# Shire of Melton Dry Stone Walls Study

**Volume 1 – The Report**

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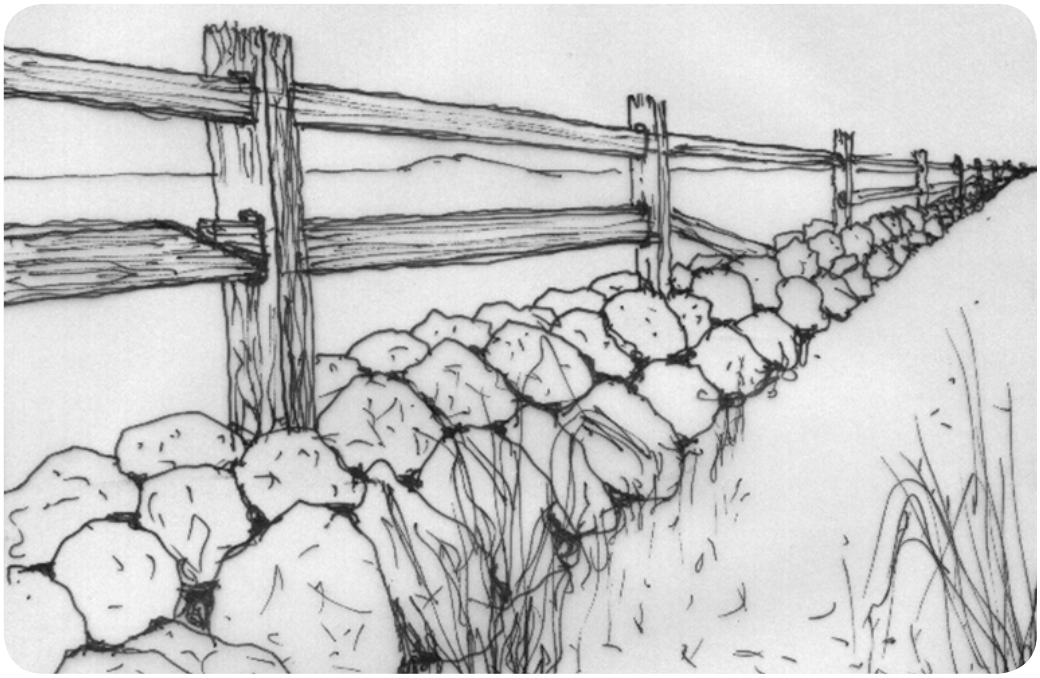
SHIRE OF MELTON

# Melton Dry Stone Walls Study

Prepared for the Melton Shire Council and
Department of Sustainability and Environment

By Planning Collaborative (Vic) Pty Ltd



SHIRE OF MELTON

Department of Sustainability and Environment

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Reference documents are available online

1. The Australia ICOMOS Burra Charter - http://australia.icomos.org
2. The Australian Heritage Commission: Criteria for the National Estate - www.environment.gov.au/resource/heritage-list-criteria-and-thresholds
3. The Dry Stone Wall Association of Australia - www.dswaa.org.au
4. ICOMOS Declaration: In Defence of the Dry Stone Cultural Heritage, Spain 2004 - www.international.icomos.org/centre_documentation/drystone_eng.pdf
5. Shire of Melton Dry Stone Wall Driving Trail http - www.melton.vic.gov.au/publicart
6. Shire of Melton 'Volcanic Genesis - www.melton.vic.gov.au/thingstodo

## Prologue

The largely flat landscape of the Shire of Melton is characterised by several low hills which are remnant volcanoes, by the steeply incised valleys of its creeks and by the proliferation of rocky outcrops and an abundance of fieldstones strewn across the landscape.

From the 1850s, settlers cleared the land and used the stones to build dry stone walls as property boundaries, stock enclosures and other structures. Today, dry stone walls dominate much of Melton's landscape and give the municipality a unique visual character.

As the demand for rural residential properties and urbanisation changes the way the land is used, the legacy of dry stone walls is threatened. This threat comes from several sources; the disinterest of property owners who do not need walls to serve their original purposes, leading to a consequent lack of maintenance of walls, the theft of readily available stones from roadside walls and the visual intrusion into broad vistas that is an inevitable part of closer settlement.

The Study's recommendations provide a mechanism to reverse this situation, and are therefore far-reaching and innovative. They place considerable obligations on the Shire to preserve many dry stone structures and to implement a program of community awareness and involvement in the protection of this vital aspect of the Shire's and the State's heritage, culture and landscape.

There are few precedents in Australia of local governments actively preserving walls and educating the public about maintenance and protection. Statutory protection of dry stone structures is rare.

Dry Stone Walls are slowly disappearing. This is mainly due to three facts. They are privately owned, and there is currently a high level of ignorance among property owners of their role as custodians of a valuable part of the Shire of Melton's heritage. Similarly, there is a low level of appreciation in the wider community of the significance of dry stone walls in telling Melton's story. Many walls are either left to deteriorate or are demolished in the name of progress.

This Study was funded by both the State of Victoria and the Shire of Melton. It represents an important milestone in the increasing knowledge about and research into dry stone walls in Victoria. The survey process and the comprehensiveness of the data collected about the dry stone structures in Melton are unique for a local government area in Australia.

The process for gathering data and assessing the Shire of Melton's walls and other dry stone structures for their attributes and location, was carried out as: desktop research, 'in-the-field' data collection using dedicated field survey forms, and in circumstances where the walls [or parts of a wall] were inaccessible by road or on property, with the additional use of Council's aerial survey maps. All data collected is stored in MapInfo GIS format and Excel spreadsheets. Linked photographs [numerically identified] also provide visual 'data' of the information collected for each wall. These are listed within the spreadsheet and provide ready access to the information collected.

This Study provides guidance, not only to the Shire of Melton and its property owners, but to the State government, in the form of the survey methodology and the means of storage of information about walls, which can be a model for similar studies in other parts of Victoria. In this regard, this Study is the first of what should be a series of studies and actions to record, preserve and celebrate the part that dry stone walls had in the development of Victoria and their on-going contribution to the State's cultural and landscape history.

The data collection and collation phase of the Study represents the most comprehensive survey of dry stone walls and other dry stone structures ever undertaken in Australia. Indeed, as enquiries into studies and research both in Australia and overseas have subsequently indicated, this Study is possibly the most comprehensive survey of dry stone walls in a discrete area ever undertaken in the world. It is also groundbreaking for the combination of manual and technological methodologies which were used to define, refine, capture, photograph and collate the raw data.

# 1. Overview of the Study and its Recommendations

## 1.1. How the Study Came About

### 1.1.1. Introduction

Located on the western basaltic plains of Melbourne, the Shire of Melton is an area once known for its rich farming industry and the dry stone boundary walls that once divided the farmers' property holdings and which contributed practically and aesthetically to the visual appeal of the early settlement landscape.

At the time of undertaking the Study, those walls that survived represented the original parcelling of land within what was known as the Port Phillip District and were considered of historical importance and worthy of consideration for protection for future generations. Some of these walls had been identified and listed during the Shire of Melton Heritage Study Stage One [2001- 02], undertaken by historian David Moloney who was a member of the team for this Study.

### 1.1.2 Background to the Funding Application

The craft of dry stone walling emerged in Australia in the mid 1800s in areas where a proliferation of stone in the geological landscape necessitated a clearing of the land. Today the Melton Shire is located in one of the fastest developing municipal urban growth corridors in Australia and the dry stone walls that were once an integral part of the cultural landscape were beginning to be threatened due to such factors as further urban development, community ignorance and theft of stones for urban landscaping.

This Study emerged out of four unrelated yet parallel events and circumstances:

- The findings of the Shire of Melton Heritage Study Stage One. This Study acknowledged the importance of Melton's dry stone structures and listed some as important and significant, however it recognised that there remained much work to do to raise community awareness and develop strategies to ensure the protection of these historical assets for future generations;
- The Shire was in the early stages of developing a tourism profile for the area and dry stone walls were considered an important element of that profile;
- The issues and comments from local farmers, historians and others that emerged during the research, development and touring of the exhibition 'A Stone Upon A Stone' curated by Raelene Marshall in 2000-2004. This exhibition aimed to tell the story about the multicultural craft of dry stone walling and the significant contribution the early settlers the made in clearing and shaping of significant parts of the Australian landscape. The Shire of Melton was one of eleven Victorian and two New South Wales municipalities that participated;
- The formation of the Dry Stone Walls Association of Australia in Ballarat in July 2002 and the compatibility of the Association's Statement of Purposes with the purpose of the State Government's Department of Sustainability and Environment's [DSE] 'Pride of Place' funding program. This led to a meeting of Association representatives with the Shire which resulted in a submission to DSE's 'Pride of Place' program to undertake the proposed Study. The submission nominated Jim Holdsworth, David Moloney and Raelene Marshall as consultants to the project should the funding proposal be successful.

## 1.2. Funding

### 1.2.1 'Pride of Place' Program and Shire of Melton

In late 2003 the Shire was advised by DSE 'Pride of Place' that their application to undertake a study of their dry stone walls [DSWs] had been successful. The DSE grant of $185,000 predominantly funded the study. The funds were administered by the Shire of Melton which contributed an additional $30,000 designated as 'time in lieu' by Council officers. The contribution of time and expertise by Council officers was a valuable component in the success of the Study and in the important process of raising the level of awareness about the existence of dry stone walls in the Shire as part of the implementation of the study's recommendations.

The total budget, of $215,000, was to cover:

- All consultant fieldwork,
- Research, data collection and assessment time,
- Overheads,
- Capital items associated with the Public Artwork [a proposed series of 'picture frames' in the landscape]

- The development of a tourist Driving Trail,
- The conduct of dry stone walling workshops, and
- The research and administrative tasks associated with a Community Awareness program.

## 1.3 Study Objectives

The Study had several key objectives, namely:

A. To identify, survey and classify all dry stone walls in the Shire and make recommendations for the preservation of those walls where this is warranted on historic, cultural or landscape grounds,

B. To develop a methodology for the identification and classification of dry stone walls which can be used in other parts of Victoria to assist in the preservation of walls,

C. To raise the awareness of landholders and the wider community both in Melton and beyond of the value of dry stone walls and to recommend means whereby walls can be celebrated and preserved. Such means to include a driving trail within the Shire, information including a page on Council's website and sites within the Shire where examples of walls can be viewed and appreciated,

D. To conduct in-field workshops in the craft of dry stone walling for the benefit of landholders to assist in the maintenance and construction of walls,

E. To create a public profile for dry stone walls in a contemporary context via the installation of public artworks in highly visible locations, and

F. To build on the awareness of dry stone walls as an important early settler contribution to Melton's landscape history, an outcome that emerged during the Melton Heritage Study Stage One.

In terms of Objective A, it became evident during the field work phase of the Study that it would be impracticable to locate and survey every dry stone wall and structure in the Shire. As discussed in Section 5, the data collection process relied on field observation and desk research. Some walls, which are not visible from public roads or which were not identified during desk research or aerial photo interpretation, may not have been located and surveyed. As additional walls are identified, from fieldwork or aerial survey, the data is added directly to Council's GIS, and relevant photos are linked to the files.

In terms of Objective E, it should be noted that it was initially proposed that the Public Artwork would consist of a series of 'picture frames' that would be placed at points on the proposed driving trail at locations where particular walls or precincts were to be viewed. This proposal was later reviewed in the light of issues that arose relating to the cost and safety of roadside parking bays, vehicle speeds on busy roads and the possible adverse impact of people interfering with walls on private property. The designated funds were subsequently redeployed to:

- The installation of a dry stone sculpture at 'The Willows' historic park in Melton township, and
- The design and installation of signage at designated points along the Driving Trail.

## 1.4 The Study Team

Planning Collaborative (Vic) Pty. Ltd. was engaged by the Shire of Melton to undertake the Study which was commenced in early 2004.

The study team comprised the following core professionals:

- Jim Holdsworth, architect, planner and urban designer and director of Planning Collaborative (Vic) Pty Ltd,
- Raelene Marshall, arts consultant and director of Culture in Action. Raelene had recently completed the major research study and exhibition entitled 'A Stone Upon A Stone', and
- David Moloney, historian and planner, who had undertaken the Melton Heritage Study Stage One and was engaged to undertake Stage Two of that study.

These core members are active members of the Dry Stone Walls Association of Australia [DSWAA].

In 2008 the study was reviewed and edited by Jennifer Loulie, Strategic Planner for the Shire of Melton, with assistance from Heritage Victoria.

In 2009 the study was extensively re-formatted and edited by Linda Fuller and Sera-Jane Peters, Heritage

Advisor for the Shire of Melton, prior to it being sent to Council for adoption. At this stage a number of major changes were made to section 8 Statutory Recommendations.

In 2011 further changes were made to sections 8 and sections 9 to include the changes to the statutory recommendations and new documents prepared as part of the request for authorization for Amendment C100.

## 1.5. Acknowledgments

The Study Team acknowledges the assistance and support received throughout the course of the Study, in particular from:

- Shire of Melton: Adam Boyle, Megan Campbell, Adrian Cope, Denis Everard, Steve Finlay, Jennifer Loulie, Kristen Cherry, Adam Parker, Steve Ryan, Les Stokes, Luke Shannon, Rodney Thomas and Wendy Vine,
- Department of Sustainability and Environment: Stuart Niven and Cathy Philo.
- Consultant to the Shire of Melton: Jo Pincus.

The Study Team acknowledges their part in the Study through their contribution to the sculpture 'Volcanic Genesis' of:

- Dry stone wallers Alistair Tune and David Long, and
- Bronze fabricator Bill Perrin.

Assistance and support from local people was also much appreciated, in particular:

- Those property owners who provided access to, and historical information about, their sites,
- Charles Finch who provided interviews and information, and who was on original Steering Committee,
- Mary Tolhurst who provided interviews and old photographs for use on the Interpretative Panels at 'The Willows' and in the Driving Trail Brochure,
- Judith Bilszta who provided some research material,
- June Hatch who provided help with sourcing information and photos for the 'A Stone Upon a Stone' Touring Exhibition and the Melton Heritage Study Stage One,
- Frances Overmars who conducted an informal tour of the area's dry stone walls for The Melton Heritage Study Stage One,
- Wendy Bitans and John Morton who provided tours of their properties and assisted with information about issues regarding dry stone walls, and
- Historian, Dr Carlotta Kellaway who assisted with the historical research for the 'A Stone Upon a Stone' Touring Exhibition and who provided material for this Study.

## 1.6. Terminology and Abbreviations

Dry Stone Walls are walls constructed in one of several styles without the use of mortar or other bonding material. The expression 'dry stone walls' and its abbreviation 'walls' are used throughout this Report to refer not only to dry stone walls but also to include other dry stone structures that were identified and surveyed which use dry stone construction as a building technique. These include such structures as dam walls, sheep dips, retaining walls, culverts, etc.

A number of abbreviations are used in this Report, as follows:

| | |
|---|---|
| MHS | Shire of Melton Heritage Study. Includes Stages One and Two |
| HO | Heritage Overlay |
| VHR | Victorian Heritage Register |
| VHI | Victorian Heritage Inventory |
| DSE | Department of Sustainability and Environment |
| DSWAA | The Dry Stone Walls Association of Australia |
| VPP | Victoria Planning Provisions |
| GIS | Geographic Information System |
| IntraMaps | Council's Geographic Information System (GIS). |

# 2. Role of Steering Committee and Council Staff

## 2.1. Steering Committee

At the outset of the Study, a Steering Committee was established with the following purposes:

- To oversee the conduct of the Study and ensure that it was carried out in a timely manner and that appropriate 'weight' and time was devoted to each element of the Study,
- To keep Council and the Department of Sustainability and Environment appraised of the progress of the study and that it met their aims,
- To act as a 'sounding board' for technical and administrative issues as they arose and to ensure that recommendations were consistent with client expectations, and
- To ensure a broad understanding and ongoing support for the longer term outcomes of the Study by involving key Council and community representation.

The Steering Committee consisted of:

- The Study Team,
- Council's Community Arts Officer, who was appointed to be the liaison officer with the Study Team,
- Council's Manager of Tourism and Leisure Services,
- One Councillor,
- A resident [local farmer and identity Charlie Finch], and
- A representative of DSE, from that Department's Urban Design Unit.

At the commencement of the Study the Study Team, in collaboration with Council's Community Arts Officer, developed a timetable and 'project milestones schedule' for the project which included a schedule of Steering Committee Meetings at key points of the Study. In the initial phases of the Study four meetings were held over a period several months.

The anticipated benefits to the Study's progress and outcomes were not maximised due to early Committee meetings being poorly attended as a result of which this management mechanism was reluctantly curtailed, meaning that the study team had to rely on the liaison officer for day-to-day contact. However, the absence of an effective Steering Committee did not affect the outcome of the Study or the quality of its recommendations. This was mainly due to the additional support provided by Council during the course of the Study in terms of:

- The entry of field data onto Council's Geographic Information System [GIS],
- The analysis of this data and the production of maps, air photos and spreadsheets,
- Input into the design of the brochure and roadside signage for the Driving Trail,
- The inclusion of the Study's pages, findings, maps and images on Council's website, and
- The installation of the dry stone sculpture at 'The Willows' Historic Park in Melton Township.

## 2.2. Geographic Information System Coordinator

The Study Team worked in collaboration and consultation with the Shire's GIS coordinator who played a key role in:

- The input of data onto Council's GIS,
- Input and maintenance of the data statistics collected in the field,
- Identifying several walls via Council's vertical air photographs which were not able to be identified by 'on-road' survey or by 'property access',
- The ongoing distribution to key Council staff of relevant data that emerged by means of 'in-house' emails and IntraMaps. This was invaluable during the research process on occasions when there were walls identified to be under threat,
- Assisting the Council staff with regard to the provision of statistics and maps in relation to any planning permit applications which potentially affected existing walls, and
- Ensuring maps and databases were available at key periods throughout the data collection and assessment process.

The value to the Study of the contribution of the GIS coordinator cannot be overestimated. The database which is linked to Council's Intramaps system, is now the main resource for Council in the on-going management of dry stone walls in the Shire. As discussed in Section 1.3 above, the capacity exists for the information to be extended as any walls which were not located during the Study are surveyed or information on walls already surveyed is updated or amended. Implementation of the Study's recommendations will be greatly assisted by the care and attention paid by the GIS Cordinator to ensure information was stored accurately and ready for integration with the GIS.

In 2009 Council altered the data storage system that existed previously for Dry Stone Walls. Council's GIS coordinator reviewed the information held in the excel spreadsheet supplied by the study and made a number of changes to the way data was collected, how it was integrated with the GIS and the linking of photographic records to data.

Council's GIS maps all the dry stone walls which have been identified in the Shire. The data for each wall has been linked to the mapping system, allowing council officers to call up 29 different data fields on the walls. A system of identification of walls was trialed using the existing digital photos taken during the study. These are linked to the GIS maps, with the position of each photo recorded for each point identified on the wall. At this stage, the trial has been a success and it is hoped that the photographic recording of the walls can be extended to provide a useful record of the condition of walls along their length.

A large number of new walls have been identified during this process. As each wall is found, they are added to the GIS and data is being collected for them. Council's Heritage Advisor has a hand held PDA which has been programmed with the dry stone wall data fields. Information for each wall can be mapped in the field using a GPS and downloaded to Intramaps automatically, back in the office. Photos taken in the field are then recorded and added to the GIS.

# 3. Study Context: Historical Overview

## 3.1. Dry Stone Walls: Historical Overview

The dry stone walls of the Shire of Melton are expressive of both the natural history of the volcanic creation of the area, and the cultural history of its human modification. Firstly, they make a fundamental statement about the volcanic landscape from which they are derived. Secondly, the enclosure of the land with fences and stone walls represents one of the Europeans' most profound marks on the landscape. The walls also have the potential to provide information about early European farming traditions, and the changes which have occurred since the 1840s.

Melton Shire was never closely settled, and its nineteenth century rural heritage is today quite scant. Little more than a handful of farms and pastoral complexes remain, while the hallmarks of early rural communities: schools, churches and hotels, are virtually nonexistent, lost quietly to time, or ravaged by bushfire. Dry stone walls however are one of the more indelible legacies of the early settlers, and constitute one of our most substantial links to this distant era. While many have been lost, a high percentage remains, most in the deteriorated condition that matches their age. The challenge of today is to save the best examples [and as many of the others as possible] from the advance of urban development, or from slow neglect.

### 3.1.1 A Volcanic Landscape

The low bald mounts that rise gently above the Melton plains do not immediately impress as fuming volcanoes. But unspectacular eruption points such as Mount Cotterell and Mount Kororoit [south and north-east of Melton], the diminutive Mount Atkinson [south of Rockbank], Cabbage Tree Hill (3 kilometres west of Toolern Vale), She-Oak Hill [on Blackhill Road near the corner of Diggers Rest – Coimadai Road], and Aitkens Hill at Aitkens Gap, are the origins of the fieldstone that was gathered up and shaped into the walls that characterise the landscape of the Shire.

These volcanoes are some of about 400 inactive eruption points that are part of Victoria's 'Newer Volcanic Province', which stretches from the Darebin Creek to near the South Australian border. Most were active between 4.5 million and 20,000 years ago. The tongues of lava emanating from 'Lava Shield' and 'Lava Hill' volcanoes – Mount Cottrell, Mount Atkinson, Mount Kororoit, Aitkens Hill, Cabbage Tree Hill and several unnamed hills – were gently effusive and slowly cooling, producing a dense basalt. The less numerous 'Scoria Hills' (the best example of which was She Oak Hill, now half quarried) were formed by more explosive and quickly cooling eruption points, which produced a more vesicular scoria, or tuff. While the round-shaped heavy fieldstone that is the major material seen in the dry stone walls of the Shire is the product of the Lava Shield and Lava Hill volcanoes, the 'vesicularity' of stone from the same eruption points varies, and there is often a mixture of dense, smooth lava stone and more honeycombed textured lava stone in the same area.

Lava Shield volcanoes were built up by an accumulation of eruptions, and have a very broad elevation, with low angle slopes, in contrast to Scoria Hills which are steeper domes and cones. Although not as visually dramatic as Scoria Hills, Lava Shield volcanoes provide a high relief and distinctive character to the otherwise flat and almost featureless volcanic plains. The broad elevation of Mount Cottrell, a landmark of early European forays around Port Phillip can be seen from as far away as Brighton.[1]

Mounts Cottrell and Kororoit are of State level geological significance. Mount Cottrell has been identified as the 'best example in Victoria of a lava shield with a lava cone forming its summit.' Its notable features are the unusual structures at its bluff and crater, and the extent of its radial flows, which have produced a very broad lava shield. It is the 'most massive of the Werribee Plains volcanoes, and one of the largest shield volcanoes in Victoria'.[2] Its broad, thin tongue flows of lava radiated in all directions, the longest being to the south. These flows changed the drainage lines and shaped the present courses of the Werribee River to its west, and the Kororoit Creek to its north. The eastern extent of

1 Eg, It is shown on 1835 maps associated with Port Phillip Association members JH Wedge and JT Gellibrand (JS Duncan, 'The Port Phillip Association Maps', *The Globe*, No.32, 1989); Governor Bourke referred to it in his journal account of his trip around Port Phillip in March 1837 (M Cannon (ed), *Historical Records of Victoria*, Vol.1, Victoria Government Printer, Melbourne, 1981, p.105). A few years later Mount Cottrell became a landmark in early race relations, when a squatter and his shepherd were murdered there by Aboriginal people.

2 Rosengren, N, 'Eruption Points of the Newer Volcanics Province of Victoria: An Inventory and Evaluation of Scientific Significance', a report prepared for the National Trust of Australia (Victoria) and the Geological Society of Australia (Victorian Division), 1994, pp.162, 301, 349.

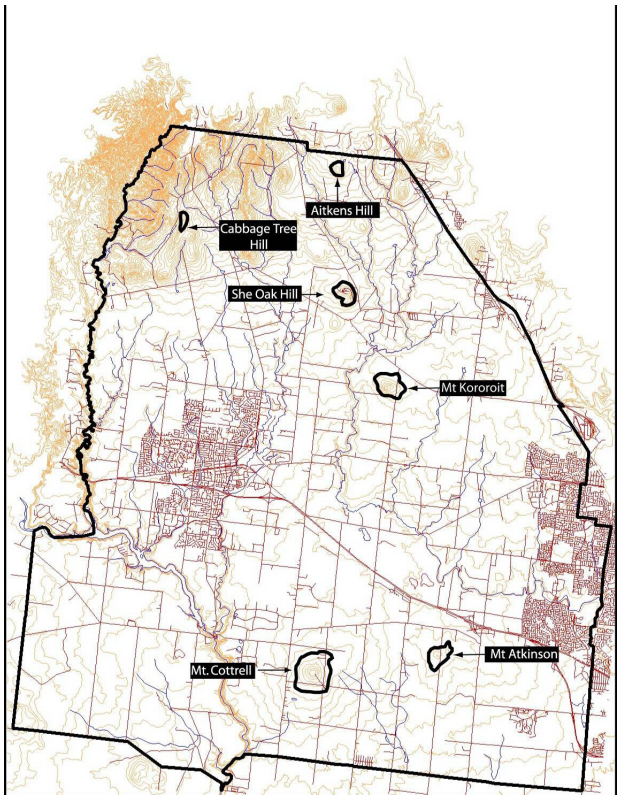
these lava flows is an unnamed gully which marks the boundary between the overlapping flows of Mount Cottrell and the [younger] Mount Atkinson.[3]

Mount Kororoit is the archetypal example of the small complex eruption points that occur on the plains between Melbourne and Woodend. It is an unusual scoria cone in that late-stage lava flows erupted from and filled the throat and crater of the volcano, covering earlier scoria deposits. The evidence of the lava flows is seen in the rocky outcrop of lava and lava agglomerate that cap the volcano.[4] Like Mount Cottrell, Mount Kororoit is also of historical significance in European exploration, featuring in early maps of the Port Phillip. It later became one of the first places proposed by historians to have been John Batman's mysterious 'Mount Iramoo', the elevation from which he spied the Aboriginal campfire smoke which in turn guided him to the place that he made his treaty.[5] Very early in European settlement of the area it became known locally as 'Mount Misery', for reasons that can now only be guessed.

Prior to European settlement, Melton Shire supported a number of biologically diverse ecosystems, dominated by Grasslands and Grassy Woodlands. Urban development and extensive clearing for agriculture has lead to less than 1% of native vegetation in Melton remaining, which makes the remaining biodiversity of particular significance. These volcanic grasslands were a direct result of the lava flows from the volcanic eruption points. These grasslands were the reason early farmers and pastoralists were attracted to the plains beyond Melbourne, and it is on these plains that they established small farms or large pastoral stations, often utilizing the plentiful volcanic stone to fence boundaries, stock and homesteads.

In many parts of the Shire where dry stone walls exist, volcanic grasslands have been preserved. These grasslands, some of which have national significance are a vital part of the landscape. At Mount Cottrell, the presence of dry stone walls has preserved rare and endangered flora and fauna from overgrazing and clearance. Across all areas of the Shire the dry stone walls harbor native vegetation species, especially the native tree violet, herbaceous perennials and grasses which are increasingly rare.

**Figure 1: Volcanoes of the Melton Region**




3 Stewart, G, 'The Newer Volcanics lava field between Deer Park and the Werribee River', *Geological Survey of Victoria, Unpublished Report* 1977/26, 1977, pp.4, 7.

4 Rosengren, *op cit*, pp.21, 209

5 By civil engineer James Blackburn (son of pioneer engineer and architect James Blackburn) in his paper to the Historical Society of Australasia entitled 'The Locality of Batman's Treaty with the Port Phillip Natives' (27/11/1885). The actual location of Mt Iramoo is still contested however.

## 3.2. Fencing in Nineteenth Century Rural Victoria

### 3.2.1. Fencing the Wilderness, 1850s-1870s

Fencing and walling the Australian wilderness was a big and slow job. In 1826 rural affairs commentator James Atkinson reported that he knew of no example of dry stone walling having been erected in the colony of New South Wales.[1]

Initially pastoralists employed shepherds to look after sheep. They guided the sheep to pasture during the day, and in the evening returned them to folds, constructed of wooden hurdles or brush fences, near their huts [or outstations]. There are several dry stone walls on Melton's Kororoit Creek that are thought to have been associated with early pastoralists: an outstation associated with Yuille at Caroline Springs, and the remnants of a wall that are thought to have been associated with a shepherd's enclosure.[2] Other fencing was used on the squatters' homestations: the 'home paddock' [likely for the squatters' precious horses] and the 'cultivation [or kitchen] garden'. Early fences were also required to separate stock for breeding purposes. These fences were usually of post-and-rail, vertical timber slabs or other primitive paling material.[3] [However at Greenhills in Toolern Vale there are some remains of a dry stone wall that would appear to be the remnants of an original homestation garden.[4]]

Two major and related events in the early 1850s radically changed this situation. Firstly, the exodus to the gold-rushes made it difficult and expensive for squatters to retain labour for shepherding. And secondly, the extensive survey, subdivision and sale of Crown land in the early 1850s provided security of tenure to pastoralists, and incentive for them to invest in major improvements, including permanent fences, on their stations. Pastoralists were also encouraged to fence their land to ensure that neighbouring farmers didn't allow their stock to stray upon the open expanses of their stations.

1 Kerr, JS, 'Fencing, a brief account of the development of fencing in Australia', *Australasian Society for Historical Archaeology Newsletter*, Vol. 14.No.1, March 1984, pp.9-16.
2 Melton Heritage Study Place Nos. 467 and 81.
3 Kerr, *loc cit*; Allan Willingham, 'The Dry Stone Walls in the Corangamite Region: A Brief History', in Corangamite Arts Council Inc, *If These Walls Could Talk, Report of the Corangamite Dry Stone Walls Conservation Project*, Terang, 1995, p.44
4 Melton Heritage Study, Place No.055

Nevertheless, until the 1860s, extensive fencing of properties remained the exception rather than the rule. The first boundary fences in the Barrabool Hills of Victoria were only erected in 1854, and boundary and paddock fencing 'only gathered momentum after the mid 1850s.'[5] This was no doubt due to the extensive sale of Crown Land as freehold in the 1850s, as well as the increasing availability of capital due to the gold boom, and the increasing availability of labour, including professional stone wallers, as alluvial gold declined in the late 1850s.

Slowly, fences began to replace shepherds on the pastoral estates. Early maps of Melton Shire show that pastoralists built walls and fences relatively sparsely – only on property boundaries and to enclose huge paddocks [about 5-10 square kilometres in the south part of Clarke's Rockbank estate].[6] In dramatic contrast the same historical maps [and the mapping survey undertaken as part of this Study] show concentrated patterns of walled paddocks established on farms in the same areas at the same time. The creation of small paddocks enabled mixed farming, by securing crops and gardens from stock, and managing stock for breeding. This Study shows that, in the south of the Shire, virtually all of these fences were dry stone walls. Dry stone walls were also used to protect the homestead from stock, to construct stockyards, fowl houses and pigpens, and possibly, on a few of the larger farms, to provide aesthetic effect.[7]

Given the expense of establishing a farm from nothing in a wilderness, and the experience of many small farmers as agricultural labourers before coming to Australia, it is almost certain that the walls on all but the largest farms would have been constructed by farmers themselves rather than by professional wallers. For example, general hand William Ison and his wife arrived on a Werribee farm in the mid 1850s, and found there a small wooden cottage and a young German in charge,

5 Kerr, *loc cit*
6 Shire Map Series (1892); Army Ordnance Map, 1916: 'Sunbury'.
7 Alan Marshall, asking an old waller why the walls on a particular property were so high, was told that ostensibly the reason was to keep steers in (they jumped fences), but the real reason was 'just so that he could say he had the best walls in the Western District, the biggest and the best, and bugger you.' (cited in Corangamite Arts Council, 1995, p.114).
On Melbourne's western plains district however, such finely constructed walls were generally associated with formal gardens on only the largest properties, such as the Ha Ha walls on the Eynesbury (Melton Shire) and Werribee Park (Wyndham Shire) pastoral estates, or Greystones (Moorabool Shire).

'who had already done some clearing of the stones which covered the land … We set to, and cleared about 10 acres, and had it fenced in with stones by the next sowing time.'[8] The quality of wall construction would have depended on the experience of the farmers and their seasonal hands at the craft. William Robinson who settled in Melton in 1872 was a stonemason who turned his skills to fieldstone of the Tarneit area, building a house [which does not survive] of the material and numerous fences [some of which survive along Robinsons Road].

The tracks that wandered across the landscape gradually became straight roads, constrained within the boundary walls of freehold rural landholdings. Slowly but surely the wide open land became plotted and pieced with fences. However until the fencing of properties was completed, straying stock remained a problem. Reserves for impounding stray stock had been established early: 'by early 1851 a poundkeeper's hut or house and a couple of fenced paddocks near a water supply had been established at more than forty inland sites.'[9] [By 1854 George Scarborough, on Mount Cottrell Road, had been installed as the Melton poundkeeper.[10]] Despite squatters' express anger at having to paying fees to retrieve their beasts, pounds became well-known gathering places, frequented by bullock drivers, carriers, pastoralists and farmers in search of strays.

The outbreak of the highly contagious sheep disease, 'scab', which reached epidemic proportions in the 1850s, hastened enclosure of the pastoral estates.[11] Western District squatter Neil Black quickly enclosed his Glenormiston run, and in 1854 George Russell ordered five miles of wire: '…the importance of fencing is becoming every year more apparent.'[12] The scab mite caused incessant itching: sheep would bite themselves, scratch with hind feet, and rub against trees and posts, leaving wool and infection behind. Infected flocks, including travelling mobs, threatened a huge financial burden; when a flock was infected at least half would perish and the survivors lost their wool. Pastoralists kept a close eye on neighbouring flocks, and all sorts of extreme remedies were attempted, including immersion in 'corrosive sublimate' and scraping with an iron hoop, scarifying the sheep's skin and, more successfully, multiple dippings in a hot compound of tobacco and sulphur. The 1862 legislation intended to control the spread of scab failed, and was followed in 1864 by an Act which appointed inspectors and introduced dipping procedures.[13] Further Acts resulted in the complete eradication of the disease in Victoria during the 1870s.

Likewise, the appearance of pluero-pneumonia in Australian cattle in the early 1860s impressed cattle-men of the need to isolate their properties from travelling or straying stock.[14] That 'dreadful disease' also encouraged the erection of property fences by Melton dairy farmers [and was responsible for less use of local Commons by farmers].[15]

During the 1860s many of the surveyed roads on the square-mile grid in the south of the Shire had been closed and incorporated into the Clarkes' immense Rockbank estate. By closing roads pastoralists escaped the great expense of fencing their property, and also had free use of the grass growing on the road reserve.[16] In 1878 a Royal Commission into Closed Roads was established following 'public uproar' over the issue. It was informed that local communities, drovers with stock and professional visitors [doctors, school inspectors] had to pass through systems of many gates, and sometimes become lost along the unfenced roads. The closures sometimes necessitated long detours to markets, and closed access to water and public recreation reserves.[17]

In the Parish of Pywheitjorrk alone there were 35 kilometres of enclosed roads by 1877,[18] contributing to the isolation of small local farming communities. Doctors' reluctant to visit the Mount Cottrell district seems to have been a contributor to a tragic consequence of a diphtheria outbreak in 1870, in which 6 children from one family died suddenly.[19] The Royal

8 Murray, E, *The Plains of Iramoo*, Henwood & Dancy, Geelong, 1974, p.111. (Murray notes that in 1974 these walls were still standing.)
9 Priestley, Susan, *The Victorians: Making Their Mark* (Fairfax, Syme & Weldon Associates, McMahons Point, 1984), pp. 68-9
10 Government Gazette 1854
11 Kerr, *loc cit*
12 Willingham, *op cit*, p.45
13 Falla, RP, 'Scab Disease in Sheep: An Historical Study', Donald History & Natural History Group, 1963, p. 1
14 Kerr, *loc cit*
15 Victorian Parliamentary Papers, 1864, p.94 ; John Chandler, Michael Canon, *Forty Years in the Wilderness* (Loch Haven, Main Ridge, 1990), p.175
16 Royal Commission into Closed Roads, Progress Report (containing minutes of evidence etc), Victorian Parliamentary Papers 1878 (No.72), p.viii
17 *ibid*, p.22
18 Ford, Olwen, 'Voices From Below: Family, School and Community on the Braybrook Plains 1854-1892' (M.Ed Thesis, University of Melbourne, 1993), pp.236, 239
19 Alex Cameron, 'Melton Memoirs' (Melton & District Historical Society, unpublished typescript), p.8; Ford, *op cit*, p.245

Commission recommended against permanent fencing on road reserves.[20] At the same time, walls began to be built along the previously closed Faulkners Road, indicating that it was now open for traffic. One of these walls, built by Clarke, is today one of the best walls remaining in Melton Shire [Wall F96].

By 1876 the presence of 'substantial stone walls' appears to have been hallmark of a good farm in the Melton district, the Australasian's 'Travelling Reporter' making sure to note these on the farms of Ralph Parkinson, George Missen, John Moylan and Isaac Gidney.[21] Little is known however of dry stone wallers who worked in the Shire at the time: Irish brothers John and George Funston worked in the Toolern Vale area from the 1850s; Patrick Connor worked on Mount Aitken in the 1860s; and Dick [the mason] Mitchell, and Arcoll [Arkell] worked in the Mount Cottrell area before 1872.[22]

The construction of fencing that was encouraged by sheep scab and cattle pleuro pneumonia was also fostered by legislation. At the beginning of the pastoral period in Victoria, common law held that, generally, a landowner was under no obligation to construct or maintain boundary fences, or fences adjoining a public road. However, as a result of Australia's rapidly expanding pastoral industry, trespass of stock, and the need for security, the Victoria's Fences Statute 1865 gave landowners the right to claim equal contribution towards the construction or repair of boundary fences from the owners of adjoining lands.[23] The Fences Statute 1874 made fencing subject to much more comprehensive legislation governing the obligations of adjoining landowners with respect to dividing fences.

### 3.2.2. Types of Fencing in the Nineteenth Century

The 1874 Fences Statute specifies the types and dimensions of fences that it deemed 'sufficient', providing an insight into fencing at the time. 'Sufficient fences' were 'post and rail' [which had to be a minimum of three feet six inches high]; 'paling' [minimum 3'6" high]; 'wire' [minimum 3'6" high]; 'a bank or wall of substantial materials' [minimum 4' high]; 'a close hedge or live fence' [minimum 4'6" high]; a 'logs and chock fence' [minimum 4' high]; 'a combination of any of the abovementioned fences' [minimum 4' high]; and several variations of ditches and fences, and finally natural watercourse boundaries.[24]

And so, in addition to being a minimum of 4 feet high, a stone wall used as a dividing fence had to have a base of 'not less than 2 feet wide at the bottom', and be '9 inches at the top'. And a composite stone and wire or rail dividing fence also had to be a total height of at least 4 feet [1.22 metres]. Although the specifications for road boundary fences were not given [the Crown being exempt from the legislation], it could be expected that the walls on these public boundaries would be at least as high as those that divided neighbouring properties.

Kerr advises that the great variety and combination of early fencing types arose 'as much from material shortages and the need to use what was procurable as from a desire to improve the utility and durability of fencing.'[25] The order of the fences listed in the Act can be taken as a general indication of how widespread each type was in the 1870s.

1. Post and Rail Fencing

Certainly, 3 feet 6 inch post and rail fences were the most common early fence type in Australia, and paling fences were also popular among early settlers, no doubt due to the relative prevalence of forests and woodlands across Victoria, rather than stony land. However in places where timber was scarce fencing was a particularly expensive improvement, and in the 1820s '… only to be seen on the farms of the richest settlers …. The smaller settlers content themselves with a two rail fence'. Lands for grazing were generally enclosed with three rails, but large enclosures intended for horned cattle or horses, especially where timber was scarce, were frequently enclosed with two rails only.[26]

In 1854, William Westgarth, on his way to the goldfields Royal Commission in Ballarat, recorded that he 'struck west through post and rail fences onto the Keilor

20 Royal Commission into Closed Roads, *op cit*, pp.8-23; If These Walls Could Talk, *op cit*, p.56
21 The *Australasian*, October 1876.
22 Bilszta, JA, 'Dry Stone Wall: Faulkners Road, Mt Cottrell, Shire of Melton', 9/9/1990, unpublished paper
23 Lawlink: New South Wales Law Reform Commission website: 'Report 59 (1988) – Community Law Reform Program: Dividing Fences'; Parliament of Victoria website: Law Reform Committee, 'Review of the Fences Act 1968'
24 The Fences Statute 1874 (Fences Amendment Act, November 1873), Clause 4 (i-xi). Other types of early fencing are described in Michael Cannon's *Life in the Country: Australia in the Victorian Age: 2*, Nelson, West Melbourne, 1978, pp.89-90; and Graham Condah's *Of the Hut I Builded*, Cambridge University Press, Melbourne, 1988, p.89.
25 Kerr, *loc cit*
26 ibid

Plains'.[27] By the 1860s timber fencing, probably from the Grey Box forest in the west and south-west of the Shire, was common in the vicinity of Melton. But as John Chandler records, farmers regularly lost such fencing to the bushfires that swept south from the ranges over the plains.[28] Even on squatter John Aitken's property, in the volcanic area near Aitkens Hill to the north of the Shire in the late 1850s, nearly 80 percent of his 300 chains of fencing was either 'post-and-rail' [either 2 rail, the most common, or 3 rail], or 'post & 2 rails with [2 or 3] wires', or 'post-and-rail with 5 foot palings'. The balance, some 64 chains, was 'stone walls'.[29] These figures might reflect the initial preference for timber fencing by squatters, and an early dearth of professional dry stone walling skills in Victoria, not remedied until after the gold rushes. While the records of Henry Beattie on Mount Aitken show that he erected stone walls in 1868, in the same year he built nearly twice as much '3-rail fence'.[30]

**2. Post and Wire Fencing**

The Fences Statute inclusion of 'wire' fences next is also significant. Wire fencing, introduced during the gold rush years, held great promise in areas where natural timber and stone were scarce. Some was brought back from Scotland and England by Western District pastoralists such as George Russell, who was impressed that it could be 'got cheap': 'Such a fence might do for paddocks, or even for boundary lines bye and bye.'[31] Despite its good price there were problems. Complete metal fences were exceedingly expensive, and it was also found that the British metal posts provided with the wire 'will not go down in our ground'.[32] The excessively thick and soft 'black bull wire' was gradually substituted by thinner and stronger galvanised steel wires, meaning fence posts could be planted much further apart, usually about 30 feet, supplemented by for or five 'droppers' between each post to keep the wire stable.[33] The system found widespread application throughout Western Victoria in the 1870s and 1880s as wire fencing manufacturers at home and abroad made substantial improvements in the production and cost of wire, timber posts, and the associated winding and straining devices.[34] Originally the rural rule had been 'post and rail for cattle' and 'post and wire for sheep',[35] but with the invention of barbed wire in the 1870s and its widespread use in Victoria during the 1880s, cattle as well as sheep could be kept safely behind the wire and fewer strands used.[36]

**3. Bank and Ditch Walls**

The 'bank walls', which usually included a ditch on the outside, may have been included in the Fences Act on the strength of their prominence in contemporary English rural encyclopaedias, because there seems to be little reference to them in Victorian historical records.

**4. Dry Stone Walls**

In 1856 a government agricultural reporter travelling through the eastern part of Melton Shire [the parish of Maribyrnong] commented that: 'A few good stone fences the only improvement worth noting.'[37]

A dry stone wall [or 'wall', as referred to in the Fencing Act] was the best solution, says Vines: 'Where stone was abundant, timber scarce, transport of fencing material expensive, skilled labour available, and where cheaper alternatives were unavailable.'[38] From about the mid-late 1850s, when freehold ownership exploded and the price of labour declined, and through the early 1860s when the price of labour remained cheap, the labour-intensive construction of stone walls remained very competitive.

Many walls were built wherever stony ground made them possible, or necessary. Although by 1874 wire fencing was already much cheaper than the construction of a good stone wall (see later), stone wall construction remained popular, with pastoralists who could afford professional wallers,[39] and with farmers needing to clear stony ground and manage stock and crops. In the mid

27 Lack, J, Ford, O, 'Melbourne's Western Region: An Introductory History' (Melbourne's Living Museum of the West Inc, Melbourne Western Region Commission, 1986), p.27
28 Chandler, *op cit*, p.174
29 Map, 'Index of Fences' on John Aitken's Mount Aitken property (after Crown Land sales). PROV 460/P0/39365. (The stone walls would appear not to survive.)
30 Beattie, Steward K, *The Odd Good Year: Early Scots to Port Phillip, Northern Australia, Gap, Gisborne and Beyond*, Southwood Press, Marrickville, 1999, p.63
31 Willingham, *op cit*, p.45
32 *ibid, pp.45-6*
33 Cannon, 1978, *op cit*, pp.89-91
34 Willingham, *op cit*, p.46
35 Kerr, *loc cit*
36 Cannon, 1978, *loc cit*
37 Victorian Parliamentary Papers, 'Statistics of Victoria for 1856', Appendix No.1, p.46
38 Vines, G, 'Comparative Analysis of Dry Stone Walls in Victoria, Australia and Overseas', in Corangamite Arts Council, 1995, *op cit*, p.56
39 Ann Beggs-Sunter, 'Buninyong and District Community News', Issue 211, August 1996

1850s brothers John and George Funston, stone wallers and farm labourers from Ireland, are known to have been erecting walls on the Mount Aitken and Gisborne Park estates.[40] The rate of wall building seems to have picked up during Henry Beattie's later occupation of the Mount Aitken estate, station accounts in 1868 showing the employment of a John Starkie for four weeks to help Henry gather and cart stones, and the engagement of 'Paterick [sic] Connor, Stone Wall Fencer' to erect 34 chains of stone walling at the very low rate of only 8 shillings per chain.

This popularity is evident in the Lands Department files relating to the 1860s Selection Acts, which record the type, length and price of fencing 'improvements' made by selectors. A detailed examination of 21 selections in the Mount Cottrell, Rockbank, Mount Kororoit and Diggers Rest–Holden areas reveals that stone walling constituted by far the largest proportion (60%) of the 32.3 kilometres of fencing built on those properties by c.1875, despite the fact that it was the most expensive. Post-and-wire fences, one of the cheapest types of fencing then available, comprised only 6 percent of all fences erected. Post-and-rail fences, a little cheaper than the best stone walls, and a little dearer than the cheapest, constituted 9% of the fences. (Note that many other 'composite' varieties of fences were constructed from these three primary materials. There were also a small number of 'stub' or picket, and 'log' fences.)[41]

Stone walling resolved two problems: the need to clear the land of rocks, and the need for fencing. Unquestionably, as was the case elsewhere, the key reason for the preference for dry stone walls on Melbourne's western plains by selectors was the need to clear stony land to enable cropping and grazing (dairying).[42]

40 Judith Bilszta, Melton Heritage Study Research, Place No.029 (3/8/2005)

41 Research of PROV VPRS 625 (Selection Act files) for the Keneally, Slattery, Reddan J, Reddan M, Tate, Rhodes C, Rhodes, McKenzie, O'Brien P, McLeod, O'Brien J, Moloney, White, Mangovin, Carrige, Moylan Mary, Moylan Margaret, Parry, Moylan, MP, Moylan T, and Watts selections. This sample is primarily of selectors on stony country, Hannah Watts, in the forest off Chapmans Road Toolern Vale being the only exception; interestingly, the cost of her post & rail fences were half the price of the others, no doubt reflecting the relative proximity of materials, with none of the other properties having ready access to local timber. Another possible bias of the sample is the over-representation of Moylan properties. But it remains a good sample of fences built in stony country in the period late 1860s to mid 1870s.

42 Selectors were in fact obliged under the Selection Acts to cultivate 10% of their land area.

Apart from the relatively small areas that were sold under the Selection Acts, there were many other areas of dry stone walling in Melton Shire. It is estimated that there were 23 miles of fencing on the Moylan brothers' Mt Kororoit property by 1876, and from the extensive walls that survive today it is evident that much of this was dry stone wall construction.[43] Property sale advertisements in the local paper suggest that the properties on the Keilor Plain east of Toolern Creek were almost entirely walled.[44] Advertisements for stone wallers in the Buttlejorrk, Diggers Rest and Rockbank Estate areas appeared regularly until 1890. Between Toolern Vale and Diggers Rest the Beaty family built many kilometres of medium sized stone walls along boundaries, and a few larger walls inside their properties for stock. Other walls, including one of substantial composition, are scattered lightly around Toolern Vale.

The highest concentration of walls is situated in the southern plains of the Shire, on the former small farming communities of Mt Cottrell and Truganina, and the paddock and boundary fences of WJT Clarke's Rockbank station. Extensive, though with a few exceptions quite deteriorated lengths of the Rockbank boundary walls survive. Later, in the 'Rocky Bank' area farmers built fences not only with field stone, but with the fragments of boulders that had to be blasted out of paddocks.

According to Vines the dry stone walls of the Keilor Werribee Plains 'form a reasonably distinct regional style quite different from either the interstate examples or the Western District walls'. This regional style is characterised by:

'… walls constructed using the local rounded, smoothly weathered, basalt field-stone of variable size. They are generally fairly low walls, averaging 1.2 metres with a width at the base of an average of 0.83 metres and battered sides on a slope of about 5-10 degrees off the vertical. Coursing is uncommon although coping is almost always found on intact walls and through stones can usually be identified at regular intervals of about one metre. The coping stones are often quite large, rounded boulders of a maximum dimension of 400-500 millimetres. Because of their rounded shape the stones are rarely suited to the close-fitting construction seen on the Western district walls, either for the main part of the wall or the coping. As a result, the rabbit proofing

43 The *Australasian*, 28th October 1876

44 Bilszta, 1990, *op cit*.

techniques involving close plugging, overhanging coping, or other methods are never found in this region.'[45]

These regular round stones lack interlocking, and often surface friction, and were never the ideal building material. The author of the 1848 'Rural Cyclopedia' considered round stones objectionable 'as they are ever rolling off'. The small wedge stones which held these round stones in position were easily dislodged.[46] Similarly, the 'round stone fence' surmounted by turf was described in Loudon's 1857 guide to British agriculture as a 'very indifferent fence', whose only apparent benefit was that it cleared the land of stone and could be built by labourers. It was found to be unstable when built to a standard wall height. Stock could easily dislodged its copings, and 'great trouble and expense are annually required to keep it in repair.'[47] Despite this, as can be seen in an apparently scarce example of this type in Corangamite [the Foxhow Road Wall], a sturdy wall of very respectable height can be built by careful selection and coursing of stones, and the use of copestones and extensive plugging.[48]

The Fences Statute's specification of walls to be a minimum 4 feet high, and with a base of not less than 2 feet wide at the bottom was in accordance with traditional construction. The 1848 Rural Cyclopedia specified an overall height [including cope stones] of 4 feet 3 inches [1300 mm], with a base of 2 feet 6 inches [760 mm].[49] Historically, this seems to have been the 'average paddock height' for which tenders were called in sheep country.[50]

Walls in cattle country were built higher 'to discourage the cattle from leaning over to reach greener pastures and dislodging coping stones'. In the Western District 'walls enclosing cattle were generally at least 1.4 metres high'.51 This seems to have been a standard also applied in Melton, where the Moylan's high walls [presumably for their cattle] on Mount Kororoit Farm measure 1400 mm [4 feet 7 inches] in height. Many dairying walls in the Western District are higher however, reported by Perkins to be 1680 mm [5 feet 6 inches]. McLellan notes 'fine, taller walls' up to 2130 mm [7 feet] high, to stop the cattle leaning over and dislodging stones.[52]

Although there is no conclusive evidence of it in Melton Shire, elsewhere boundary walls were built higher than internal walls. Vines states that: 'In almost all the dry stone wall regions in Victoria, the … most substantial walls are located along the boundaries of properties. Subdivision of properties into fields was evidently a secondary consideration once the property had been fenced. Additional stone walls would be constructed to subdivide the property into paddocks if the field stone was so abundant as to allow these.'[53] Perkins [whose stone wall education was in Britain] states similarly that: 'Inner boundaries however were not built as high as the boundary fences, which are also known as March Dykes.'[54] While various hints as to this practice are evident in the historical record, firmer evidence is found with Western District selector John Lamont who is recorded as having built his walls four feet [1200 mm] high on the boundary, and 3 feet 6 inches [1070 mm] for internal subdivision walls.[55]

The high rabbit walls, built in the Western District from the late 1870s until the 1890s,56 are an exceptional type of wall, with unique variations such as overhanging copestones [sometimes with projecting palings] and deep trenches attempting to keep the rabbit plague at bay. They were characterised by their:

> *'great average height and greater length and number than anywhere else in Australia; by their high level of finish, both in terms of tightly positioned and evenly coursed stones and by the careful plugging of the gaps between the stones; and by the distinctive blocky, vesicular rock from which they are constructed.'*[57]

The angular shape and texture of these stones created friction and stability, and enabled closely packed walls into which plugs could be firmly hammered. These materials, which enabled such high walls, were the exact opposite to the round smooth stones that comprised Melton Shire's most common fieldstone.

45 Corangamite Arts Council, *op cit*, p.58
46 Willingham, *op cit*, p.41
47 Loudon, JC, *Encyclopaedia of Agriculture*, 5th Edition (Longman Brown Green Longmans and Roberts, London, 1857), p.496
48 Corangamite Arts Council, *op cit*, p.28
49 Willingham, *op cit*, p.41. The 1300 mm height was chosen as one of the categories for Study field survey. Almost all of the walls in the Shire had a base width of 700-800 mm.
50 Corangamite Arts Council, *op cit*, pp.49, 113
51 *ibid*, pp.17, 21
52 Nathan Perkins, in Corangamite Arts Council, *op cit*, p.130; Rod McLellan, 'The Dry Stone Walls of Victoria's Western District', *Historic Environment* Vol 7 No 2, 1989, pp.28-32
53 Corangamite Arts Council, *op cit*, p.60
54 *ibid*, p.130
55 *ibid*, pp. 18, 45, 48, 68-74
56 Willingham, *op cit*, pp.17, 48-51
57 Vines, 1995, *op cit*, p.59

A type of all-stone wall that is rare in Victoria, of which good examples can be found in Melton Shire, is a variation of the 'single' or 'crochet' wall, often also referred to as a 'Galloway dyke'. Its origins are the enclosures commenced in 1720 in south west Scotland, and which became 'well known and esteemed' throughout Britain, and recommended for the 'Western Isle' of Scotland.[58]

Similar 'filigree' walls 'that stand up well to the wind' were also used on the wind-swept Clare and Galway coasts of Ireland.[59] However the primary purpose of the Galloway wall was apparently not to rebuff the wind. In 1812 it was described as: 'the rudest and the simplest in its construction … formed of large, ill-shaped stones' placed atop a standard double wall. The light showing through the wall frightened sheep and cattle from attempting to jump the walls. The Argyllshire Survey provides a clear description:

> *'The upper courses of galloway-dykes ought to be made as narrow and open as possible, to afford the least footing for sheep and to let them see through. And if the first course of single stones should project a little over the double wall, so much the better. Of all the dykes this is the most formidable for sheep. A double wall of twice the height will not turn them with equal certainty. The tottering appearance, and seeing light through the stones deters them from any attempt to scale it, together with the want of footing on the top. These walls may be made with the coarsest stone, and when they are properly made, with the centre of gravity resting on the stones below, they stand better than a double wall.'*[60]

These walls were said to be cheaply erected and repaired. The virtues of the 'superior Galloway dyke' were still being praised in Loudon's 1857 Encyclopaedia.[61]

The one known example in the Western District is primarily one stone in width, and features very large irregular stones in the upper part of the wall. In Melton there are at least two walls that would appear to be similar to this in general design [though without some of its qualities]. These walls have single walls of large stone, with more modest interstices, built atop double walls. A variation on this theme are two very well constructed, long and high walls, in excellent condition, whose bottom half is a traditional double wall, and whose top half is single wall, but tightly built, without interstices. A very unusual feature of these walls is that all the large stones are situated on the top of the wall [sometimes sitting above very large flat stones], and the small stones on the bottom. The only known walls that share some common characteristics with these walls [although apparently of lesser quality construction] are those built by Andrew Lamont at Dundonnell in the Western District.[62]

**5. Composite Walls**

The last type of traditional fence listed in the 1874 Fences Statute was the 'combination' or 'composite' fence, amalgamations of standard types. These include fences constructed partly of stone walls and partly of post & wire or post-and-rail fences (and sometimes with planted hedges). In most of the study area today, the remnant early fences are characteristically a combination of low stone walls with split timber post with wire above (or more rarely, timber rail). These composite stone walls characterise the Shire of Melton,[63] raising a number of questions:

- Why were these walls constructed?
- How common is this type of walling elsewhere in Victoria and the world, and is it more especially associated with Melbourne's western plains municipalities?
- Were the walls originally full stone walls modified by the addition of fence posts and wire?

Experiments with combining fencing materials to most economic effect were undertaken early in Australia. Unable to afford more than two-rail timber fences, in 1827 one farmer reported on 'an excellent fence' that could be made by filling the space underneath the lower rail with turf. Squatters were also experimenting. In 1851 John Learmonth and his neighbour William Lewis of Terinallum in the Western District erected a boundary fence in which the lowest rail was replaced by a stone dyke (or wall).[64] It appeared to Learmonth: 'that in some

58 Colonel F Rainsford-Hannay, *Dry Stone Walling*, Stewartry of Kirkcudbright Drystane Dyking Committeee, Gatehouse-of-Fleet, Kirkcudbrightshire, 1972, p.104
59 *ibid*, p.85
60 *ibid*, p.103
61 Loudon, *loc cit*.
62 Corangamite Arts Council, *op cit*, p.73; also National Trust of Australia (Victoria) File No.5490, 'Dundonnell'
63 They would also appear to be the characteristic type of the Shire of Wyndham, and be prominent in the municipalities of Hume and Whittlesea.
64 Kerr, *op cit*. (Dyke was the Scottish word for stone wall.)

part this would add little to the expense, and at the same time would add to the durability and safety from fires.' In November 1856 the McDonalds of Stonyfield petition George Russell to fence their mutual boundary with a 'split rail fence and double stone dyke'.[65] An 1861 treatise on fencing by a Scottish manufacturer includes diagrams showing wire fencing on top of stone walls.[66]

The construction of half stone walls then occurred very early, and was not always simply an accidental by-product of the amount of fieldstone available. Kerr identified the half-wall half-fence 'tradition' in the Western District, and also at Coswell near Swansea in Tasmania, 'where rock-pile walls or dykes form the base storey for both post and wire and modified cockatoo fencing.'[67] There is a record of a wall constructed at Turkeith near Birregurra in 1927 with: 'two foot walls with cope stone on a 2'6" base, with barb wire.[68]

In the Shire of Melton 'half-stone walls' with the stone less than 18 inches high, are also known to have been built deliberately. The exact reasons are probably lost to time, but farmers know that they had benefits in terms of preventing sheep crawling under the lower wire, and in preventing draught horses from scratching itch mites in the hairs of their legs.[69]

Many of the composite stone and wire walls in Melton have neat coping stones intact. These all appear to have been built in the traditional manner in relation to base width and double wall construction [perhaps to comply with the Fences Act definition of a 'sufficient' wall]. Other composite walls are less neatly constructed. These generally have a higher percentage of round-shaped stones, and consequently a higher wall batter and a more pyramidal shape. While some of these have obviously had posts inserted into them, it is also possible that some might have always been composite walls. The relative instability of stone walls built with the 'round stone' that predominates in the Shire may also have encouraged the original wall constructions to have been kept low, and topped up with wire.[70]

There is evidence that many of today's composite walls are the remnants of original all-stone walls that were later repaired by part-demolition and incorporation of post-and-wire fencing, or else just built up to a 'workable height' by the addition of post-and-wire fencing [perhaps to accommodate a transition from sheep to cattle].[71] Mitchell, apparently citing retired waller Len Breen, states that 'Stone walls … have since been electrified or had post and wire worked into their construction'.[72] One wall identified in the Moorabool Shire is known to have been built c.1870, and had post-and-wire added after 1908.[73]

Some apparently 'composite' stone walls are definitely not so. Sometimes stone 'floaters' would be gathered from crop land as they appeared, and stacked under fences, making a rubble stone fence, rather than a professionally built 'dry stone wall'. Melton farmer Mary Tolhurst tells that the walls on her childhood property were built by Tom Haynes and her father George Tarleton. Prior to sowing a crop the men would take the horse and dray and pick up stones and place them along and under the post-and-wire and post and rail fences on the property.[74]

The very fact that composite fences are mentioned in the 1874 Fences Statute suggests that at least some of the composite stone and wire fences of the study area were likely to have been built that way. It is likely that many, probably the majority, of 'half walls' were constructed because of limited availability of fieldstone. This is the only explanation Western District farmer Winston Whiting has been able to find for the fact that, of 3 miles of all-stone farm boundary fencing constructed by his father, half a mile is 'normal fencing' with 'stone foundations'.[75]

Peel puts the simple and primary reason for their construction succinctly:

> *'With increasing distance from a timber supply, less timber was used in fence construction and wire fences, or stone walls in the stony country, became more common. Again, where less stone was available, stone walls and wire fences were combined, with the stone*

65 Willingham, *op cit*, p.48
66 *ibid*, p.46
67 Kerr, *op cit*.
68 Mary Sheehan (author of Colac Otway Heritage Study), 11/8/2005
69 Personal conversations, John Morton, and Charlie Finch.
70 Loudon, *loc cit*
71 Vines, 1995, *op cit*, p.60
72 Mitchell, H, 'Building Dry Stone Walls', *Grass Roots*, No.48, April 1985
73 Richard Peterson, Daniel Catrice, 'Bacchus Marsh Heritage Study', 1994
74 Mary Tolhurst, February 2002.
75 Corangamite Arts Council, *op cit*, p.80

*wall portion consisting of anything from a single row of stones to a substantial wall three or more feet high with only one or two wires on top.'*[76]

For example, says Peel, timber for the Sunbury vicinity was sourced from the Mount Macedon area, but as Sunbury was also at the edge of stony country, split timber, stone and wire were all used, commonly in the same fence.[77] And, as Vines has shown, the 'combination' fencing is also common on the Keilor and Werribee plains.[78] The reason for part stone wall - part wire fences of the Melton Shire study area relates to the quantity of stone in the area.

And so the most typical stone fence of the study area reflects the particular geography and history of the Melton Shire, and is important for this reason. Our natural association of 'the richest areas for dry stone walls'[79] with areas where fieldstone is most abundant is the main explanation, but not the complete reason for the different extents and qualities of stone wall construction in different volcanic areas. While the availability of stone is the 'supply' side of the equation, there is also a 'demand' side: the need for fencing; and the economic feasibility of clearing land and building walls.

As mentioned previously, both historical and present maps of dry stone walls in the Shire show strikingly greater densities of walls in farming areas than on large pastoral properties. This is despite the fact that at least one of these cases [the Parishes of Pywheitjorrk and Derrimut in the south of the Shire] both land-uses are situated in exactly the same volcanic landscape. So, while the greatest numbers of extant walls in the Shire were built as part the Clarkes' vast Rockbank pastoral estate, the greatest concentrations are situated on medium and small sized farms. Another contrast between pastoral and farming properties evident in the fieldwork undertaken for this Study is that in all but one case [Clarke's boundary wall No.F96 on Faulkners Road] the most substantial stone walls – the most 'all-stone' and the highest walls – are also to be found on farms and small grazing properties rather than on the large pastoral estates.

We have also seen that farms had a greater need for fencing, in order to separate stock from crops, and for construction of dairy yards, small dams, pigsties and cowsheds, than did large sheep-runs, which only required fencing of boundaries and large paddocks. This more intensive use of the land would also have meant that it was worth investing more in the land, including clearing the property of fieldstone. Whereas land needed to be cleared for crops, and to maximise grass for cattle on small farms, less complete [if any] clearing of land was required to make huge flocks of sheep economical. For example, in the 1890s parts of the Chirnside Brothers great Werribee Park pastoral estate were let to tenant farmers: 'The Chirnsides retained the 'rocky' country, which was not fit for cultivation, but which was quite good grazing country, growing a nice quality of wool.'[80] And there was comparatively little demand for fencing [and stones] on the vast paddocks in the southern part of the Clarkes' Rockbank estate. While the evidence of the nearby small farms indicates that there was sufficient stone to build at least some substantial all-stone walls, it was not economical [or perhaps necessary] to build such walls for sheep paddocks.

At least three of the 21 selectors examined in the district [the Holden area] had stone coverage that was too expensive to clear. The Land Department inspector reported on Ellen Slattery's selection, which appears to have been the worst: 'I consider the land to be unfit for cultivation; it would cost from £20 to £30 per acre to clear some part of it, as it is a mass of rock.'[81] While most of the volcanic plains would have cost much less than this to clear, even with a very conservative estimate of only £1 or £2 per acre, stone clearing would still have been a substantial cost likely to have been economical only for the more intensive land uses; that is, for farming rather than pastoralism.[82] Being unskilled work, farmers [and their sons and itinerant labourers] would also be in a position to do it themselves cheaply.

So, even if there was sufficient fieldstone to build substantial stone walls, it was not always economical to clear it. The comparatively large size of landholdings

76 Peel, LJ, *Rural Industry in the Port Phillip Region 1835-1880*, MUP, 1974, p.108
77 Peel, *op cit*, p 108.
78 Vines, G, *Built To Last; An Historical and Archaeological Survey of Dry Stone Walls in Melbourne's Western Region* (Living Museum of the West Inc, 1990).
79 Eg, Vines, 1995, *op cit*, p.58
80 Morris, G, 'Centennial History, Werribee', extract obtained from *Werribee Banner*, 5th April 1962.
81 PROV VPRS 625 Unit 304 (20712), Inspector Yeoman, 10/9/1875
82 Figures provided by selector Alexander McLeod, whose density of rocks appears to have been unremarkable and may have been light, suggest that he spent approximately £1-2 per acre on 'clearing stone and sundries' (PROV VPRS 625, Unit 273 (18276)).

in Australia, the high cost of fencing from scratch, and the predominantly pastoral land use, is likely to have had a significant influence on the form of stone wall built. Whereas in Europe there is a high proportion of high all-stone walls, in Australia paddocks with enough stone to build high all-stone walls may not have been economical to clear.83 In the Melton Shire exceptions to this occurred in the larger and more successful mid-nineteenth century farms and small grazing properties [such as the Moylan, Beaty and Hopkins properties], on which some substantial stone walls [generally near the homestead] were constructed. The other major exceptions in Melton are the large and finely built Clarke dry stone wall dams. These, together with the magnificent boundary walls built by the Manifolds in the Western District to protect against rabbits, also support a conclusion that the use of stone was related not just to its quantity [the supply], but also to the special needs of the owners [the demand]: for farming; or to countervail the peculiarly dry climate on Melton plains; or to combat the devastating rabbit plague on the Stony Rises. Cultural circumstances, for example, the local pool of skills in the Western District, and local traditions [such as belief in stone walls as a fire retardant], no doubt also played a part.84

Analysis of the 21 Selection Act files provides some grounds for arguing that the composite walls, such as 'post-and- wire and stone', may have been particularly associated with the Melton district. The printed forms upon which selectors were asked to mark the improvements to their properties included 11 types of walls. However, these 11 options did not include categories for the most common type of stone wall in the district: the composite 'post-and- wire and stone' [or 'post-and-rail and wire and stone'] fences. Yet at least 5 of the 21 selectors in the district describe these types of fences on their selections, marking additions such as 'stone bottom' to the 'post and wire' category [Patrick O'Brien]. It is likely that the lack of category meant that others again [in addition to these five] simply selected one of the given types to describe their composite walls; some probably called their 'half stone' fences either 'stone walling' or 'post-and-wire' or 'post-and-rail' fences. [As such, it is likely that much of the fencing described as 'stone' and other categories was actually composite post-and-wire and stone. The price of the different type of walls would support the possibility that some 30% of the fencing built by these selectors was in fact post-and-wire and stone.]

One conclusion that could be drawn from the Selection Act pro-formas is that composite 'post-and-wire' and stone' and 'post-and-wire and rail and stone' walls/ fences were variants that were particularly associated with Melbourne's western plains. Alternatively, they may have been variants that became more common throughout the whole of Victoria around the time of the Selection Acts.

A source for further work on dating composite stone fences might be surveyors' field notes [made from the late nineteenth century] for applications to bring properties under the Torrens title system. They mark 'stone walls' and other types of fencing along boundary walls, and regularly note 'stone fences', 'post-and-wire in stone', or 'post-and-wire fence with loose stone base'.

Composite stone and post-and-wire walls appear to characterise Melton Shire in a way that they do not elsewhere. But they are not confined to Melton Shire of Melbourne's western and northern plains. Examples are to be found in virtually all of the stone wall districts of Victoria, although they would appear to be small minority in some districts. There are also known to be many in New Zealand's Otago area, at least some in North America, but virtually none in Europe. The questions that remain, and can only ultimately be answered by further studies in other regions, is whether they are in fact the most common type of fence in Victoria as some claim, and whether they are more concentrated and numerous in Melton Shire and the Melbourne fringe than elsewhere.

83 Gary Vines, posting in Heritage Chat, 11/8/2005

84 While it has not been analysed, it would seem that many of the large stone walls in the Western District (e.g., the Kolora, Derrinallum and Purrumbete areas) were built by farmers c.1900 (Corangamite Arts Council, 1995, pp.76-142 and *passim*). The primary reason for the farmers' high walls, no doubt, was the amount of stone on the properties. But the 'demand' side may also have contributed. This was a period when dairying was transforming from a cottage to an export industry: the quality of the soil, or the rainfall, might have made this investment in the land worthwhile at this time, whereas it did not in Melton Shire. This is clearly very speculative, but perhaps demonstrates a need for more general research on the relationship between economics of farming and fence construction.

### 6. Other Fences

The Fences Act also refers to other types of fences: 'a close hedge or live fence'; and a 'logs and chock fence'. The analysis of the 21 selections in the Melton - Hume municipalities in the 1870s finds one long 'log fence' [125 chains, or approximately 2.5 kilometres], built at a low cost of 8 shillings per chain. This was built on the only selection in forest country.[85]

During the late 1860s and 1870s many colonial farmers believed that stone, post-and-rail, wire, or combination fences should gradually be replaced with hedges. These could shelter stock from the cold, and crops and pastures from the hot Australian winds. Hedges began to be planted along the fence lines, with the intention of overgrowing and eventually replacing the 'less permanent' types of fence. For example, Osage Orange and Briar Rose were advertised in local papers for sale in large lots. Other species that might be found include Boxthorn, Hawthorn, Briar Rose [also called Wild Rose, or Sweet Briar], the native Tree Violet [which is indigenous to rocky volcanic areas], and the South African Honeysuckle or Red Trumpet Flower.[86] Along some fences these species have apparently been self-sown by birds. No pure hedge fences would appear to remain in the study area, although remnants of hedges in conjunction with stone, post-and-wire/rail fences do survive.

## 3.2. Fencing in Nineteenth Century Rural Victoria

When the labour market settled down after the gold-rushes, the price of a full (all-stone) dry stone wall remained relatively stable, at around 30 shillings per chain. However the composite stone and post-and-wire wall would appear to have been much cheaper, probably around 20 shillings per chain. During this time wire fencing became increasingly competitive, especially around 1880 when 'relatively cheap barbed and plain wire' was introduced.[87] Between the 1875 and 1911 the cost of post-and-wire fencing in Melton plummeted from c.20 shilling per chain, to 7 shillings per chain.[88] The 1880s then have been marked as the turning point for the decline in construction of dry stone walls.[89]

The following figures provide some context for the understanding of the relative price of stone fencing during the nineteenth century.

### 1850s

Early fencers built substantial timber fences around the home cultivation paddocks and drafting yards at a cost of 2s 6d per rod [10 shillings per chain], on the average, until the gold rush years, when the cost doubled. The most common early expedient at the time was the 'brush fence', which could be built for about 4 shillings per chain.[90] Both of these fences were vulnerable to fire, and after 20 years post-and-rail had deteriorated so as to be worth not much more than firewood.

The Manifold Brothers were amongst the first in Victoria to build stone fences. Surprisingly, during the gold rushes in 1856 [although the rush had past its peak], they were able to build a wall 'through some of the roughest country imaginable' at a total cost of only 24 shillings per chain [or £96 / mile].[91]

### 1860s

During the 1860s the typical costs for fences in the Melton district were: 4 rails [32 shillings per chain]; 2 rails & 3 wires [26 shillings per chain]; stone wall [34 shillings per chain].[92] It is notable that wire was already introducing efficiencies into fencing [although all-wire fences had not yet become widespread], and that stone was the most expensive option.

On the other hand, in 1868 Henry Beattie of Mt Aitken paid a professional stone waller Patrick Connor only 8 shillings per chain, and Henry Clarke only 4 shillings per chain for 3 rail fencing.[93]

Another much cheaper option in the early 1860s was the 12 shillings per chain paid for sod walling [5'6" wide at bottom, to 3'6" and capped with a large sod leaving a

85 PROV VPRS 625 Unit 317 (21653), Hannah Watts.
86 Peel, *op. cit*, p.108
87 Matic, A, Vines, G, 'An Archaeological Desktop Study of the Proposed Edgars Creek Drainage Scheme, Epping, Victoria', Report for Melbourne Water, June 2006, p.12
88 Seven shillings per chain is the price Exford Closer Settler PJ Redden paid for post and wire fencing in 1911 (PROV, VPRS 5714/PO/1364). The price of post & rail fencing also reduced in this period, from c.25s for two rail, to 20s for three rail fencing. This probably reflects the development of timber cutting industry in Melton, and better transport (rail and road).
89 Vines, 1995, *op cit*
90 Cannon, 1978, *loc cit*
91 Willingham, *op cit*, p.48
92 Peel, *loc cit*
93 Beattie, *op cit*, p.63

space for a furze or gorse to grow on top].[94]

**1870s**

The lowest fencing prices paid in the mid 1870s by any of the 21 Selectors examined were by Hannah Watts, who was the only one of the 21 living in a forested area. She was able to pay just 10 shillings per chain for post-and-2 rail fences, and only 8 shillings per chain for 'log' fencing.

The prices paid for different types of fencing by the other local Selectors who were living on the stony volcanic ground shows that:

- 'Post-and-wire' fencing was the cheapest [by a narrow margin], at an average of 20 shillings per chain [although prices ranged from 15 to 30 shillings per chain].
- 'Post and wire and stone' fencing was the next cheapest option, at c.20 - 25 shillings per chain.
- 'Post-and- rail' fencing was nearly as cheap, at a little over 25 shillings per chain [this was probably 2 rail fencing].
- 'Stub', or 'picket' fencing was 28 shillings per chain.

The prices paid by the Selectors for their stone walls by far their most popular choice] seems to have clustered around two main prices: c.20 shillings per chain [a range of c.20-25 shillings]; and c.30s shillings per chain [a range of 30-34 shillings]. As such these prices vary from the cheapest of all fencing, to the most expensive by a considerable amount. The lower price likely reflects either: firstly, a lower / 'half wall', with post-and-wire or post-and-rail above [most likely]; or secondly, a farmer-built rather than a professionally-built wall. The likelihood that it is the former is supported by the cost range of the few walls that are specifically identified as composite, which is exactly the same range as the cost range of the lower priced stone walls [20-25 shilling]. If so, then composite stone and post-and-wire fences were almost on a par with 'post-and-wire' in terms of economy [and in addition made use of stone cleared from paddocks].

The evidence given to the 1878 Royal Commission on Closed Roads regarding the cost of fencing would appear to confirm this analysis. 'A real good' stone wall, said PJ Nolan [the Werribee Shire Secretary / Engineer]: 'is worth about 30 shillings a chain.' [95] This implies that there were also 'not so good' stone walls; these probably included the composite half walls.

Still, costs varied in accordance with difficulty of terrain, and no doubt also the local availability of stone and skills. At Mt Franklinford in 1874 a 4 feet high stone wall with coping stones was built for 21 shillings per chain.[96] On the other hand, in 1877 the cheaper of two quotes received for a stone wall of nearly 4 chains around the Rockbank primary school was 100 shillings per chain. This was obviously to be a finely constructed feature wall, but even so the Education Department had budgeted for only 40 shillings per chain. In 1878 Augustus Schebler of Melton was given the work at the price of 36 shillings per chain.[97]

**1880s**

The widely cited price of dry stone walling in the 1880s remained at 30 shillings per chain, 'the stone being of course found on the premises.'[98]

### 3.2.4. Dry Stone Walls in the Twentieth Century

The main period of construction of dry-stone walls in Melbourne's west was in the period 1850-1880, after which improvements made wire considerably more economical than stone walling. However, some new stone walls were built, and existing stone walls repaired, into the twentieth century. This appears to have been particularly the case in the Western District where special circumstances, including the late building of rabbit walls, the turn of the century boom in the dairy industry, and local walling traditions and skills, played a part.

The break-up of the large pastoral estates in the early twentieth century had seen the Clarkes' Rockbank estate, much of the Staughtons' original Exford estate, William Taylor's Overnewton estate, and the Greenhills and Melton Park estates turned into farmland. While in Melton many walls had been damaged by the building

94 Willingham, *op cit*, p.45

95 Royal Commission into Closed Roads, Progress Report (containing minutes of evidence etc), Victorian Parliamentary Papers 1878 (No.72), p.13

96 Claire Gervasoni, talk to Dry Stone Walls Association of Australia 4/6/2006

97 PROV VPRS 795, Items 77/37824, 78/7725

98 Eg, Peel, *loc cit*

of the railway to Ballarat in the 1880s, they remained virtually intact until about the 1920s, after which much of the walling was breached for farm machinery.[99]

The break up of the pastoral estates coincided with the industrialisation of the dairy industry, and in the Western District, with its traditions and skills, many new dairy farmers constructed stone walls on their properties. A major impetus for this was protection against grass-fires. Alan Marshall described the reasons for wall building in the district: 'the farmers did two things at once; they got rid of the stones that littered every acre … and they got fences that laughed at bush fires and lasted for ever.'[100] As early as the 1850s stone walls had been built around Western District cultivation paddocks and homesteads partly as protection against the bushfires. A disastrous bushfire that burned the area in 1908 encouraged many of the new farmers to take the same action: 'The campaign of stone walling started then, so that fires could be contained to one paddock at a time. The walls had been started in 1897 and even before that.'[101] Another Western District farmer explained: 'I've only known a couple of occasions when a fire has gone through a wall. If you get grass or dust within the wall, it catches on fire and then the flames will actually creep through but very rarely.'[102] In Melton too, some farmers recognise the ability of a dry stone wall as a firebreak, the rule of thumb being that each foot in height is equivalent to a 5 foot plough break.[103]

In the Western District there was also general appreciation amongst farmers of the benefit of the walls as a shelter for stock, and the '6 feet' walls in the Kolora district were built with that in mind.[104]

In Melton the break-up of the pastoral estates does not appear to have stimulated much new wall building. There are a fewwalls that can be definitely associated with the period, Dalgook at Taylors Hill [1906], in which a stone wall was built to enclose the homestead complex, an area of about half a hectare and Bonnie Doon at Plumpton [1906]. Other than that there was some small demand for repair of walls, which provided an income for Bob Barkly of Mount Cottrell during the 1950s.[105]

From the late nineteenth into the mid twentieth centuries many walls were removed by landowners in an attempt at rabbit control. The huge Eynesbury estate was one of the leaders: In 1897 the Melton Express carried an advertisement for tenders to remove '60 chains of stone walling between Grieves and the 1400 acre paddock and erecting a dropper fence.'[106] Large sections of the walls to the east of the Shire were replaced by post-and-wire fencing during the 1930s.

At the same time in the Western District, self-taught farmers frequently built their own new walls, and wallers such as Tom Larkins were commissioned to pull down and rebuild rabbit infested walls. However professional wallers in that area recalled the 1930s depression as a turning point, with very few new walls being commissioned thereafter.[107]

During the early twentieth century, and especially during the 1930s depression, stone fences in the Melton area were regularly damaged by weekend 'rabbiters', on bikes or on trains, in search of their quarry. On Monday mornings they would be repaired by the farmers.[108] While Robert Hopkins in Truganina took pity on the rabbiters and allowed them access to his walls, most were not so welcoming. In the Western District Alan Marshall regularly hunted rabbits under the walls when he was a boy: 'We'd dig in, and of course sometimes a bit of wall would collapse, then the farmer would come roaring down the paddock and we'd go for our lives'.[109]

Even in the Western District wall building had virtually ceased entirely by the 1960s. By the 1950s the cost of walling was £66 per chain, far too expensive for most landowners.[110]

### 3.2.5. Survival of Dry Stone Walls in Melton Shire Today

This Study has shown that approximately 45 percent of the dry stone walls surviving in the Shire today were erected as part of the Clarke Rockbank pastoral estate. Of the balance, it is estimated that three larger farms the Beatys on Blackhills Road [8.5%], Hopkins and Farragher on Hopkins Road [7.4%]111, and the Moylans on Mount

99 Bilszta, Faulkner's Road, 1990, *op cit*
100 Corangamite Arts Council, *op cit*, p.114
101 *ibid*, pp.92-93, David McGarvie
102 *ibid*, pp.80-81, Winston Whiting,
103 John Morton, personal conversation, 19/7/2006
104 Corangamite Arts Council, *op cit*, pp.83-84, Gerald Moloney
105 John Morton, personal conversation, 17/7/2006
106 The Melton *Express*, 9/9/1897
107 *ibid*, pp.68-74.
108 Mary Tolhurst, personal conversation.
109 Corangamite Arts Council, *op cit*, p.114
110 *ibid*, p.118; Mitchell, Grass Roots, *loc cit*
111 The subdivided paddocks in this area were traded between Hopkins and Farragher and others in the early years, and it

Kororoit Road [5.6%], between them built another 21.5 percent of the remaining walls. The residual one third of the walls in the Shire were built mainly by smaller farmers and selectors. On the remaining evidence, the Missens of Rockbank [3.3%], Payne of Rockbank [3.2%], Campbell of Toolern Vale [1.6%], and Gidney of Rockbank [1.4%] appear to have been the next most prominent dry stone wall builders in the Shire.

> *[References are made to 'Beatty', 'Beaty' and 'Beattie'. The families are related, but different branches changed their spelling during the nineteenth century. The name 'Beaty' applies in the north of the Shire and the name 'Beatty' at Rockbank, for instance in Beattys Road. The name 'Beattie' refers to an unrelated family.]*

With the spread of urbanisation [and motor cars], many walls along roads have become subject to theft by suburban gardeners. While some have been repaired by their owners [not by professional wallers] most have been left to their fate, often with a new post-and-wire constructed fence behind them. Some farmers have been compensated by professional landscape gardeners to take away walls. Some of the best dry stone walls and dams are still threatened by unchecked rabbit burrowing underneath them. Many more have been demolished by the advancing suburbs and industrial precincts. And rural residential subdivision has broken up many of the long nineteenth century walls: new gates have been inserted, usually without professional repair of the new wall ends, threatening the structure of the wall; different standards of maintenance have been created along the wall, which destroys its unity; and different shelter belt plantings have occurred, similarly breaking up the unity of a wall and often [depending on distance from the wall] threatening it structurally.

Despite the losses, many stone walls, being more durable than timber post-and-rail or wire fences, have survived. The Study identified some 170 kilometres of stone walling, in various degrees of intactness, in the Shire. Most of the best preserved and most picturesque examples are on more isolated roads, or out of sight in the back paddocks of rural properties. Generally the more solid and finely constructed all-stone walls are usually situated close to homesteads, often around gardens, such as the Eynesbury Ha Ha wall.[112] Melton's dry stone walls are a now rare link with the early European settlement of the municipality, and one of the major collections of stone walls in Australia. Their preservation is today's challenge.

## 3.3. Municipal Statement of Significance

The construction of dry stone walls in the Shire relates most directly to the following four sections from the Shire of Melton Statement of Cultural Heritage Significance, from the Shire of Melton Heritage Study, Volume 1.

**Pastoralism**

This first industry in the district dominated the Shire's nineteenth century history. The sheep-runs of the Clarkes, Staughtons and Taylor in particular occupied most of the land in the Shire. Pastoral homesteads, such as Exford and Eynesbury, are important Victorian heritage places, as are complexes such as the Rockbank woolshed. Less well known are the remarkable and probably unique series of dry stone dams built by the Clarkes across the vast Rockbank estate.

**Transport**

Two of Victoria's primary early inland roads to Portland, and Mount Macedon crossed the Shire. These roads became even more important during the gold-rush, when they became known as the Ballarat and Mount Alexander Roads. Melton has two very early stone bridges, the famous Djerriwarrh Creek sandstone bridge, and the lesser known and more altered Melton Highway bridge over the Kororoit Creek. Some early ford sites and tracks also survive near these places. Wayside facilities [such as hotels and stables] along these roads were the genesis of towns such as Melton, Diggers Rest and Aitkens Gap. With the exception of the Diggers Rest hotel, all of these original wayside places have been demolished; however, isolated places such as the now ruinous Rockbank Inn, retain scarce archaeological evidence of these colourful historic times. The coming of the railways [Diggers Rest 1859], and Rockbank and Melton South [1884] had a major impact on the district, stimulating farming and timber cutting, and giving birth to Melton South township.

is not certain who built some of the walls. Their adjacent farms constitute have what is probably the highest density of drystone walls remaining in Melton Shire.

112 This was also observed by Gary Vines, in 'Built To Last', *op cit*., and in the Heritage Study of the adjacent Bulla area.

The historic opening up of the Shire for farming in the early twentieth century resulted in new roads, and the Monash designed Bridge Road concrete bridge, to provide the then all-important link between farms and the nearest railway station [Melton South].

**Farming**

Some larger farmers and small graziers managed to carve out successful farms in the nineteenth century. Places such as Strathtulloh, Glen Elgin, the Beaty properties on Blackhill Road, and the Hopkins farm survive as evidence of this. But small farmers of the 1850s fared less well, most selling out to the Clarkes and other pastoralists when their hard work and hopes were dashed by wretched seasons and markets in the 1860s. Ruins of stone cottages, and some dry stone wall farm complexes, are all that remain to testify to those who prevailed – usually for a single generation, until around the end of the century. These relics have the potential to teach us much about the farming practices and the way of life on the Melton plains in the earliest farming period.

The break-up of the pastoral estates at the turn of the twentieth century was a turning point in the history of the Shire. The vast 'sheep-runs' that many Meltonians believed had obstructed the progress of the district gave way to small farms growing hay and dairying. These historic changes coincided with major improvements in the practice of farming, with new grains, fertilisers, and separating and refrigerating technology becoming available. Out of these changes emerged Melton chaff, which became renowned as the best in Australia; unfortunately none of the chaff mills that situated at local stations survive. What does survive of this period are some of the modest, typically double-fronted weatherboard early twentieth century farmhouses, built by the small farmers at this time, and also a few more elaborate farming homesteads. These places are crucial, in terms of both number and consequence, to the Shire's history and heritage.

**Water and Fire**

Melton is an extremely dry place. The Melton-Werribee plain has the lowest rainfall in the Port Phillip district; plants that are otherwise confined to the Mallee grow in the area; and there was no reticulated water in Melton until the 1960s. The theme of water conservation pervades the Shire's history, evident in domestic underground tanks and cisterns; the probably unique series of large and finely built dry stone dams built on the Rockbank pastoral estate; the community's enterprising but ultimately unsuccessful efforts to provide a town water supply [including the 'original' idea of combining bridge and dams, realised in the McKenzie Street weir]; the failed popular campaign for irrigation in the Shire; and the realisation of the futility of attempting a formal avenue of exotic ornamental trees in High Street, and their replacement by informal plantings of native species and hardy peppercorns.

Related to this dryness is the part that bushfires have played in the Shire, from north to south, from early to recent times. They virtually wiped out the town of Toolern Vale in 1965, destroying most houses, its bluestone school, Mechanics Institute, church, post office and general store. Isolated chimneys tell of bushfires' impact on farms. They have destroyed many heritage places, further diminishing the already quite small number of such places in a Shire that was so lightly populated in the nineteenth century.

# 4. Assessment Criteria

## 4.1. Basis of Assessment of Significance

This Study has used the principles of the *Australia ICOMOS Burra Charter [1999]* and its Guidelines as the basis for assessments of all dry stone structures. The Burra Charter defines cultural significance by aesthetic, historic, scientific, social and spiritual values. These values are also largely prescribed in the VPP Practice Note: Applying the Heritage Overlay that states:

'All places that are proposed for planning protection, including places identified in a heritage study, should be documented in a manner that clearly substantiates their scientific, aesthetic, architectural or historical interest or other special cultural or natural values. The documentation for each place should include a statement of significance that clearly establishes the importance of the place.'

Reference has also been made to the Local Government Heritage Guidelines proposed by the Department of Planning and Housing, State Government of Victoria, April 1991 as referred to in Clause 15.11.2 State Planning Policy Framework.

## 4.2. The Australia ICOMOS Burra Charter [November 1999]

The concept of cultural significance used in this Study is that defined in the Guidelines to the Burra Charter:

> *'Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.' [Article 1.2]*

Article 2 of the Charter goes on to describe the first four of these heritage values as follows:

Article 2.2: Aesthetic value: 'Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use.'

Places of aesthetic value may:

- Demonstrate a high degree of creative or technical accomplishment;
- Demonstrate important design or visual qualities.

Article 2.3: Historic value: 'Historic value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section.'

'For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has changed or evidence does not survive.'

A place may have historic value because:

- It is of importance for its association with events, developments or cultural phases which have had a significant role in the occupation and evolution of the community;
- It illustrates part of the evolution or pattern of the cultural heritage;
- It is an example of rare, endangered or uncommon aspects of the cultural heritage;
- It has a strong association with the life or work of a person or group of people of significance to the cultural heritage;
- It is an important representative of the range of places which make up the cultural heritage of a community;
- It has been influenced by an historic figure, event, phase or activity.

Article 2.4: Scientific value: 'The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information.'

A place may have scientific value because:

- It illustrates some technological, creative, technical or scientific processes or advances;
- It is of importance for information contributing to an understanding of the history of human occupation and the cultural history of the area.

Article 2.5: Social value: 'Social value embraces

the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.'

A place may have social value because:

- It is highly valued by a community for reasons of religious, spiritual, cultural, educational or social associations;
- It is recognised by the community as having public value or is held in high esteem for its associations with the whole or part of the community whose history or culture is interwoven with the history of the place;
- It forms a particular and significant component of the heritage of a local area;
- It demonstrates a distinctive way of life or custom that is no longer in use or is in danger of being lost or is of exceptional interest;
- It has potential for education and interpretation.

## 4.3. Assessment Criteria Used in this Study

The determination of heritage significance for each of the walls in this Study has relied on the more detailed Australian Heritage Commission Assessment Criteria Application Guidelines [Reference document: The Australian Heritage Commission: Criteria for the Register of the National Estate]. This document is recommended in the VPP Practice Note: Applying the Heritage Overlay as a rigorous guide to the heritage significance of places. It provides detailed, clear and justifiable explanatory notes and inclusion and exclusion guidelines [with examples] relating to each criterion.

## 4.4. Dry Stone Walls and the Burra Charter Criteria

Adapting the broad Burra Charter criteria to this Study provided a more detailed checklist of criteria to apply when the database was being assessed and analysed. This assisted the identification of data fields for use in the field survey, and also with desktop research.

### 4.4.1. Aesthetic Significance

Two aspects of aesthetic significance were identified: the wall itself, and its landscape setting.

**1. The Wall**

Factors influencing its significance include:

- Visual presence / strength / cohesion. This relates to its:
  - Height,
  - Length, and
  - State of preservation.
- Quality of construction - proportions, consistency of height and wall batter, distinctiveness of coping stones, and smoothness of face stone interlocking.
- Abutting [later] tree plantation. [This can either highlight or overwhelm the wall].
- Lichen / moss cover [density].

**2. The Landscape Setting**

The landscape context can have a number of factors influencing significance, including:

- Landmark quality. This relates to its:
  - Size,
  - Prominence, or visibility, from a public place
  - Boldness of definition or quality in the landscape.

There are relatively few walls in the Study Area with landmark quality. As with most surviving nineteenth century walls elsewhere in Australia, most walls have suffered dilapidation. Many of the lower Melton walls are screened by long grass, or overwhelmed by later plantings.

The best walls are those in their original farming or pastoral landscapes. There are a number of good examples of these in the Shire [e.g. farms associated with the Moylan, Bitans and Beaty farms]. These often have a significant presence in, and or a unified impact on the landscape.

By contrast a number of originally long walls have been divided into sections corresponding with the rural residential allotments into which they have been

divided in recent decades. Their presence in landscape, and of course their integrity, is greatly diminished due to gaps in the walls, or surviving sections of wall having been maintained differently, or having new umbrageous plantings, or prostate plantings, added to them.

Dry stone walls can be quite a prominent part of rural or flat and featureless landscapes. The ability to view a number of walls at once has the potential to create a patterned landscape. The likelihood of this is often enhanced by an undulating landscape, or, in flat relatively featureless landscapes, density.

### 4.4.2. Historical Significance

Examples of possible associations of dry stone walls with historical events, periods or persons that were identified included:

- Early pastoralism [1836-1852],
- Nineteenth century pastoralism [c. 1852-1900],
- Early nineteenth century farming [c. 1852-1865],
- Selection Act farms [c. 1865-1885],
- Later nineteenth century cottage dairying industry [c. 1860s -1900],
- Original crown survey, e.g. walls that preserve evidence of original surveyed properties, never-used roads or villages, farmers commons, water reserves, or rural school or church reserves,
- Introduction of rabbits,
- Major pastoralists, e.g. WJT Clarke, Sir WJ Clarke, Simon Staughton and Sons, William Taylor,
- Locally prominent waller/s,
- Early twentieth century farming / grazing, in particular the break-up of the pastoral estates [c. 1900-1914],
- Mid twentieth century farming [including destruction by new farm machinery,
- Rabbiters, loss of skills / neglect; rebuilding and modifying].

### 4.4.3. Technical / Scientific Significance

This was considered to be the 'Research' [i.e. archaeological] potential of the place to contribute to a wider understanding of the history of human occupation of Australia, in particular on Melbourne's western volcanic plains:

- **Dry Stone Wall Construction in Victoria:**

  There has as yet been no comparative analysis of different types of wall construction across Victoria. The distinctive composite walls that dominate in the Shire of Melton, and the western and northern areas on the outskirts of Melbourne generally, mean that the data collected about Melton's dry stone walls will contribute to a better understanding of practices, traditions of dry stone wall construction in Victoria generally.

- **Design innovation, creativity:**

  This may be particularly applicable to less common dry stone wall structures, such as causeways and dams. However, the achievement of a good construction technique using difficult local materials, such as the amorphous round-shaped fieldstone or large boulders, might also qualify a wall for inclusion under this category.

- **Quality of original construction:**

  For example, consistent height, wall batter, and coping stones; good face stone interlocking. However these 'craftsmanship' qualities are of relatively little potential technical or scientific value, and are best covered in the Aesthetic assessment criterion [above].

### 4.4.4. Social Significance

This was considered in regard to factors such as:

- The value in which the wall is held in the local or wider general community such as contribution to a local sense of place, or more general evocation of the honest toil of hardy pioneering generations, or by some group within the local or wider community [such as farmers]. Such esteem should be demonstrable.
- Dry stone walls will have different potentials for interpretation or public education. [For example, regarding the local history of dry stone walls, or a particular construction technique].

Public visibility, and ease of roadside access for driving trail and other interpretative material, would be a part of assessing a wall's educative potential. The prominence / visibility of a wall from a public road, including unfolding / dynamic views from motor vehicle, constitutes potential criteria of social significance.

## 4.5. Qualifiers of Significance

Based upon the standard charters and texts, namely the Burra Charter, the Australian Heritage Commission criteria, and also JS Kerr's 'The Conservation Plan' , the study team also developed and applied the additional guidelines to the assessment of dry stone walls, as follows.

### 4.5.1. Condition and Integrity

Intactness, authenticity / integrity, and condition are not fundamental criteria of significance, but rather qualifiers of significance. So for example, all other things being equal, a wall which is highly intact would be rated more highly than one which is deteriorated, or which has been reconstructed.

The 'intactness' of a wall [the amount of the original wall which remains] is distinct from its 'authenticity' or 'integrity' [the degree to which the wall has been subject to restoration or reconstruction], and from its 'condition' [its present state of repair].

Notes on repairs and alterations;

- It is usual and desirable for walls to be repaired as higher stones are knocked off by stock or stolen, as timber posts and wire deteriorate, and as they are undermined by rabbits or otherwise destabilised by earth movement or intrusive root systems. Repairs [restoration, or reconstruction, if done in accordance with the original design of the wall, and with original or 'like' materials] will enhance the integrity and condition of a wall.
- Minor repairs are mostly conducted with original materials [i.e. restoration] and are likely to have little or no detrimental impact on the integrity or potential heritage significance of a wall.
- More extensive repairs, for example reconstruction of whole sections of walls which have mostly collapsed, have significant potential to impact detrimentally on the integrity of a wall. Integrity will be more affected where the reconstruction has been undertaken poorly, by an unskilled waller, or in a construction style different from the original. At worst such repairs consist of no more than piling or pushing stones and boulders into gaps in the original wall.
- The introduction of new stones different from the original [e.g. in size, or stones which have predominantly been split or quarried in contrast to rounder, weathered and sometimes lichen-covered fieldstone of the original wall] will also impact detrimentally on integrity. However if such repairs have been undertaken by a skilled waller they may not be unduly detrimental, and could in fact confer new value ['social significance'] by virtue of accenting and contrasting early and later walling techniques and materials.
- The routine introduction of new posts will have some, often minor, detrimental impact on the integrity of the fence, as they are usually of different dimensions or material [notably the now-common steel star drop-posts]. More significantly, new posts interfere with the structure if added into the wall itself, as is often the case as posts are renewed and spacers added. In many cases new posts do not appear to have significantly disturbed the structure, which probably indicates that they are simply replacements of original posts. However renewal and addition of posts are presumably undertaken by landowners rather than experienced wallers, and are sometimes crude. Such disturbance is minimised when a new post-and-wire fence is built immediately adjacent to the original wall rather than 'in' it. [However, this diminishes incentive to maintain the original stone fence].
- Necessary replacement of the original wires with thinner modern and barbed modern wires, probably also with a different number and configuration of strands, impacts on integrity to a minimal, almost negligible, extent.

### 4.5.2. Rarity

Rare walls are outstanding, exceptional, seminal etc walls, in terms of structural type, an historical theme, aesthetic value, or walls which were once common, but

are now scarce, rare or endangered.

Thresholds for the study area [in accordance with JS Kerr and Burra Charter] would be established upon completion of the field survey. The survey data would be analysed to identify walls that were rare at the local level. As far as the very limited data from other areas allows, potentially rare walls at the broader [State] level would also be identified.

#### 4.5.3. Representativeness

Representative walls are exemplary, or the best, examples of typical walls. Within the study context the different categories of typical walls were, for example, based on structural types / subtypes, or walls that represent particular historical themes or aesthetic values. [These historical, technical and aesthetic categories would be accordingly refined during the field survey].

Upon completion of the field survey the data would be analysed to identify examples that were representative at the local level. As far as the very limited data from other areas allows, walls that are potentially representative at the broader [Regional or State] level were also identified.

## 4.6. Method of Assessing Individual Walls and Cultural Landscapes

#### 4.6.1. Individual Walls

The objective was to be able to construct, as far as possible, a 'cross-section' or 'profile' of the typical Melton wall. The method was to isolate the walls that fitted within those parameters and these would be the first-cut selection of representative Melton dry stone walls.

Depending on how many there were, this group was subjected to further queries, such as stone size, height, length, condition, until the best examples were identified.

#### 4.6.2. Dry stone wall precincts

The potential 'cultural landscape' value of walls was identified and initially ranked during the fieldwork surveys. Where warranted they were followed up with further desktop and historical research investigation as part of the data analysis process.

A cultural landscape or dry stone wall precinct of high significance would feature walls that are relatively:

- High in number,
- High in density,
- Substantial in size,
- High in visibility by virtue of undulating topography, reasonably open vegetation, and proximity to roads, and
- In a fairly original historical context [e.g. farming, or pastoral] with minimal new development [either buildings or plantings].

The topography of the Shire where dry stone walls are situated has former volcanoes [e.g. Mount Cottrell, Mount Atkinson, Mount Kororoit, She-Oak Hill, Cabbage Tree Hill, Aitkens Hill] as prominent features. These volcanoes, the source of the building material of the walls, are an integral part of cultural landscapes. Along with the volcanoes are the grasslands and waterways which attracted the early settlers to these areas and which provide aesthetic and scientific significance to the landscapes.

## 4.7. Cultural Landscape Assessment

Whilst re-writing the statutory recommendations in 2009, the dry stone wall precincts were assessed using Heritage Victoria's Landscape Assessment Guidelines. This was in order to check that the precincts recommended for protection using the Significant Landscape Overlay, would qualify as cultural landscapes. This process assisted to identify the qualifiers of significance in a landscape context and provided a statement of landscape significance, which is included below.

#### 4.7.1. Landscape Assessment Guidelines

There were five basic factors which determined the

precinct boundaries:

- Extent of natural features- volcanic mounts, grasslands, waterways.
- Historic association with existing properties or walls
- View lines from public roads and interpretive potential
- Overall preservation of the walls and representativeness of type
- Lack of visual intrusion in landscape and defined boundaries

The Heritage Victoria Landscape Assessment Guidelines defines a precinct as;

- An area definable by physical boundaries and containing elements which relate to each other to form a single, recognisable entity. The key attributes of a precinct are its natural and human elements, their distribution and relation to each other, and the history which links them. The grouping should represent a level of significance which is somehow greater than the sum of the parts.

The Heritage Victoria Landscape Assessment Guidelines defines the dry stone wall landscape type as an;

- Organically evolved landscape, developed over time often through incremental changes brought about by patterns of use. Will typically include designed landscape elements. (Vernacular is used to describe places which are ordinary rather than monumental)

The Heritage Victoria Landscape Assessment Guidelines defines the landscape values as applied to the dry stone wall landscape as;

- Aesthetic significance – includes views and vistas, form, layout and groupings of and relations between different elements; scenic beauty.
- Archaeological significance – includes landscapes with post-contact archaeological remains and their relevant setting.
- Historical significance – association of a place with important events, eras or individuals.
- Scientific significance – botanical value and environmental value, geological and geomorphological values are typically thought of as natural values, and would be considered only where an association would also be culturally significant.

Statements of Significance for five dry stone wall precincts are contained in Volume 2 of the study. The five precincts which have citations are: Mount Atkinson, Mount Kororoit, Mount Cottrell, She-Oak Hill, Greigs Road Precinct, Plumpton Road Wall, and Selection Wall, Western Highway.

The following Precinct Landscape Assessments are only for precincts which are proposed for Significant Landscape Overlay controls in the short term. The remaining precincts should be reassessed at a later date.

### 4.7.2. Mount Kororoit Precinct Landscape Assessment

Mount Kororoit dry stone wall precinct is an organically evolved landscape which contains elements of both natural and cultural significance. The landscape is dominated by scientifically significant Mount Kororoit and Kororoit Creek. It contains aesthetically significant views from and to Mount Kororoit, as well as an historically and technically significant collection and arrangement of dry stone walls and farm buildings.

The volcanic Mount Kororoit is of State significance. It is an unusual scoria cone that has formed the basis of geophysical studies for developing models of scoria volcano evolution. The Kororoit Creek is regionally significant and in the reaches near Mount Kororoit, has the oldest river red gums along its whole length. The in-stream vegetation is of State significance in these reaches. The area has been intensively farmed and only small patches of native vegetation remain along the creek valley.

Mount Kororoit can be viewed without interruption from as far away as the Calder Highway and Gisborne Road. The combination of the views of the Mount, the lack of development, the dense collection of very high and technically outstanding dry stone walls and the landscape undulations of creek valley, farmland and volcano creates an outstandingly scenic precinct. The precinct boundaries extend from Holden Road in the north, Ryans Lane to the west, Leakes Road to the east and just past Finchs Road to the south.

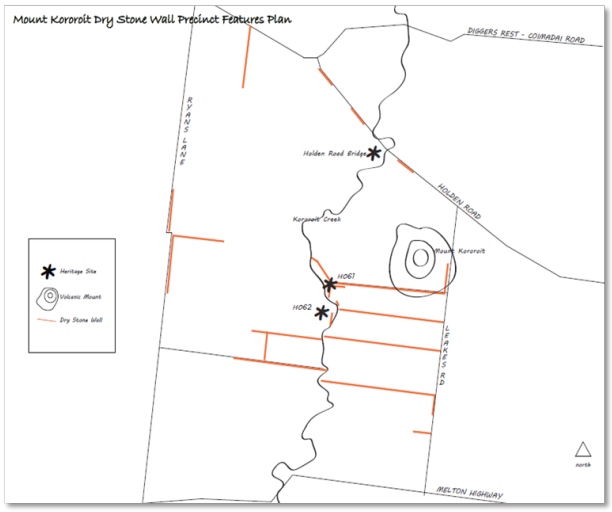
The Mount Kororoit precinct boundary coincides with

the historic land boundaries of the Moylan family. The Moylans first purchased land at Mount Kororoit in 1855 and most walls in the precinct are thought to be built by them. The property was historically significant in Melton's history as were members of the family. The dry stone walls of the precinct illustrate the farming practices of the Moylan family and contrast with the large nineteenth century pastoral holdings around it. The walls demonstrate a mastery of walling techniques and a number of different wall styles in the one concentrated area.

The farmstead, Mount Kororoit and its out-buildings and the bluestone hut on the west side of the creek have been recognised as having historical significance in the Melton Heritage Study as HO61 and HO62.

**Mount Kororoit from Finch's Road, looking north east**

**Figure 2: Mount Kororoit Dry Stone Wall Precinct Features Plan**




**Mount Kororoit from Leakes Road, looking north**

**Wall A272 looking west to Mount Kororoit homestead**

**Wall A274 looking south to Kororoit Creek**

**Wall A275 looking from west side of Kororoit creek to Mount Kororoit**

**Looking across Kororoit Creek to the south-east.**

**Wall A279 on Ryans Lane with Mount Kororoit in the distance**

**Disused bridge near Holden Road, over Kororoit Creek**

### 4.7.3. Mount Cottrell Precinct Landscape Assessment

Mount Cottrell dry stone wall precinct is an organically evolved landscape which contains elements of both natural and cultural significance. The landscape is dominated by Mount Cottrell and its associated volcanic grasslands, contains aesthetically significant views both from and to Mount Cottrell, as well as historically important dry stone walls, land use patterns and archaeologically important nineteenth century farm sites.

The precinct is located around the volcanic mount of Mount Cottrell, between Mt Cottrell and Faulkners Road. Assessed as being of State significance for its unusual structures at the bluff and crater and the extent of radial flows, which produced a very broad lava shield, it is the most massive of the Werribee plains volcanoes and one of the largest shield volcanoes in Victoria.[1]

The precinct boundaries extend from the summit of Mt Cottrell to Greigs Road to the north, Boundary Road to the south, the Werribee River to the West and Downing Street to the East, with deviations. This encloses an area that corresponds roughly with the lava flows of Mount Cottrell and the presence of rare and threatened volcanic grasslands, including large areas of locally, regionally and nationally significant grasslands.[2]

The precinct has various landscape characters. Residential subdivision has occurred on the southern

1 Rosengren, N. 1994 Eruption Points of the Newer Volcanics Province of Victoria, National trust of Aust (vic). P.162

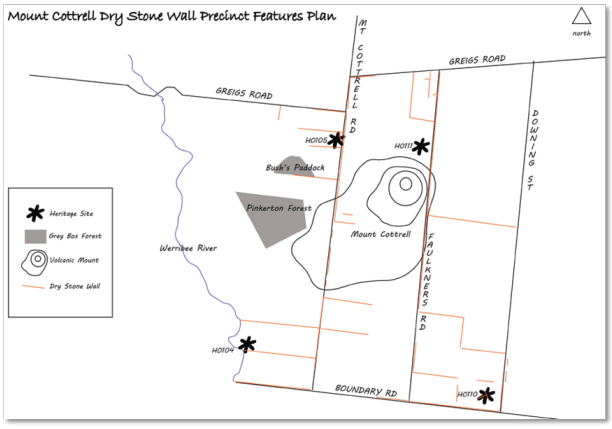
2 Agriculture Victoria Services, 2007 Melton Environmental Atlas, pp.25-31

slopes of Mount Cottrell, between Mt Cottrell Road and Faulkners Road. Further to the south the landscape has retained an open, farming character to Boundary Road and into Wyndham Shire to the south. Between Mount Cottrell and the Werribee River are areas of rare grasslands and Grey-Box bushland at Bush's paddock and Pinkerton Forest. To the north and the east is open farmland and small scale agriculture such as tree-crops. The boundaries of the precinct have been drawn to include the important views of groups of dry stone walls from the high point of Faulkners Road and Mount Cottrell Road and the views from Boundary Road towards Mount Cottrell.

The dry stone walls of the precinct illustrate nineteenth century rural settlement patterns and the contrast between small landholders and the huge pastoral properties to the north and east, which saw the construction of wall F96 by WJT Clarke. The dry stone walls of the precinct demonstrate a number of different construction types and uses for dry stone walls, including dams, wells and sheep-washes. The walls are clustered densely at the base of Mount Cottrell, to the east on Boundary Road and form long north-south arrangements along Mt Cottrell and Faulkners Road.

Specific elements within the precinct have been recognised in the Melton Heritage Study; Kerrs Farm HO110, Moloney's farm site and water reserve HO104, Mt Cottrell road stockyards and ruins HO105 and Mount Cottrell Homestead HO111.

**Figure 3: Mount Cottrell Dry Stone Wall Precinct Features Plan**




**Wall C58 near Greigs Road**

**Probable sheep fold in Bushs paddock at western boundary of precinct**


**Looking east to Mount Cottrell across wall K173 showing volcanic grasslands**

**Wall F181 at southern boundary of precinct, looking north with Mount Cottrell to the left**

**Wall K161 looking east to Mount Cottrell**

**Wall F96 along Faulkners Road looking south from Mount Cottrell**

**View from Mount Cottrell over volcanic grasslands to Melbourne in the east**

**Mount Cottrell Road stockyards**

## 4.8. Data Attributes and Storage

Prior to commencing fieldwork, careful consideration was given to the types of information (attributes) that needed to be recorded for each dry stone structure, and in the design of the field survey forms. Importantly, it was recognised that by collecting field data in a consistent manner and by recording quantitative data where possible, would assist Council staff to use and query the data on completion of the study. Microsoft Excel spreadsheets and Mapinfo GIS were used as the final storage format for all data collected.

Initially, the field survey was designed to record six main categories of data: General Data, Wall Descriptions, Context, Interpretability, Potential Threats, and Other Comments. These fields were reviewed and altered as the field survey progressed [see Section 5]. Numerous of these initial categories were adapted from Gary Vines' 1990 historical and archaeological survey of dry stone walls in Melbourne's Western Region.

### 4.8.1. General Data

- Date of Survey
- Surveyor/s
- Survey Wall Number
- Location:
  - Road
  - Number
  - Which Side of Road [North, South, East, West]
  - Shire's Unique Identifier [for property]
  - Map Co-ordinates or GPS Reference [optional]
- Wall ownership [choose one, if known]:
  - Single
  - Shared [choose one, or both]
  - Whole wall
  - Portions of wall
- Link to other wall
- Access to property required [for known /possible walls]. Yes / No
- Photograph/s Number/s
- [Wall appears on] Historical Maps:
  - 1892 [Yes / No / Unknown]
  - 1916 [Yes / No / Unknown]

### 4.8.2. Wall Description

- Original purpose [choose one, if known]:
  - Road boundary
  - Property boundary
  - Internal paddock
  - Internal stock holding yard
  - Homestead / front wall
  - Dam
  - Causeway / culvert
- Wall Type:
  - All-Stone
  - Standard [double]
  - Mixed [single-double]
  - Galloway
- Composite Stone with Post-and-Wire:
  - Double wall
  - Single wall
  - Mixed single-double wall
  - Foundation only
  - Planted hedge
  - Post-and-Rail [evidence of]
- Length [current - metres]
- Base width [original - estimate - millimetres]
- Height [original - estimate - millimetres]
- A number of ranges of wall heights were adopted which generally coincided with the type of walls in the district:
  - < 300 mm: Foundation and another 1-2 courses, with post-and-wire fence. [Some of these walls were clearly built to this height; others may just be the base of a former stone wall].
  - 300-750 mm: Composite post-and-wire [and occasionally post-and-rail / hedge]; 2-4 wires and barbed top-wire. The smaller ones are often least durable and most disturbed. Many of these 'half' walls were probably built by farmers rather than professionals.
  - 751-1000 mm: Composite construction becomes less common as height increases. Many of these walls were also probably built by farmers rather than professionals.
  - 1001-1300 mm: Usually All-stone, well built, and sturdy appearance.
  - 1300 mm: All-stone walls. Construction techniques

more refined and greater consideration given to 'finish', such as smooth batters, regular coping, plugging.

- Quality of Original Construction:
  - Coarse: poorly built, possibly by farmers rather than professional
  - Traditional / Competent: built professionally
  - Refined: built professionally to best standard, with special attention to finish, such as coping stones, smooth batter [often a garden wall].
- Quality of Repairs [including restoration / reconstruction]:
  - Skilled
  - Unskilled
  - Coarse
- State of Preservation [current]

The following grades (and inclusion/exclusion guidelines) were adopted:

**Excellent**

The wall is effectively intact, i.e. most of its length [c. 80-100%] is to its original condition / height. This category includes walls in which:

- All original construction features are discernable,
- Some coping stones may have been removed,
- There are a few gaps or broken down sections,
- New gates or openings associated with a later subdivision have been added, but where the original wall is substantial [long and / or high], and remains comprehensible and otherwise intact,
- There has been professionally executed restoration or reconstruction with original or 'like' fabric, even if considerable in extent,
- Posts and wires have been reconstructed in modern materials, but without significant disturbance of the original stonework.

**Good**

The wall is substantially intact, i.e. a substantial length [c. 50-80%] is at or close to its original condition/height. This category includes walls in which:

- Stones have been removed or fallen from most of the length of the wall,
- There are substantial collapses and gaps in the original wall,
- There has been reasonably skilled restoration / reconstruction in original or 'like' stone,

Post and wire elements have been reconstructed in modern materials but without significant disturbance of original stonework.

**Fair**

The wall is reasonably intact. That is, a reasonable length [c. 20-50%] is at or close to its original condition / height. This category includes walls in which:

- The height is reasonable over most of its length [although not necessarily at the original height], and the wall is at visible over its entire length [from a distance of c. 10 metres away],
- There has been extensive but indifferent or unskilled restoration / reconstruction, including reconstruction with non-'like' materials. [Repairs will sometimes be evident through differences in stones, or lichen / moss cover], and
- The post and wire has been renewed with significant disturbance of the original stonework.

**Poor**

The wall is minimally intact. That is, little fabric [< c. 20%] remains. This category includes walls in which only relatively short lengths, or foundations only, remain.

- Components [details of original construction]:
  - Coping stones [typical, angled, other]
  - Consistency of wall batter
  - Smoothness of wall facing and stone interlocking
  - Presence of throughstones
  - Presence of plugging
  - Presence of shallow trench foundation

- Stone type [basalt]:
  - Fieldstone
  - Quarried / split
  - Vesicular / scoria
- Stone size [predominantly]:
  - Small
  - Large
  - Medium
  - Varied
- Presence of lichens and or moss

#### 4.8.3. Context

- Adjacent
  - Plantation
  - Self sown wall plantings
- Nearby landforms
  - Eruption point
  - Rocky outcrops or creek banks
  - Abundant fieldstone
- Topography
  - Undulating or Incised
  - Flat
  - Depressions / Swamp nearby
- Land Use
  - Farming / Pastoral
  - Farming [later, intensive]
  - Rural Residential
  - Idle
  - Other
- Visibility
  - High
  - Medium
  - Low
- Cultural Landscape Value
  - Outstanding
  - Notable
  - Some
  - None

#### 4.8.4 Interpretability

- Potential
  - Lay-By: Picture Frame / On-Site Interpretation
  - Heritage Trail / Brochure Interpretation Site
- Installation Issues for Potential Lay-By Site
  - Made Road
  - Traffic [High, Medium, Low]
  - Jurisdiction
    - Melton
    - VicRoads

#### 4.8.5 Potential Threats

- Neglect
- Poor repairs
- Vandalism / theft
- Rabbits
- Unsympathetic new plantings
- Subdivision
- Demolition

## 4.9. Levels of Significance

The level of significance under which individual walls and precincts were considered were determined as follows:

#### 4.9.1 State Significance

Places that meet the Criteria of the Heritage Council of Victoria and the Criteria for the Register of the National Estate. They are considered significant to the State of Victoria, and are to be recommended for inclusion into the Victorian Heritage Register. [This should occur with high priority, that is, within a period not exceeding 12 months].

#### 4.9.2 Local Significance

These places meet the Criteria for the Register of the National Estate as they relate to the cultural heritage of

the Shire of Melton. In assessing places for this threshold they were compared with other places in the Shire. They relate to themes identified within the Melton Heritage Study's Statement of Municipal Significance. They are considered significant to the Shire of Melton and are recommended for inclusion in the Heritage Overlay of the Shire of Melton Planning Scheme. [High priority: 0-12 months].

### 4.9.3 Conservation Desirable

Places listed as Conservation Desirable are considered to be of potential heritage significance at the local level, and contribute to the character of the Study Area. They require further research, and it is recommended that the assessment reports of these places be prepared as soon as possible. [Medium priority: 1-2 years].

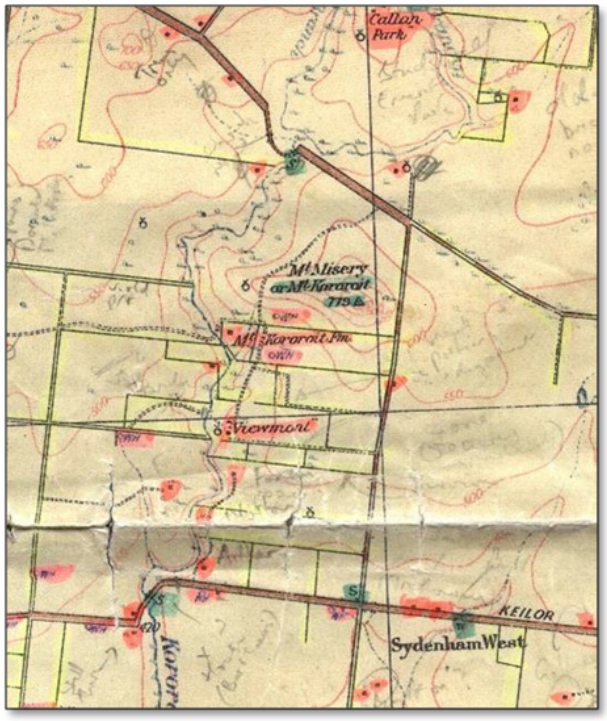
### 4.9.4 Driving Trail Walls

Walls that are included in the Driving Trail should be maintained. Recommendations in this regard are included in Section 9. Similarly, the roadside verges should also be maintained in terms of mowing of grass and removal of litter. Assessment reports [either as individual walls or precincts] should be prepared in the medium term [Low priority: 2-3 years].

### All Other Walls

The conservation of all other walls in the Shire is encouraged by education, training, funding incentives, interpretation etc.

**Figure 4: Historic Map and Photograph**




*Extract from the 1916 Army Ordnance Survey Maps shows dry stone walls in the area around Mount Misery.*

*'This photograph taken around 1925 shows that even before the 1930s Depression dry stone walls in the area were in a state of disrepair. The photo, taken on the Keilor Melton Road shows Jack Tolhurst on the cow with Harold Tolhurst and Mark Cleary'.*

*- Mary Tolhurst 2002*

# 4. Data Collection: Field Survey

## 5.1. Objectives and Scope

A key objective of the Study was to collect critical data that would enable the study team to make recommendations to Council as to which dry stone walls and structures were of sufficient significance to warrant their protection within the Victorian Heritage Register or under the Melton Planning Scheme.

It was clear at the outset that field surveys would principally need to be conducted from public roads, and hence the ability to see long distances would be limited in undulating country where walls would disappear into valleys, making an assessment of their length, as well as their condition and other features difficult. On the other hand, while flat land made visibility of walls stretching into the distance easier, it also meant that there were few elevated locations from which to view the countryside. Therefore data collection for the more inaccessible walls would need to be accumulated by other means such as direct property access, examination of Council's air photographs and by referencing old maps.

Three previous reports which investigated and surveyed dry stone walls were reviewed as to the data collection fields and methodologies that were employed. They provided useful background information in the framing of the initial field survey and data collection process. They were:

- Gary Vines, Melbourne's Living Museum of the West Inc, 'Built to Last: An historical and archaeological survey of Dry Stone Walls in Melbourne's Western Region' [National Estate Grants Program 1990],
- Mayne Wilson and Associates 'West Kiama, A Heritage Assessment of its Dry Stone Walls', prepared for Kiama Municipal Council 1998, and

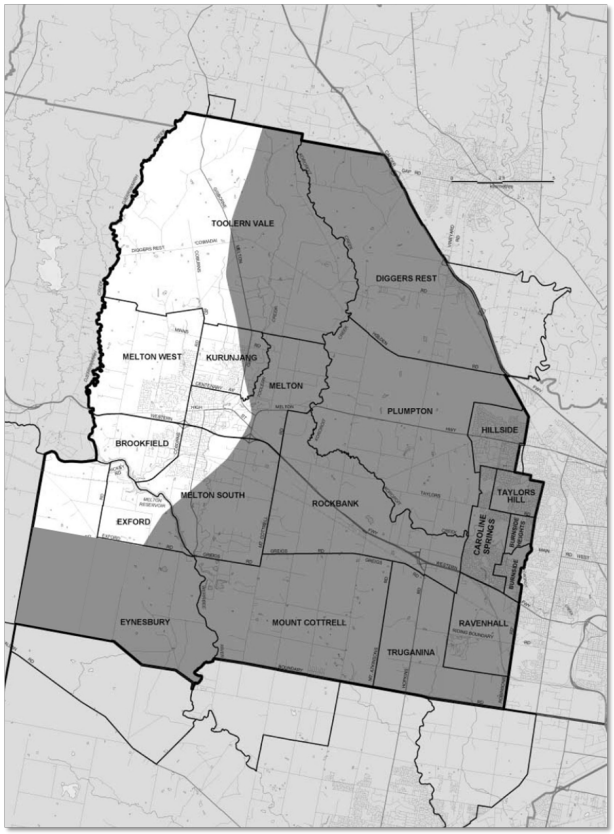
  *'If These Walls Could Talk', Report of the Corangamite Dry Stone Walls Conservation Project, [National Estate Grants Program 1995].*

## 5.2. Scoping the Fieldwork and Supplementary Data

As mentioned previously David Moloney had identified and recorded many of the dry stone walls in the Shire whilst undertaking the Melton Heritage Study Stage One. However, in order to fulfill the requirements of this Study, the task of locating, surveying and photographically recording comprehensive data on dry stone walls and structures throughout the Shire was identified as the principle goal and outcome of the research and data collection process.

Because of the primary research nature of the Study, there was little previous experience from other studies to guide the study team. Thus, the process of data collection and collation went through several refinements and these are discussed briefly below. For more information on the process of fieldwork, the Shire of Melton Planning Department have both samples and archives relating to the fieldwork undertaken.

**Figure 5: Areas of the Shire Where Dry Stone Walls Exist**



At the beginning of the Study the study team set out to gather relevant data for each wall in the Shire. It became evident that there would be four processes for that information:

- Roadside: in-field survey of each wall visible from the road,
- Property access: letters to landholders followed by study team follow-up visit, and or a landholder report on an abridged data collection survey form,
- Use of Council's vertical air photographs, and
- Historic maps, such as the Army Ordinance Map 1916 [Sunbury] and the Shire Map Series 1892.

In addition the study team sourced information from:

- Historic Maps:
- Army Ordnance Map 1916 [Sunbury]
- Shire Map Series 1892
- Existing literature relevant to the field data collection process:
- Heritage Overlay [planning scheme controls] [HO]
- Shire of Melton Heritage Study Stage One [2001-2002] and Stage Two[2006]
- Victorian Heritage Register [VHR]
- Victorian Heritage Inventory [VHI]
- Gary Vines, Melbourne's Living Museum of the West Inc, 'Built to Last: An historical and archaeological survey of Dry Stone Walls in Melbourne's Western Region' [National Estate Grants Program 1990]
- Mayne Wilson and Associates' West Kiama, A Heritage Assessment of its Dry Stone Walls', prepared for Kiama Municipal Council 1998
- 'If These Walls Could Talk', Report of the Corangamite Dry Stone Walls Conservation Project, [National Estate Grants Program 1995].

## 5.3. Determining Data Fields

An initial set of pre-determined 'fields' or 'categories' to describe the attributes of the Shire's dry stone walls was prepared as an initial step in the data collection process, as described in Section 4.7. As the data collection research progressed these 'fields' were modified as and when the need to further revise them dictated. These same nominated fields were also used in both the electronic and hard copy data collection methods, as discussed in detail below. These fields have been further modified in the most recent adaptation of the data fields to the PAD.

As discussed in Section 4., determination of the assessment 'fields' was based on the *Australia ICOMOS Charter for Places of Cultural Significance 1999* [The Burra Charter].

Additional data was collected where deemed relevant to assist with assessing walls and precincts for later inclusion in the community awareness program, in particular the driving trail and its public art component, and as part of the community awareness program.

## 5.4. Survey Rationale and Processes

### 5.4.1 Survey Rationale

The area of the Shire where walls and other dry stone structures were known to exist was divided into two parts; north and south of the Western Highway to facilitate the data collection process. These two parts have different physical characteristics:

- North of the Highway the topography is more undulating and, in its northern parts, more wooded. The pattern of roads and subdivision reflects this topography as well as the pattern of early settlement.
- South of the Highway, the land is quite flat, with the exception of the low Mount Cottrell and the valley of the Werribee River. The pattern of roads and subdivision is orthogonal and regular, reflecting the largely featureless landscape.

In order to test the initial data collection methodology, one area in the north, [Area A] and one in the south, [Area B] were selected as the first areas to be surveyed because of their differing physical characteristics and large numbers of walls.

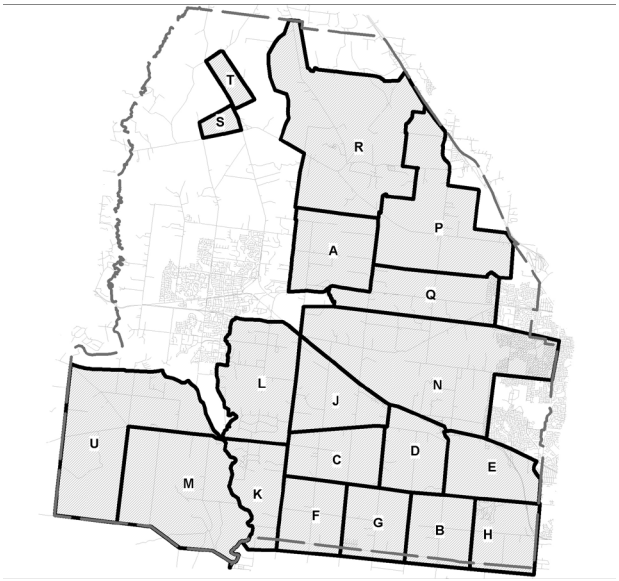
Area A was bounded by Leakes Road [east], Melton Highway [south], Ryans Lane [west] and the unformed Queensbury Way [north]. The former volcanic cone of

Mount Kororoit is in the north-eastern part of this area.

Area B was centred on Hopkins Road and bounded by the unformed Clarkes Road [east], Boundary Road [south], Mount Atkinson Road [west] and Riding Boundary Road [north].

The areas north and south of the Western Highway were then further divided into smaller areas, generally bounded by roads, to make the fieldwork a more structured process, and each of these areas was assigned a letter from C onwards. [e.g. Area C, Area D etc.]

**Figure 6: Field Survey Areas**




### 5.4.2. Determining the Survey Areas and Wall Numbering System

During the preliminary fieldwork of Areas A and B, each wall, as it was surveyed, was assigned a number [e.g. A11, A42, B12, B13].

As the fieldwork progressed, walls were given a unique sequential number to which was added the Area letter as a prefix. Thus each surveyed wall [or other dry stone structure] has a unique number and a prefix letter which assists in identifying its location. [e.g. C81, J202]. The Survey Area letters and the 'notionally selected' boundaries of the Field Survey Areas, have no other significance other than being used to facilitate the fieldwork process.

### 5.4.3. Survey Processes

Data about each wall surveyed was captured and recorded in three ways:

- Information on a field survey form,
- The location and length of the wall on a map, and
- Photographs of each wall.

The fieldwork phase proved to be the most significant and time-consuming aspect of the Study. In an effort to identify efficiencies the study team made many changes to the data collection process. A range of methods was tried, abandoned and modified. In the initial phases the study team trialed several methods of data collection. These included hard copy maps and survey forms and electronic methods by way of GIS and GPS tracking systems using a small screen hand-held Personal Digital Assistant [PDA] to capture the data into the selected fields.

### 5.4.4. The Four Phases of Data Collection and Collation

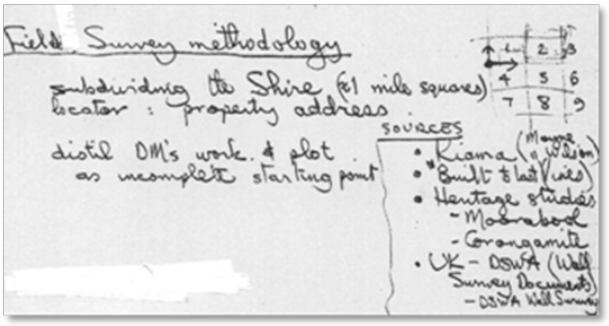
The process of data collection and collation went through several refinements. In principle however the methodologies used to collect the data were undertaken as follows:

- First phase: trials of a data collection methodology using hard copy survey forms and maps in Areas A and B,
- Second phase: field surveys [test areas] using GIS and GPS tracking system,
- Third phase: refined methodology collecting 'all data' for all walls using hard copy survey forms and maps, and
- Fourth phase: further refined methodology collecting 'all data' for all walls determined as in 'Excellent' or 'Good' condition and 'base data' only for walls deemed to be in 'Fair' or 'Poor' condition. This methodology expedited the fieldwork procedure as full information was collected only where this was necessary.

Once the methodology for data collection had been refined to a satisfactory degree the majority of the fieldwork occurred during the third and fourth phases.

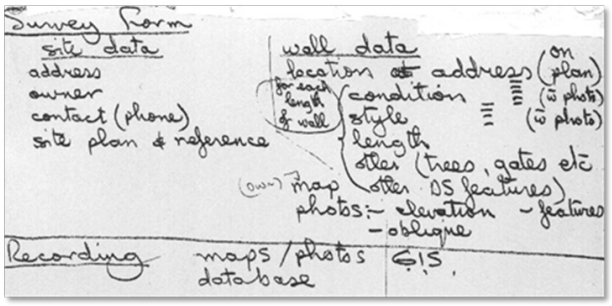
As the fieldwork progressed, so did the sorts of recommendations that were likely to be made regarding individual walls. Therefore as issues arose, the fine tuning of the data collection processes were continuously refined to reflect and accommodate the anticipated findings.

In addition to the statistical data collected, at least two photographs were taken for each wall, and to assist with later analysis, small sketches and or notes were included



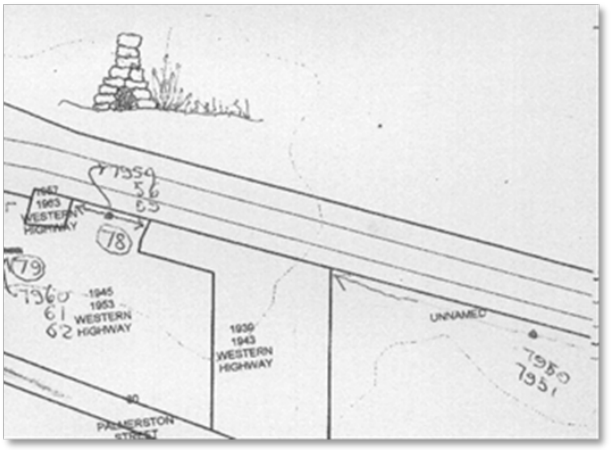

as an adjunct to the plotting of the wall on the hard-copy map. Examples of early notes and sketches are shown below.

Early notes associated with determining the areas for




the first survey trials north and south of the Western Highway and researching the existence of other studies. [First Phase: Trials of Data Collection Methodology using hard copy survey forms and maps in Areas A and B].

*Early notes associated with determining the data fields for the First Phase Field Survey Form.*




*Where relevant, small sketches and or notes were included as an adjunct to the plotting of the wall on the hard-copy map.*

### 5.4.5. Photography

In the first and second phases of the fieldwork photographs were taken using one of four different cameras, both film and digital, this raised issues in setting up a continuous 'numbering system' as 'film' numbers went from 1-36 only and digital photos needed to be downloaded from time to time.

In addition there were lens 'depth of field' limitations with the more modest digital cameras which proved to be somewhat inadequate for the long range photos required to capture the 'on road' wall images. This situation was resolved by the introduction of a single-lens-reflex digital camera [SLR] with a range of zoom lenses.

The photo numbering system was originally set up to accommodate the range of cameras. Initially wall photos were identified by the survey date and the film or digital camera photo number e.g.:

- Date:14 02 03 - Wall A 42, Film photo numbers 412, 413, 414 [Film roll 4: shots 12,13,14]
- Date 17 05 03 – Wall C 59 Digital photo numbers 1214, 1215, 1216.

This photo numbering system was modified when the data was entered into Council's database so that, for example 'wall 264' which was located in Area B was numbered B264, and the four photos taken in the field were numbered B264-1, B264-2, B264-3 and B264-4. This revised numbering system proved to be an effective method for future ease of access to the database and photographs.

### 5.4.6. Interpretive Site

It became evident during the fieldwork phase of the Study that the property at 1520 - 1570 Mount Cottrell Road had unique advantages as a suitable site to meet several of the Study's objectives, in particular:

- As one key highlight of the Driving Trail,
- As the preferred site for workshops to involve local landholders and to demonstrate the construction and preservation of existing walls,
- The dry stone walls and other remaining dry stone structures were considered to best represent the quintessential portrayal of the Shire's early settlement patterns,
- The remaining walls and other remnant dry stone structures, as a group, are of particular local and regional significance. They include:
  - Several road and paddock boundary walls in fair to good condition,
  - Dry stone walls forming stock holding yards,
  - The ruins of a bluestone structure [possibly a rudimentary farmhouse],
  - A dam whose sides are constructed of dry stone retaining walls and which was possibly used as a sheepwash, and
  - Other features including a well and mature vegetation including peppercorn trees and windbreaks of eucalypts.

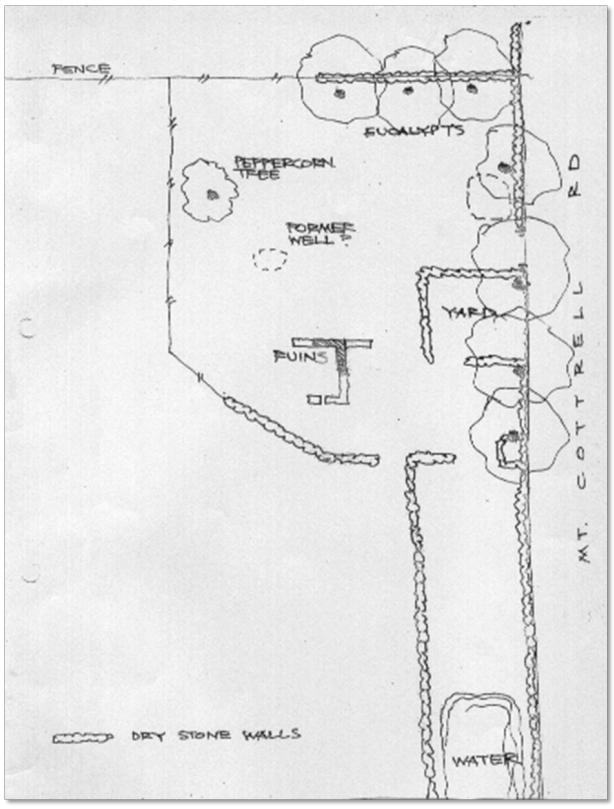
Located on gently sloping land on the western flank of the low Mount Cottrell, a former volcanic cone which rises from the otherwise flat land by some 100 metres, the site also has expansive views to the west and south-west across former farming and bushland towards the valley of the Werribee River.

The dry stone walls and other features occupy an area of about 100 metres by 300 metres, bounded on the east by Mount Cottrell Road. An added bonus is that the dry stone structures are also highly visible, being located close to the easily accessible, relatively quiet Mount Cottrell Road, within 300 metres of Greigs Road which is a major east-west route through the Shire, and about 3 kilometres south of the Western Highway.

The Shire has recognised the significance of the site since at least 1998, when Amendment L34 to the Melton Planning Scheme proposed rezoning the larger portion of the property for extractive industry purposes, and the historical portion of the site as a 'Public Park and Recreation Zone' [its current zoning]. The Amendment provided for a future transfer of the historical portion of the site to public ownership. It specified that the land must not be used for extractive industry unless the following condition was met: 'The historical sheep wash and ruins identified as site 7822H/414 by duCros and Associates must be included in a plan of subdivision as a Municipal Reserve in accordance with this Scheme'.

Additionally the place was identified as a site of historical significance in the Melton Heritage Study Stage One [2002] and was recommended for Heritage Overlay protection in the Planning Scheme in Stage Two of the Melton Heritage study [2006].

**Figure 7: Sketch Plan of Dry Stone Structures at 1520 – 1570 Mount Cottrell Road**



## 5.5. Data Collection Procedures

Discussed below are the methodologies used for primary and secondary data collection and recording, and the reasons why certain methods were trialed, modified, adopted or abandoned.

The Melton Heritage Study Stage One identified the location of many walls in fairly well defined areas of the Shire, generally represented as places where volcanic activity or lava flows had caused rocks to be present on the surface of the ground.

### 5.5.1. Three phases of data collection and refining of data fields

There were four phases of data collection undertaken in the field. Each phase represented a refinement of the fields and the techniques used to capture data.

First Phase:

Field survey was undertaken on hard copy spreadsheets, with cadastral maps at 1:1000 scale, a digital camera and a car with 10 metre calibration on the odometer.

Following the completion of the data collection for the trial Areas A and B, it was evident that the transfer of data into Council's electronic database, the marking up of a map layer on the Geographic Information System [GIS] and the linking of the two was likely to be a time-consuming process and prone to human error in the data entry process.

In cases where a wall was not fully visible from the road, the high-resolution and recent colour aerial photographs, corrected to be cadastrally accurate and co-ordinated with the base maps which are part of the GIS, were used to aid the verification of the location and length of walls.

Second Phase:

As a refinement to the First Phase method of collecting the data, Council's GIS coordinator and the study team determined to trial a hand-held PDAand geographical positioning system [GPS] so that field data could be logged directly into the system while in the field and downloaded onto the network once back in the office. Prior to undertaking the work in the field the PDA was pre-loaded with a blank drop-down menu that contained the full range of data collection 'survey fields' and the map of the area to be surveyed. The PDA was linked to the GPS equipment which allowed the position of the vehicle to be shown on the screen. The location and length of a wall could be then hand drawn onto the map on the screen or directly entered by wireless link from the GPS as the vehicle moved along a road parallel to the wall.

Despite the fact that the data was ultimately to be entered and stored electronically and the manual recording of data onto field sheets and maps appears to have had inefficiencies, the manual process proved to be the more efficient of the two methodologies.

While, in principle, the 'electronic' system appeared to offer time savings both in the field and in the office, for several reasons this proved not to be the case, namely:

- All data entry and mapping occurred onto the small screen of the hand-held PDA, a process that required moving from map screen to data screen and back continuously. Because all was able to be entered by one person only, it in fact increased the time to record the data,
- Entering data was difficult due to vibration and motion of a moving vehicle, some supplementary information, such as presence of trees, other random features, location of photographs, etc. could not be easily entered without undue time delay, due to the necessity of scrolling between various pages on the small screen of the PDA, and the GPS did not function at all times.

The lengthy field survey process and the various refinements to the data collection methods showed the potential benefits as well as the limitations of an electronic recording system. As a result, it is considered that the potential time and accuracy benefits that exist with an electronic system warrant the use of a PDA and GPS equipment in the field.

Once it was resolved to return to a manual data collection process, the study team decided that, in order to minimise the potential for error in data entry onto Council's data base, the spread sheets should be redesigned to mirror the format of the GIS. Relevant amendments were also made to the process of data collection and to some of the data collection fields.

The manual data collection tasks were assigned to two persons as follows:

- Person 1: responsible for all data entry onto field data sheets [including 'wall number' and 'photo numbers']. Data was collected from within the vehicle as far as possible, and by approaching the wall for other information.
- Person 2: locating the wall, marking it on the map, taking photographs, identifying the height, base width and other details of the wall, marking the location and direction of view of photographs, recording other information onto the map regarding the environment of the wall.

During this phase the survey team also determined the relevant data collection fields and trialed collecting the data which would ultimately identify the most appropriate sites for the proposed Driving Trail and public education aspect of the Study.

Third Phase:

The manual data collection methodology described above was applied to the Third Phase of the fieldwork which included the majority of the walls.

The data set used in this Phase comprised the same data collected in the First and Second Phases but in addition included the following attributes:

- side of road of wall,
- whether access onto the property at a later date was required to complete the survey,
- whether the wall was in single or multiple ownership,
- the original purpose of the wall,
- standard of any repairs,
- the extent of each type of condition of the wall, where this varied,
- the presence of lichen or moss on the stones,
- whether adjacent planting was planted or self-sown,
- whether the wall had inherent landscape or educational values,
- whether the abutting road was sealed or gravel,
- whether the abutting road was managed by the Shire or VicRoads,
- the general level of traffic density on the abutting road,
- any evident threats to the wall and
- The level of visibility of the wall.

Fourth Phase: Two Tier Data Collection [the Refined Process]

As the field work progressed it became increasingly evident that some of the information collected about a wall and its setting was of less significance than other walls. Therefore a two-tier data collection process was adopted, in which for walls identified as being in 'Excellent' or 'Good' condition, or with some other distinguishing characteristic of note, all data was collected, whereas statistical and basic data only was collected for walls considered to be in 'Fair' or 'Poor' condition.

Other Data Collection Processes

Fortunately, a large amount of the data collection could be undertaken without the need to enter private properties. However in some cases, the length and, to a lesser extent the condition, of walls could not be fully determined from the road. In these cases it was determined that data would be collected by other techniques such as:

- Landholder participation either by:
  - Property access for the study team surveyors via pre-arranged visits. Access to private property occurred where property owners were on-site at the time of survey and had agreed to the surveyors entering their land
  - Landholder self-survey using an abridged data collection survey form.
- On-property survey using an abridged data collection survey form, by Council's Land Management Officer,
- Air photo interpretation using Council's aerial survey maps, or
- Referencing historical maps such as the Army Ordnance Map 1916 [Sunbury] and Shire Map Series 1892.

The aim was to collect as much information as possible about the more inaccessible off-road walls and structures

and the study team, Council's GIS co-ordinator and the Study's liaison officer worked collaboratively to:

- Identify and list the properties which needed to be accessed. This was facilitated by Council via the Rates database, and approach relevant owners via means of an initial 'Agreement to Participate' questionnaire mail out. [This resulted in a favourable response from approximately twenty respondents].
- Contact and follow-up with those landowners who were agreeable to on-property access. A mutually agreeable time was set up to meet on site.

As part of the of the 'Agreement to Participate' Questionnaire, those landowners who were not agreeable to 'on-property access' by the study team surveyors were given the option of undertaking the survey and photography themselves. Three landowners chose this option.

A further means to obtain data by on-property survey was the assistance of Council's Land Management Officer who was familiar with the Council properties on which there were dry stone walls. This assistance arose from a presentation the study team made to key Council staff and Management regarding the current situation and the findings and issues that were still to be resolved. A key factor among these was access to information about walls that were inaccessible to the study team from the on-road survey methodology. Council's Land Management Officer was among those who attended and as a result offered to collect basic information which proved to be an extremely valuable contribution.

## 5.6. Data Collection Fields

Table 1: Data Collection Fields summarises the extent of data collected in each of the four phases of the field work. In the first, second and third phases all data was collected as indicated with an asterisk in the relevant columns. To expedite the process, in the fourth phase, only Tier 1 data [indicated in the Table by T1] was collected for all walls, and more detailed Tier 2 data [indicated in the Table by T2] was collected only for walls in 'Excellent' or 'Good' condition.

**Table 1: Data Collection Fields**

| Data Collection Fields | 1st Phase [Test Areas A&B] | 2nd Phase [PDA & GPS trial] | 3rd Phase | 4th Phase [Two Tier System] |
|---|---|---|---|---|
| Administrative: | | | | |
| Property address | * | * | * | T1 |
| Date of survey | * | * | * | T1 |
| Surveyor name | * | * | * | T1 |
| Wall identification number | * | * | * | T1 |
| Photo numbers | * | * | * | T1 |
| Wall details: | | | | |
| Stone type | * | * | * | T1 |
| Stone size | * | * | * | T1 |
| Original height of wall | * | * | * | T1 |
| Base width | * | * | * | T1 |
| Details of throughstones | * | * | * | T1 |
| Details of copestones | * | * | * | T1 |
| Construction technique | * | * | * | T1 |
| Condition of wall [variable and graded as either 'Excellent' 'Good' 'Fair' 'Poor'] | * | * | * | T1 |
| Type: if wall was Composite [i.e. with built-in posts and rails or wire] | * | * | * | T1 |
| Presence and species of Plantation | * | * | * | T1 |
| Other features or associated planting | * | * | * | T2 |
| Environment: | | | | |
| Topography of site and context | * | * | * | T2 |
| Vegetation of site and context | * | * | * | T2 |
| Landscape and natural features of the site and context | * | * | * | T2 |
| Land use | * | * | * | T1 |
| Date of construction [or estimate] | * | * | * | T1 |
| Other comments | * | * | * | T1 |
| Photographs: | | | | |
| Technical construction and stone size and type details | * | * | * | T1 |
| Parts of long walls | * | * | * | T1 |
| Elevation | * | * | * | T1 |
| Landscape vista | * | * | * | T1 |
| Other particular features | * | * | * | T1 |
| | * | * | * | T1 |

| Data Collection Fields | 1st Phase [Test Areas A&B] | 2nd Phase [PDA & GPS trial] | 3rd Phase | 4th Phase [Two Tier System] |
|---|---|---|---|---|
| Mapping: | | | | |
| Length and location marked onto map | * | * | * | T1 |
| Additional Data: | | | | |
| Wall: | | | | |
| Side of road of wall | | | * | T1 |
| Single or multiple ownership | | | * | T1 |
| Original purpose | | | * | T1 |
| Standard of any repairs | | | * | T2 |
| Extent of each type of condition of the wall where this varies | | | * | T2 |
| Presence of lichen or moss | | | * | T2 |
| Adjacent planting, planted or self-sown | | | * | T2 |
| Inherent landscape or educational values | | | | |
| Evident threats | | | * | T2 |
| Level of visibility | | | * | T1 |
| Abutting road: | | | | |
| Whether it was sealed or gravel | | | * | T2 |
| Management: Shire or VicRoads? | | | * | T2 |
| General level of traffic density | | | * | T2 |
| Property: | | | | |
| On property survey required? | | | * | T1 |

## 5.7. Database, Photographs and Mapping

The fieldwork process resulted in collecting information and photographs on approximately 300 walls and other dry stone structures. All data is stored in Mapinfo GIS format.

The latest phase of the project has seen Council's GIS staff build a relational database which enables users of the data collected in the study to perform queries to extract required information and generate reports in Microsoft excel. These reports can be readily modified to requirements. The Heritage Advisory Service is the custodian of the data collected and is working to constantly refine and design a more user friendly database and reporting tool. The use of a PAD and GPS in the field will greatly assist the process of adding new walls and updating the existing data.

## 5.8. Dry Stone Structures not Surveyed

Most of the dry stone walls that are visible along or from public roads have been identified and surveyed as part of this Study. Drawing on local knowledge, Council staff, air photo interpretation, historical maps, extensive fieldwork, and contact with property owners, most of the walls deeper within private properties that are not visible from roads have also been identified and surveyed. However, there are some walls and other dry stone structures that exist in the Shire which have not been surveyed as part of this Study.

As discussed in Section 10, any additional walls that are located in the future should be recorded according to the field data sheets and survey methodology and added to the database. This task should be undertaken to the same degree of completeness as occurred during the Study to ensure quality control of the new data, and should be managed by an appropriate staff member, preferably a strategic planner who has been trained to undertake the fieldwork and who can also liaise with Council's GIS Co-ordinator regarding maintaining the data in an up-to-date manner.

## 5.9. Community Awareness and Education

At the time of the submitting the funding application to DSE, Council's Tourism and Leisure Services Department had developed a 'New Initiatives Program' which focused on raising awareness among the broader community of the:

- Importance of dry stone walls as a vehicle for understanding and interpreting the patterns of 'early settlement' within the Shire,
- Importance of the cultural and social history of the municipal landscape, and
- Importance of preserving and maintaining the Shire's walls and the craft of dry stone walling for future generations.

As set out in Table 1, the Data Collection Field: Environment: Other Comments enabled the initial collection of data from which to extrapolate information with regards to:

- The development of a Driving Trail,
- The installation of Public Art,
- The installation Interpretative Signage, and
- Providing the community with information via brochures and electronic means such as Council's Website.

When gathering this particular set of data the study team surveyors developed a 'High', 'Medium' and 'Low' ranking methodology that covered the topics of Heritage Importance, Interpretation, Landscape Vista, Public Art Site, Driving Trail Site and Educative Profile.

In the final outcome of the Community Awareness components of the Study, this data was ultimately further modified by the findings by the historian David Moloney and the practical aspects associated with the implementation of the Capital Works.

# 6. Data Analysis

## 6.1. The Spreadsheet

At the conclusion of the fieldwork, a spreadsheet with 60 fields and more than 300 different dry stone walls and structures was available for analysis. The spreadsheet included a number of key fields such as wall type, height, condition, length which could be interrogated to provide a profile of the walls in the Shire, including the most outstanding examples, and candidates for the most representative examples of particular wall types. Other fields such as historical associations, visual access, and presence of coping, could also be used to identify other typical examples, or to further differentiate representative examples.

At the conclusion of the interrogation of the spreadsheet the following analysis emerged regarding dry stone walls and structures.

## 6.2. Wall Types

Ten types of walls were identified in the Shire, although four types were numerically insignificant. See Figure 9: Description and Drawings of Examples of Walls in Melton Shire. While as many variations of walls as possible were allowed for and recorded, the field survey indicated that there are two main types of walls in the Shire.

**Composite Walls**

These are by far the most numerous type of walls in the Shire. Most appear to have been purpose-built combinations of a low dry stone wall [with the usual double-wall and other features indicative of standard construction] combined with a top of a different fence type. Usually this top is post-and-wire [from 2 - 4 strands, plus top-wire], although there are still quite a few remnants of post-and-rail and stone fences remaining [all except one of which are now without rails].

Some posts in these 'half walls' appear to be very old, but it could be expected that all [or most] would have been replaced. Some have remnants of the old thick 'black wire', usually no longer functional. It is possible that a few were originally all-stone walls that were altered as they began to break-down through lack of maintenance. Nearly all have had posts and wires renewed, and drop posts and new steel star posts are common. Sometimes this has necessitated disturbance of the wall, probably associated with new post spacings. Often the new posts appear to have disturbed the structure only minimally; these are probably replacements of original posts.

Height of the stone component of these walls varies from nearly one metre to just one or two courses of small stone. There are quite a few examples of these very low walls that have been well built, to traditional foundation dimensions, and with a coping course. Some were apparently built to stop sheep crawling under the fence. Some had rabbit netting incorporated above them.

There are many walls that have hedges along them, but it is presumed that most of these were self-sown, from bird droppings, or seed build up on the windward sides. It is likely that some of these are the remnants of hedges that were originally purposefully sown.

**All-Stone Walls**

These are the highest and most visually impressive walls. They are generally the best examples of the craft of dry stone walling in terms of their uniformity, cohesiveness and length. Most examples that survive today in reasonable condition were probably professionally-built.

In the Melton Shire typical features include double-walling, consistent base width, and smooth face batter; straight alignment; [usually] large stones at or towards base; [often] a coping course; and [less common] a shallow trench. Through-stones are relatively uncommon in Melton Shire, probably due to the round shape of most stones, which are not suitable for this purpose. Similarly, closely interlocked wall faces are not common in Melton, although plugging of face interstices has often been used to compensate for this in terms of stability and appearance; however where it was used plugging has usually fallen loose from walls, a result of the quantity of round and smooth stone in the Shire, and lack of maintenance.

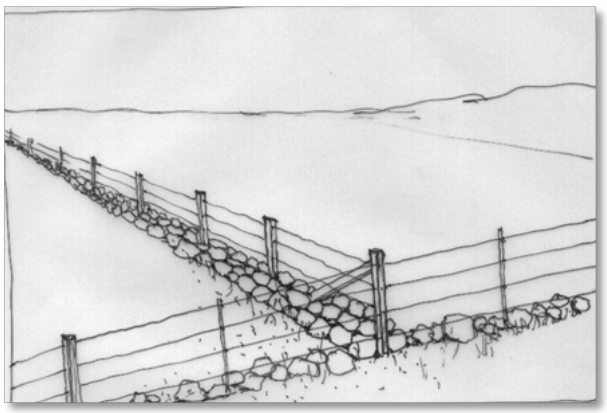
A few single all-stone walls were also identified. A unique [in the Shire] variation of singling occurs on the Moylan family's 'Mount Kororoit Farm' property, which, in addition to some conventional walling of various types, has a number of walls that are double [at the bottom] and single [at the top] walling. All of these double / single walls have the small stones on the bottom and larger stones on the top, surmounted by cope stones.

Some have a middle course of huge stones.

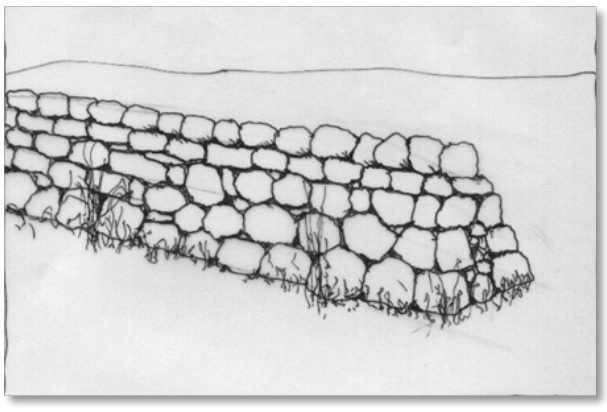
Another variation of these double / single walls on the Moylan property are walls whose single upper course has an open latticed elevation, without coping, in the manner of what are usually described as 'Galloway' walls [after the region in south-west Scotland where they are popular], but which were also used on the west coast of Ireland. These walls are generally in poorer condition.

The six main types of walls, and the percentages of each, are shown on the following pie chart. Note: In the text and Tables below the symbol < represents 'less than' and the symbol > represents 'greater than'.

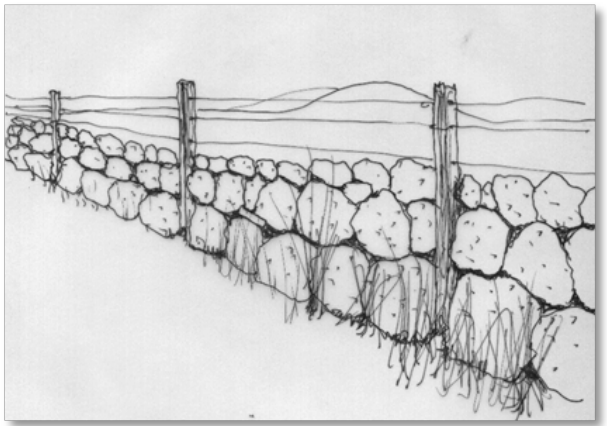
**Figure 8: Description and Drawings of Examples of Walls in Melton Shire**



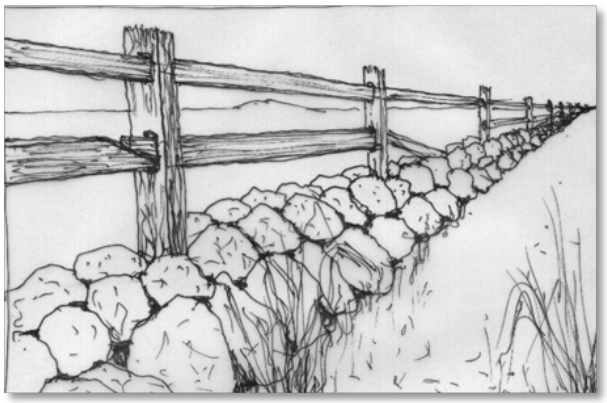
Wall Type: Post and Wire Double
Construction: Composite



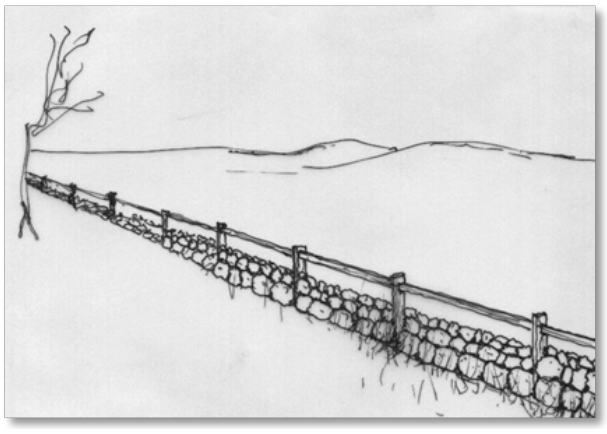
Wall Type: All Stone Double
Construction: Conventional (all stone)



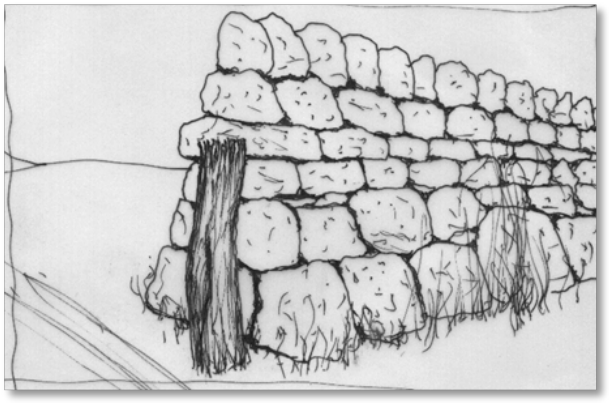
Wall Type: Post and Wire Single
Construction: Composite



Wall Type: Post and Rail Double
Construction: Conventional (all stone)

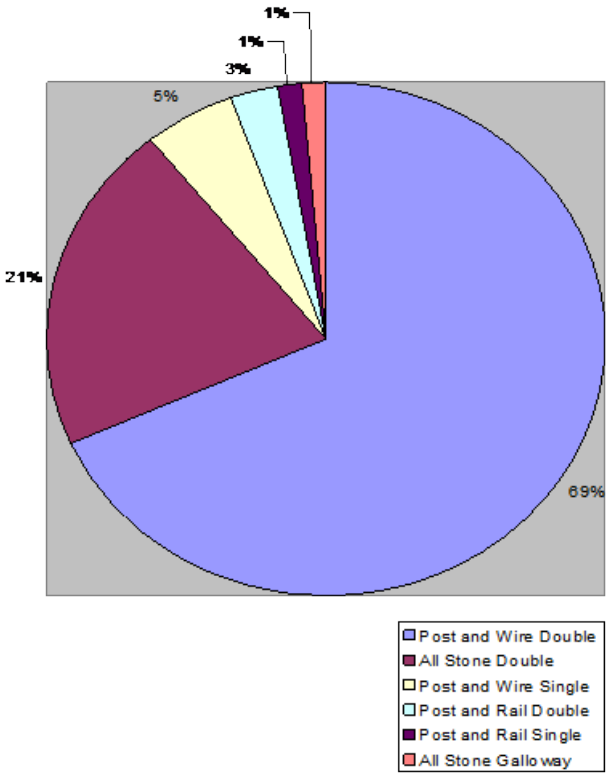


Wall Type: Post and Wire Single
Construction: Composite



Wall Type: All Stone Galloway
Construction: Composite

**Wall Type**




From this pie chart it is evident that by far the most numerous type of wall [69% of the total] is the 'Post-and-Wire Double'. This is a 'composite' wall, having a conventional double wall base with post-and-wire above.

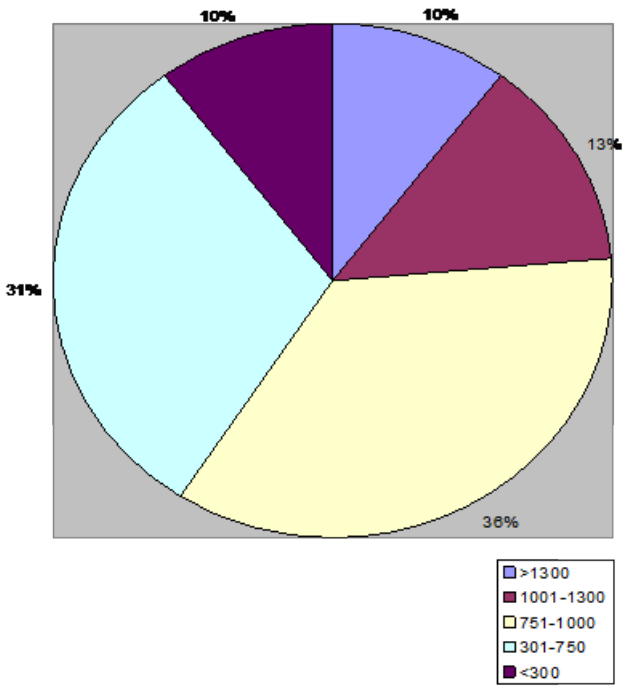
The next most numerous type of wall [21%] is the 'All-Stone Double', being a conventional double wall structure without post-and-wire.

The remaining 10 percent of walls comprise 'Post-and-Wire Single' [a composite wall with a single course of stones]; 'Post-and-Rail Double' [a composite wall with remnant posts, usually accommodating two rails, which were missing in all but one example]; 'Post-and-Rail Single'; and 'All-Stone Galloway'. This last type of wall is a variation of what is usually known as a Galloway Wall; it usually comprises a double lower wall, and a single upper wall, sometimes with spaces in between in the more characteristic 'crochet' form of this type.

## 6.3. Height of Walls

Five ranges of wall heights were identified as the most suitable prior to the Study, and used as the basis for field survey data collection. The heights [in millimetres] and the percentage of walls of each height are shown in the following chart.

**Height**



The vast majority of walls [67%] are in lower-mid range of height, between 301 and 750 mm, and between 751 and 1000 mm. Although no comparable data is available, it would appear that while such lower walls exist in other parts of Victoria, this is a distinctive and characteristic feature of the walls in the Shire of Melton. It certainly contrasts with the celebrated precincts of high walls in several parts of the Western District.

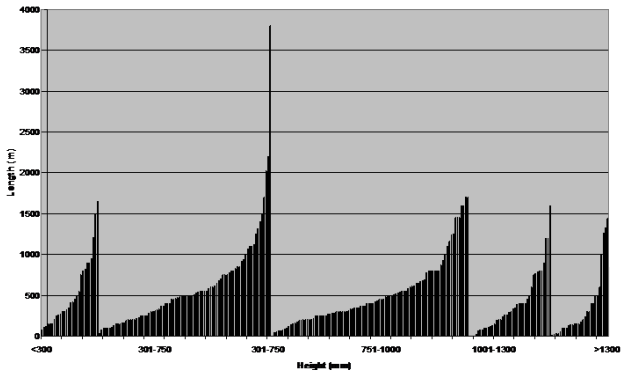
However 23 percent of the remaining walls are of quite significant height, between 1001 and 1300 mm, and over 1300 mm. Many do not appear remarkable upon first observation, due to being shrouded by long grass, or having a few missing coping stones which provide a poor impression from a side view [in contrast the view from the top of the walls almost always provides the impression of a perfectly straight and substantially intact wall].

Another 10 percent of the walls are very low, below 300 mm, with post-and-wire above. This is an interesting group. Most have solidly-built conventional double wall bases, with only one or two courses, sometimes with neat coping, suggesting that this is the form of their original construction. There is some local anecdotal evidence that these were in fact deliberately built in this way to prevent certain breeds of sheep from crawling under the wire. On the other hand it is likely that are the remnants of an original higher wall reduced when a new post-and-wire fence was added at a later time. A few are clearly built of stones cleared from the paddocks being added to the base of an existing post-and-wire fence [this is particularly evident when the mortise in a former post-and-rail fence is partially obscured].

## 6.4. Length and Height

The following chart shows the length of walls in each height range.

**Length vs Height**

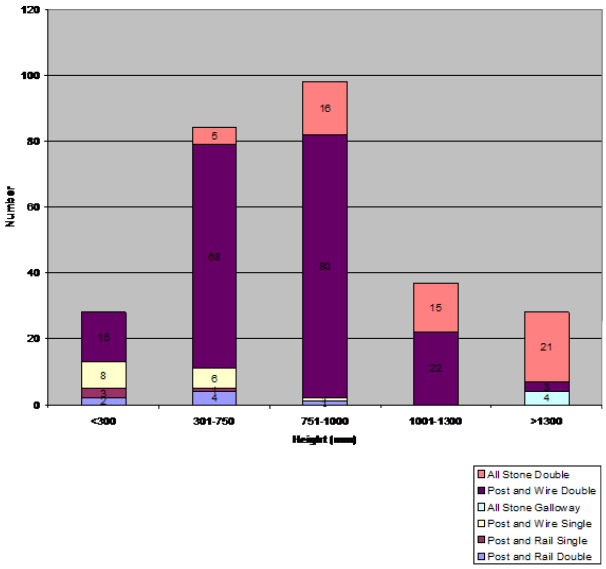



The bottom axis indicates the number of walls in each height range. With the exception of the notable exception of one exceptionally long wall on Blackhills Road [Wall No. R248] the distribution of lengths is remarkably uniform for every height range. The longest wall in each height range is approximately 1500 metres. The profile of the other walls in the two most numerous height ranges [301 – 750 mm, 751 – 1000 mm] is very similar. The lowest range [< 300 mm] and the two highest ranges [1001 – 1300 mm, and > 1300 mm] have steeper profiles, indicating a higher proportion of longer walls.

## 6.5. Wall Type by Height

The following chart shows the number of walls of different heights, and the distribution of wall types within these heights.

**Wall Type vs Height**




While 'All-Stone Double' walls are distributed across all but the lowest walls, it is noticeable that they increase as a proportion of walls as they become higher. It is particularly noticeable that the highest category of walls [> 1300 mm] is comprised predominantly of 'All-Stone Double' walls. All stone walls are generally the highest walls in the Shire.

'Post-and-Wire Double' walls form by far the largest proportion of the most numerous types of walls in the Shire, those that are between 301 mm and 1000 mm high.

Unsurprisingly, single walls ['Post-and-Wire Single'] are the lowest walls. Similarly 'Post-and-Rail' single and double walls are also low [almost all remnants of these fences had two rather than one rails above a stone base].

Walls have a number made up of a letter which indicates which survey Area the wall is located in and a number which is unique to that wall. (in general, the number indicates the sequence in which walls were surveyed during the fieldwork, but are of no specific significance).

## 6.6. Condition of the Walls

An analysis of walls surveyed, indicates that their Condition ['State of Preservation'] as recorded during survey in 2006 shows the following:

| Condition | Percentage of all Walls |
|---|---|
| 'Excellent' | 7.5 |
| 'Good' | 32.1 |
| 'Fair' | 41.6 |
| 'Poor' | 18.8 |

It is notable that approximately 40 percent of walls are in either 'Excellent' or 'Good' condition, and 60 percent in 'Fair' or 'Poor' condition. As many of the surveyed walls are old and the level of maintenance is evidently low, these percentages are likely to alter over time with deterioration and lack of regular attention as to their condition, so that the percentage of walls in excellent or good condition will reduce.

The 'All-Stone Double' walls comprise nearly half of the 'Excellent' walls and are in the best condition of all the walls.

An analysis of walls sorted by Condition according to Height shows the following:

| Height (millimeters) | Percentage of all Walls in 'Excellent' and 'Good' Condition |
|---|---|
| > 1300 | 82 |
| 1001 - 1300 | 56 |
| 751 - 1000 | 40 |
| 301 - 750 | 26 |
| < 300 | 10 |

It is evident that the Condition of the walls deteriorates as the height decreases and that he most substantial [highest] walls are in the best Condition.

The middle categories of walls [751 – 1000 mm, and 301 – 750 mm in height], which are by far the most numerous [and therefore representative] type of walls in the Shire, have only a minority of walls in 'Excellent' and 'Good' condition. Most of these walls tend to have collapsed, or spread at the base, through lack of maintenance. It is also likely that a much higher percentage of these lower walls were built by non-professionals, mostly farmers, and were therefore less well constructed than the higher walls, most if not all of which would have been built by professionals.

These figures demonstrate why the best surviving examples of the most numerous types of walls [751 – 1000 mm, and 301 – 750 mm in height] are in relatively poor condition. While less than pristine, these walls are clearly the most representative of the walls in the Shire, and it is important that the best available examples are preserved.

# 7. Preserving Dry Stone Structures through Community Awareness and Education

## 7.1. Actions Implemented During the Study

In the Shire of Melton there are about ten different styles of dry stone walls which represent the varying skills of the waller, the type and size of stone available and in some instances, such as the Clarke properties, the wealth of the landowner who was able to employ highly skilled artisan wallers. Unlike other most other places in Victoria the variety of wall styles in Melton include the recognisable composite timber and stone or timber, wire and stone fencing types, 'All-Stone Walls' which were constructed with either with single or double rows of stones at the base and the more unusual walls near Mount Kororoit built with the largest stones on the top.

One of the issues that confronted Council in seeking funds to undertake this Study was reports from farmers of theft of stones from their walls for the development of domestic gardens. Although this was possibly due to community ignorance, it did however point to the fact that the success of the Community Awareness and education aspect of the Study was critical to the ongoing awareness, education and custodianship of the Shire's walls by the local community.

High on the public profile aspect of this study [at a time when Council was reviewing its tourism branding in a growing municipality] was the study team's and Council's intent to ensure a raised community awareness of the cultural and historical significance of the Shire's dry stone walls.

Another important aspect was the Department of Sustainability and Environment's funding criteria which focused on ensuring the Study outcomes would result in strategies that engender an ongoing sense of community awareness and 'Pride of Place'.

The following actions were implemented during the course of the Study, and are part of a larger suite of recommendations aimed at achieving these strategies and outcomes:

- Driving Trail: development of a dry stone walls Driving Trail which takes the tourist past some of the most historically important and visually appealing dry stone walls and precincts in the municipality,
- Sculpture: installation of a dry stone wall sculpture, Volcanic Genesis at the 'The Willows' Historic Park in Melton township, a well known community landmark and gathering place,
- Interpretive Signage: installation of a 'three panel' interpretative sign to mark the starting point of the Driving Trail at the 'The Willows' Historic Park,
- Workshop: conduct of a workshop in the dry stone craft for local landholders and paying participants at the Mt Cottrell Road site. This site is considered to best represent the quintessential portrayal of the Shire's early settlement patterns and the hard and labour-intensive tasks faced by early settlers in clearing the land, and
- Website: inclusion of relevant information, images and other data about this study and dry stone walls in general on a dedicated section of Council's website.

These five actions are discussed in detail in Sections 7.2-7.6

## 7.2. Driving Trail

The original scope of work for this Study included a proposal to develop a Driving Trail to take visitors to sites at which examples of the Shire's dry stone walls could be seen. The Trail was envisaged to include a number of roadside lay-bys identified by large rectangular frames which would focus the viewer's attention on a particular wall or landscape. Due to perceived safety issues with traffic on busy roads, the cost of constructing and maintaining the lay-bys and picture frames, and the experience of landowners elsewhere of damage to walls at such viewing points, it was agreed to review this proposal. Instead Council chose to concentrate on one site as the key public profile location for community information about the Driving Trail, namely 'The Willows' Historic Park, which became the site for dry stone sculpture 'Volcanic Genesis' and the interpretative signage which provided information about dry stone walls in the Shire and about the Driving Trail.

The Driving Trail can be travelled in two parts; north and south of the Western Highway and takes about 1.5 hours to complete, with a total distance of approximately 90 kilometres. It takes the visitor past eight sign-posted

sites where some of the best examples of Dry Stone Walls in the Shire can be observed. Along the way, visitors also pass many other walls and dry stone structures including some interesting examples of other uses for dry stone construction, including a dam wall, sheep dip and yards.

The Trail starts at 'The Willows' then goes north and into Toolern Vale, past the rocky outcrops of the former volcano of Mount Kororoit and allows the visitor to take in two of the longest walls in the Shire, the greatest of which extends for 3.8 kilometres along Blackhill Road. At its most southern edge, the Trail runs along the boundary between the Melton Shire and the City of Wyndham, an area rich in dry stone walls, including many examples of double stone walls.

## 7.3. Sculpture at 'The Willows' Historic Park

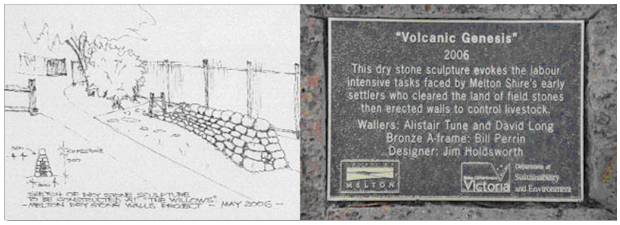
The original scope of the Study included, as part of the original Public Profile, the installation of a series of Picture Frames and lay-by stopover points as area markers for the Driving Trail. This proved to be impracticable, and the alternative, of constructing a dry stone sculpture as the focal and talking point for the start of the Driving Trail, was adopted.

The sculpture 'Volcanic Genesis' [Figure 7] was designed by Jim Holdsworth. It is an example of an 'All-Stone Double' wall in its various stages of development, placed in a setting of local pasture grasses. Its aim is to evoke the hard and labour-intensive task that was faced by early settlers in clearing the land of field stones and using them to build walls around paddocks or farms in order to make the volcanic plains of the Melton area productive for grazing livestock or growing crops.

'Volcanic Genesis' was constructed in July 2006 by two of Victoria's eminent dry stone wallers, David Long and Alistair Tune. The artwork includes a bronze A-frame which is modeled on the typical timber frames used by traditional wallers in the construction process and which would remain in place until each section of wall was completed. The A-frame was cast by renowned sculptor Bill Perrin of Melbourne and represents one of two A-frames which would be normally be placed at either end of a wall to ensure it was constructed straight and true. The stones for the sculpture were sourced form farmland several kilometres west of Melton township.

The Sculpture Volcanic Genesis at 'The Willows' Historic Park is the work of wallers Alistair Tune and David Long and sculptor Bill Perrin. The rear of the signage that marks the start of the Dry Stone Walls Driving Trail can be seen the background of the photograph above. The drawing below is by the sculpture's designer Jim Holdsworth. The plaque that commemorates the funding bodies, the installation of the sculpture, the artists and the designer is situated in the associated landscaping on a large rock adjacent to the sculpture.

**Figure 9: Volcanic Genesis**




## 7.4. Interpretative Signage at 'The Willows' Historic Park

Three narrative panels were installed at 'The Willows' Historic Park to mark the starting point of the Driving Trail:

- Panel 1: Dry stone walls - History and Heritage: describes why dry stone walls were constructed, outlines the history of the ancient craft and discusses the geology and history of Melton and its landscape.
- Panel 2: Dry stone walls – Construction and Endurance: outlines the methods of constructing dry stone walls. It discusses the range of styles which represent the varying skills of the waller,

the type and size of stone available and in some instances the wealth of the landowner who was able to employ highly skilled artisan wallers. The variety of recognisable wall styles in Melton, such as composite timber and stone or timber, wire and stone fencing types are indicated by line drawings.

- Panel 3: Stone Walls Driving Trail: provides a map of the route and outlines the eight key areas of the Driving Trail as discussed above in 7.2.

*The photograph above shows the three Interpretative Panels that mark the starting point of the Driving Trail. The narrative includes a history of the Melton area and its dry stone walls' heritage, a map of the Driving Trail with information about the specific Areas of Interest and information about where to obtain the Driving Trail Brochure. They are sited in a prominent position at 'The Willows' close to the Sculpture 'Volcanic Genesis'.*

**Figure 10: Interpretative Signage At 'The Willows'**

## 7.5. Workshop in the Craft of Dry Stone Walling

The aim of the workshop was to educate local landowners on how to maintain their walls and to set in place a possible model for future workshop participation and restoration of walls in the longer term. Both the above-mentioned Driving Trail and the workshops in the dry stone craft were considered integral elements of the community awareness and education aspect of the Study.

When it came to determining the site for the workshop the property at 1520 - 1570 Mount Cottrell Road was considered as the key site in the Shire and the most appropriate for the activity, in particular because of its significant historical importance, its high visibility and cluster of unique dry stone structures within close proximity of passing traffic.

In June 2006 qualified wallers Alistair Tune and David Long conducted a two day practical dry stone walling workshop at the site where a remnant section of wall was reconstructed. The workshop was attended by nine people, comprising local farmers and some paying clients.

The invitation to participate was promoted in the local media and was included in the original questionnaire that was mailed to Council's 'dry stone' landholders via a list supplied by Council's Rates Department. The paying participants who attended did so as a result of promotion by the Dry Stone Walls Association of Australia. On the Friday evening prior to the workshop weekend the participants attended a welcome and video introductory session which also included a Council-endorsed Health and Safety regulations and sign off. Participants were also given a handout on how to construct a dry stone wall which was produced by the Dry Stone Walls Association of Australia with significant excerpts courtesy of the Dry Stone Walling Association of Great Britain.

## 7.6. Community Awareness: Website

An important aspect of the Study was to develop strategies and outcomes that engender an ongoing sense of community awareness and 'Pride of Place'. Initially it was proposed to:

- Install a community access computer in the Melton Visitor Information Centre, and
- Produce a CD-Rom which would include Council's website information and comprehensive details about the Driving Trail and other relevant historical background together with imagery and interviews with local people including children.

As the Study progressed however, it became increasingly evident that the average adult's and child's access to the advances in technology had also progressed to a point where it was more practical to focus on reaching a much wider audience through direct internet website access. Midway through the Study, the study team in consultation with Council reviewed the original proposal and Council elected to concentrate the funding resources towards preparing the dry stone history narrative and other material, photographs and maps for inclusion on their website.

Up to this point the study team had initially worked with both Council's GIS Officer and Community Arts Officer to identify Council's 'end product' needs regarding the Information Technology Department's 'www' administration frameworks, limitations and requirements. The final negotiations of the website development were conducted with an outsourced consultant employed by Council.

- Access to the Dry Stone Wall pages on Council's website is via the Tourism and Leisure Menu Tab. [Sub menu - Arts and Culture].

# 8. Recommendations: Statutory Protection

## 8.1. Recommendations

Statements of significance were written for five precincts and two individual walls. These statements provide strategic justification for the protection of the walls within each precinct. Although only 2 precincts are proposed for landscape protection in the short term- Mount Cottrell and Mount Kororoit, the individual walls within the other three precincts- Mount Atkinson, She-Oak Hill and Greigs Road precinct are included in the list for proposed individual Heritage Overlay controls.

In summary:

*One precinct Mount Kororoit, has been assessed as being of State significance and recommended for inclusion on the Victorian Heritage Register.*

*Mount Kororoit precinct and Mount Cottrell precinct, have been recommended to be included on the Significant Landscape Overlay.*

*138 walls have been recommended for inclusion on the Shire of Melton Planning Scheme Heritage Overlay (Table 2). Five of these walls are partially included on the Heritage Overlay already, as part of other heritage sites identified in the Melton Heritage Study. Two walls, P200 and N224 are not within a precinct, but have individual statements of significance and will be included on the Heritage Overlay.*

*Many walls in the Shire have already been included on the Heritage Overlay as a result of Amendment C71. Some of these sites and walls will be included within the Significant Landscape Overlay. As a result, many walls assessed as being of significance in the Shire, will have two Overlays.*

*18 additional walls (Table 3) which do not fall within the five dry stone wall precincts are recommended for further research and possible inclusion on the Heritage Overlay in the future.*

*It is recommended that the extent of the overlay to all dry stone walls also apply to an area 5 metres either side of the wall. Views of a wall from the road are important and land which affects these should be included as part of the overlay curtilage where possible.*

*Clause 52.37 of the VPP will be utilized as a means of providing temporary Interim controls during the Planning Scheme amendment process.*

## 8.2. Individual Walls

Individual walls to be included in the schedule to the Heritage Overlay (Table 2) are those walls which are found in the 5 precincts; Mt Atkinson, Mt Cottrell, Mt Kororoit, She-Oak Hill and Greigs Road, plus two individual walls, P200 and N224.

The statements of significance for the precincts allow the walls to be included in the Heritage Overlay by providing clear guidance as to what is of significance and why.

**Table 2: Dry Stone Walls Recommended for Heritage Overlay Controls.**

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| C69 | Greigs Road | Greigs Road Precinct | | |
| C70 | Greigs Road | Greigs Road Precinct | | |
| C71 | Troups Road | Greigs Road Precinct | | |
| D1 | Greigs Road | Greigs Road Precinct | | |
| D80 | Troups Road | Greigs Road Precinct | | |
| D81 | Greigs Road | Greigs Road Precinct | | |
| D82 | Greigs Road | Greigs Road Precinct | | |
| D83 | Greigs Road | Greigs Road Precinct | | |
| J132 | Leakes Road | Greigs Road Precinct | | |
| J133 | Leakes Road | Greigs Road Precinct | | |
| J134 | Leakes Road | Greigs Road Precinct | | |
| J135 | Leakes Road | Greigs Road Precinct | | |
| J136 | Greigs Road | Greigs Road Precinct | | |
| J137 | Greigs Road | Greigs Road Precinct | | |
| J138 | Troups Road | Greigs Road Precinct | | |
| J143 | Paynes Road | Greigs Road Precinct | | |
| J144 | Paynes Road | Greigs Road Precinct | | |
| J145 | Greigs Road | Greigs Road Precinct | | |
| J146 | Greigs Road | Greigs Road Precinct | | |
| J147 | Greigs Road | Greigs Road Precinct | | |
| J148 | Greigs Road | Greigs Road Precinct | | |
| J149 | Greigs Road | Greigs Road Precinct | | |
| J150 | Leakes Road | Greigs Road Precinct | | |
| J151 | Leakes Road | Greigs Road Precinct | | |
| J152 | Paynes Road | Greigs Road Precinct | | |
| J153 | Greigs Road | Greigs Road Precinct | | |
| J18 | Greigs Road | Greigs Road Precinct | | |
| B115 | Mt Atkinson Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B116 | Mt Atkinson Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B117 | Mt Atkinson Road | Mount Atkinson Precinct (Hopkins Rd District) | | |

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| B118 | Boundary Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B119 | Boundary Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B120 | Boundary Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B121 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B122 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B123 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B124 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B125 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B126 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B127 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B130 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B169 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B170 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B38 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B39 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B40 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B41 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B42 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B43 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B45 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| B46 | Middle Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| B47 | Hopkins Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| G84 | Mt Atkinson Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| G85 | Boundary Road | Mount Atkinson Precinct (Hopkins Rd District) | | |
| C185 | Greigs Road | Mount Cottrell Precinct | | |
| C49 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| C50 | Greigs Road | Mount Cottrell Precinct | | |
| C51 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| C52 | Faulkners Road | Mount Cottrell Precinct | | |
| C55 | Greigs Road | Mount Cottrell Precinct | | |
| C56 | Faulkners Road | Mount Cottrell Precinct | | |
| C57 | Faulkners Road | Mount Cottrell Precinct | | |
| C58 | Greigs Road | Mount Cottrell Precinct | | |
| C59 | Greigs Road | Mount Cottrell Precinct | | |
| C60 | Faulkners Road | Mount Cottrell Precinct | | |
| C61 | Greigs Road | Mount Cottrell Precinct | | |
| C62 | Faulkners Road | Mount Cottrell Precinct | | |
| C63 | Faulkners Road | Mount Cottrell Precinct | | |
| C64 | Harrison Road | Mount Cottrell Precinct | | |
| C65 | Greigs Road | Mount Cottrell Precinct | | |
| C66 | Greigs Road | Mount Cottrell Precinct | | |
| C67 | Greigs Road | Mount Cottrell Precinct | | |
| F100 | Faulkners Road | Mount Cottrell Precinct | | |
| F101 | Faulkners Road | Mount Cottrell Precinct | | |
| F102 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F103 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F104 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F105 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F106 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F107 | Mount Cottrell Road | Mount Cottrell Precinct | | |

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| F108 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F109 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F110 | Boundary Road | Mount Cottrell Precinct | | |
| F111 | Faulkners Road | Mount Cottrell Precinct | | |
| F113 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F114 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F182 | Boundary Road | Mount Cottrell Precinct | | |
| F183 | Boundary Road | Mount Cottrell Precinct | | |
| F184 | Boundary Road | Mount Cottrell Precinct | | |
| F93 | Downing Street | Mount Cottrell Precinct | | |
| F95 | Riding Boundary Road | Mount Cottrell Precinct | | |
| F96 | Faulkners Road | Mount Cottrell Precinct | | |
| F97 | Middle Road | Mount Cottrell Precinct | | |
| F98 | Faulkners Road | Mount Cottrell Precinct | | |
| F99 | Faulkners Road | Mount Cottrell Precinct | | |
| G90 | Downing Street | Mount Cottrell Precinct | | |
| G91 | Downing Street | Mount Cottrell Precinct | | |
| G92 | Downing Street | Mount Cottrell Precinct | | |
| K154 | Greigs Road | Mount Cottrell Precinct | | |
| K157 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K158 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K159 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K160 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K162 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K163 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K167 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| K168 | Boundary Road | Mount Cottrell Precinct | | |
| K173 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| F112 | Mount Cottrell Road | Mount Cottrell Precinct | | |
| A259 | Leakes Road | Mount Kororoit Precinct | | |
| A260 | Leakes Road | Mount Kororoit Precinct | | |
| A261 | Leakes Road | Mount Kororoit Precinct | | |
| A263 | Leakes Road | Mount Kororoit Precinct | | |

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| A264 | Leakes Road | Mount Kororoit Precinct | | |
| A265 | Finchs Road | Mount Kororoit Precinct | | |
| A266 | Finchs Road | Mount Kororoit Precinct | | |
| A269 | Leakes Road | Mount Kororoit Precinct | | |
| A270 | Leakes Road | Mount Kororoit Precinct | | |
| A278 | Leakes Road | Mount Kororoit Precinct | | |
| A279 | Ryans Road | Mount Kororoit Precinct | | |
| A280 | Mt Kororoit Road | Mount Kororoit Precinct | | |
| R242 | Holden Road | Mount Kororoit Precinct | | |
| R190 | Diggers Rest Coimadai Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R194 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R195 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R196 | Ryans Lane | She-Oak Hill Precinct (Blackhill Rd) | | |
| R245 | Diggers Rest Coimadai Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R246 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R247 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R248 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R301 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R302 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R303 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R304 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R305 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R307 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |

| WALL_NO | NEAREST ROAD | PRECINCT | HO NO | COMMENTS |
|---|---|---|---|---|
| R308 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| R37 | Blackhill Road | She-Oak Hill Precinct (Blackhill Rd) | | |
| N224 | Western Highway | | | |
| P200 | Plumpton Road | | | |

## 8.3. Precincts

The spread of dry stone walls in Melton indicates that some areas have a greater density of dry stone walls than others. In areas where there is a concentration of walls, precincts have been proposed.

There are two types of precincts proposed;

- Clusters of walls near a volcanic hill that was the source of the fieldstone, and
- Dense groups of walls situated along a major or gateway road with high exposure.

These precincts, of which five were recommended for planning controls in the draft study, have been reassessed prior to the study being adopted by Council. It was thought that from a planning perspective the use of the heritage overlay to protect large areas of land between walls would be ineffective, clumsy and overly onerous on landholders. As a result, the case for landscape protection of precincts was re-assessed. Two precincts were identified as having a strong case for landscape controls.

In order to strengthen the case for the two dry stone wall precincts proposed for landscape controls, in 2009 the precinct boundaries were re-assessed using the *Heritage Victoria Landscape Assessment Guidelines*. These gave us a number of definitions, criteria and assessment guidelines by which we could better assess the precincts proposed in the original report. Council also felt that the application of both natural and cultural criteria, strengthened the case for applying planning controls, such as were proposed by the original consultants. See section 4.7 for details.

## 8.4 Recommendations for protection

Ten dry stone wall precincts have been identified. These precincts display dense concentrations of walls and have been defined by historical and landscape associations. The use of precincts for statutory protection and assessment of dry stone walls has a number of benefits. It allows for the landscape contribution of walls to be better considered, it allows for historical associations and settlement/farming patterns to be revealed and it provides context for comparative assessment and the writing of statements of significance.

In the short term, only two precincts are recommended for statutory controls. Each of the 10 precincts has, however a number of other recommendations which aren't necessarily statutory.

There are 7 different recommendations possible for each precinct.

1) **Victorian Heritage Register:**

   Recommended for inclusion in the Victorian Heritage Register.

2) **Schedule to Heritage Overlay:**

   Recommended for Shire of Melton Heritage Overlay.

For all walls within the five precincts which have statements of significance and 2 individual walls, P200 and N224.

3) **Schedule to Significant Landscape Overlay:**

Recommended for Shire of Melton Significant Landscape Overlay. Generally for precincts which have significant natural landscape and cultural features, including volcanic mounts and views which include a large number of dry stone walls, in a non-urban zone.

4) **Conservation Desirable:**

Places for which citations should be prepared as soon as possible.

5) **Driving Trail Walls:**

Walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, and for which citations [individual or precinct] should be prepared in the medium term

6) **All Walls:**

Conservation encouraged by education, training, funding incentives, interpretation etc.

## 8.5 Precincts: Character and Recommendations

Set out below [8.4.1 - 8.4.10] are the character definitions of each precinct and the recommendations for each. Statements of significance for five of the precincts are contained in Volume 2, Citations. A further five statements of significance should be undertaken in the future.

### 8.5.1. Mount Kororoit Precinct

Character:

- Assessed as being of State significance;
- Highest proportion of high walls;
- High density of Walls;
- High proportion of Walls in Excellent / Good condition;
- Undulating landscape contributes to visibility of multiple walls from various vantage points;
- Mount Kororoit, the volcanic source of the stone, a close backdrop to the walls and creates an evocative and logical focus for the precinct;
- Regionally significant Kororoit Creek, and remnant red gum streamside vegetation adds to aesthetic quality;
- Association with other cultural heritage places contributes to significance [Mount Kororoit Farm; bluestone selectors cottage, DSW culvert / bridge];
- Association with Moylan family, and expressive of successful large farms in the Shire history.

**Recommendations:**

1. Inclusion in the Victorian Heritage Register. [High priority: 0-12 months]
2. Shire of Melton Heritage Overlay for individual walls. [High priority: 0-12 months]
3. Shire of Melton Significant Landscape Overlay for the precinct overall. [High priority: 0-12 months]
4. For walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, citations [individual or precinct] should be prepared in the medium term [Medium priority: 2-3 years].
5. Conservation is encouraged by education, training, funding incentives, interpretation etc.

**Other Recommendations:**

- It is recommended that a Dry Stone Wall Conservation Management Plan be conducted for the precinct as a matter of the highest priority. While it might be seen fit to conduct this jointly with a broader CMP that includes the buildings on site (the Mount Kororoit Homestead is highly significant; the bluestone cottage also important), the dry stone wall component should be undertaken with the assistance of a professional dry stone waller who would assess threats to the walls (especially from rabbit burrows), and help to develop a feasible conservation program. It would also propose a management regime for walls that are now in

multiple ownership. The CMP might include an education component, and incentives for works by owners. The CMP could also undertake preliminary assessment of the fabric of the walls in order to provide further information about fence and wall construction and change in the mid nineteenth and early twentieth centuries.

### 8.5.2. Mount Cottrell Precinct

Character:

- Assessed as being of Local significance;
- High density of Walls;
- Faulkners Road contains a fair proportion of walls in Excellent / Good condition [including one of the outstanding Walls in the Shire];
- These include F96, one of the best walls in the Shire, and the best Clarke boundary wall; and F95, one of better examples of 751 - 1000 high walls [the most common wall] in the Shire;
- Association with cultural heritage places contributes to significance [Scarborough ruin and farm complex, Mount Cottrell Homestead; history of 1850s land speculation];
- Integrity of part of Mount Cottrell Road precinct been diminished by rural residential subdivision, and associated fragmentation and variable condition of original Clarke Wall;
- The best precinct of Clarke boundary and internal walls remaining in the Shire;
- Mount Cottrell, a shield volcano of state geological significance, and source of the fieldstone used in the walls, is situated in the precinct; nationally significant volcanic grasslands and remnant grey-box forest remain in the precinct;
- Faulkners Road rises up side of Mount Cottrell, and provides views over a larger cultural landscape: the Melton - Werribee plains described by early explorers, and in the background the skyline of the City of Melbourne which was founded as a result of these sheep plains.

**Recommendation:**

**1.** Inclusion in Shire of Melton Heritage Overlay for individual walls. [High priority: 0-12 months]

2. Inclusion in Shire of Melton Significant Landscape Overlay, for precinct. [High priority: 0-12 months]

3. For walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, citations [individual or precinct] should be prepared in the medium term [Medium priority: 2-3 years].

4. Conservation is encouraged by education, training, funding incentives, interpretation etc.

**Other Recommendations:**

- Wall F96 is now the road boundary of four adjacent rural residential allotments. The full settlement of these lots will put the wall seriously at risk of partial demolition, and inconsistent and inappropriate maintenance. In addition, new plantations of trees along the different sections of the wall associated with the new rural residential allotments are already beginning to break down its unity. They will also severely damage the cultural landscape - the view over the plains to the city - and threaten the structure of the wall itself. This is one of a handful of the most important walls in the Shire of Melton: planning controls are critical if it is to survive. Planning controls along road boundary walls should be sufficient to require a permit for proposed new plantings along the wall.
- The walls in the precinct, especially the most significant examples, should be identified by the Shire of Melton as a high priority for future conservation works.
- The thick umbrageous planting on the Council reserve (east side of Faulkners Road) is out of context with the open landscape. If this became the norm, the present open grass plains and clear silhouette of Mount Cottrell – a landscape of geological and historical significance – will be obscured and largely lost. A more sympathetic landscape plan is recommended.

### 8.5.3. She-Oak Hill Precinct [Blackhill Road]

**Character:**

- Assessed as being of Local significance;
- Very high density of walls;
- Very high proportion of walls in Excellent/Good condition [including R248, the longest wall in the Shire];
- Association with other cultural heritage places contributes to significance (including Pinewood, and Glencoe);
- Association with Beaty family - expressive of successful large farm;
- She Oak Hill adjacent [although nearly quarried out of existence], and Aitkens Hill visible to the north, indicate the source of the stone;
- Blackhill Road runs along a ridge with views over valleys of Kororoit Creek [to east] and Yangardook Creek, Greenhills, and Black Hills [to west].

**Recommendation:**

1. Inclusion in Shire of Melton Heritage Overlay for individual walls. [High priority: 0-12 months]
2. For walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, citations [individual or precinct] should be prepared in the medium term [Medium priority: 2-3 years].
3. Conservation is encouraged by education, training, funding incentives, interpretation etc.

**Other Recommendations:**

- It is recommended that the dry stone walls condition and threats be identified as part of the development of a limited Conservation Management Plan to ensure their long-term maintenance. Archaeological survey of some of the walls has the potential to provide further information regarding early pastoral settlement, and in particular the original construction of the walls and any modifications to the style of the walls that have occurred in the early twentieth century.

### 8.5.4. Mount Atkinson Precinct [Hopkins Road district]

**Character:**

- Assessed as being of Local significance;
- Very high density of walls;
- Good proportion of walls in Excellent / Good condition;
- Association with cultural heritage places contributes to significance [Rocklands, Tibbermore, reputed shanty site, another ruin];
- Expressive of successful small farmers in difficult landscape, and enclosed by a Clarke boundary wall.
- Walls in this area of Melton are increasingly under threat from light industrial development and losses have been rapid in the last five years.

**Recommendation:**

1. Inclusion in Shire of Melton Heritage Overlay for individual walls. [High priority: 0-12 months]
2. For walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, Citations [individual or precinct] should be prepared in the medium term [Medium priority: 2-3 years].
3. Conservation is encouraged by education, training, funding incentives, interpretation etc.

**Other Recommendations:**

- The walls in the precinct, especially the most significant examples, should be listed by the Shire of Melton as a high priority for future conservation works.
- An education campaign regarding the significance of the walls, and penalties for theft of stone, should be initiated by the Shire of Melton. This might include interpretation and other signage within the Precinct.
- The integrity of the walls is likely to be affected by any future change in land-use (including changes to the Urban Growth Boundary). If this is envisaged, guidelines for appropriate development of the walls should be prepared; compliance with these would need to be mandatory.

### 8.5.5. Greigs Road Precinct

**Character:**

- Assessed as being of Local significance;
- Very high density of walls;
- Reasonable proportion of Walls in Excellent / Good condition;
- Association with other cultural heritage places contributes to significance [former Beam Wireless Station, Payne ruin];
- Situated on a main road in the Shire with high visibility and access, and potential for interpretation.
- Walls will come under increasing pressure from road widening and urban growth.

**Recommendation:**

1. Inclusion in Shire of Melton Heritage Overlay for individual walls. [High priority: 0-12 months]
2. For walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, citations [individual or precinct] should be prepared in the medium term [Medium priority: 2-3 years].
3. Conservation is encouraged by education, training, funding incentives, interpretation etc.

**Other Recommendations:**

- Visibility of the walls is diminished where grass has been allowed to grow in front of the walls along the Greigs Road property boundaries. It is highly recommended that grass on the wide verge be kept mown.
- The walls in the precinct are recommended as a priority for future conservation works.
- A campaign of education regarding the significance of the walls, and penalties for theft of stone, should be initiated by the Shire of Melton. This might include interpretation and other signage within the Precinct.
- The integrity of the walls is likely to be affected by any future change in land-use (including changes to the Urban Growth Boundary). If this is envisaged, guidelines for appropriate development of the walls should be prepared; compliance with these would need to be mandatory.
- The following precincts should be the subject of a citation in a future study. They do not have a statement of significance. The extent of each of these precincts is shown on Figure 16: Locations of Precincts for further study and citations.

### 8.5.6 Melton Highway Precinct

**Character:**

- Moderate – low density of walls only;
- Reasonable proportion of walls in Good / Excellent or Fair condition;
- Road is a major gateway to the Shire, and potentially strategically important in marketing Melton's dry stone wall image and heritage;
- Association with other cultural heritage places contributes to significance [very early over Kororoit Creek, bridge over Kororoit Creek];
- Walls will come under increasing pressure from realignment, interchanges and road widening.

**Recommendation:**

1. Conservation desirable. Places for which citations should be prepared as soon as possible [medium priority: 1-2 years] and include interpretation, liaison with VicRoads, positive conservation initiatives, potential to use in Shire marketing strategy. Further consideration regarding possible recommendation for Melton Planning Scheme Heritage Overlay.
2. Walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, and for which citations [individual or precinct] should be prepared in the medium term [Low priority: 2-3 years].
3. Conservation encouraged by education, training, funding incentives, interpretation etc.

### 8.5.7. Beattys Road Precinct

**Character:**

- Low density of walls, but in a limited area;
- Walls generally in only Good / Fair condition;
- Association with other cultural heritage places of high interest contributes to significance [Rockbank Inn, Water Reserve, early Limestone Reserve, ruinous timber Beattys Bridge]; possibly contribute to a cultural landscape.
- Proposed to include:
- Two walls not identified in this Study [on the water reserve to north of Beattys Road, west of Rockbank Inn site];
- Walls on / near corner of Plumpton Road, to east.
- Walls will come under increasing pressure from proposed alignments for the Outer Metropolitan Ring Road and urban growth

**Recommendation:**

1. Conservation desirable. Places for which citations should be prepared as soon as possible [medium priority: 1-2 years] and include interpretation, liaison with VicRoads, positive conservation initiatives, potential to use in Shire marketing strategy. Further consideration regarding possible recommendation for Melton Planning Scheme Heritage Overlay.
2. Conservation encouraged by education, training, funding incentives, interpretation etc.

### 8.5.8. Western Highway Precinct

**Character:**

- Reasonable density of walls;
- Reasonable proportion of Walls in Good / Excellent condition, but the other half are in Fair / Poor condition;
- Association with Clarke, and small farmers;
- Mount Atkinson nearby to south, although not prominent, is likely source of stone;
- Road is the major highway in the Shire, and potentially strategically critical in marketing Melton's dry stone wall image and heritage;
- Includes the only wall reasonably visible from the Highway to traffic travelling east [N224]; however this is somewhat remote from others and could be included in protection as an individual wall;
- Several surveyed walls are subject to demolition as part of the construction of the Deer Park By-pass and other road widening and interchange developments

**Recommendation:**

1. Conservation desirable. Places for which citations should be prepared as soon as possible [medium priority: 1-2 years] and include interpretation, liaison with VicRoads, positive conservation initiatives, potential to use in Shire marketing strategy. Further consideration regarding possible recommendation for Melton Planning Scheme Heritage Overlay.
2. Walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, and for which citations [individual or precinct] should be prepared in the medium term [Low priority: 2-3 years].
3. Conservation encouraged by education, training, funding incentives, interpretation etc.

### 8.5.9. Sinclairs Road Precinct

**Character:**

- Good density of walls in a limited area;
- High proportion of larger and all-stone walls;
- Reasonable proportion of walls in Good / Excellent or Fair condition;
- A minor Road, perhaps with greater potential for conservation;
- Association with other cultural heritage places contributes to significance [Stoneleigh];
- Walls will come under increasing pressure from road widening and urban development.

**Recommendation:**

1. Conservation desirable. Places for which citations

should be prepared as soon as possible [medium priority: 1-2 years] and include interpretation, liaison with VicRoads, positive conservation initiatives, potential to use in Shire marketing strategy. Further consideration regarding possible recommendation for Melton Planning Scheme Heritage Overlay.

2. Walls that are contributory to driving trails, and for which should be a priority in terms of maintenance of roadside verges, and for which citations [individual or precinct] should be prepared in the medium term [Low priority: 2-3 years].

3. Conservation encouraged by education, training, funding incentives, interpretation etc.

### 8.5.10. Robinsons Road Precinct

**Character:**

- Reasonable density of walls;
- Reasonable proportion of walls in Good / Excellent or Fair condition;
- Association with Clarke, and small farmers;
- Road is a major gateway to the Shire, and potentially strategically important in marketing Melton's dry stone wall image and heritage;
- Several walls have been destroyed as part of recent light industrial development and the Deer Park Bypass.
- Proposed precinct includes nearby walls on [and perpendicular to] Middle Road.

**Recommendation:**

1. Conservation desirable. Places for which citations should be prepared as soon as possible [medium priority: 1-2 years] and include interpretation, liaison with VicRoads, positive conservation initiatives, potential to use in Shire marketing strategy. Further consideration regarding possible recommendation for Melton Planning Scheme Heritage Overlay.

2. Conservation encouraged by education, training, funding incentives, interpretation etc.

**Figure 11: Mount Kororoit Precinct**

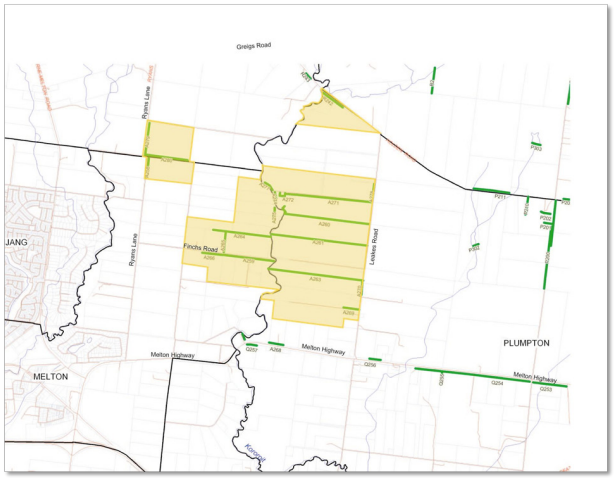



**Figure 12: Mount Cottrell Precinct**

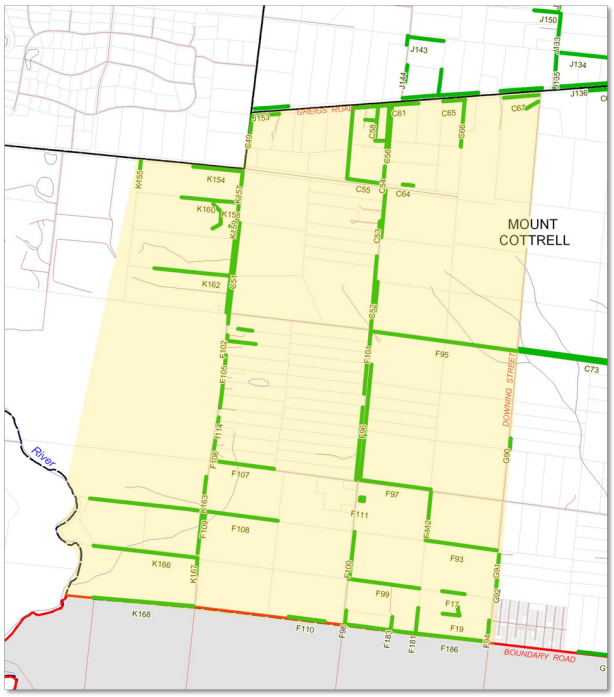


**Figure 13: She-Oak Hill Precinct (Blackhill Road)**

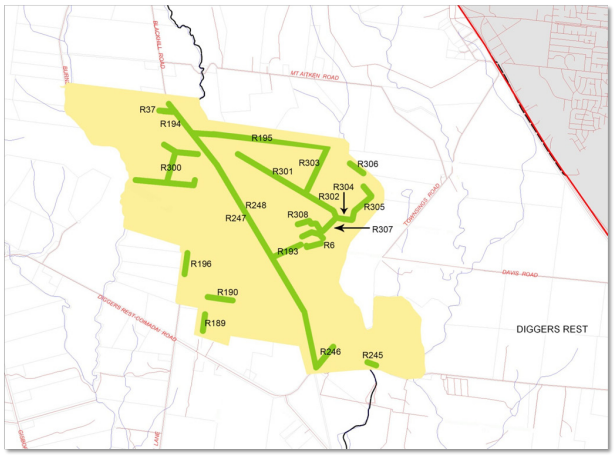



**Figure 14: Mount Atkinson Precinct (Hopkins Road District)**

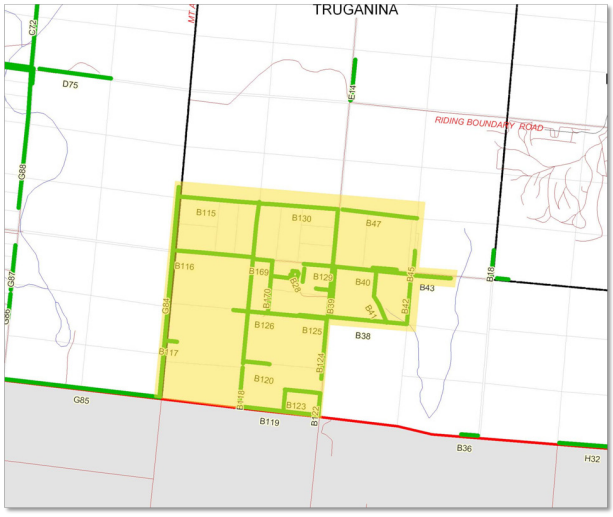



**Figure 15: Greigs Road Precinct**


**Figure 16: Western Highway Precinct**

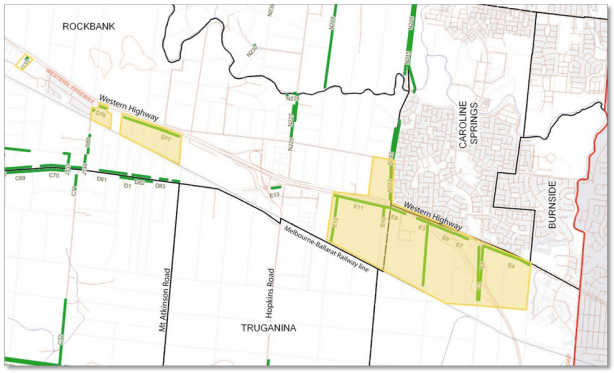



**Figure 17: Melton Highway Precinct**

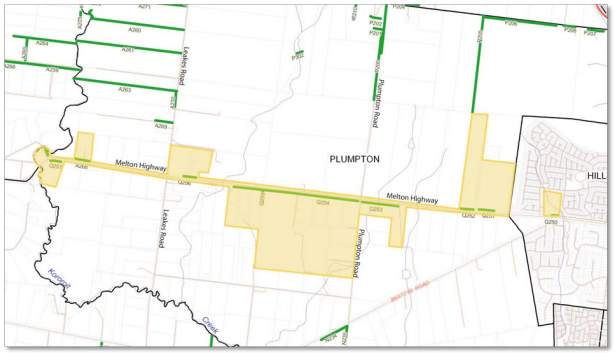
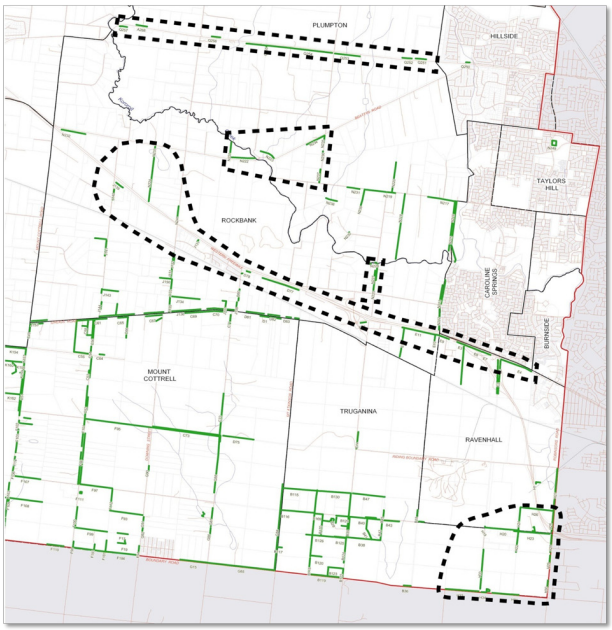


**Table 3: Dry Stone Walls and Structures Recommended for further research and possible Statutory Protection**

| WALL_NO | NEAREST ROAD / LOCATION | INDIVIDUAL WALL OR PRECINCT | COMMENTS |
|---|---|---|---|
| D77-78 | Western Highway Precinct | Western Highway Precinct | D77 partially demolished for new service centre |
| M178 | Eynesbury Road | Individual wall, associated with HO1 | |
| H35 | Boundary Road | Individual | Wall will possibly be demolished for Western Inter Modal Freight Terminal |
| E9-12 | Western Highway Precinct | Western Highway Precinct | Walls E2 – E8 demolished by VicRoads |
| H21 | Rockbank Middle Road (off) | Individual/ Robinson Rd Precinct | |
| Q256 | Melton Highway | Individual | |
| G85 | Boundary Road | Individual | |
| N234 | Beattys Road | Beattys Rd/ Precinct or Individual | |
| N235 | Plumpton Road | Individual or Beattys Rd Precinct | |
| G173 | Troups Road | Individual | |
| P210 | Holden Road | Individual | |
| N225-N227 | Sinclairs Road | Individual | |

**Figure 18: Locations of Precincts for Further Study and Citations**



# 9. Complementary Recommendations: Walls, the Community and Council

## 9.1. A Program of Community-Oriented Actions

The five actions discussed in Section 7 complement the recommendations set out in Section 8 regarding the statutory protection of walls. However, they represent only the initial steps in the task of raising the community's awareness of the importance of dry stone walls and their preservation and to stem the loss of walls in the Shire.

It is fortunate that most of the walls in Melton can be viewed from public roads. This is an important advantage, but also a cause for some concern.

It is an advantage because, if the level of community respect for walls is to grow, then the historic, landscape and visual values of walls need to be appreciated by the public. One way to do this is to make those walls that abut main roads more visible to passing traffic, and to maintain these walls in good condition, which requires commitment and action by both the responsible road authority and the owner of the walls. Melton is fortunate to have a large stock of walls in good condition along highways and main roads. The maintenance of verges, by clearing them of tall grass and other rubbish close to the wall will present the wall in its best light, and reinforce Council's respect for this visible element of the Shire's cultural heritage. With advice about wall maintenance, encouragement and modest financial support, owners of these very visible walls can keep their walls in good condition.

It is of concern because, due to a high level of ignorance about the historic importance of walls, those which are readily accessible, such as those that form the road boundary of a property, are vulnerable to theft. This likelihood is increased where the wall is in poor condition due to lack of maintenance or interest by the landowner. The Driving Trail and other promotional activities assist in changing the attitude of landowners and the general public.

The task of raising the level of awareness and respect for walls among landowners, developers and Government agencies and the wider community is of critical importance if walls are to be retained, maintained and allowed to play their role in the cultural and landscape heritage of the Shire and the State.

The recommendations for statutory protection cover the most important walls and groups of walls, although many other walls are important elements of the landscape and the history of the Shire. Of particular importance in this regard are those along roadsides, not only because of their visibility but because of the 'marketing'; value to the Shire if they are presented well and are properly maintained.

Because walls are almost exclusively privately-owned, owner commitment to the maintenance of walls is critical. This commitment will only come out of Council's leadership in enhancing awareness of the importance of walls, and the consequent owner's recognition of their role as custodian of part of the Shire's history and identity. Unfortunately, walls are too often seen as liabilities; not necessary for farming purposes, expensive to maintain, easier to replace with a post-and-wire or electric fence, a habitat for weeds, snakes and the like. This attitude must be reversed as a matter of urgency and the Shire must take a co-ordinating and leadership responsibility in this regard.

The number and condition of Melton's dry stone structures are diminishing. However, as the statutory recommendations of this Study attest, they are a valuable feature of the Shire's history and landscape, and a workable balance must be found between total retention and an uncontrolled or unmanaged future in which the current level of loss of walls continues, whether by deterioration or by deliberate action.

It is evident that the removal or deterioration of existing walls is due to one or more of the following factors:

- A lack of appreciation by property owners of the historic nature of walls and their importance in the context of the Shire's growth,
- A lack of appreciation of the potential for walls to contribute to serve as functional elements of rural properties,
- A lack of information or skills to repair walls to prevent further damage or deterioration,
- A belief that walls are too expensive to maintain,
- The need to increase paddock sizes or make farming more efficient by removal of intrusive walls,

- The change in land use from rural or semi-rural to a more intense urban use,
- The expansion of public infrastructure such as major roads and services, and
- Theft of stones from existing roadside walls by the general public for private use.

While it is unrealistic to expect that every dry stone wall and other structure will be retained, and recognising that some loss is inevitable, it is essential that walls other than those recommended for statutory protection under the Planning Scheme are retained, particularly where they are in visually prominent locations.

The most effective technique to reverse the further loss of walls is to increase awareness and appreciation by property owners, Council and Council staff of the value of walls to both property owners and to the wider community, and to complement this increased awareness by a program of repair and maintenance of existing walls.

Property owners need to be informed of and accept their custodial role in maintaining part of the Shire's and, in some instances Victoria's, heritage and to appreciate that walls can be an asset to their property rather than an unwanted liability.

To achieve this increased level of awareness and to stem the continuing loss of walls, it is recommended that Council implements a range of actions, under the themes of Raising Public Awareness, Increasing the Extent of Wall Maintenance, and Raising Council and Staff Awareness, as follows.

Raising Public Awareness

**1. Driving Trail**

- Promote and regularly review the Driving Trail which was implemented during the course of the Study.

**2. The Dry Stone Walls part of Council's website**

- Continue to promote dry stone walls on Council's website and in other publications such as Council's Community Newspaper.

**3. Works at the Mount Cottrell Road Interpretive Site**

- Install interpretive material on part of the property at 1570 Mount Cottrell Road, Mount Cottrell, as a feature of the Driving Trail, but also as a destination in its own right, and
- Review and revise the Driving Trail Brochure once this property has been developed as an Interpretive Site and is available for visiting as part of the Driving Trail.

**4. Roadside Maintenance**

- Establish and implement an ongoing maintenance schedule for removal of long grass from selected sections of roadsides where good examples of walls form the property boundary.

**5. Incentives and Advice**

- Engage the services of a qualified dry stone waller to provide advice and training to property owners,
- Develop incentives to assist property owners whose properties have walls and which are in Heritage Overlay areas or in other significant locations such as along the Driving Trail or on main roads,
- Prepare written information for property owners which can be used by them to understand the planning permit application process as it relates to walls.

**6. A Public Awareness Program**

- Undertake a two stage series of actions to complement the above key actions.

**Council and Staff Involvement**

- Develop and implement strategies to ensure Council and Council staff are aware of the Study's recommendations and the importance to the Shire of dry stone structures in general, particularly when dealing with planning permits, capital works projects or activities by other agencies which may adversely affect dry stone structures,

- Ensure that the relevant aspects of the Study are formally understood and embraced by Council and relevant Council staff,

- Ensure the Study's outcomes are incorporated and included in the ongoing maintenance and implementation of relevant Departmental Plans and

- Facilitate staff access to the Study's findings through IntraMaps and other relevant Melton Shire 'in-house' information dissemination methods.

These recommendations are discussed in detail in Sections 9.2 - 9.10.

## 9.2. Driving Trail

The Driving Trail is supported by a publicly available brochure, together with the interpretive signage and the sculpture 'Volcanic Genesis' at 'The Willows' Historic Park. The Trail's relevance lies in the fact that it takes people into areas of the Shire where some of the best examples of walls and the geological history of the Shire can be seen and appreciated.

It is recommended that the brochure is maintained and updated as required and that it is widely promoted and distributed in places in addition to the Visitor Information Centre, such as Libraries, Leisure Centres, golf courses, local shops, the Victorian government Information Centre at Federation Square, etc.

It is recommended that the success of the Driving Trail as a promotional and awareness raising mechanism be enhanced by the implementation of two related actions, namely:

- Repair and maintenance of walls which abut Driving Trail roads. This is one area where the financial assistance discussed in Section 9.9.: Financial Support, could be specifically directed, and

- Maintenance of the roadside verges in front of these walls, as described in Section 9.5: Roadside Maintenance, as it applies to other highly visible walls.

## 9.3. Website

At the time of the conclusion of this Study, the Shire is redeveloping its website. The suggestions below outline ideas for inclusion during this process.

It is recommended that Council include a new 'History and Heritage' Menu Tab which would become the key search entry point to the Shire's dry stone wall information, and that the revised website includes links and cross-referencing to the following existing Menu Tabs:

- Planning and Development - Strategic Planning: Themes, protection of walls, importance of the Melton Dry Stone Wall Study in the state context, Heritage Overlays, the history of dry stone walls in the Shire,

- Include abbreviated Citations of properties as identified during the Study, and

- Links to other sites as cited in the Bibliography,

- Tourism and Leisure - Arts and Culture: Themes, introduction to project and Pride of Place, sculpture at 'The Willows', the Driving Trail and Brochure, and

- Include links to other relevant sites, as cited in the Bibliography

- Environment - Natural Environment: Theme, dry stone walls as important habitat for native grasses and fauna.

It is also recommended that, as part of the upgrade process, Council include and ensure copyright and privacy laws are adhered to and passed on to the reader with regards to text, drawings, photographs and property Citations.

## 9.4. Works at the Mount Cottrell Road Interpretive Site

The property at 1520 Mount Cottrell Road has been discussed in regard to its role as a key part of the Driving Trail and the venue for the dry stone wall workshop that occurred during the course of the Study.

The site and the interpretive material are seen as being influential in raising the awareness and appreciation of the value of dry stone walls in Melbourne's outer west and will assist in reducing the loss of existing walls in the area that occurs through neglect, ignorance, vandalism or theft.

Over time, the site can serve, not only as a focal point of the Driving Trail, but as a location where the public can see and touch examples of old and new dry stone construction and read interpretive material about the geology of the area, the heritage that dry stone walls represent in the Shire and see the techniques used then and now for the construction and maintenance of dry stone walls.

## 9.5. Roadside Maintenance

While the recommendations for statutory protection cover the most significant walls and precincts, many other walls are important elements of the landscape and the history of the Shire. Of particular importance in this regard are those along roadsides, not only because of their visibility but because of the 'marketing'; value to the Shire if they are presented well and are properly maintained. This is considered to be an essential element of this package of actions to preserve walls, raise their profile and increase public recognition and thus respect for walls.

It is recommended that the Shire undertake a program of regular mowing of roadside verges adjacent to selected dry stone walls in order to prevent the growth of long grasses and other vegetation which blocks the view of walls. This work:

- Will also require the removal of fallen stones close to the walls so that mowing can occur effectively and their replacement into the wall by skilled wallers,
- Is particularly important if the integrity of the Driving Trail is to be maintained, and
- Would have maximum effect if Council were able to develop an agreement with VicRoads whereby the long grasses, other vegetation and removal of rubbish on the Western Highway were to become part of a regular maintenance regime.

The locations where the roadside maintenance regime is recommended to occur are:

- Greigs Road where walls exist along the road boundary,
- Melton Highway, where walls exist along the road boundary,
- Western Highway, where walls exist along the road boundary,
- Robinson's Road, where walls exist between Boundary Road and Riding Boundary Road,
- Sinclair's Road, where walls exist between Mount Kororoit Creek and Neales Road, and
- Beatty's Road, where walls exist between Mount Cottrell Road and Plumpton Road.

These locations are shown on Figure 17: Locations of Roadside Maintenance.

In addition, it is desirable that those walls which abut roadsides which are specifically referred to in the Driving Trail brochure are maintained together with the mowing of the respective roadside verges.

## 9.6. Incentives and Advice

One of the objectives of these recommendations is that Council provides practical incentives to custodians of dry stone walls..

It is recommended that Council engages the services of a professional dry stone waller to act as an occasional or part-time dry stone wall Heritage Adviser. If it became a regular position, the service would strengthen links with the community, property owners and council officers.

The availability of a dry stone wall heritage adviser should be well promoted. The service would signal to the community that the Council is serious about preserving its dry stone wall heritage.

It is envisaged that this position would assist dry stone wall property owners with provision of basic advice on restoration, reconstruction, and alteration. For example, advice in relation to the best method of repairs, or an approximate price for professional works, or advice and monitoring of do-it-yourself repairs.

### 9.6.1. Dry Stone Waller

The services of a qualified waller to provide advice to property owners regarding the maintenance of their walls would be on an on-demand basis. This person would be contracted to conduct workshops as discussed below, and to undertake maintenance projects on private property at a cost to the property owner which would be subsidised by Council.

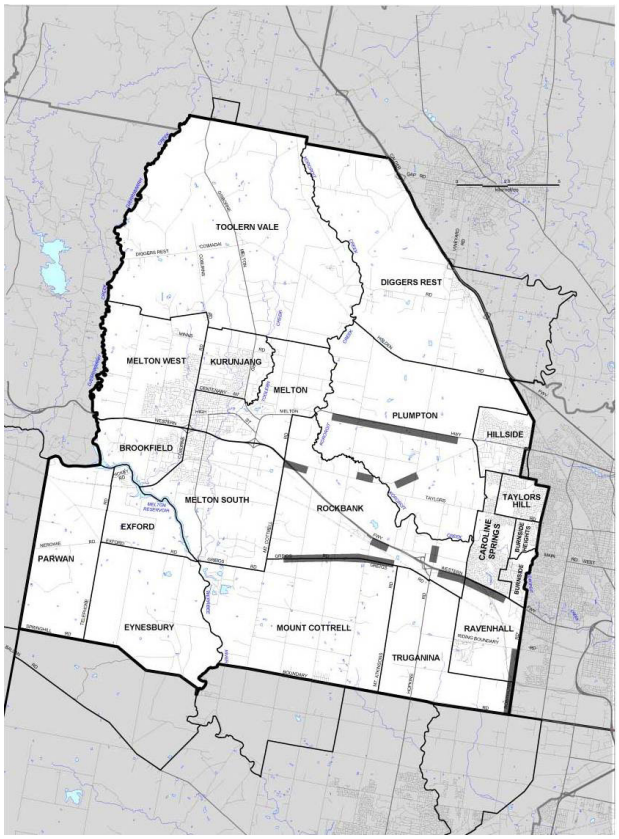
The amount of such subsidy would need to be determined, but financial assistance could be sought from State government grants programs. The principle of subsidising the services of the waller is seen as important in reinforcing in property owners' minds the commitment of Council to the Shire's walls and, by implication, the expectation that owners will adopt a similar philosophy.

The dry stone wall workshop which was conducted during the Study achieved several beneficial outcomes. It enabled a severely degraded wall to be rebuilt at the Mount Cottrell Road Interpretive Site, it gave the participants the knowledge and skills to undertake small dry stone constructions themselves, including the maintenance of their existing walls, and it demonstrated the effectiveness of practical training in raising awareness and interest in Melton's dry stone walls.

Dry stone walls are most durable when built by a skilled and qualified waller. However, any property owner, with a rudimentary knowledge of dry stone walling techniques, can competently undertake minor repairs and maintenance. This elementary skill also develops a sense of pride and commitment to the maintenance of the asset that the wall represents to the owner.

The training of wall owners in the rudimentary aspects of wall construction and maintenance is regarded as an important means of ensuring the retention of existing walls. This should be achieved through the conduct of an ongoing program of dry stone walling workshops to educate owners in the techniques of dry stone construction and wall maintenance.

**Figure 19: Locations of Roadside Maintenance**




### 9.6.2. Financial Support

It is recommended that Council investigate means to financially support property owners in the tasks of maintaining their walls. This should apply to all walls recommended for statutory protection, whether individually listed or as part of recommended precincts, and for those walls where roadside maintenance is recommended and at locations referred to in the Driving Trail brochure.

These incentives may include [but are not limited to]:

- Developing a discount rates scheme for owners of dry stone walls listed on the Overlay who undertake approved conservation works. This is recommended as a strategy to encourage owners of heritage places to undertake restoration, reconstruction or

refurbishment of heritage places;

- Development of a local heritage revolving heritage fund, administered by Council staff and community representatives, or a heritage advisory group following advice from Council's Heritage Adviser. Council should consider:
- Small grants
- Small low interest loans for modest restoration works to improve the visual amenity of dry stone walls. Such low interest loans would act as incentives to achieve repair of dry stone walls that are identified as being significant in this Study, including those mentioned in the Driving Trail brochure.

Council should provide information to owners of properties listed on the Victorian Heritage Register and on the Heritage Overlay regarding the Heritage Council's Financial Assistance Program.

## 9.7. Council and Staff Involvement

It is recommended that:

- A briefing paper be prepared for the consideration of Council. This paper should outline the recommendations of the Study and the direction to be undertaken.
- Council staff who are affected by the outcomes and recommendations of this Study be advised of it and their role in its implementation.
- A workshop be provided about the Study and its outcomes, for the benefit of Councillors and key Council officers.
- Council engage with dry stone wall owners to educate them on the cultural significance of their walls and discuss proposed planning controls to ensure the future protection of the walls.
- Engage in discussions with the City of Wyndham regarding conservation and interpretation initiatives for two potential dry stone walls heritage precincts - at Truganina and the former Mount Cottrell districts.

The areas of dry stone walling in these districts within both municipalities would appear to derive from the same volcanic eruption points, and are parts of two shared high quality precincts. They could become the keys to the telling of an important wider story about the heritage of Melbourne's western plains.

## 9.8. Public Awareness Program

It is recommended that Council consider the following range of actions to increase public awareness of the Study, its relevance to the community and its recommendations:

### 9.8.1. Stage One: Priority 0-12 months

- Once adopted by Council, promote the Study, its processes and its findings at relevant Conferences and through other means, electronic and otherwise.
- Conduct information sessions for the benefit of owners affected by the Study, informing them of the Study and the support available to them.
- Facilitate an ongoing program of dry stone walling workshops.
- Encourage dry stone wall property owners to undertake training in the repair of dry stone walls and or pay for property owners' attendance at short TAFE workshops elsewhere.
- Conduct a bus tour of the Driving Trail. This activity could be linked to Council's Heritage Week.
- Promote the findings of the Study by mounting a semi-permanent display in the foyer at the Municipal Offices or the Tourist Information Centre. Smaller versions could be reproduced as Posters for display in venues such as Libraries, Pre-schools and other Council-owned facilities such as Community Centres.
- Make available the information regarding dry stone walls gathered during the Study to owners and ratepayers.
- Encourage the formation of a 'Friends of Dry Stone Walls' group in the Shire, by continuing education and wall-repair training days in the Shire.

Council should consider becoming a Corporate Member of the Dry Stone Walls Association of Australia and develop strategies for mutual promotion of activities and events regarding their Dry Stone Walls via newsletters, field tours and other related activities.

### 9.8.2. Stage Two: Priority 12 - 36 months

- Consider making heritage awards for appropriately restored and reconstructed dry stone walls,
- Consider the publishing of appropriate parts of the Study. This would enable the history of the dry stone walls in the Shire to be better known and more widely appreciated. It would help promote the Shire's dry stone wall history and heritage beyond the municipality,
- Consider developing partnership arrangements and or sponsorship with local landscaping suppliers or companies,
- Consider establishing other initiatives such as:
  - Encouraging Developers of new Estates to consider the use of the dry stone walling craft in the more functional aspects of public open space areas [such as seating, facades, landscape retaining walls etc], and
  - Setting up of a mandatory 'Percent for Art' strategy that links the Public Art component of new developments to the history and heritage of Melton's basalt plains.
- Publish, or encourage others to publish, articles on the Study and its findings in popular media, and more specialised professional journals. This would also promote the Shire's dry stone wall history and heritage beyond the municipality.
- Continue to develop the promotion of dry stone walls as a cultural tourism asset within the Shire. It should explore the possibility of working with adjacent Shires in developing larger and better profiled joint ventures, such as a dry stone wall driving trail on Melbourne's western plains, or a booklet on the dry stone walls of Melbourne's western plains region.
- Consider liaising with local primary and secondary schools to provide resource material for teachers and encouragement to use the dry stone walls of the Shire for excursions; history, geology and botany research topics, art subjects, and other special projects. Council or local businesses could sponsor small prizes. Assistance with resources and guidelines for school teaching is also available through the Heritage Victoria's education officer.
- Council to purchase a selection of publications on dry stone walls for use by building owners and Council officers. These could be kept at the Council or be made available through the Shire library system.

# 10. Implementation of recommendations

## 10.1. Planning

In 2011, after a long consultation process with DPCD, Heritage Victoria and legal advisors, Council resolved to adopt the study and initiate an appropriate amendment to the Planning Scheme to implement it.

This will be the first dry stone wall amendment undertaken in Victoria and Council is acutely conscious of its responsibility to make it work. It is being undertaken in a period of unprecedented growth and change in the municipality and this is adding to the complexities of drafting the amendment documentation and ensuring that the process is undertaken thoughtfully and carefully. Council has taken great pains to be as transparent as possible about its motives in drafting this amendment and the discretionary tools it will apply in managing future change.

### 10.1.1. Municipal Strategic Statement

In 2011 Council commenced a review of the current Municipal Strategic Statement [MSS]. When preparing amendments to the Planning Scheme and before making decisions about permit applications, the Responsible Authority must take the MSS into account. It is therefore essential that the MSS reflect the Shire's vision, objectives and strategies regarding its heritage. The reviewed MSS will include statements that reflect Council's commitment to heritage and dry stone walls.

### 10.1.2. Local Policies

In preparation for the dry stone wall amendment, two new local policies were drafted for exhibition with the amendment, to provide an opportunity to state how discretion should or will be exercised under the planning scheme; and help applicants understand how a proposal will be considered.

The two new local planning policies 22.12 Heritage Conservation and 22.13 Dry Stone Walls cover matters specifically protected under the Heritage Overlay and specific to dry stone walls.

### 10.1.3. Significant Landscape Overlay

In order to implement the statutory recommendations of this study, two new Schedules to the Significant Landscape Overlay are proposed being, Mount Kororoit Dry Stone Wall Precinct SLO2 and Mount Cottrell Dry Stone Wall Precinct SLO3. These overlays seek to protect the landscape character and environmental qualities of the wall precincts.

### 10.1.4. Clause 52.37

A Ministerial Advisory Committee was formed in 2006 to provide advice on heritage provisions in planning schemes. As a direct result of their report, Amendment VC50 was adopted on the 15th December 2008. Among other things, VC50 introduces a new provision in Clause 52.37 to require a planning permit to demolish or alter a dry stone wall constructed before 1940, and introduces decision guidelines for the demolition or removal of post boxes and dry stone walls.

Municipalities were invited to join a schedule to Clause 52.37 and 12 took up the Minister's offer. Melton decided not to join the schedule for a number of reasons but mainly because the lack of notification was an issue for a municipality experiencing rapid growth and with a dry stone wall study already in place.

Council will however be signing on to Clause 52.37 prior to the exhibition of the amendment as a form of interim heritage controls. The schedule to the clause will nominate the 144 walls proposed for the heritage overlay schedule and Council will later remove itself from the schedule, after gazettal of the amendment.

### 10.1.5. The Dry Stone Walls of Melton: Guidelines for the assessment of planning applications, conservation works & repair

In 2011, the Council produced the document, The Dry Stone Walls of Melton: Guidelines for the Assessment of Planning Applications, Conservation Works and Repair, to assist in the preparation and assessment of planning applications which involve dry stone walls. The document will be exhibited as part of the proposed amendment.

The document aims to assist owners, developers, utility companies, planners and government agencies in the preparation of planning permit applications and precinct structure plans. The guidelines are to be a reference document within the Shire of Melton Planning Scheme, and are to be read in conjunction with local and state planning policies and guidelines.

The document aims to raise awareness of conservation issues, explain the differences between repair and

maintenance and outline the general requirements of planning applications in regard to dry stone walls. It was considered necessary to produce the document, as existing planning guidelines and technical information as supplied by Heritage Victoria was found to be largely irrelevant to dry stone walls.

## 10.2. Council Initiatives and Community Education

Since the completion of the study, Council has put into place numerous initiatives to raise public awareness and assist owners and government agencies understand and appreciate the dry stone walls of Melton. Council has also encouraged the conservation of walls by private owners and large developers.

These initiatives include:

- Yearly Heritage Week activities to educate the community about dry stone walls
- Access to a Heritage Advisory Service with a developing expertise in dry stone walls
- A warning signage project to raise awareness of the significance of walls and encourage the reporting of theft or damage to walls
- A revamped heritage webpage on Council's website
- A Heritage Assistance Fund to help pay for repair of dry stone walls
- A Council funded wall conservation project at Morton Homestead inTaylors Hill
- A wall conservation project undertaken by Delfin at Caroline Springs
- The conservation of walls in new urban developments at Hillside and Melton South
- Promotion of the use of dry stone techniques in landscaping, gateway and signage treatments of new subdivisions.

## 10.3. Future Review

In accordance with the Project Brief, which required citations to be prepared for between 6 and 10 sites, this Report includes citations for the following walls and groups of walls.

Place No.1: Mount Cottrell Precinct

Place No.2: Mount Kororoit Precinct

Place No.3: She-Oak Hill Precinct

Place No.4: Mount Atkinson Precinct

Place No.5: Greigs Road Precinct

Place No.6: Wall No.N224, Western Highway

Place No.7: Wall No.P200-202, Plumpton Road

However, there are other walls which warrant further study, and it is therefore recommended that the Study be reviewed in 2020. This review would assess the effectiveness of the Study, and address gaps in relation to the need for additional statutory protection particularly of the 18 walls recommended for protection and assessment in the future.

# 11. Conclusion

## 11.1. The Importance of this Study in the Local and State Context

As a backdrop to this Study there is a strong tradition and an enviable body of research which represents the recording and classification of buildings and their protection and maintenance through statutory means under local, state or national legislation. Although some dry stone structures do enjoy protection they do so generally because the wall is part of a group of structures, such as a farm complex, rather than being notable in their own right.

The Melton Stage One Heritage Study identified numerous dry stone walls that exist in Melton and highlighted their importance in the history of rural settlement in the Shire. The Study noted the need for a more thorough study of these dry stone structures.

As referred to in Section 5.1 the team referenced earlier more elementary studies which had been undertaken in Victoria and in Kiama in New South Wales. Of these the Kiama study was by far the most comprehensive, however it was limited in its breadth because the walls in that particular area were attributed to one builder.

One objective of this Study was to develop a methodology for the identification and recording of dry stone structures, that would lead to their classification and protection where warranted and which could be used in other parts of Victoria.

As far as the study team is aware, this Study is the first in Victoria, and possibly beyond, to collect and analyse comprehensive data on the vast majority of dry stone structures in a local government area.

This Study provides guidance for others in the survey of walls elsewhere and the comprehensive data collection and analyses methodologies provide a firm base from which to develop frameworks for future studies both locally and nationally.

## 11.2. Advice Regarding Future Studies of Dry Stone Walls

Dry Stone Structures have only recently gained any significant level of recognition at government level. They have been largely overlooked in heritage and conservation studies and there are few examples of dry stone structures having statutory protection or other formal recognition in their own right. This situation is changing, partly because the outward expansion of Melbourne, within the designated Urban Growth Boundary, is bringing urban development into rural areas where significant dry stone walls exist.

The Department of Sustainability and Environment recognised this inherent threat to Victoria's dry stone walls in its funding of the majority of this Study.

The study team considers that the methodology, represented by the Fourth phase of the data collection process [described in Section 5.], is one that, with refinement, can be applied elsewhere.

As discussed in Section 5, the use of electronic data collection equipment in the field was found to have severe shortcomings, and it was not pursued in this Study. However, the benefits of direct data entry into an electronic database have advantages in labour time and minimisation of error. The use of lap-top computers, and remote access internet connection to enable automatic download of information to a GIS system, could overcome the problems encountered in this study.

Similarly, the Shire of Melton, its pattern of land holdings, its topography and the types of walls, are unique and would be different in other places. The data fields used in other surveys may be different for various reasons.

# 12. Epilogue: Towards a Pride of Place

*'The isolation of the city and the refusal to grapple with its environmental problems will only hasten the deterioration of the countryside. It is in the common interest of the city and the countryside surrounding it to manage the region as an interlocking interdependent system.'*

*Ann Spirn, in 'The Lure of the Local', Lucy Lippard: The New Press New York 1997*

The Shire of Melton is located in a fast developing growth corridor on the western outskirts of Melbourne. Today it is home to many newcomers who have little or no experience or understanding of the early history of the area or the explorers such as Hume and Hovell and John Batman who saw the outstanding potential of the area for sheep pasture, or the graziers that followed onto the plains of the north-west. Yet it was these very men and women who shaped the early settlement patterns of the cultural landscape and who contributed significantly to the foundation of the Port Phillip District and what we know as Melbourne today.

In making the commitment to fund, support and undertake this important Study the Shire and DSE have set a standard for others to follow. They are to be congratulated for their vision and courage. Moreover the Study comes at a time of a growing Australia and world-wide resurgence of interest and commitment to recognise, preserve and celebrate an ancient craft that until quite recently here in Australia has been somewhat undervalued and overlooked.

In Australia successful tourism activities around 'walls' and the 'craft of dry stone walling' have developed such as the Shire of Corangamite Dry Stone Walls Heritage Trail in Victoria, and the Royal Botanic Gardens at Mount Annan in New South Wales. Overseas, popular tourism and public sculpture destinations exist, such as the Andy Goldsworthy dry stone sculptures in both the Storm King Sculpture Park outside New York and The Grizedale Forest Sculpture Park in England's Lakes District, the ancient 'Bories' in southern France and many other destinations in Europe, the United Kingdom, the United States and Canada.

Further evidence of the growing interest in the craft and its preservation is indicated by the fact that the Dry Stone Walls Association of Australia continues to gain increased Australia-wide membership, visitor attendance at their regular field trips continues to grow and the Association is fast becoming recognised as the authority on dry stone walls in Australia.

Worldwide: ICOMOS adopted a declaration within Charter [The Declaration of Torroella de Montgrí. In Defence of Dry Stone Walls: Spain Oct 2004.], new websites and other DSW Associations continue to emerge and Europe is host to an International Dry Stone Walling Congress every two years. This event draws delegates and audiences from across Europe, Canada, the United Kingdom, the United States and Australia. Indeed on the world stage, the Melton-style dry stone walls are considered to be quite uncommon, and as such were presented by Raelene Marshall, a member of this study team, to audiences at both the 8th Congress in Switzerland in 2002 and the 9th Congress in Greece in 2004.

The development of a city is often perceived as a busy,

prosperous and successful urban centre, the hustle and bustle that represents the adventurous and new. Conversely, the countryside [or seaside] could be said to represent the traditions of old, the lure and calming need to escape, to stop a while and recharge our batteries. As Melton continues to move from its earlier history to a rapidly growing city, there will inevitably be both physical and emotional tensions between a newly evolving city and the landscape and rich history of the existing countryside.

Connections Memories: Old New: Urban Rural …The challenge that lies ahead is how to find ways to balance our needs for both. This challenge is best described in the words of Lucy Lippard, one of America's most influential art writers renowned for her ability to bring together cultural studies, history, geography and contemporary art to provide a fascinating exploration of our multiple senses of place.

> *'For many, displacement is the factor that defines a colonised or expropriated place. And even if we can locate ourselves, we haven't necessarily examined our place in, or our actual relationship to, that place. Yet our personal relationships to history and place form us, as individuals and groups, and in reciprocal ways we form them. Land, history, and culture meet in a multicentered society that values place but cannot be limited to one view.'*

In this the twenty first century, a time of transition and technology, we are close to becoming alienated from the very essence of the artisan skills that can connect us with our past and sense of place. Cultural landscapes can link us to our beginnings and help us to emerge as unique and distinct societies proud of our heritage and proud of our newly emerging pride of place.

Here in Melton we have important evidence of a craft that has influenced the shaping of the cultural landscape, a craft that has survived the centuries, passed from generation to generation and from culture to culture.

Our task as custodians is to protect and preserve this important part of history before it is lost to the ravages of time, and to celebrate Melton's cultural landscape and its dry stone walls as 'icons' for which the Shire becomes renowned both nationally and internationally.

# 13. Bibliography

**Primary Sources**

Historical Maps

State Library of Victoria

- Army Ordnance Map (Sunbury) 1916, 1936
- Shire Map Series (1892)

Lands Victoria:-

- Historical Plans;
- Put Away Plans;
- Torrens Application Field Notes and Plans

Melton and District Historical Society (photographs and miscellaneous sources).

Melton Shire Council: aerial photographs.

Public Records Office of Victoria:

- Pastoral Run files
- Selection and Closer Settlement Act files
- Torrens Application files
- Education Department: schools correspondence files

Royal Commission into Closed Roads, Progress Report (containing minutes of evidence etc), Victorian Parliamentary Papers 1878 (No.72)

The Fences Statute 1874 (Fences Amendment Act, November 1873)

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