



Caversham 4 Laning: Heritage



1860s view towards what became Kew shows Captain Blackie's cottage (the oldest house in Caversham) in the upper right of the photograph. (Otago Settlers Museum Collection accessed at the Caversham Project Database)

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Contents

| 1 | Introduction | | | | |
|---|--|--|------|--|--|
| | 1.1 | Brief | 3 | | |
| | 1.2 | Limitations | 4 | | |
| | 1.3 | Acknowledgements | | | |
| | | | | | |
| 2 | Prop | oosed Work | 4 | | |
| 3 | Meth | nodology | | | |
| | 3.1 | Inputs | 7 | | |
| | 3.2 | Site Visit | 7 | | |
| | 3.3 | Recommendations from the Preliminary Desk Top Assessment. | 8 | | |
| 4 | History of the Road through Caversham9 | | | | |
| | 4.1 | 1840s – 1880: Tracks to Road | | | |
| | 4.2 | 1880s to 1910 | . 18 | | |
| | 4.3 | 1905 to 1950 | . 24 | | |
| | 4.4 | 1950s onwards | . 32 | | |
| 5 | Assessment of Archaeological Potential33 | | | | |
| | 5.1 | Physical Setting | | | |
| | 5.2 | Sub-surface archaeological potential | | | |
| | 5.3 | Buildings - Residences | | | |
| | 5.4 | Ancillary Structures | | | |
| | 5.5 | Industrial School / Boys' Home | | | |
| | 5.6 | Roading structures - poles, rock walls, kerbs, paths roa | | | |
| | | nselves | | | |
| | 5.7 | Aberfeldy Street | | | |
| | 5.8 | Burnett Street to Barnes Drive East | | | |
| | 5.9 | Goodall Street footbridge to former Caversham Station area | | | |
| | | Hillside and The Glen | | | |
| 6 | Assessment of Effects41 | | | | |
| | 6.1 | Summary Statement | | | |
| 7 | Statutory Requirements41 | | | | |
| | 7.1 | Historic Places Act 1993 | . 41 | | |
| | 7.2 | The Resource Management Act 1991 | . 42 | | |
| | 7.3 | Dunedin City District Plan | | | |
| | 7.4 | Consultation with Stakeholders | | | |
| 8 | Statement of significance43 | | | | |
| | 8.1 | Subsurface remains | | | |
| | 8.2 | Residential Buildings and Auxiliary Structures | | | |
| | 8.3 | Caversham Road | | | |

| | Area | 2b - Barnes Drive to Lookout Point | 45 |
|-------|--------|--|-----------|
| | 8.4 | The Prehistory of the Site | 45 |
| | 8.5 | The Industrial School and Farm | 45 |
| | 8.6 | Residential Buildings and Auxiliary Structures | 46 |
| | 8.7 | The Rock Retaining Walls | 47 |
| | 8.8 | Summary of Significance | 47 |
| | | | |
| 9 | Sumi | mary of Heritage Issues | 47 |
| 10 | Selec | cted Bibliography | 49 |
| Appe | endix | 1: ICOMOS (NZ) Charter 1995 | 50 |
| • • | | ` ' | |
| Appe | endix | 2: Historic Maps | 53 |
| Appe | endix | 3 Historic titles | 57 |
| Appe | endix | 4 Otago Witness 6 November 1858 p6 | 62 |
| Anne | ndix | 5: ED 41479, Land ownership for Ministerial purposes, project ar | ea |
| | | Os works (Opus Dunedin) | |
| Appe | endix | 6: Building Assessments (external) | 71 |
| | 10.1 | South Side of Road | 72 |
| | 10.2 | North Side of Road | 80 |
| | 10.3 | Associated Features | 83 |
| | 10.4 | Street Furniture | 87 |
| | 10.5 | Access covers | 87 |
| | 10.6 | Structures | 88 |
| Арре | endix | 7: Industrial School from <i>Otago Witness</i> 11 July 1905 | 91 |
| | | 8: Ministry of Works (MOW) 1984 works plans, courtesy Op | |
| Inter | natior | nal Consultants © (Dunedin) | 93 |

1 Introduction

NZTA (New Zealand Transport Agency) proposes to widen parts of State Highway 1 that connects the Dunedin Southern Motorway to the city. The project area is best described as being the State Highway 1 corridor between Andersons Bay Road and Lookout Point. More definitively, the project starts at Kensington Hill, south of King Edward Street overpass, and finishes south of Lookout Point at the transition onto the southern motorway. As part of the project development, this document was commissioned to assess the potential effects of this proposal on the identifiable heritage areas addressed in earlier documents (Eaves 2009).

In the lower area closer to the city, the widening of two-lane motorway to four lanes will require the construction of a new bridge at The Glen, a new footbridge at Goodall Street and alterations to the signal-controlled Barnes Drive intersection. As the highway climbs to Look Out Point, the widening of the road will require the removal of several buildings, gardens and constructed rock walls that have served as access areas for the residents.



Figure 1: Map showing general location of Caversham project

1.1 Brief

The brief for this report was to divide the project into two areas corresponding to the two stages of works, and to ascertain specific risks within the areas, in regard to both archaeological and built heritage resources. The overall purpose of this work is to clarify the heritage risk (buildings, structures and archaeological) for the project area and identify areas of stakeholder concern To do this, further research, limited consultation with key stakeholders (iwi, NZHPT) and a site walk over were undertaken, to inspect for visible features. A draft version was released for general comment to all parties before the report was finalised.

1.2 Limitations

This document does not constitute an assessment of cultural or iwi values as only tangata whenua can make these comments.

This document was compiled from primary and secondary sources sourced by the author and Opus Information Centre. Every effort has been made to ensure this information is correct; however any subsequent alterations to any part of this project or project area may alter some findings.

No property or structure was accessed for the purposes of this assessment; therefore all statements are based on external inspection only.

1.3 Acknowledgements

The author is grateful to KTKO Ltd and the New Zealand Historic Places (NZHPT) Otago/Southland for their time and discussion regarding potential implications, particularly at this very early stage of the project. The Dunedin City Council archivist, Alison Breese, also provided information and assistance which were much appreciated.

2 Proposed Work

Full details on the nature and extent of proposed works associated with the project are provided in engineering and planning documentation associated with the two Notices of Requirement. A brief summary is provided here to provide context for discussion on potential heritage impacts.

The project area involves a section of State Highway (SH) 1, located between Lookout Point (western extent) and the bend at Andersons Bay Road (eastern extent). The work involves doubling lanes in areas which are currently single-laned. The proposed works will follow the route of the existing highway. There will be no alterations to the railway line or tunnels (or any rail infrastructure), nor is there any requirement to realign any part of the highway.

It is proposed that the works will be in two stages; the first (Figure 2a) will be from Andersons Bay Road to Barnes Drive, the second, from Barnes Drive to Lookout Point (Figure 2b).

4

Andersons Bay Road to Barnes Drive

This section of the project (Figure 2a) will include a new over-bridge at the Glen, and a separated four-lane highway from the King Edward Street over-bridge to Barnes Drive. Improvements are also planned to the road layout at Barnes Drive. These involve building separate left turn lanes to create two through lanes in each direction, while the right turn land for Caversham will be extended.

The northbound on-ramp from the Glen will be closed once this project is completed because there is not enough room for it to merge with the new four-lane highway. The Goodall St pedestrian bridge will also be raised and extended. The speed limit for the Andersons Bay Road to Barnes Drive section of this project will remain at 80km/h.

Barnes Drive to Lookout Point

The major work in this section (Figure 2b) will involve widening and realigning the highway between Barnes Drive and Lookout Point. Safety will be improved through a central median to separate opposing traffic flows, as well as the provision of separate service lanes for most of the remaining properties alongside the highway.

Safety at Lookout Point will be improved by restricting right hand turns on to State Highway 1 at Mornington Road and South Road and closing the Short Street access onto the highway. Further investigations are being undertaken into the viability of building a traffic over-bridge to directly link Mornington Road and Riselaw (and South Road). The speed limit for this portion of the project will increase from 50km/h to 60km/h.

April 2010 5



Figure 2a: Detail of proposed works Andersons Bay Road (R) Barnes Drive (L)



Figure 2b Detail of Proposed Work Barnes Drive (R) to Lookout Point (L)

3 Methodology

3.1 Inputs

This assessment follows the format provided by the NZ Historic Places Trust (HPT) in their *Sustainable Management of Historic Heritage Guidance* series¹, Information Sheet 9, "Preparing a Heritage Impact Assessment".

This assessment is guided by ICOMOS (NZ) Charter (Appendix 1), NZHPT Sustainable Heritage Guidelines (ibid) and communications between Opus and the NZHPT, Dunedin City Council and polices and rules outlined in the District Plan. The following documentary sources were employed for this assessment:

- The NZHPT Register of historic areas, places and wahi tapu
- Documents, published and unpublished, including books and articles relevant to this area and project
- Dunedin City District Plan²
- Historic survey plans (Land Information New Zealand)
- The National Library's photographic collection
- Otago Daily Times (various dates)
- Opus Dunedin files for the project
- New Zealand Archaeological Association site database (Archsite)

Due to the extensive period of history for this project area and the continuous use and occupation, the recommendations made at the end of this document are designed to provide a guide to NZTA for the management of heritage resources as part of this project.

3.2 Site Visit

Areas of potential risk were identified in a desk top assessment (Eaves 2009, edited as 3.3) and it was clear further research was required, and a site visit essential, in order to clarify, eliminate or confirm areas identified as heritage risk (both archaeological and built) associated with the project.

The site visit was undertaken on 23rd and 24th February 2010, in fine conditions, although on the 24th long distance visibility was partially obscured by smoke from a nearby large fire. In order to ascertain what visible evidence remained (for all forms of heritage) the entire length of the project area (both sides) was walked³ although some access was limited in areas with dense vegetation (gorse, bramble, or steep sided valley edge). No invasive testing of any form was undertaken and no test pits were dug. Meetings were held with Iwi and NZHPT, in order to discuss areas of potential risk

¹ http://www.historic.org.nz/en/Publications/SustainMgtSeries.aspx (consulted March 2010)

² http://www.dunedin.govt.nz/your-council/policies/district-plan/volume-2

³ In accordance with the TTMP and the H&S Plans held at Opus Dunedin offices.

and to begin to identify approaches to limit, mitigate or remove the risk associated to specific areas.

3.3 Recommendations from the Preliminary Desk Top Assessment

In 2009 a desk top review of the project area identified the likelihood of heritage risk in certain locations. Key recommendations in the report were:

- Consultation with Iwi to clarify the nature of the burial at Lookout Point and the ramifications of this. It is also desirable to clarify if there are additional sites (unrecorded) in this vicinity.
- Implications for the old Boys' Home and associated structures at Lookout Point, as the landscape setting (including notable trees) was originally the Industrial School and established in 1869.

See buildings appendices 6 and 7 for physical descriptions; see discussion in Section 4, below.

- There is potential for early European material, possibly redeposited, to be revealed during any earthworks on the north side of the motorway extension, from Eglinton Road (Cargill's first home) east to the area of works commencement (joining the existing 4 lanes from Anderson's Bay Road) and including the area of the railway workshops (Hillside). There were other industries in this area, notably the Gas Works, a tannery, a brick works and many small industries.
- Railway infrastructure: tunnels, workers' housing, paths, walls, roading, stations dating from 1873.

The line was re-routed in the 1980s, along with the construction of State Highway 1. Both railway tunnels will not be damaged or encroached upon by this project. Only late C20th bridges will be altered; the riveted steel bridges remain untouched. Concrete abutments on the south side of SH1 will likely remain, or, like the rail batter cut for the line, will become covered by the widening of the road at this point. Although there are no remaining station buildings or features, the foundations will not be affected by these works as the rail track is not to be moved. The adjacent Gasworks will not be affected either, as all works are on the east side at this point.

• There is potential for historic material (structural or individual objects) to be recovered during the course of the project, at any point along the project route, in areas that have been previously disturbed during 1980s road and rail works, or, from areas that have no visible surface features. These will range in time from Maori, to early contact period, to Chinese and European gardening, to late C19th European, and will range in site type from road and rail formation, to construction of houses and their curtilage (outbuildings and rubbish tips).

To minimise all risks to this project, the appropriate authority must be applied for from the NZ Historic Places Trust. This authority application will require a Methodology for Excavation and Monitoring as well as a full assessment of length of proposed works.

4 History of the Road through Caversham

Although it is not necessary for this assessment to include a detailed history of the Caversham roading network, some understanding of the establishment of this route is necessary to comprehend the sequence of roading styles and likely remains of such works. Such changes - from track to dray path to basic road to formed State Highway - will provide the necessary background to indicate how this succession of events may have impacted on the heritage resource within project area.

4.1 1840s - 1880: Tracks to Road

Goodall (1980) writes of tracks across the hills and to various hunting areas, which complemented a system of river and sea links around the Otakou region. Where necessary, waka were dragged across land (Andersons Bay) and it was these tracks that "were adopted by the earliest Europeans, too, as most of the hilly terrain was a tangle of bush" (1980:16).

Olssen (1995:18-44) provides an account of the people and places in Caversham. To paraphrase, he states that the first settlers arrived in the (now) city area in 1848, settling around the harbour to the north but soon moved south to occupy lands along the southern hills and the swamp on the other side – Caversham eventually being known as 'the Flat', with other 'villages' nearby. One of the early settlers was W.H.Valpy, a wealthy migrant from India who settled on the low hills of this area and who:

... employed men to 'form a crude road from the southern end of Princes Street to his farm at Forbury' and later had a path built to the beaches on the Pacific Ocean.....Valpy named the area...One of the main roads south from Dunedin followed Valpy's footpath for a distance, then skirted the hills to the north of the marshy flat, the Mornington ridge, then climbed up the Caversham Valley to Lookout Point before descending to Burnside and the Kaikorai River's estuary.....(Op cit).

Valpy's 'tracks' formed the basis for many roads in the area. The road (above) curved around the edge of the hills at the Glen, to avoid the large swamp that became Carisbrook.⁴

McDonald (1965) is more precise, stating

⁴ http://en.wikipedia.org/wiki/Caversham,_New_Zealand

Most important was the southern route from the end of Princes Street. The first hazard was the detour made necessary by the tidal inlet at Manor Place...then there was a swampy expanse opposite the modern Oval, impassable in wet weather; then the road crossed the spur at Hillside, ran up the Caversham Valley, and descended steeply from Lookout Point into the valley of the Kaikorai. By this route, it was reported, [1849] drays were already passing to Green Island Bush but this could only have been in favourable conditions. There was no metal on any of these roads. To Andersons Bay there was a footpath five feet wide, with a ditch on either side...(ibid p17)

Historic title searches and maps have produced a picture of the first roads in this area. Figure 3 is taken from the Certificate of Title (Otago Lands Registry) number OT65/299. It shows that in 1853, Block 6 of Dunedin was surveyed and roads marked.

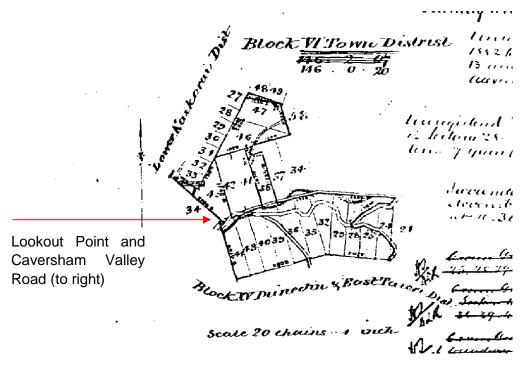


Figure 3: Part of CT OT65/299, of 1853.

The full title is in Appendix 3

Figure 3 also shows the allotment numbers around Caversham Valley Road. SO2 (Appendix 2 and Figure 5) shows all allotments for west Dunedin and more specifically, the two routes south from the town in the late 1800s. Roads Boards were first established in Otago in 1856 (McDonald 1965:138)⁵ and the road north from the town, to Port Chalmers, was easily delineated.

It was the south road that caused the trouble. In that direction lay the rural lands of Green Island, Taieri...Clutha and the old Otago block for which it was Dunedin's function

⁵ For Caversham and other areas in 1865. The multiplicity of boards at this time lead to "unconformity [that was] an embarrassment in later years" (McDonald 1965:139).

to serve as port and market....The Great South Road ... had been regarded as that which ran ...by way of Caversham and Lookout Point. But the swamp section was difficult and some members of the Board now had other routes in mind. The majority favoured the development of a line up Rattray and Maclaggan Streets on to the main ridge behind the town and thence along the crest to Lookout Point; others... preferred [a different approach but whichever was preferred it was essential] to secure the co-operation of the external authorities....On 23 February 1857, [the Town Board' voted £500 for the Maclaggan Street route [and] at the same time it aside £150 for the swamp Caversham...Work on the swamp road had been begun by day labour, in April, but after a few weeks it was abandoned because of the lateness of the season, leaving the surface in a far worse condition than if it had been left untouched. (McDonald 1965:37-9)

Both Dunedin and Provincial government officers' tempers flared, each side claiming the other was responsible for the process of road building – and thereby which route should be chosen. The General Road Board resolved on 5 January 1858 that

The best outlet as far as gradients were concerned was by way of Caversham, and as that road had already been so far formed it was expedient that the Board's operations should be directed towards meeting it at the town boundary. A few weeks later the Provincial Government declared that it was willing to find funds to form a good road from the jetty to the Caversham rise.....During the next year or two the Provincial Government succeeded in overcoming the swamp barrier, completed the road, and handed it over to the Town Board for maintenance. (McDonald 1965:42:43)

The Otago Witness of November 1858 printed a 'Supplementary Estimate' by a civil engineer (J T Thompson) as to the cost of a Main South Road between Dunedin Town Boundary and the Taireri Ferry. His quote (Appendix 4) is addressed to Captain Cargill, the Superintendent of Otago, and it broke up this Main South Road into stages, the first being Caversham Quarry Road⁶, the New Mill and Saddle Hill (in the Kaikorai Valley) – these three stages to cost £2400. Thompson set out recommendations for construction including width of road, length and which parts must be metalled. However, it is not until 1901 that the Otago Witness can report the meeting of the Taieri County Council that:

The metal allocated for Caversham to Taieri Ferry and the Short road, Look-out Point, has been run out, the road opposite Abbotsford railway station metalled, and the footpaths throughout Kaikourai....The state of the Main South Road calls for the council's consideration. The road has

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⁶ Fox's Quarry operated at Glen Road, Caversham (Northern Advocate 20 December 1906:2)

been starved for years, and it must be obvious to councillors that every year its condition is becoming worse. The metal allocated is barely adequate to patch the worst of the holes and watercourses and no attempt whatever can be made to keep up the crown of the road. Instead of the sides, the centre serves as a water tavble and this too, with gradients steep enough to ensure an easily maintained road with even a moderate crown..... (*Otago Witness* 11 September 1901:28)

This lament of the council's Engineer continues, stating the midwinter issues with the road meant that metal had to be applied in July. However, the physical shape of the road as a channel, rather than a flat, is clear.

Alma Rutherford's (1978) account provides yet more detail. She notes a dray road was formed from the town to Green Island Bush via Caversham and Lookout Point by 1849 but was un-metalled and that by 1857 the Swamp Road was often still impassable (1978:6).

Between these various accounts it is fairly clear that a formed road existed through Caversham Valley by the late 1840s, which was fortuitous given the gold rush of the 1860s. The hunt for gold caused dramatic growth across this region in the 1860s and caused incredible pressure for housing and roads, all with footpaths, lighting, embankments, cuttings and retaining walls. The press and public placed demands on the Roads Board which at that time were unrealistic, particularly as fresh water and sanitation were also under severe population pressure and considered of greater priority (Olssen 1995: 18-44).

From the 1860s onwards, on the ridge from Mornington downwards to Parkside (Montecillo Ridge to the Flat), wealthy families built large homes (Olssen 1995:18-44). The Main South Road, as the arterial link to the goldfields, featured numerous shops and small industries along it. Rutherford discusses the growth of the suburb of Caversham (Figure 3) and shows how the

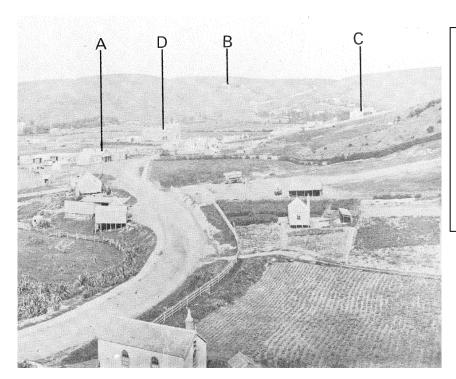


Figure 4: Caversham c1867 from Rutherford 1978:9.

A = Caversham hotel (first one)
B = Sidey's homestead (the landowner of the upper allotments)
C = .St Peter's Church

D = the Benevolent Institution, which later founded the Industrial school at Lookout Point.

Main South Road headed towards the base of Caversham Rise (approximately the area of the Glen, today), in about 1867, and how it curved around the swamp (at left, above) which became Carisbrook.

By 1876, maps for the area show all flat lands around the Main South Road as occupied and in the process of further subdivision (Figure 6). Also in this year, E B Cargill built a new home,⁷ from the latest materials (concrete), designed by his son-in-law F W Petre. Although well clear of the project area, it indicates how Caversham was no longer just a swamp outside the town, but an accessible part of it and moreover a desirable place to live, away from the stench and noise of the overcrowded town. Once the railway opened and passed through the suburb (1873), Caversham was on the map (Rutherford 1978:16).

At this point, Rutherford's 1978 text (and numbers) provides the most useful method for itemising the human activity occurring in the vicinity of Caversham Valley Road. Using Figure 7 (below) and moving from grid west to east (that is, Mosgiel to City direction), the following items are identified:

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⁷ Olssen 1984:214

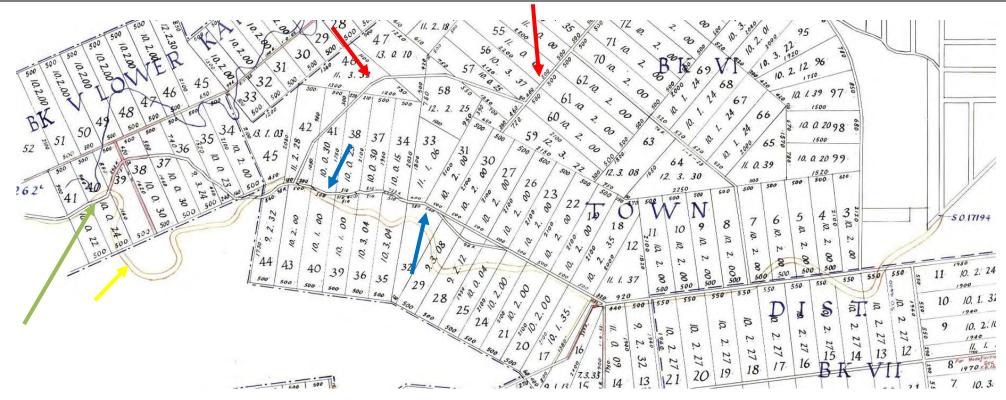


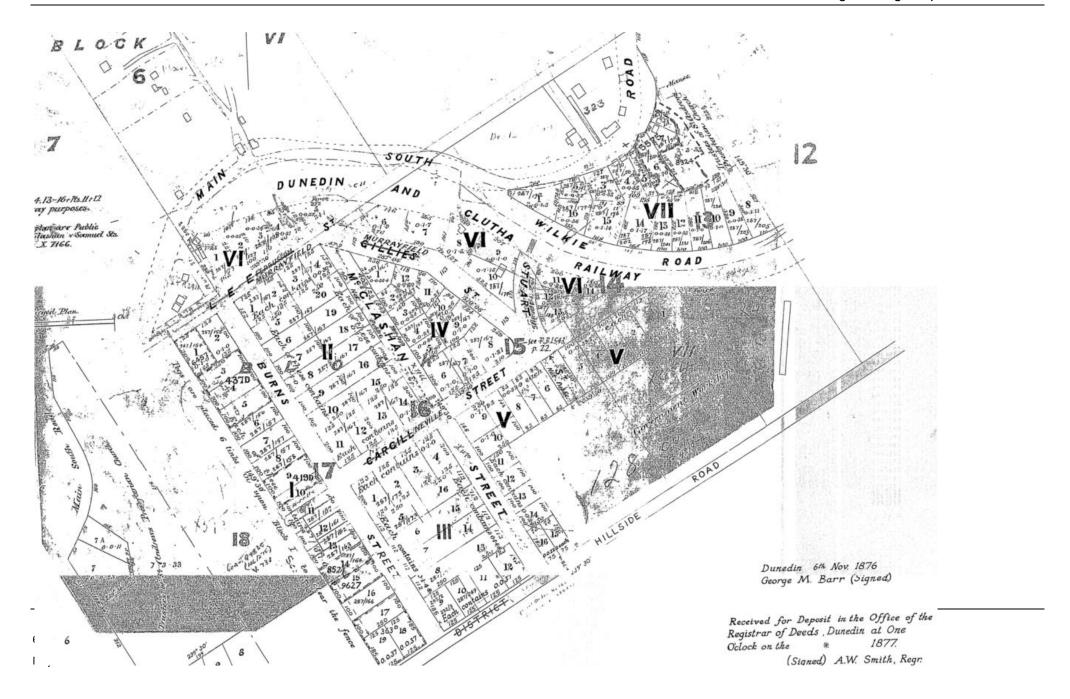
Figure 5: Part of SO2, showing the two routes south from Dunedin (LINZ).

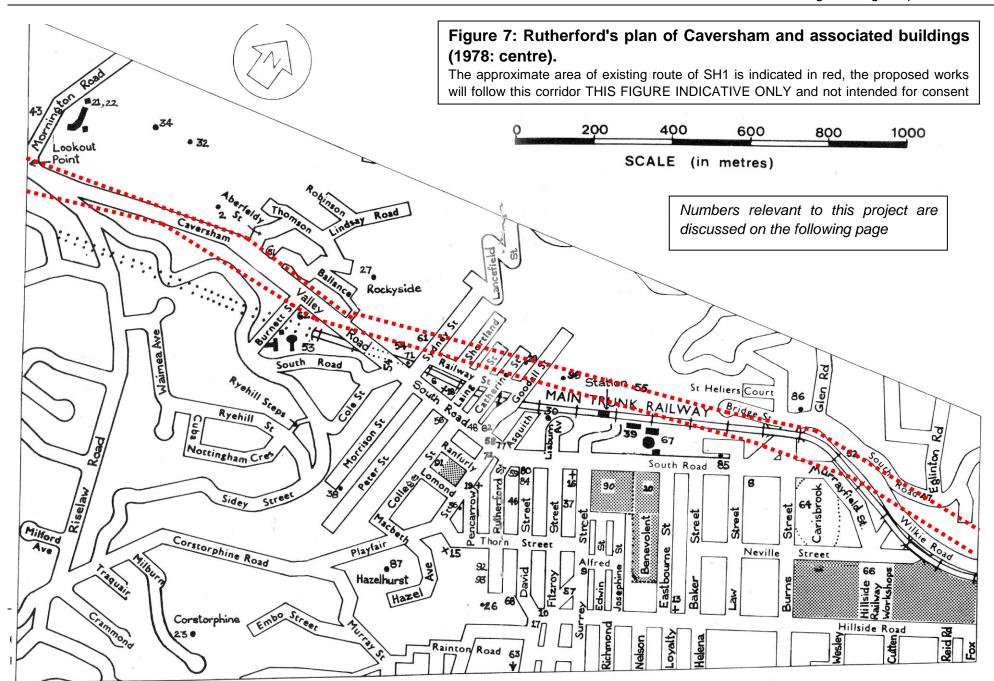
No date is available for this plan, but it is likely to be of the period 1860-70 as it shows all main roads south as discussed in the 1850s. Both routes 'joined' at Lookout Point (green arrow) and the difference was their routing through the suburbs. The upper route took the hills (red) the lower, through Caversham. A third route (yellow arrow) is visible along the Parkside area and is the Main South Road.

Figure 6: (overleaf) Part of Deed 128, Plan of Caversham East township in 1876 (LINZ).

Note the name changes of some streets (Cargill to Neville) and that McGlashan Street was subsumed by the Hillside railway workshops.

May 2010 14





Listed below are sites indicated on the map provided as Figure 7. Sites are identified by number, and listed as they appear on the map from left to right (approximately west to east). Information is also provided as to the potential impact of the project on these identified sites.

21 & 22: Industrial School. The only remaining pre 1900 structures appear to be those indicated in Figures 8, 9 and 10 – a brick rectangular building and a weatherboard villa (181 Caversham Valley Road, currently occupied). Other buildings in this area are late C20th.

The brick building is outside the area of works, the villa at 181 Caversham Valley Road may be impacted by the project.

2: Captain William Blackie's Cottage (1850). Probably demolished years ago, the precise location should be ascertained as foundations, gardens etc may still remain.

This area is outside the project area of works.

51: The first Caversham railway tunnel (1871)

This site is clear of proposed works.

27: 'Rockyside', the 1858 home of John Turnbull Thomson, Chief Surveyor of Otago.

This site in Lindsay Road is clear of works

Rockyside Brickworks [not on map but located above point 62]. These operated from at least 1879 until forced to close by the construction of second railway tunnel (see Figure 12).

The location of the brick works is outside the area of proposed works

62: The double track railway tunnel and adjacent riveted steel skew bridge **54**, both dating to c1906-1910. Rutherford notes (1978:35-6) that "Much of the excavated material [for the new double track tunnel] was used to heighten and widen the railway embankment between the Glen and Kensington". Other accommodation had to be made for this wider, higher double track, all of which was to be changed again in the 1980s.

Neither the double track tunnel or the skew bridge will be affected by these works.

71: Blackwood's store on the corner of Sydney Street and Caversham Valley Road. This store was removed for the 1906-10 railway works.

61: The Standard Brewery, Sydney Street, owned by the Briggs family. They shared water rights with the Railway's spring and were bought out in 1924 by NZ Breweries.

It is likely that this area was modified during 1980s earthworks. Further research required.

6: Porter's Caversham Hotel (first opened 1867)

The approximate site of the hotel is outside the project area

18: Caversham Methodist Church.

This site will not be affected by the proposed works.

29: Salvation Army Maternity Hospital (opened 1903), probably demolished in the 1980s.



96: A Fulton family home built of Oamaru stone, demolished, possibly in the 1980s road realignment.

30: Lisburn House. An historic two storey brick house built in 1865, and registered as a Category I Historic Building by the Historic Places Trust.

This site is clear of works.

55: Caversham Station and platform, demolished 1962 and 1980s respectively.

Located within the project area. It is possible that some physical remains of features may be located during works.

39: Immigration Barracks (1872 – 1904 sold for removal)

Site is located outside the area of proposed works

67: Caversham Gasworks, 1882-1909. Demolished and area likely modified in 1980s

86: 108-112 South Road. Shops at the foot of the Glen. The oldest of these has been demolished (Berwick's store) however the old butchers shop remains.

This area will not be impacted by proposed works

52: The embankment at The Glen, widened in 1907

This area will not be impacted by proposed works

47: Hillside / Eglinton Road. Modified during work on the road and rail alignment in the 1980s.

This area will not be impacted by proposed works

Summary

It is clear that by the 1880s there were several routes to Lookout Point, but the one most favoured was the one endorsed by the City Engineers – and the route that has become State Highway 1. In terms of physical evidence of technology and structures, any evidence of a formed track (road cuttings), metalling for stability, application of asphalt (tarmac or tarmacadam and shell), was not found. The need to drain the Caversham swamp would have required a series of small drains leading to a larger outlet. Archaeological evidence that may be located during earthworks associated with this project would be:

- Stage 1 area: drains, road cuttings and formation
- Stage 2 area: drains, channelling, road cuttings and formation, residual track.

4.2 1880s to 1910

This section covers the period of more intensive settlement on the hill leading to Lookout Point. It covers the settlement characteristic around the formalised route and the types of services that were soon required.





Figure 8: The garden of the Industrial School 1904 (Rutherford 1978:16).

Of all structures visible in this image, only the indicated (red arrow) brick building still stands. It is also visible in Figure 9 but hidden by vegetation in Figure 10. The principal's residence is indicated by the blue arrow.

The Industrial School was well established by 1882. Not only are there brick buildings but also trees and access tracks and vegetable plots are visible in photos from this period . Figure 10 of 1882 shows a pencil line weaving under the surveyed lines of the road, possibly indicating an early track. Below it, South Road is shown surveyed in detail and the relationship of South Road to the new road can be accurately measured. Both the Industrial School lands and the adjacent hill top, "Look Out Point", are shown. The path of the contemporary Mornington Road, through allotments 41 and 42 to the new road, was designated in 1872⁸ but not shown in full on this plan.

⁸ CT 3/42, Otago Lands Registry





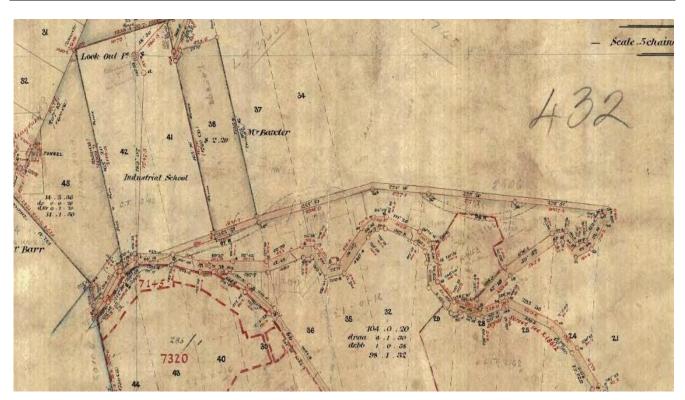


Figure 9: Part of DP432 (LINZ) dated 1882 showing Industrial School property boundary.

The entire plan is reproduced in Appendix 2

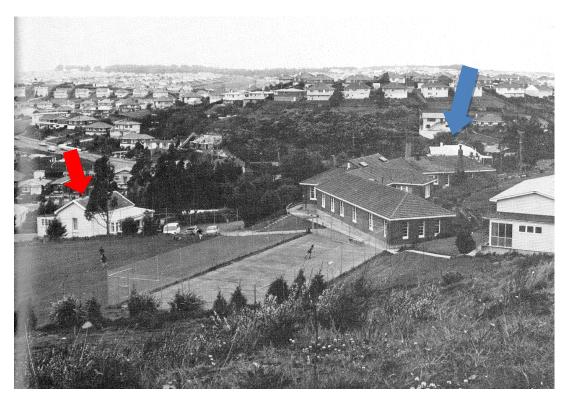


Figure 10: Lookout Point Boys' Home in 1976 (Rutherford 1978:17).

The one-time jumble of nondescript buildings, borrowed and moved from various parts of Dunedin, has been whittled down to a manageable few, the main buildings being large one of red brick erected mainly in 1941, while the principal's spacious kauri residence was built about 80 years ago (ibid).





Figure 11: The same view in 2010.

The north side of Caversham Valley Road, at Lookout Point, was clearly established as the Industrial School. On the opposite side of the road, some housing is visible behind the rail tunnel excavations of 1907 (Figure 12) and the hillside itself possess an established brickworks and clay quarry.

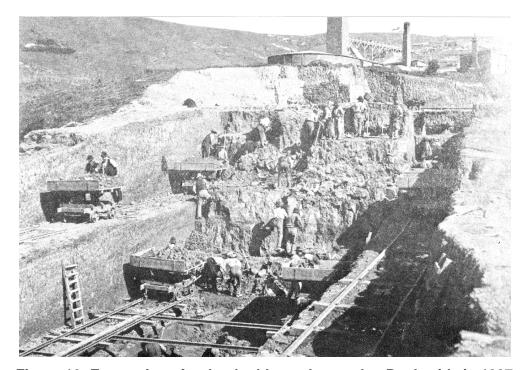


Figure 12: Excavations for the double track tunnel at Rockyside in 1907 (Rutherford 1978:41).

Note the brickworks behind and above it, the tall brick chimneys. Closest to shot is a Hoffman kiln and also visible is an aerial tramway (of some kind) to transport clay (possibly water) from higher up the site. Evidence for these works may become apparent when houses on the south side of Caversham Valley Road are removed.



Much of the existing housing on the south side of Caversham Valley Road is likely to have been built on either the site of the quarry or the brickworks themselves. Figure 12 therefore provides indicative information relating to both land use at this time and housing construction on adjacent lots; affluent members of society would not have built their homes near a noisy (and toxic) brick kiln therefore the only likely housing would be workers cottages, or other people unable to be too choosey about the location of their home, that is, rental accommodation.

Olssen's (1995: 18-44) analysis of the population shows many Caversham residents were skilled Protestants who established many of the local industries, charitable organisations and churches. C & W Sheil's brickworks (based closer to St Clair) had quarries in Forbury, and Caversham; Kensington appears to have been a heavy clay area as William White's clay pipe factory was using Caversham clay, in 1874, on Caledonian Society land. Caversham Gasworks operated from 1882-1909⁹; several breweries, a tannery and the wax Vestas match factory. McKinlay and Son had their boot factory in Kensington in 1879 and the NZ Flour Mill opened in 1880 (Olssen ibid). Later the railway workshops were established here, employing 700 by 1930 (op cit).

By 1900 over fifty businesses occupied the Main South Road, David Street and Forbury Corner.....There were bakeries,...a laundry [usually run by Chinese], several bookmakers' and tailors' workshops, joiners' shops...hotels... (Olssen:26-7)

Summary

Figure 13 indicates that the tram and rail lines to Caversham terminated in two places, one at approximately the second rail tunnel (just before Burnett Street) and the second near Aberfeldy Street. This left the rise of the hill to be climbed. Caversham Borough amalgamated with Dunedin in 1904, partly to acquire the electric tramway service but also to access funds to assist in road widening (Olssen 1995:33). The Caversham project's plan of the tramway system (Figure 13) shows that one line followed the route of the Caversham Valley Road, and that such formalisation would have required tracks, surface treatment and clear sub-surface excavations to prepare an adequate base for the part of the road carrying the trams. Moreover a power supply had to be reticulated for the length of the tram line, indicating overhead power cables (and poles) would have been required.

The installation of the electric tram required the installation of these services at least as far as Aberfeldy Street. Formation of a road to support trams would have involved the covering over of previous tracks rather than their removal; it is likely traces of original road and track surfaces will remain in the Burnett to Aberfeldy Streets vicinity.

⁹http://en.wikipedia.org/wiki/Caversham,_New_Zealand states that these were removed for the Caversham Bypass in the 1970s and 1980s, however remnants have been included in a new subdivision.



6-CBT13.00

May 2010 22

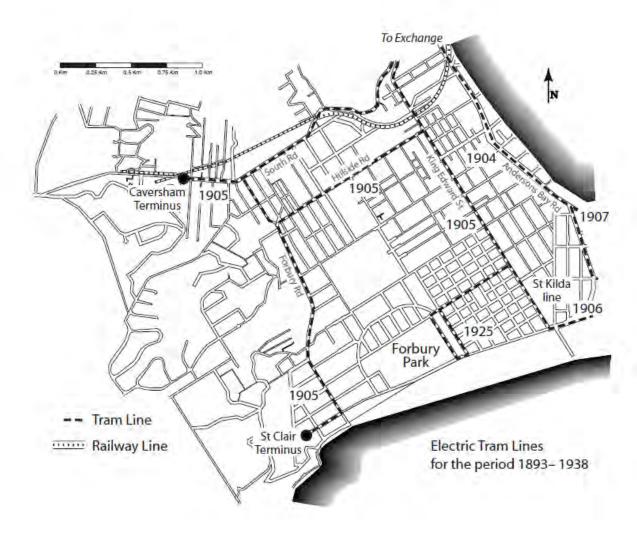


Figure 13: Tramway system.

(http://caversham.otago.ac.nz/resource/maps/index.html).

May 2010

23

4.3 1905 to 1950

This period was characterised by continued pressure to widen and stabilise the road, both on the flat (Stage 1 – Andersons Bay Road to Barnes Drive) and the hill (Stage 2 Barnes Drive to Lookout Point). The Otago Witness of 1 June 1904, reported that "the proposal to widen the road 26 feet," was an action considered 'imperative" as there was "insufficient room for vehicles to pass the electric trams with any degree of safety when the latter start running". By 1905, trams were running through the suburb.



Figure 14: 1905, looking over Parkside, Carisbrook and Hillside (Rutherford 1978:58). A = Lisburn stables with the Gasworks chimney against a background of the Glen quarry. B = the fire brigade tower, C = the town hall, D = the gymnasium of E, the College Street school. A road is visible along the cutting to the quarry in The Glen.

Forming the flat road up the hill to Lookout Point had clearly created new problems¹⁰. Dunedin City Council archives (CE Correspondence)¹¹ contains various letters and records of requests to stabilise clay slopes by the houses on the south side of the road. Properties were accessed by 'footways' with 'access' from the road level. While the first walls were discussed as early as 1915 (440 feet long and requiring 2-3 stairways – this is likely to be the first and second sections, as per Figure 16) but it seems they were not built until the 1930s. This ramp, stairs and wall section runs from approximately 85-109 Caversham Valley Road. The two properties located below this rock wall are accessed from a concrete stuccoed wall, of later date.

¹¹ All references were supplied by A. Breese of DCC, for which the author is most appreciative. They are from the City Engineer's (CE) records.



6-CBT13.00

May 2010 24

¹⁰ This would correlate to Stage 2 of the proposed works.

Garages were being built by the 1920s, sometimes causing adjacent property boundary walls to fall down. By the 1930s, the need for the larger retaining wall became reality as part of the relief worker scheme of the times.



Figure 15: The first of three stone walls, 2010.

In the City Engineers Correspondence of 1929-37, a memo states:

The ... proposals for removing the bank and constructing the necessary walling in connection with widening in Caversham Valley Road opposite Aberfeldy Street...widening the carriageway to 32 feet and providing a 6 feet wide high level footway along the south building line with an earth batter between the footway and the top of the wall.....The walling would be of stone pitchers grouted in cement mortar. Provision has also been made in the estimate for a cyclone netting fence along the outside of the high level footway and down the ramps to the roadway. Permission to deposit the spoil on the sections on the North side of the road has been obtained...The estimated cost of the work if carried out under the U.B.5 scheme is £412 (City Engineer reporting on 12th November 1931)

Summary

It seems clear then that this final form of stone wall to 109 Caversham Valley Road dates to the Depression period. Later correspondence (19th August 1933) assists in dating the higher section of stone wall as Mr A Jamieson, who lived "about 8 chains up the rise above Aberfeldy Street" (south side), was having subsidence problems as the clay bank at the front of his property was moving north. A stone toe wall was suggested by the City Engineer to remedy this, which would maintain the 32 foot wide road, maintain existing kerb and guttering (K & G) and again use relief labour, for £176. In an additional letter of the same date, the City Engineer notes that path is ..



hard and dry.... and as most of the footway is fronting the Railway property¹² where there are no houses...[paving] is not an urgent matter...[but tarred macadam surfacing would cost £41.....At the top end of the street, there is a length of 18 chains where no footway or K & G has been constructed, where recently several residences have been erected. Along (sic) portion of this section a clay bank encroaches on the roadway and before K & G and a footway can be formed along this portion walling will be necessary.

A month later, after an inspection of the site, works were approved. It would, therefore, seem likely that the higher section of rock wall (not affected by these proposed 4 laning works) dates to late 1933.

Aerial Photographs of 1947

Aerial images from 1947 (Q and R 43, 45, 49 and 51 from DCC¹³) show the established routes, and housing, in the post war period. Overlaid on each image is the approximate route of the existing SH1. Quality of each image varies, depending on the angle of the original. All images have been cropped to remove areas well clear of the project area.



Figure 16: East end, 1947.Red line shows approximate route of SH1. North is to the left.

Figure 16 (left hand side) shows the clear curve of the rail line and at the bottom centre is the gas holder (circular feature), disconnected in 1967 and demolished in 1968 (Rutherford 1978:44). Figure 17 continues around Hillside, showing housing (left) and the workshops (right), then Carisbrook Stadium. The present highway passes to the left of the gas holder;

¹³ With thanks to Andrew Dunn, DCC.





¹² This suggests the houses in this area were in the ownership of the railways.

therefore all visible housing in this image has been removed. Moving from left field to right, the quarry in the Glen is no more (replaced by housing), there is a batter built up from soil from the second rail tunnel, the rail line, some housing (now removed), then the stadium. The rail over bridge was replaced in the 1980s.

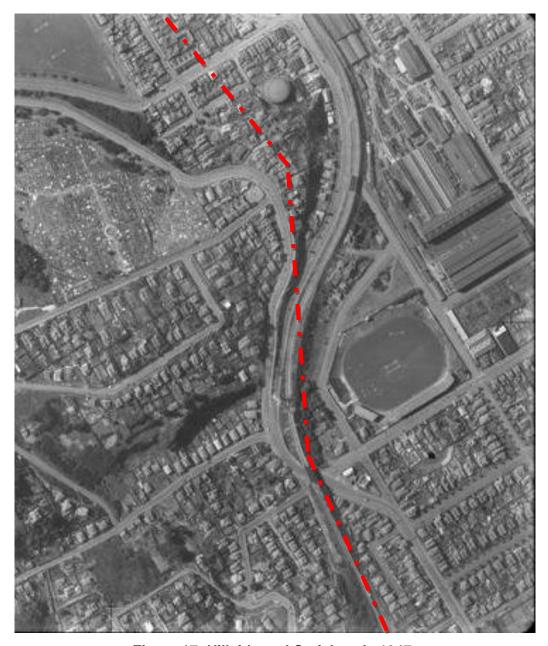


Figure 17: Hillside and Carisbrook, 1947.





Figure 18: Vegetation cover over first rail tunnel

Figure 18 is bisected by the rail line and the Main South Road, again east is at the top. In the centre of the photo is Caversham Station¹⁴, which is surrounded by the Gas Works (top), housing (to the right) and cleared areas, to the south are the road over bridges from Goodall to Sydney Streets, and to the left are two residences with gardens, one of which appears to have been removed in the 1970-80s period while the other, higher up the hill (further left) remains.

Figure 19 continues west from Figure 18 but shows the ridge line (top to bottom) of Rockyside, with the road and rail links out of shot, to the right. Although image quality is poor, there is clear evidence of structures and plantings in this area. Centre right shows a building encircled by hedge and gardens and the irregular shape of the plantings would suggest an early landowner of the area.

¹⁴ Demolished in 1962 (Wikipedia on "Caversham, New Zealand", quoting Alma Rutherford (1978) *The Edge of the Town*, NZHPT Otago Regional Committee)



6-CBT13.00 May 2010





Figure 19: The north side of Caversham Valley Road at Rockyside

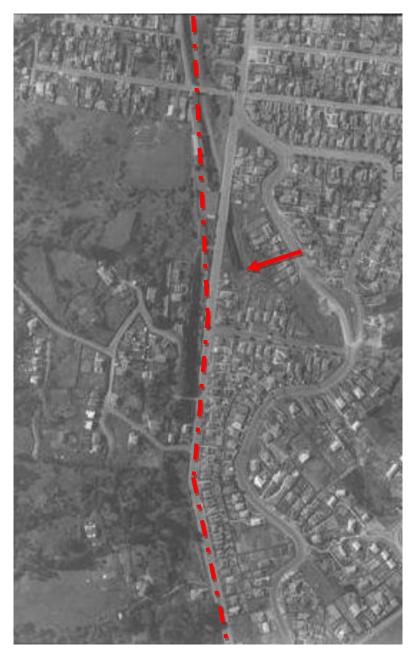


Figure 20: Barnes Drive to Caversham Rise, 1947.

Figure 20, centre mid field (indicated), shows where the second rail tunnel goes underground after passing under Caversham Valley Road. The rail over bridge at the top (east) of the image is approximately the contemporary area of Barnes Drive, meaning the rail over bridge section remaining today dates to 1907 (Figure 12). Structures and features that are visible on the north side of the rail line have been demolished or removed, including the old dump area (grassed). On the south side of Caversham Valley Road (i.e., right), from Burnett Street ('T' intersection, centre field) almost all lots have houses whereas those on the north (left) are still mostly grassed.





Figure 21: Lookout Point, 1947

The last aerials in the sequence show the 'scarred' areas where buildings or construction were at Lookout Point at the Industrial School / Boys' Home. The curved driveway (from Caversham Valley Road) shows the clear link to the building that is currently located at 181 Caversham Valley Road (indicated, Figure 23) and appears to confirm that this was indeed the principal's residence.



Figure 22: Enlarged portion of Figure 21, the Boys' Home.



While the quality of the image is again poor, the gardens and buildings shown in Figure 8 no longer exist but visual evidence still remains. It is likely, therefore, that physical evidence will remain.

Summary

The use of the aerials allows individual buildings to be identified in relation to the existing SH1. The formalisation of this highway in the 1970s and 80s impacted on many of these buildings and industries and created a corridor of sufficient width and viability to Barnes Drive (Stage 1 of the proposed works). Stage 2 however, will require additional land purchases and building removal outside of the road shown in these aerials and it is these landscape changes that will create the greatest heritage effects.

4.4 1950s onwards

The lower slopes and 'Flat' of the Caversham Valley contained numerous small factories, terraced houses and two-storied shop/house buildings. Many of these were demolished for rail and road realignment in the 1970s and 1980s. Materials from this demolition were both removed (off site) and some was redeposited as part of contouring.

Old Ministry of Works files (Appendix 5) provide some idea of what land was claimed for these works. These images are photographs only therefore cannot be enlarged beyond the presented size, but they show the equivalent of land designations for the Dunedin-Milton Motorway:

- Black lines indicate railway land boundaries
- Blue dashed lines show existing ministerial requirement
- Blue shaded areas were to be 'uplifted' from existing ministerial requirements
- Red lines show proposed ministerial requirement, that is, the route of the proposed road way.

This sequence of images (Appendix 5) provides a diagrammatic reference for the buildings and structures shown in the aerials, but in more detail.

Where RED and BLUE overlap it is reasonable to state that this is the route of the intended works, both at that time and in the future – even in the 1970s there were plans for a wider road, but funds constrained this. Where the road was not significantly altered in the 1970s (Caversham Valley Road from Burnett Street to Lookout Point) it would be reasonable to assume that under the existing road surface are the remains of pre 1950 and earlier (even to 1840s) roading evidence. Areas outside this 'red zone' were to be used as work areas for various aspects of the construction – materials storage etc. Moreover, this corridor still remains in that areas that were cleared for the works of that time which were not used (such as the corridor between Barnes Drive and Burnett Street, south side) can now be used. Areas to the east of the Glen have been extensively modified, included excavated and re-contoured, and it is highly unlikely any *in-situ* material remains.



As previously stated, the only areas of building clearance will be those involved for Stage 2, the housing on the rise to Lookout Point. Other areas required for this 4 laning project are currently occupied by tenants, such as the scrap works at Wilkie corner. The areas required for Stage 1 were cleared of surface remains (buildings, structures) in the 1970s and afterwards were contoured; suggesting that any remains on these sites would be redeposited and likely to be damaged. The depth required to encounter *in-situ* material is shown in Appendix 8, a series of plans and cross-sections indicating the depth of the works was up to 28.5 feet.

Additional information from these MOW files shows that the road and rail routes changed places with each other at this time and that significant modification of the areas of the proposed Stage 1 works of this project have already been modified. These are the "as built" plans, which give clear information regarding the completed works, not just what was intended (Appendix 5). As part of these works, the Caversham Railway platform was demolished in 1988¹⁵ but the station itself had been closed in 1962.

Summary

During the 1970-80s public works, the road and rail line effectively changed places in the area of the proposed Stage 1 works. The likelihood of any sub-surface material remaining is low, however the reconnection of a drain network at Gas Works Creek (see Appendix 8) provides evidence that at some depths (5m or more) there may remain structures relating to early drainage in the area. However, the surface of the Stage 1 project area has been severely modified and as these proposed works do not require additional land in this Stage 1 area, there is low risk to heritage.

The Stage 2 area is the opposite. Little work was done on this section past Barnes Drive, therefore it is reasonable to consider that significant information is preserved under the current road and foot surfaces, and that additional information (of social, historical and architectural nature) will be found in the structures and properties that line the rise of the highway to Lookout Point.

Private vehicle use has grown to the extent that daily vehicle use on Caversham SH1 is 25,000¹⁶ vehicles. The 4-laning of this roadway is a continuation of the history of the road, as well as the growth of this area as the major southern portal for Dunedin.

5 Assessment of Archaeological Potential

5.1 Physical Setting

The project area is located on flat land that rises to the top of saddle at Lookout Point. It encompasses areas that are grassed, planted road reserve, occupied business (scrap yard), houses with gardens, mature and dense bush and overgrown railway reserve areas thick with gorse and bramble. Parts of the project area are long-standing public ownership

¹⁶ Otago Daily Times 7 April 2010.





¹⁵ D Eaton, Opus Dunedin, pers comm.

lands that track the changing proposals for road and rail links in this area and this has created the opportunity for regeneration and survival of important ecological areas. The southern railway line effectively mirrors the existing Caversham road corridor (SH1) and this includes two tunnels, various sidings and abutments as well as disused railway land (Caversham Station, demolished 1962¹⁷) Some parts of the project area (notably the northern side of Caversham Valley Road) have already been cleared of some buildings and have remained cleared in anticipation of this project. These areas still retain many of the plantings (exotic and native) that were associated with human occupation of these areas and discussed in the previous section.

The Dunedin City Council purchased the Caversham Valley Forest Reserve in 1994, for the purpose of protecting both invertebrate species and the forest habitat. This purchase was made on the understanding that the land had the potential to be used for public access, recreation and education and to this end the DCC manages the reserve as if it were covered by the Reserves Act 1977. It is a designated Urban Landscape Conservation Area (UCLA 14 Caversham Valley Slopes) and is therefore covered by the rules and policies in the District Plan.

Archaeological potential: Medium Built heritage potential: Medium

5.2 Sub-surface archaeological potential

There are two facets to examining the archaeological potential for the entire length of the project. The first is for Maori prehistoric material and while Iwi discussions to date have been occurring, no final statements can be made at this time. However, it is the opinion of this author that there is reasonable cause to consider that pre-European material could be encountered by project works along or in the vicinity of the ridge of Lookout Point, and along the old walking track route.

More importantly, there remains potential for koiwi to be discovered during any works around Lookout Point. Roberts (1913:32) recounts:

The hills extending southward from the north end of Whakaherakau, known as Lookout Point, were Ko-ranga-a-runga-te-Rangi – a name which is often mentioned in Maori history. "Te Rangi Ihia, a noted Ngati Mamoe chief, who was in alliance with the Ngai Tahu, married Hine Hakiri, a daughter of the ruling chief of Ngai Tauhu at Kaiapoi. He died at Otepoti (Dunedin). He was buried on the peak Te raka a runga te raki (Look Out Point south of Dunedin), that his spirit might see thence his old haunts to the southward" (Rev J W Stack, South Island Maoris, p.82).

This potential is a clear risk for this project and all possible means for mitigation must be examined. Continued discussions with Iwi on this matter as well as potential areas of tracks

¹⁷ Wikipedia on "Caversham, New Zealand", quoting Alma Rutherford (1978) *The Edge of the Town*, NZHPT Otago Regional Committee





or occupation, is essential. Evidence of tracks or occupation may remain sealed under contemporary roads or footpaths, as well as under residences or adjacent structures.

In terms of pre-1900 archaeological material relating to European sites, Rutherford's plan (Figure 7) outlines clearly where European structures and activities were located prior to the 1970-80s road and rail works. Combined with the information in Appendix 5, there are demonstrably clear areas of European material, be it redeposited or *in-situ*. While some areas have been dramatically altered by these works (for example, around the Glen and further east) it is still perfectly possible for redeposited material to be encountered, or, at deeper levels, for original features to be located.

Concern was raised by NZHPT during consultation that there may be a disused rubbish dump in the Barnes Drive area. The DCC archives (the City Engineer's records) of the 1920s discuss the Glen Avenue-Mornington tip, which is now Glenpark Avenue (on the Maryhill side of the hills, to the north of Caversham Valley Road). This tip is situated well above Barnes Drive and

...this tip is used by us on one day a week and the amount of refuse deposited is about 7 cubic yards weekly. Deposits from private sources continue over the whole week and renders useless our effort in cleaning up each Wednesday....It cannot be enclosed as it is largely on the public street - consequently private persons tip all sorts of refuse - some of it offensive. It might with advantage be closed...

(DCC City Engineer's records)

While clearly outside the area of the proposed works, there is always some potential for materials discarded at one time into 'bush' areas to come to light at some later time. On the basis of these DCC archives it would appear there is no official rubbish dump in the Barnes Drive area, but potential for isolated find spots still exists.

Stage 1 (Andersons Bay Road to Barnes Drive) Archaeological potential: Medium to low

Stage 2 (Barnes Drive to Lookout Point)
Archaeological potential: High

5.3 Buildings – Residences

Summary descriptions of the buildings to be removed are provided in Appendix 6. The majority are domestic residences dating from approximately 1880s onwards. Stylistically, some of the villa forms presented are late Victorian and could have been constructed, or moved to the respective sites, in the period 1880s onwards. This stylistic evidence is backed up by the actual subdivision of these allotments in 1872. Appendix 3 is the full title for subdivision of parts of allotments 41 and 42 (see Figures 5 and 12), which were grants to Mr Sidey. Without searching every historic title for the Caversham hill, from this architectural style evidence combined with the Sidey title evidence, it is likely the oldest



villas on Caversham Valley Road date to approximately 1880-90. Detailed searches on individual properties will be necessary for some of the villas; bungalow or later period homes are clearly the result of the ongoing subdivision of the mid twentieth century.

DCC archives evidence from the City Engineer's files also suggests some of these villas will date to the 1880s, as they were railway property. It is highly likely that some railway worker homes were located in this area, as well as around the Hillside workshops.

When the villas and adjacent bungalows are removed from Caversham Valley Road (between Burnett Street and Lookout Point, Stage 2) the residences behind them will be revealed. These newly-exposed residences will have values with the removed buildings, possibly even shared facilities which will not become apparent until further research is undertaken, which is beyond the scope of this document.

Archaeological potential: Medium to High Built heritage potential: Medium to High

5.4 Ancillary Structures

The late Victorian residences will have associated outhouses, sheds (wood or coal), possibly chicken runs, rubbish pits and gardens (including fruit trees). The social and historical values of these ancillary structures, and the paths that connect them, have the potential to provide information on the first European residents of the hill leading to Lookout Point. As subdivision occurred in this specific area there will be changes in the forms and use of these ancillary structures. This is information that, ideally, would be collected in some form¹⁸ prior to removal and would be part of documentation programme that could be linked to 5.3. Any structures identified as being pre-1900 would meet the definition of an archaeological site under the Historic Places Act, but such a review was beyond the scope of this document.

Archaeological potential: Medium to high Built heritage potential: Medium to high

5.5 Industrial School / Boys' Home

As plans for the second stage of the 4 laning project are not confirmed, it would be inappropriate to say which structures, gardens or landscapes features will be affected other than in general terms.

The aerial photographs (Figures 17-23) show that any alteration to the landscape in the grounds of the former Boys' Home at Lookout Point will affect the archaeological evidence. The subsurface evidence likely to survive includes driveways, gardens and potentially some buildings, most notably the building at 181 Caversham Valley Road (Figure 25, below). It seems likely that this weatherboard villa was the principal's residence as, stylistically, it is late Victorian period. It is also possible that the remains of ancillary structures (5.4, above) may exist in the vicinity. Closest to the road are two separate late 20th century residences, the construction of which is likely to have damaged or destroyed any archaeological

¹⁸ NZHPT provide a series of guidelines, the first of which is on the recording standing structures.





features. Moreover, several episodes of road-widening occurred at this intersection from 1915 onwards (LINZ maps), therefore the immediate road reserve area may be severally altered.

When options are considered for Stage 2, the likelihood that any vehicular overpass will require the removal of 181 Caversham Valley Road is high. As these buildings, and the surrounding grounds, were created prior to 1900, they meet the definition of an archaeological site under the Historic Places Act 1993 and application for an authority to modify this site would be required from the Historic Places Trust.

Archaeological potential: High Built heritage potential: High

5.6 Roading structures – poles, rock walls, kerbs, paths roads themselves

The oldest kerb, guttering, ramps, stairs and paths appear to be the Depression period rock retaining walls. Depending on their construction, their construction will have overlaid or removed the original 'footways' to the residences, which were possibly first 'tar macadam[ed]' in the 1920s. Any earlier paths, including Maori or dray routes, may be preserved in the road reserve on either side of the road. In either event, it is desirable to understand the construction sequence for these retaining walls as the 4 laning project will remove the lower section. Examples of early roading construction, particularly of the dates likely along the path of this road, have mostly been destroyed; therefore it is highly desirable to capture any information prior to destruction, even if not legally required by the HPA age indicator (of pre-1900). Moreover, archival evidence found so far had indicated early twentieth century dates, but behind these structures may be revealed remnants of earlier, possibly pre-1900 structures.

The upper section ('209') will be retained as at that point the road will move to the north side of the existing road. On this side of the road are remnant hawthorn hedges and old roads, which prior to destruction, should be recorded as part of a general programme to capture the information (social, historical, architectural) suggested in 5.3 and 5.4 above and using the NZHPT guidelines series to provide parameters for such recording.

Archaeological potential: High

Built heritage potential: Medium to high

5.7 Aberfeldy Street

Captain William Blackie's cottage, built 1850, was still standing in 1902 when the shingles were replaced with a new roof (Rutherford 1978:6) but it must have been removed earlier, and possibly the site was cleared for the works of the 1970-80s. The location of his home (Figure 7 number 2) was in the direct path of the then proposed works (see image on cover). The likelihood of encountering these remains (if they still exist) is remote but still possible if higher areas are utilised by Stage 2 works in any way. Other images of Blackie's cottage (not reproduced) show it underneath a very large eucalypt, so any mature eucalypts, or large stumps, in this vicinity may indicate the location of this cottage. Clarification of the location, if at all possible, is highly desirable as if the foundations or



associated cultural material remain, they would be considered as archaeological remains (HPA 1993).

Archaeological potential: High Built heritage potential: High

5.8 Burnett Street to Barnes Drive East

This intersection was modified in the previous works therefore there is a likelihood of the rediscovery of material, probably redeposited. On the south east corner of this intersection widening will occur and as this is immediately above the rail embankment, it will cause damage to the 1863 batter. This author's understanding of the proposed works, in this area, is that it will involve actually back filling this area (embankment) for approximately 100m, to a sufficient height and strength to support the proposed roadway. As the rail embankment will be completely covered it would be desirable to record this feature using NZHPT guidelines for the recording of structures, and in consultation with the NZHPT to the level of recording required. Railway design maps will exist for the construction of it, and these should be secured to supplement any record made of the embankment in this area. During the field visit in the author made a surface collection in this area (2m north of Laing Street demolished abutment, north side) and this is shown in Figure 23 Both figures 23 and 24 show typical nineteenth century ceramics (transfer printed) although those found at Goodall Street were eroded (redeposited as part of fill) whereas those at Laing Street were reasonably intact, suggesting that they have not moved far and that further evidence of nineteenth century human activity would be near.

Archaeological potential: Medium Built heritage potential: Medium





Figure 23: Surface finds at Laing Street - C19th ceramics.

Left: Rhine pattern (C19th) rim, right, plain ware



Figure 24: Surface finds at the 1980 Goodall Street footbridge - C19th ceramics and glass. Clockwise from left: bottle glass, plainware (vessel base), Rhine pattern (C19th) rim, clinker, blue glass (probably a poison bottle)



5.9 Goodall Street footbridge to former Caversham Station area

This 1970-80s period footbridge will be removed and replaced with a higher and wider-spaced footings bridge. The existing bridge may be relocated to the Gas Works Creek, to supplement the existing railway footbridge that was placed there in the 1980s (removed from the railway area¹⁹). On the south side of this bridge, at the base of the support pillars, a surface collection was made (Figure 24). This weathered collection of cultural material indicates the types of finds likely in this area.

Proposed works in this area will be on both sides of the road but widening only on the south side. In this area, both the first railway tunnel and reserve areas will remain while the highway is slightly widened on the south side, with some minor realignment to compensate.

In the late 19th century these areas were populated and featured many small industries as well as domestic residences, and a rubbish dump. There are likely to be many finds made of redeposited materials as well as potential primary deposits of artefacts and features, where depth is required for new footbridge excavations or previous removals and alterations of surfaces have altered surface levels.

The station and platform area, while completely barren now, may well retain some subsurface evidence of structures. Back towards the Goodall Street area, various domestic arrangements, including gardens and springs, may remain.

Archaeological potential: Medium to low

Built heritage potential: Low

5.10 Hillside and The Glen

Most of the soil embankment on which the current rail line rests was deposited in 1907 then changed in the 1980s works. The 1907 deposits raised the rail line level to meet the new tunnel (by Burnett Street) therefore all pre-1907 roading and cultural material remains under this embankment. The 1907 area will be utilised in this new project on the north side of the road, between the rail line and the existing road; only in that the road will be widened here. Personal communications²⁰ state that this area was also used for storage of materials during the 1980s works therefore there is likely to be quite a mixed filled base around the Glen intersection.

Further east The Glen 'on-ramp' will be closed off, but the road will remain as part of the proposed project, to allow an annual road race event to reinstate and use this facility when required. Typical remains in this area might be residential foundations (houses, outbuildings) and rubbish pits, as well as remains of clay extraction or associated industries (bricks and pipes). There is also the possibility that a pre-European track was the basis for the first roads here and remains of both this tract and the early roads could be found during hillside removal. There will be no earthworks in the area of The Glen on-ramp.

²⁰ D Eaton to M Eaves, 2010.





¹⁹ D Eaton to M Eaves, pers. comm. 2010.

The Wilkie corner southern lane is where the works will commence / end for Stage 1 of this project. As previously stated, this area was severely altered in the late C20th and it is extremely unlikely any new material will be revealed here.

Archaeological potential: Medium Built heritage potential: Medium to low

6 Assessment of Effects

6.1 Summary Statement

The historic heritage values of the separate elements (section 5) are quite varied: This project and the area it will cover (both stages) has the potential to affect both Maori and European archaeological objects and features and thereby their associated values and significance. It will also alter the 1880-1910 landscape of the rise to Lookout Point, a residential area that grew as a ribbon development along the southern route to and from the town. This will affect the social, architectural, historical and amenity values of residents in adjacent properties as well as those using the route for access purposes.

It could be argued that the proposed works (both stages) are simply the finalisation of plans started in the mid-19th century, to create a reasonable access to the Taieri Ferry - or other transport links in that area, such as the international airport. Nevertheless, to mitigate the effects of this project it will be essential to undertake documentary recording of structures and landscapes, and to make provision for the requirements of the statutory requirements (Section 7, below) as they apply across the entire site.

7 Statutory Requirements

In conjunction with the District Plan, there are several pieces of national legislation that assist with the protection and management of heritage sites. These must be considered in regard to any development or land use proposal that may affect heritage (or archaeological sites) within an area.

7.1 Historic Places Act 1993

Purpose and Principles

- (1) The purpose of the Historic Places Act is to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand.
- (2) In achieving the purpose of this Act, all persons exercising functions and powers under it shall recognise
 - (a) The principle that historic places have lasting value in their own right and provide evidence of the origins of New Zealand's distinct society; and
 - (b) The principle that the identification, protection, preservation and conservation of New Zealand's historical and cultural heritage should –



- (i) Take account of all relevant cultural values, knowledge, and disciplines; and
- (ii) Take account of material of cultural heritage value and involve the least possible alteration or loss of it; and
- (iii) Safeguard the options of present and future generations; and
- (iv) Be fully researched, documented, and recorded, where culturally appropriate; and
- (c) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.

An archaeological site is defined in the HPA 1993 as any place in New Zealand that:

Either

- (a) i) was associated with human activity before 1900; or
 - ii) is the site of the wreck of any vessel where the wreck occurred before 1900; and
- (b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.

Under the HPA 1993 all archaeological sites, whether recorded or not, are protected, and it is illegal to destroy, damage or modify an archaeological site without authority to do so from the New Zealand Historic Places Trust (NZHPT, "the Trust").

In considering any application for an authority, the Trust may grant fully, or in part, or decline any application.

7.2 The Resource Management Act 1991

The Resource Management Act 1991 (RMA) provides guidelines and regulations for the sustainable management and protection of the natural and cultural environment. In 2003 amendments to the RMA elevated historic heritage to a "Matter of National Importance" under Section 6 (f), which identifies the need for "the protection of historic heritage from inappropriate subdivision, use, and development."

A definition of Historic Heritage has also been added with the amendments to the RMA. It is:

- a) Those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures deriving from any of the following qualities:
 - (i) Archaeological
 - (ii) Architectural
 - (iii) Cultural
 - (iv) Historic
 - (v) Scientific
 - (vi) Technological; and
 - b) Includes -
 - (i) Historic sites, structures, places, and areas; and



- (ii) Archaeological sites; and
- (iii) Sites of significance to Maori, including waahi tapu; and
- (iv) Surroundings associated with the natural and physical resources.

7.3 Dunedin City District Plan

DCC has designated this corridor for the motorway purposes. This means provision has been made in the District Plan for the construction (and associated activities) required for this project. The following designations were made without conditions:

- D455 Transit New Zealand SH 1 Motorway (from Andersons Bay Road to Sydney Street)
- D456 Transit New Zealand SH 1 Caversham Valley Road (from Sydney Street to Lookout Point).

There are no outstanding heritage orders (or similar) across this area. There are no listed waahi tapu or archaeological sites currently shown on the District Plan or NZHPT Register.

7.4 Consultation with Stakeholders

Both NZHPT and Iwi have indicated that further and ongoing discussion is required for this project. Aside from legal requirements to undertake such consultation, ongoing discussions will allow adaptation of research and documentation strategies, as required. The NZ Historic Places Trust has indicated it considers there is clear archaeological potential for the length of these works. This potential is both European and Maori in origin and will require a detailed approach to the Authority process by the client.

While Iwi discussions have commenced, they have indicated that they consider this project to be of significance and that the route is of sufficient interest to request additional discussion.

It is noted that a comprehensive investigative project was undertaken of the Caversham area²¹ some years ago and lead to a collation of material of importance to this community. The ongoing use of this database for educational purposes would provide a potential link for this project, particularly as a communication tool but also as a place to provide information and details of finds to the community.

8 Statement of significance

Area 2a Andersons Bay Road to Barnes Drive

8.1 Subsurface remains

While there are no recorded archaeological sites along this route, any part associated with pre-1900 human activity meets the definition of an archaeological site (or deposits) under

²¹ http://caversham.otago.ac.nz/dbaccess





the Historic Places Act 1993. Any features, disturbed or not, are covered by the Act and therefore an authority to modify should be obtained for the entire length of this project.

While the Stage 1 area was probably heavily modified in the works of the 1970s and 80s, the perimeter of the proposed works may encounter undisturbed material and it is crucial that works in previously undisturbed areas is monitored and any observations recorded. As there is reasonable cause to suspect that archaeological material may be located in areas not impacted by the 1970s and 1908s realignment work, there is a legal obligation under the HPA to ensure appropriate management of any features or deposits located. Other areas, such as Barnes Drive, also appear to be highly modified but to give assurances to all stakeholders affected by this project it is advisable to maintain awareness of the potential for material, even if re-deposited, to be encountered. For example, Hayward²² claims that Cargill's very first house was in the Hillside area. These claims could not be verified by this author, either in DCC archives (incomplete) or other texts. Land records (LINZ) show much of this area owned by the Presbyterian Church but often leased to others. Section 4 of this report discussed how this area was built up by fill from the construction of the second railway tunnel, so it is highly unlikely anything remains. However, a complete guarantee that no risk exists cannot be given.

Significance: Medium to high

Stage 2 of the project area is overall much less disturbed and therefore will require the greatest amount of modification – it also therefore carries the highest heritage risk to the project. It is clear that both sides of Caversham Valley Road will be modified, as well as to some depth and these areas will require full time archaeological and built heritage input. In addition, the potential to relocate the home of the Blackie family (cover) exists in the vicinity of the hill to the west of Aberfeldy Street. While works are not planned this far up the hill, if a site store (or similar) is located here it may have negative effects.

Significance: High

8.2 Residential Buildings and Auxiliary Structures

Stage 1 – While no buildings are involved (they are all demolished) consideration must be given to the presence of re-deposited and subsurface remains which may be encountered. When a section of the remaining spur is removed, there is potential for sub-surface material to be found, residential, industrial and pre-European. Depending on the nature and extent of any finds, the significance will vary.

Stage 1 Significance: Low to Medium

8.3 Caversham Road

Some form of track existed along parts of the proposed route in pre-European times, and some if not all of these routes were adapted by European settlers. The significance of this southern road, and associated tracks, underlies the development of all road systems in the

Hayward 1998 states that an original rough homestead was in this area, off Eglinton Road. Additional clues are 'Cargill's Corner' at the intersection of Hillside Road and King Edward Street (A Breese pers. comm. 8/3/2010) and the name change of Cargill to Neville Street in about 1924 as shown in ST33, Appendix 2.



6-CBT13.00

May 2010 44

region, as the alternative route was by sea. Caversham Valley Road is historically, a road of regional importance. The importance of this route grew as the rail corridor was sighted here, and the rail and road routes continue to align with each other today.

Significance: High

Area 2b - Barnes Drive to Lookout Point

8.4 The Prehistory of the Site

Further discussions with Iwi are required on this matter. No conclusions regarding the presence of koiwi on any part of the hill top area known as Lookout Point can be addressed at this stage. While there are no recorded archaeological sites (Maori) along the route, there are oral sources citing Lookout Point as a burial place. Consultation with iwi may provide further information on this site and clarify some of the heritage issues associated with this area.

Significance: High

8.5 The Industrial School and Farm

This was founded in 1869 by the same leading citizens who had opened the Benevolent Institution Home (1865, at the corner of Alexandra Street and Main South Road). The School was "for abandoned children, orphans and the children of drunken or profligate parents" and "the object of the institution [was] the moral, physical and mental training of children²³"

A number of additions were made to the buildings on this site from 1875-1892, including a barracks (accommodation). In 1892 a girls' section was built in brick which included a dining hall and kitchen. By 1904 there were nearly 600 children housed here and the number and size of buildings must have been considerable.

Today the remaining structures include an Adult Education Centre, winged in plan, which appears to be 1940s brick and tile. There is an accommodation cluster near Caversham Valley Road western end, comprising modern (1970s) period housing of average condition, and a bay villa set in overgrown gardens, probably 1880-1910 in construction and it is clearly associated with the Industrial School/Boys Home (181/3 Caversham Valley Road).

²³ The Cyclopaedia of NZ (Otago & Southland Provincial District) at http://www.nzetc.org/tm/scholarly/tei-Cyc04Cycl-tl-body1-d2-d17-d14.html







Figure 25: 181 Caversham Valley Road.
A bay villa of approximately 1880-1910

There appears to be an earlier brick residence further into the site (out of the works area) and the Adult Education centre (also out of area) is an example of institutional facilities of the World War 2 and post war period.

The villa raises several issues – it may be pre 1900 but it also has negative community values attached to it, as a place of 'repression'. Further investigation and research will be required if the proposal for the cross road and foot bridge goes ahead.

Significance of Landscape: High to medium Significance of Principal's House: High Significance of brick cottage: High Significance of 1941 Building: Medium

8.6 Residential Buildings and Auxiliary Structures

Stage 2 - In the western section, from Lookout Point east to Burnett Street, there is a range of housing stock dating from approximately 1880 onwards. This significance will extend to the associated structures and curtilage (ancillary structures) that may be on the current land holding, or located on adjacent properties. While none of the structures are known (currently) to be associated with a particular individual, as a group some may relate to other railway housing in the Caversham area and the potential for their significance to increase is acknowledge. However, most of the residences in this area are contiguous with *the* Dunedin housing stock of the relevant period - late Victorian bay villas, transitional bungalows, State Services Commission planned homes of the 1940-50s, and a couple of the late twentieth century. Further research may reveal social connections for some, others may retain architectural or design elements no longer common. It would be appropriate to



make a record of these structures (and curtilage) and extend this record to include the associated gardens and trees.

Stage 2 Significance: Medium to High

8.7 The Rock Retaining Walls

DCC archives show these to be Depression period structures, built to meet the demands of the residents, the needs of the road users, and the desire of the Council to provide relief work for those unemployed at the time. While electricity was reticulated earlier for the trams, the installation of these walls is likely to have coincided with other services, or at least the formalisation of sanitation and water supply. Further research into the cast iron covers (Appendix 6) may provide further information to the social development of this area. While the lower sections will be removed, all efforts should be made to document any fill materials as these will pre-date the walls, potentially including pre-1900 material. Significance will again vary, depending on the nature of the finds.

Significance: Medium to high

8.8 Summary of Significance

The project area is comprised of several areas of heritage significance, each of varying value, integrity, complexity and significance. Individually, each of these zones is of potential significance to some degree – social, historic, scientific, technological, and architectural – and some are highly altered (such as Wilkie Road area). However, the presence of *all* these areas within one project area (both stages) requires that all parts of this project be considered as relevant to the next as the area is a complex social unity.

This road and all activities associated with it are an integral part of the history of this place and therefore the significance of the varied zones within each area or stage (within the project) will be accorded a higher than average degree of significance.

9 Summary of Heritage Issues

This review of the history of the Caversham district has identified a number of potential heritage issues that may be impacted upon by the proposed realignment and improvements of State Highway One. Parts of the area, particularly in Stage One of the project (Andersons Bay Road to Barnes Drive) has already been significantly modified as a result of railways works in the early 20th century and later realignment of both the rail line and the road in the 1970s and 1980s. It is considered that the potential for archaeological material to be located within project corridor in the course of works in this area is low.

There has been less modification in the Stage Two project area (Barnes Drive to Lookout Point) and through this area the archaeological risk is considered to be medium to high. Several pre-1900 houses will be removed as a result of the new road alignment through this area. There is potential for archaeological information associated with the dwellings and ancillary structures to be revealed during the course of work. The area of the former Industrial School and farm may similarly reveal information on the development of this facility as well as the earlier occupation of the area by Maori.



Although impact on 19th century residences and sites within the area is considered to be a negative impact on the heritage resource, there is potential for archaeological information to be recorded through the process, which will add to our overall understanding of the early settlement of this district. Risks associated with the management of heritage as part of the project are primarily associated with potential time delays should sites be located during work. It will be necessary to obtain an Authority to Modify archaeological sites from the Historic Places Trust as part of the project, and further consultation with the Historic Places Trust will assist with this process.



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