection (Amendment) Bill* (Melbourne: s.n., April 21, 1999), 290-291.

[1031] "More than just roads, rates, and rubbish," Municipal Association of Victoria, published August 3, 2018, http://www.mav.asn.au/news/more-than-just-roads-rates-and-rubbish-03aug18.

[1032] LCV, *Environment Protection (Amendment) Bill*, 291.

This mode of rehabilitation deviated significantly from optimistic visions for the site held by locals. Varying land-uses were suggested ranging from the previous garden showpiece to a bird sanctuary, 'adventure training ground,' and a space for water-based recreation.[1033] Of principle importance to residents was the maintenance of the existing landscape:

> This dream area is under threat of being bordered with housing and filled with approved landfill, undoubtedly of dubious nature, to create yet another boring flat area that will, unquestionably, be of little use in promoting or raising the profile of the area.[1034]

Rather than the creation of public open space, incorporating the varied landscape and creating what could have been an inspired and salubrious parkland, these new provisions were little more than an institutional push for the historic form of rehabilitation through tipping. These changes were to the distinct advantage of the private firm poised to propose its own vision for tipping on the site, and subsequently follow this through the later profitable use of levelled land. The remaining open space on the site was to be transferred to the municipality and used as parkland.[1035]

Whilst not explicitly stated, these amendments would have ultimately reduced the onus upon the state government to ensure proper site rehabilitation. This also reduced the responsibility of the state government to ensure that discarded construction materials and non-putrescible wastes could be disposed of: particularly those by-products of the major projects being undertaken by the Kennett government, most especially the Docklands precinct revival and the CityLink tollway and Burnley Tunnel, which would have produced large amounts of fill contaminated with heavy metals.[1036] The fill would have included unsafe levels of cadmium, lead, zinc, and arsenic, amongst other harmful

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[1033] Scott Thompson, "Residents fight Niddrie quarry landfill project," *Moonee Valley Gazette*, June 3, 1996.

[1034] Ibid.

[1035] Scott Thompson, "Park plans in big quarry bid," *Moonee Valley Gazette*, April 22, 1996.

[1036] Hopkins, "Quarry Quandrary."; Lesley Hetherington, "Toxic waste dump fear for quarry," *Herald Sun*, October 24, 1996.

contaminants. The van den Bergs were familiar with this issue from their involvement in another western suburban environmental matter: 'We knew a bit about lead as we had been part of the protests to get the lead cleaned up around Ardeer.'[1037]

The absence of legitimate long-term planning—for both waste as well as the disposal of soil from major projects—signified a return to ad hoc tipping of the past. Sherryl Garbutt, Member for Greensborough, described this well when reflecting on this historic dependency in a 1999 Parliamentary speech:

> Landfilling is not a last resort for the government. Instead it leaps into landfiIling at the first opportunity without having any statewide plan for it. A company comes along and says, 'We have a big hole and we want to fill it to make money' and the government says, 'Go for it! Put the hazardous waste in there. It does not matter how you mix it up. You do not have to monitor it in the future.' That is not a policy - the government just takes any ad hoc opportunity.[1038]

In September 1996, following the approval of these amendments, an application was submitted for a planning permit in order to use the quarry as a non-putrescible landfill, in turn remediating and rehabilitating the site for residential use.[1039] The quarry site had earlier been quietly purchased from Whelan's mortgager by property developer George Adams under the company Quadry Industries.[1040] The Quadry proposal shared many similarities with the Boral plan, however, it provided a more detailed outline of activities which would follow tipping. Jos states that this was

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[1037] van den Berg and van den Berg, interview.

[1038] Legislative Assembly, *Environment Protection (Amendment) Bill* (Melbourne: s.n., March 25, 1999), 148.

[1039] "City of Moonee Valley, Notice of an Application for a Planning Permit," *The Age,* September 9, 1996, 21.

[1040] Geoff Strong, "Oasis for native animals with city views: ideal for use as a waste dump," *The Age*, April 18, 1999, 12.

initially discussed as a park prior to community inquiry.[1041] This plan entailed the use of fill to level a twenty-metre deep lake adjacent to the westernmost quarry walls. This would be drained, used as a tip, capped with two-and-a-half meters of clay, overburden, and topsoil, and developed for recreational space; the quarry walls themselves would be retained, and housing would be built upon the remaining 35-hectares of the 47 hectare site, a landscape formed by overburden from quarrying operations.[1042] The suggested fill for the tip, 'low level contaminated soil,' was defined in a September 1985 EPA document as procured from 'large infrastructure, site rehabilitation and urban renewal projects' such as those above-mentioned, which would include 'concrete and building rubble, soil, road pavement materials, rock, ash/slag.'[1043]

Responsive to the views of the community, this permit was soon rejected by the Moonee Valley Council in October 1996.[1044] The rejection of the Whelan proposal in the previous decade bolstered the view of councillors in opposing the Quadry tip.[1045] The Council was simultaneously approving development on the very quarry edge in a continuation of its prior strategy to prevent tipping.[1046] As described by Helen van der Berg, the activities of Keilor Council 'had deliberately allowed houses to be built right to the edge of the quarry so therefore it could be land-locked.'[1047] The application received a further rejection from the EPA in December, with both bodies citing concerns for the environment, as well as truck traffic and noise.[1048] Nonetheless, this did little to quell the brewing conflict. Of increasing concern to the community was the political back-flip which had been

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[1041] van den Berg and van den Berg, interview.

[1042] NQAG and FoSC, "Niddrie Quarry."

[1043] EPA, *EPA Information Bulletin 448 Classification of Wastes* (Melbourne: Environment Protection Authority, September 1985).

[1044] Tom Laurie, "Quarry plan rejected," *Moonee Valley Gazette*, October 21, 1996.

[1045] Tom Laurie, "Quarry plan precedent rejected," *Moonee Valley Gazette*, May 26, 1997.

[1046] NQAG, *Meeting minutes*, 27/8/1996.

[1047] van den Berg and van den Berg, interview.

[1048] Claire Miller, "EPA rejects quarry bid," *The Age*, January 7, 1997, 5.

performed in the rezoning of the site. It had become clear that the *Extractive Industries Act 1966* and auxiliary planning instruments were incapable of guiding the rehabilitation of the site to the satisfaction of the community where political will proved absent—or, of greater concern, heavily skewed towards private interests. In van den Berg's words, 'We are not confident that the minister is impartial.'[1049] This absence of impartiality stems from Maclellan's own view of planning and its myriad instruments and intentions. In a column published in the *Herald Sun*, he described town planning as 'about managing change, about finding a balance between the economic pressures … and the needs of those who prefer to treat their suburbs as a haven.'[1050] Economic recovery from the downturn experience in the 1980s appeared to be the major drive of planning policy. Most tellingly, Maclellan wrote:

> Not long ago planning was used as a way of stopping things. Success of planning should be measured by what it achieves, not what it stops.[1051]

7.6 Activism and community action

> If you start from the assumption that everybody's entitled to a decent amenity in their own area irrespective of their income, then you have an expectation that every council has a responsibility to provide open space. We invented the planning system to separate industry and residential zones, and that was supposed to be the major achievement of the introducing of the *Planning Act*. It hasn't been achieved, because they'll still put you cheek-by-jowl.

[1049] Miller, "EPA rejects quarry bid."

[1050] "The winds of change," *Herald Sun,* November 2, 1998, 21.

[1051] Ibid.

> Good people argue on good principals and you get mediocre legislation as a consequence—because of greed. The long term impact of that is a terrible social consequence.[1052]
>
> —Helen van den Berg, 2019

Over four hundred residents objected to the proposed tip and development plan when it was first publicised, citing a broad range of concerns.[1053] Alliances were formed with existing community groups, as discussed in conversation with Jos and Helen van den Berg:

> They said, ‘‘You and Jos are here for the long haul, and we just want to stop the quarry, so we don’t really think we should join Friends of Steele Creek - what if we form the Quarry Action Group and you can be part of it?”
>
> We needed to bring in the Niddrie Residents’ Association and even though the Steele Creek Preservation Society wasn’t doing anything at that time, we needed to look like it’s a coalition of groups. So it’s a coalition fighting it, not just the radical van den Bergs. If caring about justice is radical, we’re happy to bear the name![1054]
>
> We wanted to stay independent of the Quarry Action Group as we knew at times there would be a need for a radical position to be stated and we can do it—and that did happen. We were getting a couple hundred people to the meeting and people felt discouraged, ‘we can’t win it.’ And I said yes we can, we’re already winning it. Because they had no experience they didn’t know they were winning.[1055]

[1052] van den Berg and van den Berg, interview.

[1053] Miller, “EPA rejects quarry bid,”

[1054] van den Berg and van den Berg, interview.

[1055] The van den Bergs had previously been involved with the Rainbow Alliance, an organisation detailed within the framing chapter of this thesis. Of their experiences, Helen said ‘we had learned a lot about political action, how you get your message beyond your local boundary, how you get the media involved, how to organise and build-up a group of people - you need a core of people who are going to organise’ (van den Berg and van den Berg, interview.). This no doubt contributed to the collective opposition to the Niddrie tip.

The NQAG stated their primary principles to include traffic hazards, noise, air and water pollution, and the loss of flora and fauna which had inhabited craggy site, including the peregrine falcon.[1056] Newport Lakes was highlighted as a positive precedent for what could be achieved. A set of principles were developed:

> Preserve and respect the lake.
>
> Uphold environmental law.
>
> Uphold safety and health law.
>
> Respect the community attachment to the lake.
>
> Preserve a site of geological and cultural significance.
>
> Do not pose a threat to existing houses.
>
> Do not import or export soil.[1057]

These strong directives demonstrated motivation and awareness of the battle to come. Helen van den Berg explained: 'we had a political activist background from the peace and justice movements so we knew how to play politics - we knew at the outset this was a fight against the state government.'[1058] In her role as a spokeswoman for the FSC—a waterway which skirts past the eastern aspect of the quarry—Helen wrote to the *Age* on the matter of this development.[1059] She claimed that Maclellan had 'performed a hat trick': planning controls on the site had been altered to facilitate development, and a request by the Friends for an EES from Quadry had been rejected. These concerns culminated in the sentiment that 'economic interests have precedence over the issues of planning law and … the people's right to clean air and waterways.' This was certainly

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[1056] NQAG and FoSC, "Niddrie Quarry."

[1057] Moonee Valley City Council, *Minutes of Meeting – Niddrie Quarry agenda,* Meeting of 9 January 1997, 3, PROV, VPRS 11559/P0001/130.

[1058] van den Berg and van den Berg, interview.

[1059] "Public railroaded in quarry debate," *The Age*, January 1, 1997, 10.

indicated in a meeting of residents and Moonee Valley City Council,[1060] where the suggestion of making the 'whole site public open space' was described by council as 'cost prohibitive.'[1061] Other options entertained for the site envisioned to generate income—residential development, or open space wth 'recreational attractors'—were rejected by residents as they required the movement of overburden and fill, contrary to the principles established by NQAG, and the broader health of the environment and local residents.[1062]

It was also highlighted by van den Berg that numerous public and independent appeals processes had been rejected by Maclellan, effectively denying the community the opportunity to formalise their opposition. Power, Labor member for Jika Jika, stated in a Parliamentary address that:

> The government decided it would interfere by overriding the decision of due process made by local government.[1063]

Further objections in this medium drew upon the fear of a seagull-plane collision, with Simpson writing that Maclellan should 'Leave it to the experts … Objectors to the proposed tip can't be categorised this time as the "chattering classes,"' referring to the role of inner-city intellectuals in opposition to HCV and CRB proposals for Carlton in the 1960s.[1064] Another contributor, Gary McFarlane, theorised that the approval of the tip would not only see truck traffic return to the residential area, but that Steele Creek—a tributary of the Maribyrnong River—could also become contaminated from dumped 'toxic' materials.[1065] Merely days later, the EPA rejected the proposed

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[1060] Previously the City of Keilor prior to municipal restructuring in 1994 under the Kennett government.

[1061] MVCC, *Minutes of Meeting – Niddrie Quarry agenda*, Meeting of 9 January 1997, 1, PROV, VPRS 11559/ P0001/130.

[1062] ibid, 2.

[1063] LCV, *Environment Protection (Amendment) Bill*, 293.

[1064] "Bird strike risk from proposed tip," *The Age*, January 2, 1997, 10.

[1065] "Tip will end Niddrie peace," *The Age*, January 4, 1997, 14.

tip citing 'inadequate pollution controls,' and altering the proposal to suit EPA guidelines would come at a cost of 'several million dollars' to Quadry.[1066] Following Quadry's appeal to overturn the EPA decision, as well as to pursue MVCC's permit rejection in the Administrative Appeals Tribunal, the Minister for Conservation, Marie Tehan, requested ministerial intervention from the Planning portfolio. In response to this, Maclellan chose to 'call in'[1067] an appeal by Quadry to overturn the decision made by MVCC. The following month, Maclellan declared that a state government-appointed advisory committee would be formed to consider the matter in an independent and impartial way, although the composition of the committee was not made clear at time of announcement.[1068] This committee was later revealed to include Peter Davies, Frank Bishop, and Alan Gilpin, none of whom resided in Melbourne's north-west. Davies and Bishop had previously sat on panels for the Point Lillas hazardous waste facility and Ballarat tip respectively.[1069] In response to this, van den Berg again criticised Maclellan in the media, stating that:

> [Maclellan] was not impartial. He is the least fit person to be handling this process because of a conflict of interest in this. As the minister responsible for City Link and the Docklands, he has a vested interest in finding a cheap tip for the clean and contaminated fill coming from these projects.[1070]

[1066] Miller, "EPA rejects quarry bid,"

[1067] The Minister for Planning was granted the power to 'call-in' appeals in a 1978 amendment to the *Town and Country Planning Act 1961*. This effectively allowed the Minister make a final, overriding determination (March, *The Democratic Plan*).

[1068] Rick Edwards, "Brumby slams Maclellan on Niddrie quarry call-in," *Community News*, February 25, 1997.

[1069] Ibid.

[1070] Claire Miller, "Quarry row goes to minister," February 15, 1997, 10.

She further critiqued the formation of an Advisory Committee as it lacked transparency: 'there is no guarantee that its decision is binding on the minister.'[1071] Kate Shaw, a planning academic and activist, wrote to the *Age* to further critique Maclellan's appointment of a committee as members of the committee would be 'unlikely to be reappointed if they repeatedly argued against these amendments … For a minister to hide behind the advice of panels appointed by him is ludicrous.'[1072] She concluded:

> If our minister were really tough, he would tell these developers to comply wth the regulations, instead of pulling the rug from under communities who value their environment for more than solely economic reasons.
>
> Many of these amendments are referred to panels despite local council opposition. It is no coincidence that Mr Maclellan has recently had local government added to his portfolio: if the councils kick up he can sack them.
>
> This is truly one-stop-shop planning.

7.7 From land-use conflict to social justice

Neither the Friends group nor its supports had their fears allayed, and by August 1997 the appointed committee had deliberated and finalised their decision: the Quadry tip plan would be approved.[1073] The recommendations detailed in a four-hundred page report by the Committee were described by van den Berg as an 'error of judgement.'[1074] Opposition to the tip plan by both the MVCC and the EPA continued, with both institutions reinforcing their stance. The matter was increasingly transforming from a land-use conflict to a political and ideological one. As stated by local resident

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[1071] Ibid.

[1072] Kate Shaw, "Politics of planning overrides democracy," *The Age*, July 26, 1996.

[1073] Gabrielle Costa, "Residents fume over toxic tip," *The Age*, August 14, 1997, 3.

[1074] Ibid.

Maria Patience, 'It is very much a social justice issue … Its about people's rights in a democracy.'[1075] Stakeholders were also concerned by the potential for the compulsory acquisition of Spring Gully Reserve (see Figure 7.6). This council-owned parkland—in an area 'desperately short' of open space—was remediated by local residents after the closure of the quarry, with considerable progress made over twenty years including revegetation and the return of native fauna (Figures 7.7, 7.8).[1076] The acquisition of the park was recommended by the committee so to provide direct truck access to the quarry site, avoiding residential areas.



Residents fume over toxic tip

By GABRIELLE COSTA, local government reporter

A State Government-appointed committee has approved a plan for a toxic dump in Niddrie, in the face of strong opposition from environment groups, the local council and residents.

Residents say to add insult, the committee recommended an access road be built across Spring Gully Reserve — a park locals built over 20 years, often at their own expense.

Cr Hammer also feared the council-owned Spring Gully Reserve could be compulsorily acquired if the tip was allowed.

"The area is desperately short of parkland, which is part of the reason residents have been developing the Spring Gully Reserve. It is very very special to them," he said.

The spokeswoman for the Friends of Steele Creek, Ms Helen van den Berg, said residents were absolutely outraged at the recommendations. "We will not have a residential area turned into a toxic dump," she said, adding the recommendations were "an error of judgment".

Figure 7.6: Excerpt from *The Age* (Costa, Gabrielle, "Residents fume over toxic tip," *The Age*, July 14, 1997, 3).

This proved as problematic as the re-use of the quarry site, with the potential to establish a worrying precedent as argued by Jo Hoyne of NQAG:

> If a Government can take a park to get access to a site like that so that one person can make a profit then there is no area in Melbourne that is safe.[1077]

[1075] Camden Smith, "Losing patience about lost rights," *Community News*, August 25, 1998, 8.

[1076] Costa, "Residents fume over toxic tip."

[1077] Rachel Gibson, "Residents and unions pledge to fight plans for toxic dump," *The Age*, July 6, 1998, 4.



Figures 7.7, 7.8: The Steele Creek prior to rehabilitation in an undated image, likely 1970s. The Steele Creek, as of 2019 (*Steele Creek*, n.d., VPRS 8609/P/0033, Unit 000041, 'River and Creek Improvements,' Public Record Office Victoria; *Steele Creek,* 2019, image authors own).

The process was briefly stalled in late 1997 so that Maclellan could 'sift through' the document produced by the advisory committee.[1078] Almost concurrently, a similar scenario took place in peri-urban Werribee which also saw a former bluestone quarry site earmarked for the receipt of 'toxic' wastes under powers exercised by Maclellan—this was previously discussed in greater detail in Chapter 5.[1079] A further connection between Werribee and Niddrie can be drawn in that the successful community campaign in Werribee, led by Harry Van Moorst, provided a precedent—and some semblance of hope and solidarity—for the residents of Niddrie.[1080] By May 1998, the site's future had still not been decided on.[1081] This provided an opportune moment for the amplification of community opposition.

Additional groups, 'Save Niddrie Lake' and 'No Toxic Tip,' were also established during this time. An iteration of the 'green ban' additionally took place, with the Australian Manufacturing Workers

[1078] Gabrielle Costa, "Wait on tip decision," *The Age*, August 15, 1997, 4.

[1079] Gareth Boreham and Karen Lyon, "Outrage as toxic waste dump gets the go-ahead," *The Age*, May 1, 1998, 3.

[1080] Ray Kenny, "Ministerial nonsense," *The Age*, May 10, 1998, 18.

[1081] Ibid.

Union and Construction Forestry Mining and Energy Union both warning that work bans would occur if the proposed tip was to proceed.[1082] A number of schools—Essendon-Keilor College, Penleigh and Essendon Grammar School, and St Bernard's—were located near to the proposed tip, and concerns for the health of students were raised by teachers there.[1083] Despite these concerns, local schools—and state schools in particular—were prevented from contributing more heavily to the movement against Quadry, both as a school body and as a culmination of all local institutions: 'They are damned if they do and damned if they don't. They don't want to be seen as doing nothing, but can't do anything that might affect their numbers,' said Bill Forrest, director of city development at MVCC.[1084]

A website was also created by students at Victoria University, in the inner-western suburb of Footscray, which surmised key points of each group and the overall movement: this would have been a novel method of disseminating information publicly at the time given the relative infancy of the internet (see Figure 7.9).

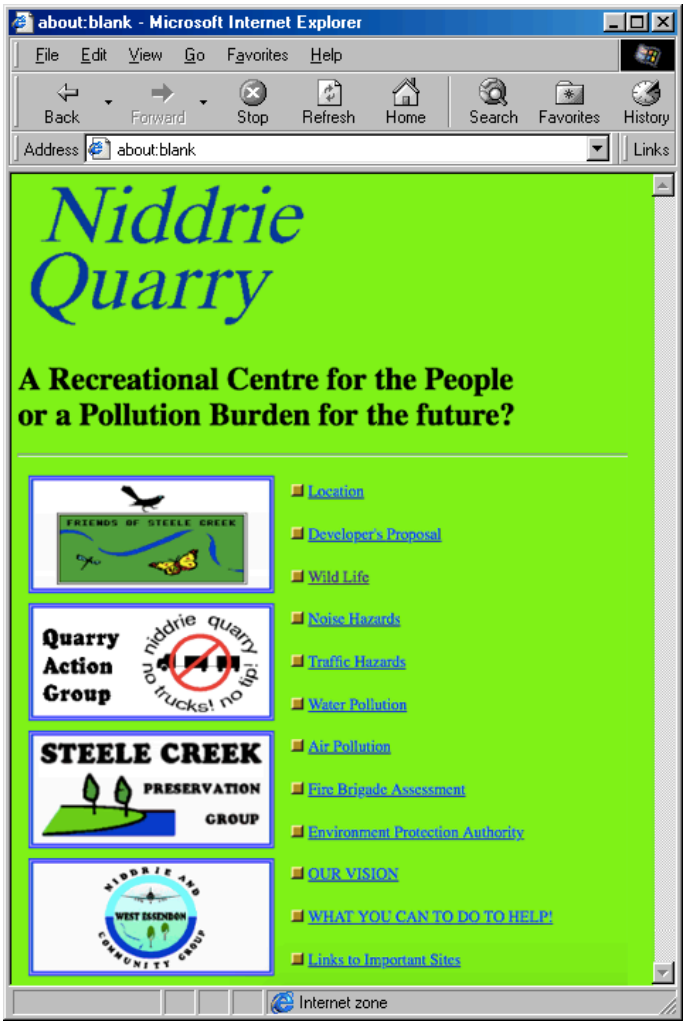


Figure 7.9: Niddrie Quarry website (Niddrie Quarry Action Group & Friends of Steeles Creek, *Niddrie Quarry,* May 10, 1997, accessed January 4, 2018, http://dingo.vut.edu.au/~westweb/environment/niddrie/index.htm).

[1082] Rachel Gibson, "Residents and unions pledge to fight plans for toxic dump," *The Age*, July 6, 1998, 4.

[1083] Amanda Tattam, "Down in the dumps," *The Age*, May 19, 1999, 56; Niddrie Lake Co-Ordinating Committee, Notes from meeting. Thursday 11 June 1998, 1, PROV, VPRS 11559/P0001/130.

[1084] Ibid.

Residents opposed to the tip had constructed barricades along the prospective Spring Gully access route to the quarry site, joined by conservationists and picketing unionists.[1085] Ruth Crow, a celebrated activist and community worker, visited the site with Helen van den Berg during this time. She described the quarry as 'an area which catches the cool breezes on hot summer evenings. Thus it could be a wonderful public open space for crowds of people living on the western plain.'[1086] She also described the nearby reserve as an 'oasis,' and noted that community support was beyond clear in the attendance of five hundred people at a march in February 1997, and in one-thousand residents present at a meeting in May 1998. This degree of support was unwavering: as one example, the NQAG and FSC groups came together to celebrate World Environment Day with a picnic and worm farm demonstrations at Spring Gully Reserve, showcasing the result of community-led rehabilitation of a marred landscape through planting programmes.[1087] Additional protests were planned to make all Melbournians aware of the saga. A protest was held outside the Flemington Racecourse on Melbourne Cup day—as the adjacent Maribyrnong River would be subject to seepage from the proposed tip—and a rally took place at Parliament House where protesters were encouraged to bring a torch or candle to 'show Kennett the light!'[1088]

Local real estate agents, concerned for the amenity of the area, also joined the cause. "Not For Sale" signs were placed at the quarry and Spring Gully Reserve (see Figure 7.10). The saga began to feature in local newspaper publications. Crucial to the success of anti-tip activism was the media. The van den Bergs state that the media 'were brilliant, they were fantastic to us,'[1089] and Jos in particular highlights the value in their presence: 'we always invited them to our home – "come over

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[1085] Claire Miller, "Barricades at dump site," *The Age*, May 22, 1999, 10.

[1086] "Devasting [sic] !" Says Mayor," in *Ecoso exchange newsletter 2/48, June 1998*, ed. Ruth Crow (North Melbourne: s.n., 1998), 7, Crow Collection, Victoria University, Footscray.

[1087] Paula Withington, "Water, water, everywhere … but how much is safe to drink?" *The Age*, June 3, 1999, 25.

[1088] "Residents stage Cup Day quarry protest," *Moonee Valley Gazette*, November 9, 1998, 4.

[1089] van den Berg and van den Berg, interview.

here, we have a story to tell, that doesn't normally come out," and you establish a relationship with journalists.' Their neighbours had been cutting articles out of the newspaper and mailing them to radio stations such as 3AW and 3LO to raise awareness of the matter. The absence of the tip saga from city-wide media discourse was worrying:

> I had been in tears and said 'we're never going to make it through to the major newspapers,' and if we don't, we won't win it.[1090]



Figure 7.10: Signs placed in the Spring Gully Reserve, published in *The Age* (de la Rue, Andrew, "Residents slam toxic dump plan," in *The Age*, July 26, 1998, 49).

In the news lull immediately following the Australian Football League grand final held in Melbourne, and preceding a public meeting later that week, Helen was called by Peter Couchman of 3LO and later Neil Mitchell of 3AW to speak of the issue on the radio. As a consequence of being on Mitchell's radio show, television channels 7, 9 and 10, then wanted to speak to Helen, prompting greater involvement from other members of the community. Following this initial media awareness,

[1090] Ibid.

a council meeting was called. Helen recalls: ‘This is where residents become absolutely brilliant. Turn up, ask your questions, and take over the meeting. Don’t let them run it their way.’[1091]

Ideas were exchanged and the coalition of activists agreed on making their cause more visible: signs would be made and members were encouraged to speak to their neighbours (see Figure 7.11). Jos van den Berg was responsible for organising residents to appear in media photos, as well as publicity stunts to garner attention:

> They just stuck up a big yellow noticeboard and Jos did his writing on it, then someone else liked the idea so they donated a sign and put it down near the Maribyrnong River. We got Rob Hulls [member for Niddrie] to auction off shareholder certificates, and these guys - we still know them - they made that trailer [A-frame sign] and that was outside 3AW studios. We contacted the unions, we got the placed green-banned, we go to the Labour Day march and take the trolley [sign], Jos has made an effigy of Maclellan. We made a ‘NO TOXIC DUMP’ sign and included Jabiluka, Niddrie, Werribee, and that sign was dropped in the city. We made footballs and gave them to the Madden brothers [sportsmen] on the Parliament House steps to have a photo taken.[1092]

Rallies were held, and a noticeboard was placed in the park to communicate the dates of upcoming rallies and meetings. The municipality became increasingly aware of the community’s anger, and the activist coalition made it eminently clear that the municipality would be held responsible for any harm which might occur as a consequence of tipping. Soon after, MVCC announced that they would reject any proposal to make a tip of the quarry site. Helen remembers:

[1091] van den Berg and van den Berg, interview.

[1092] van den Berg and van den Berg, interview.

When we formed an alliance, Council said ‘oh, we better have a proposal,’ and so they said, ‘how about a housing proposal?’ and they went and spent some money on getting that proposal and people looked at it and thought it was okay because it kept the lake. The community’s bottom line was: no trucks, in and out. It’s too steep, it’ll kill people on the roads, we had that experience with the quarry so we don’t want the trucks. Plant it thickly so you have a tree canopy. They were pretty minimalist approaches.[1093]



Figure 7.11: Helen and Jos van den Berg, centre, with group members and signage (City of Moonee Valley, *Members of the Niddrie Quarry Action Group,* n.d., in Moonee Valley Thematic Environmental History, 2012, 28).

Collective support from Council, residents, and real estate agents alike saw the preservation of the lake and alternative land-use—the construction of a housing estate—a ‘far better proposal than having a toxic quarry. It’s a residential area and this will enhance it.’[1094] A planning permit by the MVCC for a residential development was proposed and approved in October 1998, directing a clear

[1093] van den Berg and van den Berg, interview.

[1094] Paul McDonald and Angela O’Connor, “Residents slam toxic dump plan,” *The Age*, July 26, 1998, 49.

message to Quadry as to what type of development would be allowed on the site.[1095] This alternative, developed with the assistance of consultant town planners, engineers, and landscape architects, would find the site segmented into 338 lots, with a road system allowing the orientation of houses towards Steeles Creek and the quarry lake.[1096] MVCC Mayor Hedley Moffat argued that such an approach showed:

> … a way forward for the development of the site which is environmentally responsible, commercially viable, and does not deny the community full use of Spring Gully Park or destroy Niddrie Lake with toxic landfill.[1097]

The proposed housing estate—and the retained existing landscape—was estimated for completion within approximately three years, compared to a twenty-year lifespan identified for the tip, which would alleviate much of the angst felt by the community. Although well-received by local residents, one objection had been made: from Quadry, on the grounds of it being 'an inappropriate use of the land.'[1098] However positive, this proposal too would result in some degree of loss to the community. In its post-industrial form, the remnants of prior occupation had become markers of a visually diverse environment ripe for recreational use, although in a truly informed and unsanctioned manner. As the van den Bergs acknowledge, this outcome was not the desired one: 'There's no good fighting for a park—we've lost that. You'll have to take a housing proposal.'[1099]

[1095] 'Madeleine Coorey, "An offer too good to be toxic," *The Australian*, October 28 1998, 7.

[1096] NLCOC, *Notes from meeting : Thursday 2 July 1998*, 1, PROV, VPRS 11559/P0001/130.

[1097] McDonald and O'Connor, "Residents slam toxic dump plan."

[1098] Karen Lyon, "Council backs houses to block dump," *The Age*, October 28, 1998, 9.

[1099] van den Berg and van den Berg, interview.

While the site awaited its fate, quarried cliffs became hosts for bird life; children[1100] and adults alike would fish in the groundwater 'lake' which was also occupied by native turtles and water birds; and sections of rubble or overburden proved ideal for explorers and trail-bike riders.[1101] The quarried land provided an adventurous reprieve from ordinary urban life (see Figure 7.12).



The old Niddrie quarry (pictured above) is great fun for trail bikes and cycling, as these lads will testify. But car dumpers also make use of the water in the hole (arrowed, background).

A hole—but an adventure haven

HAVE you ever wondered what happened to the old Niddrie quarry since it closed down about four years ago?

No, despite reports to the contrary, the gaping hole hasn't closed up or gone away, but is

places, and the 47 hectare site is often used as a trail bike riding ground for local

Local youths said the quarry was also a popular summer

A Boral Resources official said unauthorised entry

held negotiations on possible future uses for the quarry, but no

Figure 7.12: Newspaper photograph depicting children riding bikes and an abandoned vehicle ("A hole—but an adventure haven," *Community and Real Estate News*, July 15, 1980, 1, in VPRS 11559/P/0001, Unit 000130, 'Niddrie Quarry,' 1980-82, Public Record Office Victoria).

[1100] Rupprecht states that such spaces can act as 'secret, personal and special places' for children (Rupprecht and Byrne, "Informal Urban Green-Space: A Typology," 603).

[1101] *The Age*, April 28, 1982, 4; "Woman lifted from quarry," *The Age*, January 12, 1992, 3.

This informal open space environment was greatly enjoyed by local residents who had long tolerated the processes which created it. Locals traversed broken fencing—ignoring 'no trespass' signs—to walk their dogs and use the site for exercise. Residents spoke enthusiastically of the site to the media: Greg Follett and Craig Woods described it as an 'adventure playground'[1102] in which they had spent much of their youth planting native gums and wattles to attract wildlife.[1103]

A pair of young teenagers were interviewed in the *Age* about their adventures, which included catching native fish, swimming, and observing fauna: 'I love animals,' one young interviewee said, 'there are animals in here nobody knows about. They should not be allowed to have the tip, it will kill all the animals.'[1104]

7.8 Blocking the tip

> We know history well enough to know that revolutions don't deliver a lot either.[1105]
>
> —Helen van den Berg, 2019.

In the early months of 1999, the matter had been taken to the Supreme Court by the MVCC, citing legislative inaccuracies. Quadry Industries had submitted a planning permit application on the 19th of July, 1996, which had stated the value of the proposed tip development to total $4.75 million dollars, determining a permit fee of $2,690; the true value, revealed in a Kennett government

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[1102] The sprawling disused quarry site may have provided local residents with the opportunity to encounter nature in a manner otherwise not possible in such an urbanised area (Christoph Rupprecht, Jason Byrne, and Alex Lo, "Memories of vacant lots: how and why residents used informal urban green space as children and teenagers in Brisbane, Australia, and Sapporo, Japan," *Children's Geographies* 14, no. 3 (2016): 341, doi:10.1080/14733285.2015.1048427). The perceived absence of control and ownership would lend a sense of adventure to the space, exacerbated by the varied, challenging quarried terrain.

[1103] Martin Borrack, "Quarry fight looms," *Moonee Valley Gazette*, 20 January 1997.

[1104] Strong, "Oasis for native animals."

[1105] van den Berg and van den Berg, interview.

advisory committee report for Maclellan, shows the sum of $76.4 million dollars, necessitating a fee of $13,450.[1106] This showed MVCC had been pressured to approve a permit for which vital information had been inaccurate, raising questions in Federal Parliament on the myriad legalities of permit approval. Julia Gillard, Member for Lalor, stated:

> The proposal for the Niddrie quarry stinks because it is bad public policy, because it reeks of political opportunism in dumping on Labor seats and because of the questionable conduct by the developer that I have raised today. … I would suggest to the electors of Niddrie and those concerned about the question of hazardous waste in Victoria that the choices in this election could not be more clear: the choice between Rob Hulls and his opponent and the choice between Labor and Kennett's Liberal Party and its planning laws.[1107]

Despite this, it was found by Justice Judy Balmford that MVCC would be unable to appeal the Governor-in-General's decision. Furthermore, it was decreed that conditions on the development of the site would not be instituted, and that the Council could be forced to approve a planning permit for the tip, be 'sacked,' or that the state government could compulsorily acquire the land.[1108] The protesting community vowed to blockade the site. One resident, Martin Grubb, wrote to the *Age*:

> This will be a long-term disaster; it is dangerous, irresponsible and a betrayal of residents' democratic rights. Mr Maclellan also thinks it is fine for him to demand that the council hands over mature parkland for an access route for 200 trucks a day. The recent propaganda

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[1106] PCA, *Hansard : GRIEVANCE DEBATE Victoria: Hazardous Waste* (Canberra: Parliament of Australia, August 30, 1999), 9379.

[1107] Ibid.

[1108] "Toxic dump gets green light," *The Age*, March 31, 1999, 4; NLCOC, *Notes*, 19 November 1998, PROV, VPRS 11559/P0001/130.

> brochures regarding "Your Suburb, Your Say" are now proved to be only lip-service by a minister who had no regard for the opposition by residents, the MVCC, and the EPA.[1109]

A stalemate was forced by MVCC in the refusal of a permit to construct a road in Spring Gully Reserve.[1110] The risk of compulsory acquisition of the site by the state government continued, however, endangering the long-term viability of the impasse. The politicisation of the Niddrie quarry proposal through the ministerial permissions afforded by Maclellan would ultimately situate it as a primary concern of the electorate in the 1999 state election. The Labor Party had already affirmed its opposition to the tip site, with the Opposition Leader John Brumby making exceptionally clear that the proposed tip site 'would not be doing much business' if Labor won government.[1111] 'We shouldn't just be dumping waste in holes in the ground,' he said.

In the lead-up to the State Election, the activist coalition undertook further stunts within swinging seats throughout Melbourne. Aerial imagery was shown depicting the location of Niddrie, which constituents of other electorates found alarming. Helen van den Berg assessed this as indicative of Australian egalitarianism:

> They'd say 'We thought Niddrie was out in the backwoods!' and I said 'no,' and they said 'That's in a suburb like us! Well that's not fair.' That's the thing about Australians, they mightn't care much about justice, but they do care about fairness, so if you get your message out beyond the border, you're right. Break the barrier: get out of your area, make sure it's publicly known, be on the radio, go everywhere, speak to schools, speak to little groups, doesn't matter how big, how small, speak to them, and the thing you highlight—and that they can all see—is the unfairness. And they don't want it.

[1109] Martin Grubb, "Residents say no to Niddrie dump," *The Age*, 2 April 2, 1999, 10.

[1110] Claire Miller, "Barricades at dump site," *The Age*, May 22, 1999, 10.

[1111] Rick Edwards, "Don't let Toxic Twins win," *Community News*, May 26, 1998, 3.

This also demonstrated the issue would affect many more people than the immediate Niddrie community. The potential for seepage from the tip would find itself not only in Steele Creek but also the Maribyrnong River and Port Phillip Bay. This was also placed within the context of cumulative insensitive policies being instituted by the Kennett government which indicated disregard for the broader community, as Helen surmises:

> The [Kennett] Government is doing this, one after the other; people have died because of the ambulance fiasco.[1112] People were losing their parks, they'd lost their libraries, public space was being taken, the Grand Prix, all of this was adding up. Not only were we out there saying 'this Government doesn't listen,' you had the health sector up in arms over it, you had the school sector up in arms, you had the local residents fighting things in their own area that they thought were things that they had achieved and now they were being taken away from them. This cumulative effect undid him in the end, and we were part of that process throughout the state. And then there was a year of silence when Labor got in and they didn't tell us what was going on.

The sensitivity displayed by Hulls contrasted greatly with that of the candidate put forward by the Liberal party; an interview with an Essendon North resident saw Hulls described as 'very active ... [he] has taken the Government to task on the Niddrie quarry issue. He's been attending rallies and group meetings consistently.'[1113] The Liberal candidate, 24-year-old Susannah Kruger, a public relations officer from Fitzroy, had received verbal abuse from Hulls in a city bar for her support of Kennett just prior to the 1999 election. Shortly afterwards, she offered to join the Liberal party and

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[1112]The sale of public services by the Kennett government saw ambulance dispatch and communications privatised, fragmenting the service and reducing its overall capacity and responsiveness (John Thwaites, "Private ambulances in 'dash for cash'," *The Age*, June 19, 1995, 15).

[1113] "Reader Panel: Planning," *The Age*, September 4 1999, 16.

stand as its candidate for the seat.[1114] Kruger knew little of Niddrie beyond her childhood years there, and even less of the tip conflict: quizzed on the proposed tip, she stated that she 'would like to have a look at waste reduction,' clarifying this, when pressed by her interviewer, as 'eradicating the need for such a facility.'[1115] Kruger went on to claim that her sudden interest in politics was not entirely retribution for Hulls' remark: 'That alone is not the reason why I'm running. It's certainly a strong reason. So, I think to see someone like that representing my community, I get a little bit concerned.'[1116]

One resident noted that the sudden appointment of Kruger 'doesn't say much about what they think of the voter here, does it?'[1117] In a 'crude attempt to buy votes,' as verbalised by MVCC Mayor Don Cornish, the Kennett Government position turned to one of support for the local community's views, with an election-eve 'surprise reversal.'[1118] Local residents received letters on the 16th of September stating that Kennett had spoken with Kruger and become convinced of the importance of the matter, and that the 'coalition will not support the use of the quarry as a waste disposal site if the council rejects any application submitted to it for access.' Helen van der Berg described it as a 'cynical attempt' to 'save face and buy votes,' 'all about [Kennett's] current obsession with unseating Rob Hulls.'[1119] Kruger had not met with local residents to discuss the tip.

Reflecting his close involvement with the Niddrie campaign, Hulls retained the seat with a 13.6 per cent margin, a substantial increase from the previously-held margin of 4.4%.[1120] The state election

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[1114] Gabrielle Costa, "Niddrie's new candidate eyes her quarry," *The Age*, August 26, 1999, 8.

[1115] Luisa Saccotelli and PeterCave, *Victorian Liberals draft political novice*, aired August 25, 1999, on ABC Local Radio, http://www.abc.net.au/am/stories/s46378.htm.

[1116] Ibid.

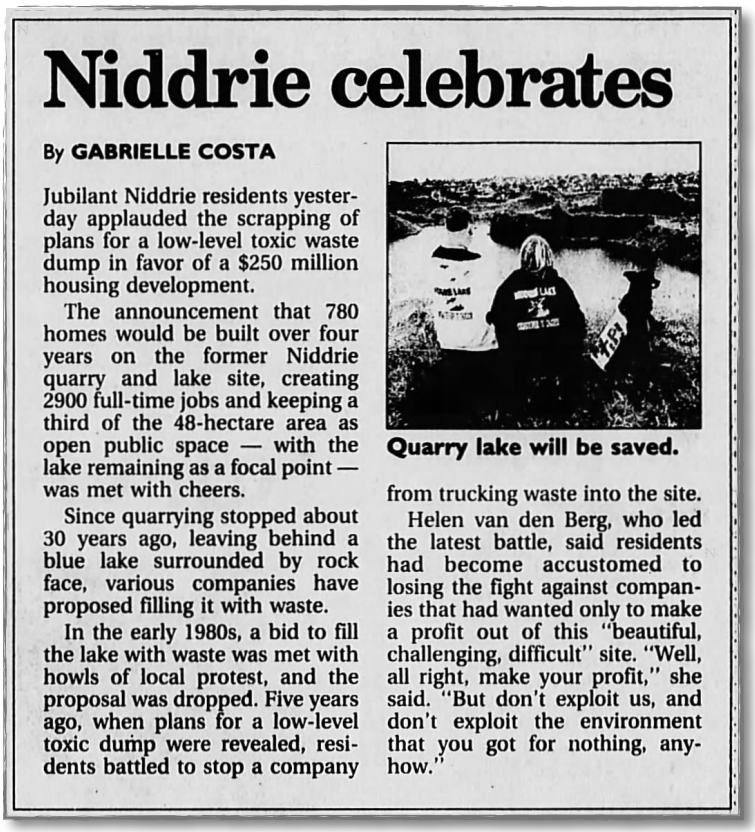
[1117] Gary Tippett, "They're just wild about Harry - and his friend," *The Age*, September 7, 1999, 7.

[1118] Sandra McKay, "Toxic dump switch a ploy: claim," *The Age*, September 18, 1999, 12.

[1119] Ibid.

[1120] Department of the Parliamentary Library Information and Research Services, *Research Paper No. 19 1999-2000 : Victorian Election 1999* (Canberra: Department of the Parliamentary Library, 2010).

had brought the Labor party to power, and the success of Hulls displayed not only the broader successes of his party—toppling the Kennett government characterised by neoliberal and economically-driven policies—but also his awareness of the needs and views of his constituents. This too, however, was limited by the pragmatism of government: the public open space so desired by the community could not be achieved, and the site was earmarked for a housing estate. The only desire of the community met was that rubbish tipping would not take place (see Figure 7.13).



Niddrie celebrates

By **GABRIELLE COSTA**

Jubilant Niddrie residents yesterday applauded the scrapping of plans for a low-level toxic waste dump in favor of a $250 million housing development.

The announcement that 780 homes would be built over four years on the former Niddrie quarry and lake site, creating 2900 full-time jobs and keeping a third of the 48-hectare area as open public space — with the lake remaining as a focal point — was met with cheers.

Since quarrying stopped about 30 years ago, leaving behind a blue lake surrounded by rock face, various companies have proposed filling it with waste.

In the early 1980s, a bid to fill the lake with waste was met with howls of local protest, and the proposal was dropped. Five years ago, when plans for a low-level toxic dump were revealed, residents battled to stop a company from trucking waste into the site.

Quarry lake will be saved.

Helen van den Berg, who led the latest battle, said residents had become accustomed to losing the fight against companies that had wanted only to make a profit out of this "beautiful, challenging, difficult" site. "Well, all right, make your profit," she said. "But don't exploit us, and don't exploit the environment that you got for nothing, anyhow."

Figure 7.13: Newspaper article in *The Age* published following the 'scrapping' of landfill plans (Costa, Gabrielle, "Niddrie celebrates," *The Age*, November 13, 2000, 2).

7.9 Creating Valley Lake

> I said the first prize would've been the park and the open space we needed. Second prize is this.[1121]
>
> —Helen van den Berg, 2019.

[1121] van den Berg and van den Berg, interview.

One year after the election of a Labor state government, the Urban and Regional Land Corporation —a statutory authority, today known as Places Victoria—purchased the site for redevelopment as a housing estate, allowing the retention and remediation of the quarry and its lake as a core element of the plan. This $250 million plan was formally announced on the 12th of November, 2000. Local residents celebrated this final blow to the tip and the proposed destruction of the adjacent reserve, with Helen Griffiths remarking that 'we've got our park back, thank goodness.'[1122] The community had been met with silence, however, which did not inspire optimism:

> We already knew by this time … that we no longer mattered again. They weren't talking to us, they had a couple of initial meetings over what they were going to do, we gave them sustainability principles and never heard from them again, when we raised concerns we were ignored … neither council nor us had any role.[1123]

The proposed development would be coordinated by the URLC and include 780 dwellings on 420 lots, accommodating an expected population of 1,500; development would now occur over four years and take place in a manner sensitive to the existing quarry, centred around the quarry lake and, in the words of Planning Minister John Thwaites, 'preserving the site's integrity.'[1124] Hulls stated that the decision reflected 'people power at its best.' However, the lake was not retained to an ideal condition and the development was not undertaken in a sustainable or environmentally-sensitive manner; its density would have also been greater than the initial MVCC plan. When asked why a community movement had not formed around this issue, Helen van den Berg explained: 'we tried, we got knocked over all the time. … no-one will listen to us so we've given up.'[1125] The

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[1122] Jen Craddock, "Niddrie wins toxic dump fight," *The Age*, November 12, 2000, 3.

[1123] van den Berg and van den Berg, interview.

[1124] Craddock, "Niddrie wins toxic dump fight."

[1125] van den Berg and van den Berg, interview.

development of a housing estate concordant with the URLC design was enshrined within the Moonee Valley Planning Scheme Amendment C25 on the 22nd of March 2002, which introduced the Development Plan Overlay and the Land Subject to Inundation Overlay as well as modifying the Local Planning Policy Framework to facilitate subdivision. In the early twenty-first century the URLC morphed through various iterations to become VicUrban in 2003 and Places Victoria in 2011. This entity successfully redeveloped the Niddrie site as the 'Valley Lake' housing estate, with the majority of construction completed between 2006 and 2017.[1126] The role of government can, in part, be attributed to the challenging terrain, further justified by the historic opposition to private sector interventions; there would be a lessened dependency on profit generation. Although historic visions put forth by the community were suggestive of recreational open space and gardens, the site commanded more intensive use as a consequence of population increase: this provided the impetus to intensively develop large areas of brownfield or disused land within close proximity to the city centre.[1127] The masterplan for Valley Lake (see Figure 7.14) was designed by planning consultants Tract, who described the site as 'chaotic and disturbed':

> With few remaining development areas close to the city, the need to reuse highly degraded sites such as this one is paramount. The outcome of the design show [sic] that it is possible to achieve excellent outcomes on difficult sites and that more than possible [sic] to rival developments of "green field" sites. The creative use of earth shaping, plant material and soil preparation for this site give [sic] clear lessons for future workings on "brown field" sites.[1128]

[1126] "Valley Lake," Development Victoria, n.d., https://www.development.vic.gov.au/residential-projects/valley-lake.

[1127] Public Accounts and Estimates Committee*, Inquiry into 2003–04 budget estimates Melbourne – 14 May 2003* (Melbourne: s.n., 2003), 93.

[1128] "Valley Lake Estate," Tract Consultants, n.d., https://tract.com.au/project/valley-lake-estate/.

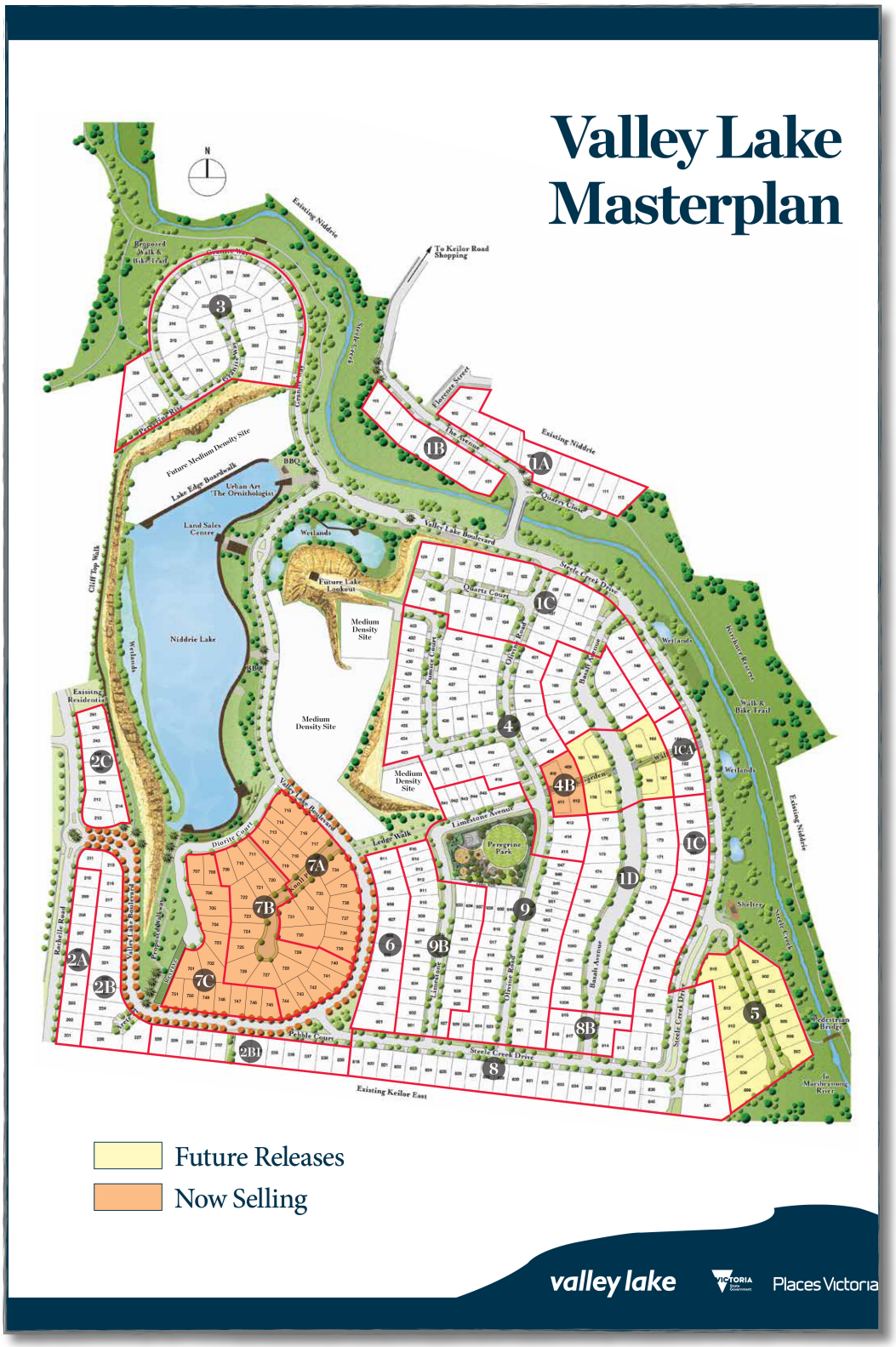


Figure 7.14: Valley Lake Masterplan by Places Victoria (Places Victoria, *Valley Lake Masterplan*, 2014, Development Victoria, accessed 6 January 2018, https://myvalleylake.com.au/the-development).

A total of 572 homes and townhouses now occupy the site in a distribution of curving streets which follow the heavily-graded and softened topography of the site, neutralised through battering and fill

where the gradient proved too steep for the density of development. Overburden on the site was removed or distributed to level the land and decrease the size and depth of the lake. The gradient of the site was made more consistent, removing the topographic variance which had made the site so unique and picturesque. In conversation with Helen, she clarifies that:

> … after the fight, they asked me to be a spokesperson for [the housing proposal], and I said no, I never wanted the houses. We supported [the council proposal]. What we got was not that. We didn't get a toxic dump – what we got was overpopulated, badly-designed.[1129]

Street names recall the site's extractive past, but deliberately make no reference to the site's more recent history. These were suggested by Jos van den Berg, who shared Helen's stance; he did not permit URLC to memorialise the Niddrie saga by naming a street for the couple. Streets were instead named Quarry Close, Basalt Avenue, Steele Creek Drive, Granite Way, Quartz Court, and Limestone Avenue, amongst other geologically-inspired terms. The peregrine falcon also features in Peregrine Rise, and in a small recreational space, Peregrine Park. A sculptor, Tim Jones, was also commissioned by Places Victoria to create *The Ornithologist*, a twenty-three metre steel ladder topped with a figure possessing a pair of binoculars. In a press release following its unveiling, Hulls stated that this bird-watcher was 'perhaps looking for the peregrine falcons that nest in the Valley Lake cliff face.'[1130] If so, the figure is looking the wrong way: he faces outwards.

Homes are oriented towards water features, either directly onto the quarry lake (see Figure 7.15) and the associated rock face, or onto Steele Creek. There is irony in the absence of oxygen in the lake, a consequence of its filling to mitigate drowning risk.[1131] The provision of open space featured

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[1129] van den Berg and van den Berg, interview.

[1130] Max Berry, "From Quarry to Model Estate," *Quarry Magazine*, June 1, 2008, https://www.quarrymagazine.com/Article/1559/From-quarry-to-model-estate.

[1131] Jos van den Berg, interviewed by Victoria Kolankiewicz, Niddrie, March 8, 2019.

heavily in the design for the site, again capitalising on its topography. The landscape also provided a rich and compelling rationale for design interventions to encourage not only passive and active recreation, but the exploration of the site and a greater appreciation for the 'unique' landscape which had emerged from geological and human-led processes. Boardwalks allow visitors and residents the ability to move through the landscape beyond the confines of the streetscape, encountering the geology more closely to be confronted with its presence as a visible scar of human interference. A cantilevered steel lookout by McGregor Coxall situated upon a basalt apex seeks to convey memories of the site's industrial past through evoking imagery of production, conveyance, and material application.[1132] Wherever an individual chooses to situate themselves within the site, there is a visibly clear demarcation between the surrounding post-war residential subdivisions and Valley Lake: if not on the basis of urban form alone, then in the incorporation of the site's topography and geology.



Figure 7.15: Valley Lake in early 2019 (image authors own).

[1132] "Valley Lake Lookout," McGregor Coxall, n.d., https://mcgregorcoxall.com/project-detail/144.

The effects of the tip saga are also visible beyond the suburb's boundaries. In response to the extent of community objection seen in Niddrie, the state government stipulated, under a hazardous waste action plan announced in December 2000, that no new 'toxic waste dumps' would be established in the state. Greater awareness of recycling and recovery of waste would preclude the need to establish hazardous waste tips; facilities for the storage of such materials would be constructed instead, where materials would remain until improvements in technology allowed for a more appropriate means of disposal.[1133] Existing 'toxic waste dumps' at Tullamarine and Lyndhurst were to close upon reaching capacity, with an estimated timeframe of approximately five years; the Werribee proposal had been rejected entirely. The putrescible tip in Ravenhall would continue to exist, however. Building unions were dissatisfied with this outcome, with a ban on the removal of contaminated soil to begin in early 2001 as a response to the protracted development of hazardous waste containment facilities: Brian Boyd, an industrial and campaigns officer of Trade Hall, remarked that 'If it jams up the major projects, so what? We're not going to wait four or five years. If we don't have those soil recycling centres set up within the next 24 months then we're going to have a crisis about where to put contaminated soil.'[1134] The transition away from landfills solves one problem, but creates another. This was identified in a state government committee report: more waste would be stored on-site at businesses or disposed of interstate, and illegal dumping increased.[1135]

The problem was not quashed through the precedent of Niddrie, but merely moved beyond the urban periphery where the kind of significant opposition seen in Niddrie, and to an extent in Newport, Werribee, and Lara, could not be generated. Landfill sites continue to pose issues for the nearest centres of population, as noted in the concluding chapter of this thesis: at time of writing,

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[1133] Meaghan Shaw, "Waste plan to rid state of dumps," *The Age*, December 8, 2000.

[1134] Bill Birnbauer, "Union threat to disrupt major projects," *The Age*, December 18, 2000, 3.

[1135] Ibid.

residents of western fringe suburb Caroline Springs routinely report undesirable smells from the Ravenhall tip located four kilometres south, and large-scale industrial recycling and waste storage facilities, such as that in outer-north Coolaroo, are seen to endanger the local community through waste stockpiling and the threat of conflagration.[1136]

7.10 Chapter conclusion

Ben Carroll's inaugural parliamentary speech in April 2012 saw Valley Lake described as a 'testament to the local community, who fought for five long years to secure it as a community asset for the enjoyment of future generations.'[1137] The ongoing difficulties faced by the local community illustrate a multitude of weaknesses in planning policy and political decision-making, predicated on vested interests in commercial operations: initially, developers whose speculative activities resulted in urban encroachment, and later, firms tasked with the disposal of household waste and fill from major projects.

Historically, the absence of comprehensive planning and the legislative insufficiencies prior to the implementation of the *Extractive Industries Act 1966* had initially resulted in an uncomfortable closeness between two discordant land-uses. The closure of the quarry in the 1970s in response to the proximity of housing illustrated the demise of the urban quarry as a viable land-use in Melbourne, especially where subject to the pressures of a vocal population in opposition to it. Despite this characterisation of quarrying as an undesirable and inappropriate use, tipping was evidently deemed a suitable land-use for decades to come, a fact made clear in the proposal by Quadry.

[1136] Mark Hawthorne, "The dirty fight over Melbourne's giant rubbish tip, Ravenhall," *The Sydney Morning Herald*, April 16, 2016, https://www.smh.com.au/business/the-dirty-fight-over-melbournes-giant-rubbish-tip-ravenhall-20160415-go744j.html; Jack Kerr, "As Melbourne's recycling stockpiles keep growing, so does the fire risk posed by the waste," *ABC News*, October 21, 2018, https://www.abc.net.au/news/2018-10-21/melbourne-recycling-facilities-pose-fire-risk/10368302.

[1137] LCV, *Parliamentary Debates (Hansard) Wednesday, 18 April 2012 (Extract from book 5)* (Melbourne: Victorian Government Printer, 2012), 1673.

The failure of Whelan the Wrecker to establish a tip in the 1980s in part stemmed from community opposition, but moreover, it reflected the absence of political support for this particular proposal than the actual viability of the land-use. It was only with the Liberal Kennett government in the mid-1990s that the MVCC and EPA would be disarmed, allowing the state government to intervene to facilitate tipping where it maintained a vested interest in the disposal of construction refuse associated with its major projects. The politicisation of the tip also served to hasten its demise, with the matter taken to a state election: the defeat of the Liberal party supporting it also spelled the discontinuance of the Quadry proposal. Integral at every stage was the local community, whose active presence and eternal vigilance served to ensure that an inappropriate outcome for the site would not occur. The very same proximity that had contributed to the quarry's closure had, in a sense, saved it. It borders on ironic that the strategic and regulatory planning mechanisms developed, in response to the mismanagement of quarries throughout the prior century, had initially served to support the Niddrie tip; it was resistance to these mechanisms which altered its course.

Chapter 8 Conclusion

8.1 Introduction

Growing up in the western suburbs of Melbourne, my childhood took place upon basaltic soil. Our housing estate sat mere metres from the Kealba quarry, and I would often wonder what lay beyond the soil batters that hid it from view. On certain weekends, I would find myself buckled into the back seat of our station wagon surrounded by rubbish—broken furniture, old televisions, and anything else no longer worth keeping—and we would drive to our local tip. My father would reverse the car onto a concrete ledge, easing the process of discarding objects once-valued. I would sit mesmerised at the sheer volume of waste, rammed and moved about by yellow bulldozers, that seemed to meld into the earth. I had yet to discover the symbiotic connection between the two landscapes, let alone the conditions underlying their urban position; it was not until undertaking this research that this relationship, as a consequence of piecemeal or inadequate planning, became known to me.

This thesis comprises a novel undertaking in constructing a comprehensive history of quarrying regulation in Melbourne, traced from its origin in mining legislation to the development of strategic and statutory planning policies. This is further embedded within a historical overview of the development of town planning and initial public health concerns, addressing an initial objective of this research: to detail a historic overview of basalt quarries and their re-use over time, whilst also understanding the changing urban conditions of the broader region which affect land-use. Another key objective of this research was to identify which aspects of the Victorian planning system facilitated or precluded land-use outcomes. Laws enacted following the settlement of Melbourne demonstrated the initial use of mining legislation with respect to extractive industrial resources, clarifying the absence of specific controls until the mid-twentieth century, arguably prompted by the

opportunistic proliferation of quarries throughout the metropolis wherever material was of sufficient quality.[1138] Controls developed in the 1960s were, in this sense, reactionary to past shortcomings. Strategic planning policies published throughout the twentieth century, beginning with the 1929 *Plan* by the MTPC, acknowledged urban quarrying but did little to anticipate the after-use of these sites. There were no provisions, whether strategic or statutory, to dictate a particular after-use; similarly, there was no recommendation of how to best identify a suitable after-use reflecting local community needs or desires, and legislation such as the *Mines Act 1958*—replaced by the *Mines Resource (Sustainable Development) Act 1990*—proved 'inconsistent and complex' at best.[1139] Rather, quarry operators—be they private firm or local municipality— relied on the end-use of the quarry site as a tip, to be landscaped following its completion and utilised most frequently for public open space. A key determinant of the development outcome observed is the responsiveness of government to the desires of residents, given that legislated controls and permissions were developed in the 1960s to guide remediation—a more visual summary of this can be located in Appendix B of this thesis. Exploring this is conducive to the third objective of this research: discovering the role of local actors, or the wider community, in mediating or determining the land-use outcomes for disused quarry sites, where an after-use has been established or promulgated by the Victorian planning system. Extrapolating upon this sentiment, this research also sought to emphasise the value of 'unseen' and 'unplanned' spaces, not only framed as resistant to formalised planning mechanisms, but also as spaces which counter common perceptions and understandings of urban growth and change.

Nineteenth-century Melbourne had inadequate controls, resulting in an uncomfortable proximity between quarries and residential or commercial land-uses. The legacy of industrial activity endures

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[1138] Friend, *Quarrying in Victoria*, iii.

[1139] SDC, *1964-65 : Victoria;* Samantha Hepburn, "Not quite The Castle: why miners have a right to what's under your land," *The Conversation*, November 15, 2011, https://theconversation.com/not-quite-the-castle-why-miners-have-a-right-to-whats-under-your-land-4176.

well beyond their life-span, resulting in large voids carved into urbanised landscapes necessitating remediation. Their resolution through tipping similarly illustrates a dearth of regulation surrounding urban garbage disposal, exploring this quandary throughout the nineteenth and twentieth centuries. Tips as default remediation of quarry sites differentiates Melbourne from other cities in Australia, where the incineration of refuse was also commonly practised, often as a dominant form of rubbish disposal. This further bolsters Melbourne as anomalous in its underlying basaltic geology: conditions which had proved serendipitous for extractive industry were also crucial for the disposal of waste in a rapidly-developing metropolis. This underpins closer attention of an alternate 'story,' beyond institutional record: one which reveals local communities and their struggle to see their visions and desires reflected in land-use outcomes, as a consequence of rejecting the practice of landfill as a method of remediation. Constructing this narrative not only gives substance to the enduring legacy of urban actors, but it also speaks of the social, political, and economic conditions which determine what individuals and community members react to, and how they do so.

Amongst other outcomes of this research, it is apparent that urban quarries are valuable spaces to explore the weaknesses of planning policies and legislation over time. Unlike typical industry, which may nonetheless be similarly located in places designated unfit for other purposes, they are fundamentally tied to geology: the quality of material determines their location.

8.2 Research aim

The initial aim of this research was to identify how statutory and strategic planning controls were created in relation to extractive industrial sites and their re-use, and what influenced these visions and directives. These were found to be reactionary in that they responded to past problems, rather than anticipating future limitations. Additionally, this thesis aimed to affirm the relationship between quarrying and waste disposal, contending that the historic absence of planning resulted in

an uncomfortable reliance on the practice so to remediate difficult and complex sites. How the landfill arose as a default 'solution' in Melbourne, where other Australian cities adopted incineration, was also traced. The concentration of bluestone quarry sites of exceptional scale and depth, in conjunction with the marginal status of western suburbs residents, had allowed urban authorities to continue their reliance upon this method until the 1970s. Individual, community, institutional, and private perspectives on waste are found to differ significantly. Waste disposal is seen in narratives *in* planning as a temporary, but necessary, inconvenience, whilst narratives *of* planning firmly established a 'story' of residential life contending with undesirable proximal land-uses. Furthermore, Melbourne's underlying geology allowed for a vast proliferation of quarried landscapes throughout the city.

The final aim of this research was to identify the actions taken by local communities to locate desirable or compensatory after-uses for these spaces, culminating in two case study analyses framed as narratives *of* planning. Resistance to planning—the institution of a new land-use or development, in this instance—is traced. The inadequacy of historic planning mechanisms allowed for urban encroachment, and this comprises a crucial factor in community-led conflict. The post-extractive basaltic landscape in turn acquired a new appreciation from residents in both Niddrie and Newport that saw value ascribed to the atypical landscape, forging community attachment to the space: narratives *for* planning, which play a part in informing end-use outcomes. Attention paid to local actors' perceptions and ideas for space crucially informed the outcome of the Newport case study site, whilst these narratives *for* planning in Niddrie were only considered at the eleventh hour, and even so, only informed the end-use outcome in a superficial manner.

Where these outcomes differ can also be attributed to the temporal period during which remediation took place, with the land-use outcome observable in Niddrie more congruent with state government political and economic policies in line with Melbourne's urban identity as a cosmopolitan and

sophisticated metropolis. Newport conversely demonstrates a land-use outcome which fosters a more local sense of place, reflecting the role of local government as the predominant overseer of remediation.

8.3 Conceptual reflections

Ameel's narrative typologies can be applied to the case studies in order to locate distinct narrative threads. Narratives *in* planning can be found in the historical delineation of planning policies, regulatory frameworks, and legislation: not only are changes to these documents outlined, but so too are the processes by which they are altered. Historical conceptualisations of the tip and its associated impacts, for example—as well as the subsequent actions undertaken to improve it—are investigated to locate the influence of particular individuals; the extent to which measures responded to perceived urban ills; the precedents referred to; and their finessing in response to public criticism. Narratives *of* and *for* planning can be understood as the storied past of the urban environment, and the conceptualisations of place held by residents: in both Niddrie and Newport, resident objections are predicated upon these narratives for planning as a refutation of proposals; these are narratives, communal and individual, of the place as it was, and as it changes. In both case studies, residents speak of their experiences as they illegally traverse the quarried landscape, fishing in lakes and admiring the jagged basaltic walls mere meters from their homes.

The authorship of these spatialised narratives in turn reflects the struggle for power, where visions for the future reflect the desires and motivations of the author—the planner, the local resident, the politician—which see space recast as a contested realm. Urban conflict can be traced, further still, to the foundational works of Lefebvre and Harvey: where landscapes embody power and capital, narratives *in* planning are, to borrow from Lefebvre, written 'for the market, with profit in

mind.'[1140] Unfolding narratives capitulate to the 'the intertwining logic of capital and the state,' emphasising development and land-use for the sake of profit and political advancement.[1141] The human dimension of these landscapes—particularly those outside the realm of capital accumulation and political power—are neglected as they resist commodification. One may contemplate whether the success of the Newport community, in effecting a socially beneficial outcome, came as a result of widely-felt conviction, of sheer dedication, or perhaps the strength of its vision; it is difficult to ascertain an objective explanatory factor. This case study, however, makes abundantly clear the significant economic, political, and social changes which took hold in the ensuing decade, with the advancement of late capitalism and its subsequent incorporation into political ethos. With urban centres increasingly subjected to marketing, image, and ''higher' social and economic uses,' the ethos underlying the development of Niddrie becomes eminently clear.[1142] However, what Niddrie also demonstrates is that where 'politics have become the core of the urban process,' resistance and reaction can too be amplified in equal measure.[1143] Maclellan's utterance in the midst of the Niddrie saga may be reconfigured to form a concluding remark: the success of planning may be measured in what it achieves, but perhaps a community—and its narrative *of* its place—becomes evident in what it resists.[1144]

8.4 Significance, contributions, and implications

The generalist nature of historical planning activities and directives renders the findings of this thesis pertinent to all spaces marred by extractive industry in urban Melbourne, although the majority of these lie beyond the scope of this work.

[1140] Lefebvre, *The Urban Revolution*, 83.

[1141] Castells, *The City and the Grassroots*, 297; Castells, Godard, *Monopoville.*

[1142] Lowes, *Indy Dreams*, 20-21.

[1143] Castells, *The City and the Grassroots*, xv.

[1144] Ibid.

The rationale underpinning the focus on bluestone reflects the unique basaltic geology beneath Melbourne's western region, which distinguishes it from other Australian cities, such as Adelaide and Sydney, where clay and limestone compose the landscape. For a city so reliant upon basalt for its identity—bluestone blocks are associated with the city's famous laneways and early nineteenth-century buildings—narratives which centre this material, its production, and those affected by it are absent. Limiting the concerns of this thesis to bluestone would remedy a historic oversight of this extractive industrial sector within planning history literature, as well as a more general neglect of Melbourne's western suburbs in (urban) history.[1145]

This research delves deeply into two rich case studies, utilising a range of source materials to construct a narrative based upon the fine-grained analysis of planning decisions, deliberations, and outcomes. Overall, whilst this work demonstrates that a profound narrative can be constructed largely of archival material and newspaper publications, methodological weaknesses were also experienced: the absence of newspaper indexes for collections held by the State Library of Victoria, as well as municipal libraries, extended the duration of research process. This also left the researcher curious as to whether a plethora of materials were in existence but not accessible or readily readable, which could have contextualised or illuminated the research further. A strong case can be made for the digitisation of such materials, as well as their public availability.

This thesis effectively contributes a historical delineation and analysis, otherwise absent, of how planning institutions approached the concern of quarry and waste management since Melbourne's colonial settlement, and the role of local communities as veritable scrutineers. This research additionally provides a substantial basis for the further exploration of quarried land in Melbourne beyond the realm of bluestone, and how framing illuminates a plurality of narratives. This places

[1145] There is a dearth of literature on the urban quarry in Melbourne with the exception of Friend, although some attention has been paid to refuse disposal through Nicholls' thesis and Boyd's report.

further emphasis on the role of the community in negotiation land-use outcomes, positing such movements as fundamentally driven by justice and fairness.

8.5 Scope for future research

The research undertaken highlights that vigilant governance and consultative planning is essential, and must be responsive to the necessities of extractive industry and waste disposal, but also of community desires. Reflecting the ongoing consumption of stone resources, quarries will continue to be established beyond Melbourne's urban fringe—and perhaps subjected to those very same encounters and conflicts with the population, by way of urban encroachment.

In researching bluestone quarries, it became apparent that such sites were enthusiastically used by local residents: this occurred in both Niddrie and Newport, as well as another quarry complex in Sunshine North, where a housing estate is in the process of completion. This presents an avenue for future research, tracing informal or unsanctioned use of quarried landscapes as IGS.[1146] Both historic and future-oriented studies of this could be undertaken, tracing the extent and type of use apparent: Rupprecht states that this can provide 'valuable insights' for urban planning.[1147] The need for such study is especially apparent given the loss of IGS in Melbourne. This consequence of development pressures has escaped local study thus far.

Undertaking a historic analysis of land-use planning illuminates the potential for repetition in the future. The growth of Melbourne's urban fringe over the past decade has resulted in the proliferation of housing estates in previously semi-rural locales.[1148] This is especially pronounced in Melbourne's west, atop the vast basaltic plain which is the locus of this research, where large

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[1146] Rupprecht and Byrne, "Informal urban greenspace," 597.

[1147] Ibid, 604.

[1148] A. Butt, "Development, Dilution, and Functional Change in the Peri-Urban Landscape: What Does It Really Mean for Agriculture?," in *Food Security in Australia: Challenges and Prospects for the Future,* eds. Quentin Farmar-Bowers, Vaughan Higgins and Joanne Millar (New York: Springer, 2013), 425-442.

allotments, previously used for grazing, are rezoned and carved into residential blocks.[1149] This pattern of development can be clearly observed in the previously-underdeveloped localities of Truganina, Tarneit, Quandong, Ravenhall, Mount Cottrell, and Mambourin.[1150] Development in this region is co-located with areas reserved for extractive industry (see Figure 8.1).

Although long-term projection has allowed for the establishment of rigid, five-hundred metre buffer zones, an existing quarry-tip present in Ravenhall exemplifies the futility of this approach: conflict with the community can still arise where undesirable scents and dust travel to nearby housing, prompting a movement, "Stop the Tip," representing nearby residents.[1151] This bears the potential to create considerable discomfort for local communities, increasing in the severity of impact in tandem with the urbanisation of the sub-region.

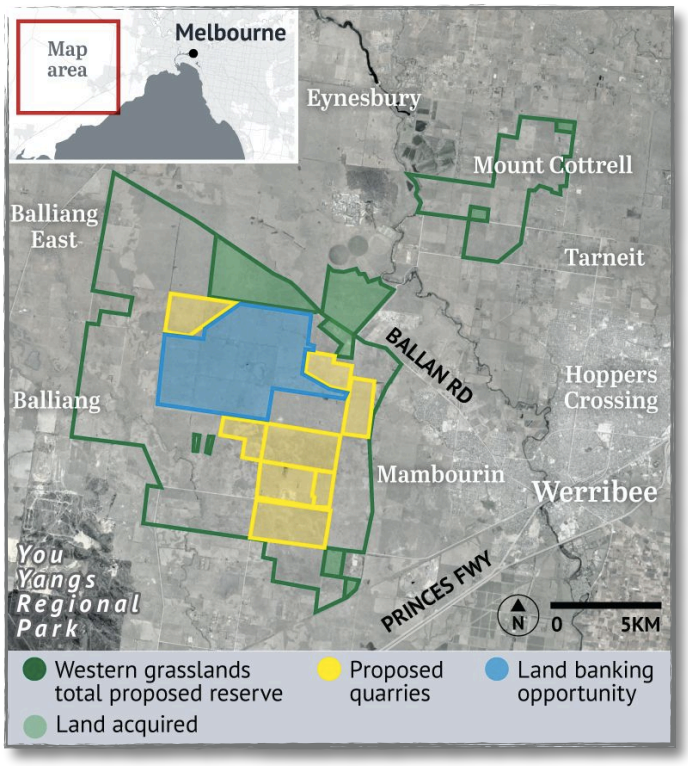


Figure 8.1: Proposed quarries on the western suburban fringe—potential sites for future analysis (Carey, Adam and Lucas, Clay, *Western grasslands reserves*, in "From grassland to wasteland: Victoria breaks promise to create environmental reserve," *The Age*, May 12, 2019, accessed 23 May, 2019, https://www.theage.com.au/politics/victoria/from-grassland-to-wasteland-victoria-breaks-promise-to-create-environmental-reserve-20190512-p51mjd.html.).

1149 G. Garrard and S. Bekessy, "The biodiverse suburb," in *Land of Sweeping Plains: Managing and Restoring the Native Grasslands of South-eastern Australia*, eds. Nicholas Williams, Adrian Marshall and John Morgan (Melbourne: CSIRO Publishing, 2015), 398.

1150 DPCD, *Melbourne West : Wyndham - Caroline Springs - Melton Investigation Areas* (Melbourne: s.n., 2009), https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne/melbourne-2030-a-planning-update-melbourne-@-5-million/docs/Melbourne_West_Wyndham_-_Caroline_Springs_-_Melton_Investigation_Area_updated_May_2009.pdf.

1151 "Stop the Tip : Fight the tip," Stop the Tip, published 2018, stopthetip.com.au.

The discomfort and conflict which may arise will provide a fascinating opportunity to analyse the extent to which extractive industry has been considered in strategic plans for Melbourne's expansion and the accommodation of a growing populace in areas considered to be under-utilised. The disposal of household refuse is also of interest given the development of a 'recycling crisis,' as prior arrangements to dispose of recyclables offshore ceased: this has resulted in the stockpiling of rubbish which has fuelled a number of fires in industrial estates in Melbourne's outer suburbs.[1152] Writing an urban history of rubbish disposal, building upon the findings in this thesis, would prove timely. This would again reinforce the close relationship between quarrying and tipping which has been observed to develop, and forcibly diminish, over time.

8.6 Concluding remarks

In this research we see a constant wavering in the predominant interest of planning mechanisms. The earliest interests of the town planning system in its infancy, in the form of the MTPC during the late 1920s, were entrenched in 'functionalism and 'hard' physical planning' of the metropolis.[1153] We see this system and its planning agencies change over time throughout the following decades, prioritising industry, then its populace, and visa versa; the influence of class struggle upon political decision making, which is increasingly influential with respect to town planning, becomes crystallised in the struggles that come to shape the city.[1154] In conjunction with social movements seen locally, nationally, and globally, a renewed vigour for fairness and justice becomes integral to citizenry, culminating in a sense that the planning of the city should embody such principles.

[1152] Robyn Grace, "Recycling crisis: What Victorians are doing to reduce their household waste," *The Age*, August 5, 2019, https://www.theage.com.au/national/victoria/recycling-crisis-what-victorians-are-doing-to-reduce-their-household-waste-20190805-p52dxe.html.

[1153] MTPC, *Plan*, 128.

[1154] Mullins, *The Struggle*, i.

This thesis began with an interest in the particular way quarry sites have been, are or can be redeveloped, prompting initial investigations into the post-industrial conditions that create brownfield landscapes. Bluestone quarries were identified as not only exemplary of Melbourne's identity, but also sites of activity impacting the landscape heavily. Their number and spread throughout Melbourne's marginal western suburbs—a consequence of piecemeal and insufficient past planning—underpins municipal and state government reliance on these spaces for landfill, effectively resolving two urban issues albeit in a manner not sensitive to surrounding residents. Where government and private interests together saw continued opportunity to lawfully facilitate their use for landfill, it was opposition and agitation from residents which ensured an outcome aligned with their expectations.

A dichotomy is located in this research: one of material loss, through the extraction of a resource, and one of material gain, through the fulfilment of a tip site and its subsequent remediatory power. Establishing a chronology of how the Victorian planning system addressed these modes of land-use highlights the complexity of providing a land-use integral to the function of the populace which is not well-received by those residing nearby. This is especially exemplified in proposals for urban tips in Newport and Niddrie, which demonstrate an increased awareness amongst the local population of environmental and public health, and in turn, justice and representation within government vis-à-vis land-use planning. In some senses, this thesis traces the development and decline of the urban quarry and tip; in another, it is a story of how the local population can agitate for development outcomes which are sensitive, democratic, and just, prevailing over an extensive history of shortcomings in the realm of planning and governance.

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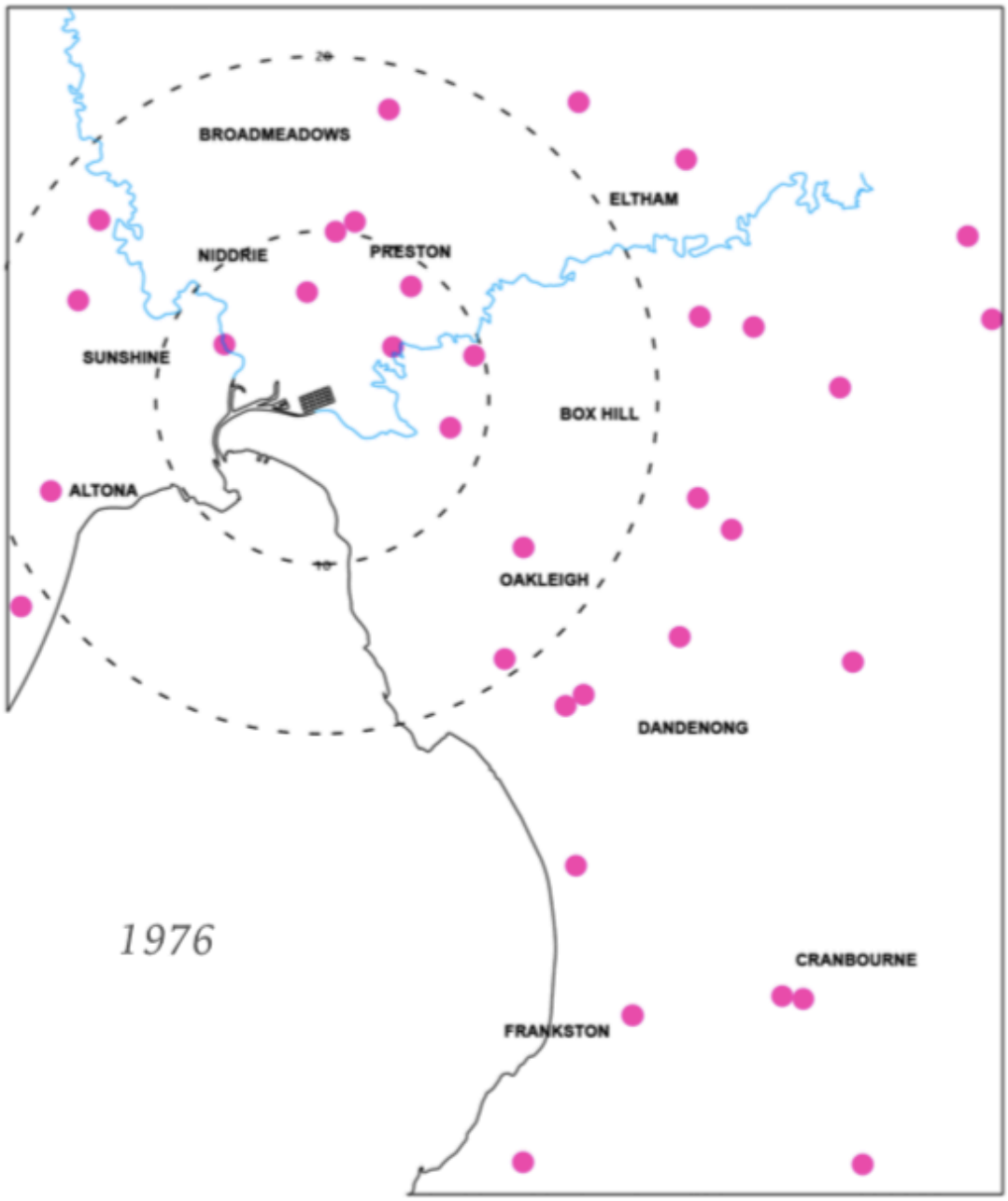
Appendix A

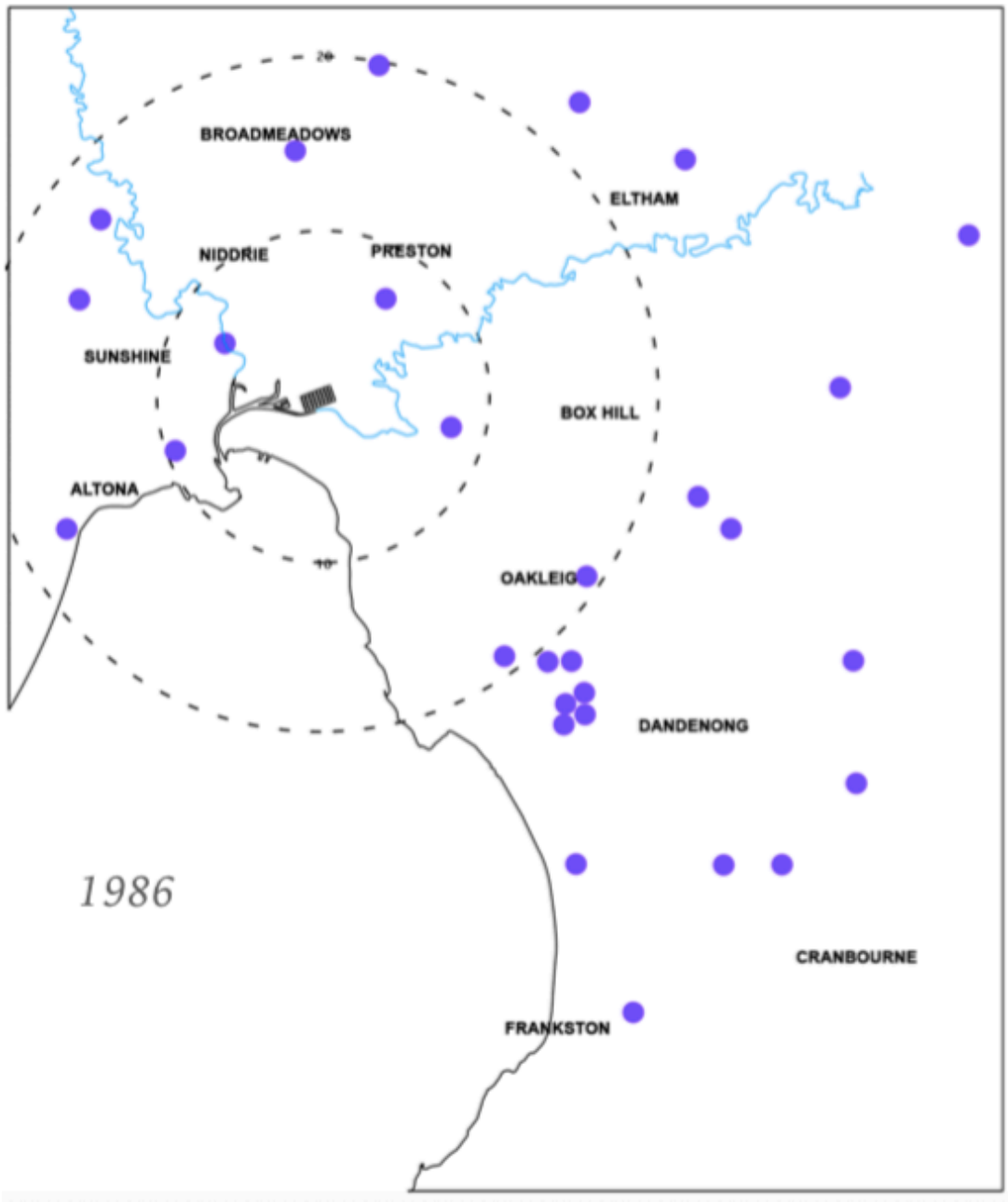
Map illustrations authors' own.

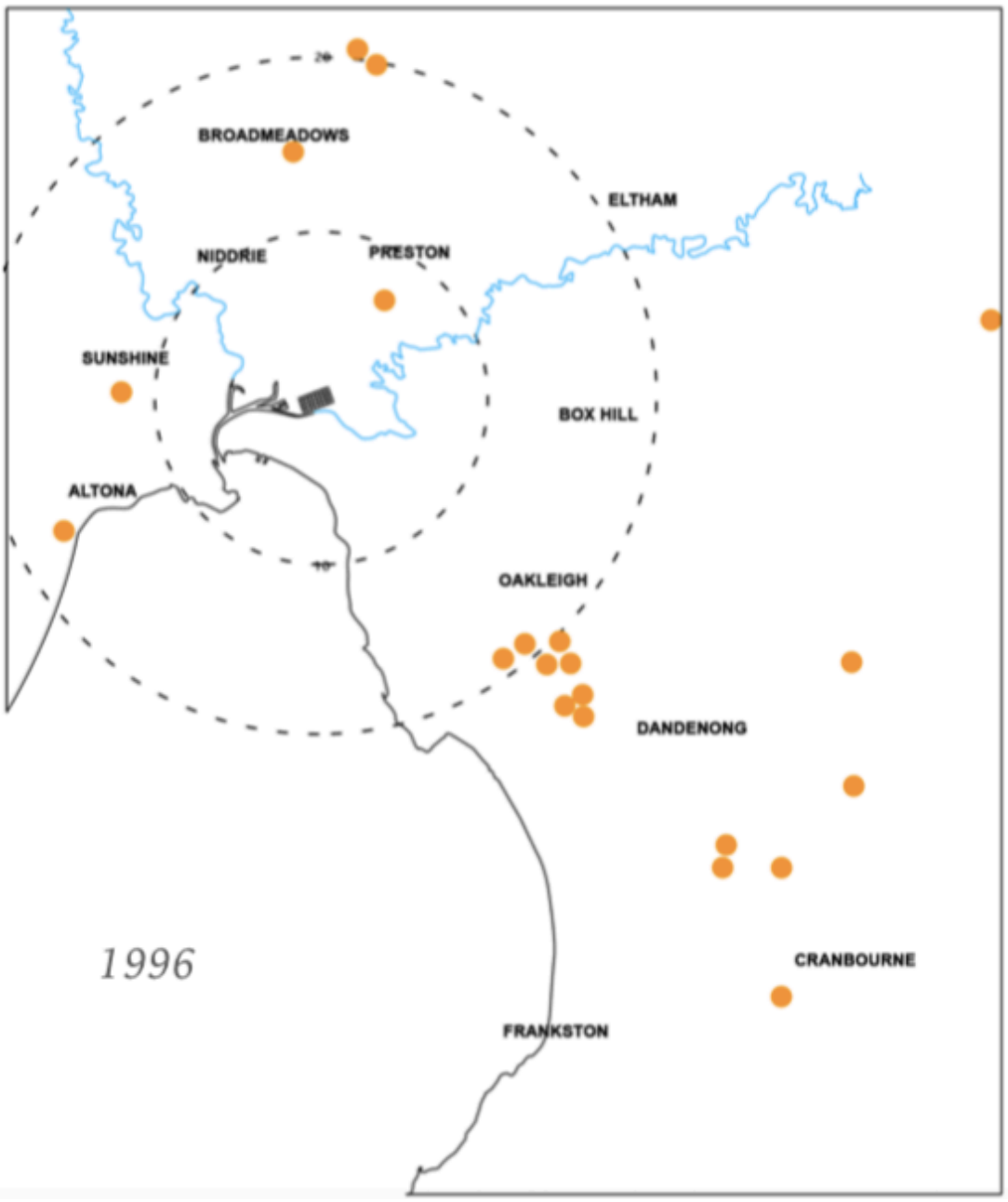
These illustrations depict the distribution of quarries in metropolitan Melbourne over time.

Three years are depicted: 1976, 1986, and 1996.

The depicted data was informed by analysis of street directories in these years.




20
BROADMEADOWS
ELTHAM
NIDDRIE
PRESTON
SUNSHINE
BOX HILL
ALTONA
10
OAKLEIGH
DANDENONG
1986
CRANBOURNE
FRANKSTON


20
BROADMEADOWS
ELTHAM
NIDDRIE
PRESTON
SUNSHINE
BOX HILL
ALTONA
10
OAKLEIGH
DANDENONG
1996
CRANBOURNE
FRANKSTON

Appendix B

Summary of legislation and policy relevant to quarries and putrescible waste disposal, 1835-2000.

Year	Entity or document	Impact on the quarry or tip
1851	Government Gazette supplement	Charles La Trobe proclaimed extraction of gold and ores from Crown soil
1853	Select Committee on the Sewerage of and Supply of Water for Melbourne	Report published on threats to public health identified in the urban environment, including reference to 'cesspools and rubbish depots' and 'accumulations of filth' (Select Committee, *Minutes of Evidence*, 10-11).
1853	Sewerage and Water Supply Commission established	Infrastructure constructed for surety of fresh water supply to metropolitan Melbourne.
1855	*Gold Fields Act*	Specify Court possession of powers to enforce rules and regulations on mining claims, placing it under ownership of the Crown.
1855	Central Board of Health	Established by legislation.
1860	Board of Land and Works	Commission of Sewers and Water Supply powers transferred to Board of Land and Works.
1867	Water Supply Department of the Mines Department	Acquired responsibility for provision of water supply.
1889	*Public Health Act*	Regulatory basis for conviction of continued operation of noxious land-use or activity by Board of Public Health.
1889	*Royal Commission to Inquire Into and Report Upon the Sanitary Condition of Melbourne*	Noxious industries and undesirable land-uses were discussed, with precedents for rectification identified in other Australian cities.
1890	*Mines Act*	Regulations pertaining to procurement of materials from earth by private individuals under licence, creating system for individual to be issued with access to Crown land for gold mining and to undertake related works. Necessitation of licence for exploration of materials other than gold, and royalties would be payable. Stone considered under ownership of the Crown rather than the landholder; definition of 'earth' continued to include rock, stone, soil, etc. akin to minerals.
1891	Melbourne and Metropolitan Board of Works established	Provision of sewerage infrastructure for metropolitan Melbourne.
1910	*Local Government Act*	Municipalities able to create by-laws to prohibit quarrying.
1922	Metropolitan Town Planning Commission	Established in response to 'unsatisfactory conditions' of the city (Freestone, Amati, Mills, "Ideas on the Move," 1).
1929	*Plan for General Development*	Metropolitan Town Planning Commission published 1929 *Plan* which was not unfulfilled, but indicated some interest in the curtailment of undesirable land-uses within urban Melbourne through zoning and regulation.
1944	*Town and Country Planning Act*	Creation of Town and Country Planning Board created under this Act in 1946. Created basis for planning permits and prohibition of land-uses, as well as Planning Schemes and Interim Development Orders to enable land-use planning.

1949	*Town and Country Planning (Metropolitan Area) Act*	Planning powers granted to the MMBW.
1954	*Local Government Act (Amendment)*	Centralisation of permit approval or rejection powers with Planning Minister to override municipal by-laws
1954	*Melbourne Metropolitan Planning Scheme 1954: Report*	MMBW published 1954 *Plan* which continued on from the 1929 *Plan*'s acknowledgement of undesirable land-uses and the subsequent management of this through considered zoning. Also discussed was the after-use of tipping to facilitate reclamation of former quarry sites.
1957	*Report of the State Development Committee on Extractive Industries*	Inquiry initiated, published in 1958, which highlighted the *Mines Act* as 'inconsistent and complex,' and not applicable to quarrying. Need for a more streamlined approach to quarry reulation and management was identified.
1958	*Health Act*	Provisions outlined for municipal control of refuse disposal albeit with enforcement vested in Commission of Public Health.
1958	*Mines Act*	Stone considered under ownership of the Crown rather than the landholder; definition of 'earth' continued to include rock, stone, soil, etc. akin to minerals. Reliant on Chief Mining Inspector to regulate on-site practices. Consciousness of the applicability of the *Mines Act* to quarrying in turn underscored the need to establish a dedicated act for extractive industry. No measures to ensure remediation of site.
1958	*Town and Country Planning Act*	Did not address urban quarrying regulation.
1958	*Local Government Act*	Prescribed municipalities with power to consider land-uses 'non-conforming,' as well as the capacity to address impacts of 'quarrying and blasting operations.'
1961	*Town and Country Planning Act*	MMBW given power as Responsible Authority to grant or refuse permission to conduct extractive industrial operations. Municipalities granted power to enact by-laws which could override Mineral Leases on sites. Appeals to be made to Minister for Local Government, not MMBW or Mines Department.
1964	Select Development Committee	Report on extractive industries produced as a consequence of an inquiry begun in 1961. The poor regulation of quarries and their remediation, as well as their abandonment, were noted. Urban encroachment was recognised as a significant issue.
1966	*Extractive Industries Act*	Initial comprehensive legislation pertaining to extractive industry, seeking to maintain access to the resource and prevent its encroachment and sterilisation. The Act attempted to enforce uniform control of quarrying operations. A sinking fund for rehabilitation was established in addition to an independent board set up to hear objections and appeals for licensing. By-laws and planning schemes said to be insufficient.
1966	*Local Government Act (Amendment)*	Municipalities granted ability to charge for access to, and use of, tips.
1967	*The Future Growth of Melbourne*	MMBW identified rapid population growth and urbanisation as a core issue.
1970	*Environment Protection Act*	Addresses rehabilitation of industrial land with reference to pollution, noise, waste disposal, and related hazard.s

1971	*State Development Committee Progress Report on Disposal and/or Destruction of Garbage and Other Rubbish*	The first comprehensive report on refuse disposal, which identified 'fragmentary control and piecemeal planning' (SDC, *Progress Report*, 11). This would necessitate the development of regulatory measures to extend the lifespan of tips.
1971	*Planning Policies for the Melbourne Metropolitan Region*	MMBW published 1971 *Planning Policies* which advocated strategic planning as 'a new concept of broad planning' (MMBW, *Planning Policies*, 5). The need to conserve resources is noted, which encompasses stone resources, and in turn, the basis to better regulate quarrying.
1977	*Review of Planning Policies for the Non-Urban Zones : Melbourne Metropolitan Region*	Non-urban zones emphasised, stated to contain extractive industry, indicating a more focused approach. Problems stemming from 'highly capitalised' extractive industrial sites is noted, in addition to impacts on local amenity and landscape value (MMBW, *Review of Planning Policies*, iii).
1978	*Local Government (Regional Refuse Disposal) Bill*	Responsive to 1971 SDC report, providing legislative basis for management of refuse disposal on a regional level envisioned to result in higher-quality planning outcomes.
1978	*Environment Effects Act*	Environmental Effects Statement to be publicised in newspaper publications to invite comment from the public in relation to proposed development; would form ministerial inquiry.
1981	*Metropolitan Strategy Implementation*	Extractive industrial practices in non-urban zones now excluded, non-urban zones reconfigured to address farming and the preservation of sensitive landscapes.
1982	Western Suburbs Planning and Environment Action Program	Program launched by Minister for Conservation and Planning Evan Walker, acknowledging the land-use conflicts and issues experienced by residents of the western suburbs.
1982	*Planning Opportunities along The Maribyrnong River*	MMBW document identified non-industrial future for the riparian Maribyrnong environment and surrounding catchment.
1983	Industrial and Related Activities	Task force established to explore land-use conflicts between residential and industrial land-uses in Melbourne's western suburbs.
1984	*Maribyrnong River Plan*	Ministry for Planning and Environment produced this *Plan*, and identified quarrying as having detrimental impact on environmental aesthetics and public health, formalising the sentiment held by local residents that quarrying is an inappropriate land-use in suburban Melbourne.
1984	*Extractive Industries (Amendment) Act*	1981 Bill enacted to introduce bond logging system for surety of site reclamation in addition to measures to suspend licences where the licensee has not adhered to the *Act*.
1987	*Shaping Melbourne's Future*	Document produced by State Government of Victoria emphasising landscape conservation.
1987	*Planning and Environment Act*	Would allow for amendments to be made to planning schemes where extractive industrial land-use had previously been disallowed. Permit-based land-use necessary to carry out activities.
1989	*Extractive Industries Regulations Act 1989*	Regulatory requirements for site management and explosive and machinery use, but not measures relating to rehabilitation plans.
1989	*Local Government Act (Amendment)*	Legislative basis for community engagement and participation with respect to land-uses concerned with waste management.

1990	*Waste Management in the Greater Melbourne Area*	Environment and Natural Resource Committee investigated methods of waste management and disposal in light of land-use conflicts and encroachment, advocating stronger management and environmental controls to shift community perspective.
1990	*Mineral Resources (Sustainble Development) Act*	Established further framework for rehabilitation with licence provision reliant on work plans for rehabilitation as well as payment of royalty fees into bond fund; fines for failure to rehabilitate.
1992	*Environment Protection (Resource Recovery) Act*	Tip site reclamation regulations introduced and would be mangled by Metropolitan Waste Management Council.
1992	*Recycle 2000*	Behavioural change policy introduced to lessen rate of waste disposal in putrescible landfill by 2000, in turn envisioned to extend the lifespan of existing tips.
1992	Melbourne Water	MMBW abolished and reformed into Melbourne Water sans planning capabilities.
1994	*Report on Planning Issues for Extractive Industries*	Report authored by Environment and Natural Resource Committee based upon submissions relating to urban fringe extractive industry, affirming the cessation of a majority of urban quarrying operations as a consequence of urban encroachment and land sterilisation. Constraints to future quarries noted. *Extractive Industries Act 1966* to be retired. Recommendation that town planning approaches be more proactive in determining current and future extractive industrial sites, including granting quarrying firms the right to object to developments near to the site's boundary. Committee called for town planning to play a stronger role.
1995	*Living Suburbs*	Strategic plan oriented around Melbourne's emergence as a post-industrial metropolis, emphasising liveability, economic growth, major infrastructure projects, and development.
1995	*Extractive Industries Development Act*	Superseded 1966 *Act*. Strong focus on rehabilitation of sites, rather than operational regulations. Necessitation of detailed rehabilitation plan as licence condition.