

Daylesford Botanic Gardens, Day Basin Forecourt

Heritage Impact Statement

Prepared for GbLA

13 December 2023

FINAL REPORT



Acknowledgement of Country

We respect and acknowledge the Traditional Owners, the Dja Dja Wurrung people, their lands and waterways, their rich cultural heritage and their deep connection to Country, and we acknowledge their Elders past and present. We are committed to truth-telling and to engaging with Dja Dja Wurrung Corporation to support the protection of their culture and heritage. We strongly advocate social and cultural justice and support the Uluru Statement from the Heart.

Report register

The following report register documents the development of this report, in accordance with GML's Quality Management System.

Job no.	Issue no.	Notes/description	Issue date
2941	1	Draft Report	30 November 2023
2941	2	Final Report	13 December 2023

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1 Introduction

1.1 Background

GML Heritage Victoria (GML) has been engaged by GbLA to provide heritage advice and prepare a heritage impact statement (HIS) for Daylesford Botanic Gardens (also known as Wombat Hill Botanic Gardens) (the subject site).

This heritage impact statement (HIS) has been prepared to accompany a permit application for Daylesford Botanic Gardens by Hepburn Shire Council. This report identifies the subject site's heritage context and the items in its vicinity, and assesses the potential impacts of the proposed development on the heritage significance of the place and individually significant elements.

Daylesford Botanic Gardens is a registered place on the Victorian Heritage Register (H2202).

This HIS addresses the following proposed development: hard and soft landscaping works to the area in the vicinity of the Circular Day Basin, including paving, planting, garden beds and the installation of a stone rill with a reticulated water system surrounding the Day Basin and connecting to the top of the Cascade.

1.2 Project details

Heritage Impact Statement for: Daylesford Botanic Gardens

Victorian Heritage Register Number: H2202

This HIS forms part of a permit application for: Works associated with hard and soft landscaping and the installation of a water feature in the vicinity of the Wombat Hill Day Basin and forecourt.

Pre-application meeting number: P36326

A preapplication meeting was held on 3 March 2022. GML and GbLA presented the following at the meeting:

- GML presented a summary of the heritage advice provided to GbLA in the 'Memorandum of Heritage Advice on the Wombat Hill Botanic Garden Day Basin and Forecourt Landscaping Design Project' (17 February 2022). Detail was provided on the relative significance gradings of the Day Basin elements as drawn from the Conservation Management Plan (CMP) (2007).

- GbLA presented the 'Wombat Hill Botanic Garden Day Basin Forecourt Landscape Conceptual Plan 11.02.2022'. The document was circulated to Heritage Victoria in advance of the meeting. The presentation also outlined the current site conditions and how heritage considerations have been integrated into the concept.

The following advice was provided by Heritage Victoria in response to the materials presented at the pre-application meeting (email dated 11 March 2022):

Heritage Victoria understand that the proposed works are to convert the empty Day Basin to a lily pond and water feature.

The Day Basin dates from 1882, is the earliest known structure to remain in the gardens, and is the last remaining original feature related to the early establishment of the towns water supply.

Heritage Victoria would prefer that the Day Basin be retained and interpreted in its original form, including the ability to interpret the Day Basin's spatial volume and material composition.

There are concerns that the engineering required to facilitate the proposed lily pond use is likely to involve significant works that will impact on the heritage fabric.

Any works to the Day Basin that were not categorised as conservation works would require a permit from Heritage Victoria.

Heritage Victoria would require conservation works and interpretation as part of any approval.

While we broadly support the filling of the Day Basin with water if it was proved safe to do so while protecting the fabric, we are concerned that the planting out with lily's is likely to detract from understanding that early utilitarian use.

Heritage Victoria could consider an appropriately designed water feature sited elsewhere in the garden, noting that the reservoir was once the gardens aesthetic water feature.

In regard to the associated with the redesign of the forecourt, Heritage Victoria is broadly comfortable with the works but would prefer to see less hardscaping and more soft landscape features.

There is insufficient information to provide advice regarding the further landscaping for the 'cascade project'.

Heritage Victoria would like to understand whether conservation works are planned for the Tower.

Due to subsequent changes to the design, a second pre-application meeting was held on site on 21 April 2023 with Hepburn Shire and Heritage Victoria, to discuss proposed adaptive reuse works to the Day Basin. The following advice was provided by Heritage Victoria following an initial officer review of the options discussed on site:

Sealing

- You gave me two options related to sealing – Option 1 being the installation of a rubber liner and Option 2 a concrete slab supported on cement stabilised crushed rock base, with rendering of the brick walls.
- Further information would need to be provided regarding the claim that either of the sealing options are readily reversible. In particular there is doubt as to whether the butyl rubber could be removed from the bricks in the future. The concrete slab option would also be difficult to reverse.
- The interior slab proposal for option two could drive salts into the historic brickwork. A Limecrete (not Hempcrete) slab may be more suitable. Limecrete is also known as Lime Concrete. We can discuss this further if this was demonstrated to be the only option. At this stage I have the most concerns regarding option 2 and its impacts.
- It would be useful to understand if there are any anticipated impacts associated with the proposal to seal the bricks from the front – in which case they may not be able to dry out and could start to break down. This may not be an issue given the length of time the bricks have been in direct contact with the ground (and are not breaking down), but should be considered at this stage. It may be that additional drainage is considered to address this.
- Can the approximate date of the remains of render on the existing bricks be confirmed?
- Traditionally Natural Hydraulic Lime (NHL) 5 was used as a waterproofing render in fountains. It is more flexible than cement (less likely to crack) and has known longevity. Note the following Heritage Victoria/Heritage Council Heritage Technical Codes (HTC) on lime mortars:
 - Repointing with Lime Mortars
 - Lime mortars for the repair of masonry
 - NHL 5 could be used to waterproof the basin, but first the original bricks and bluestone should be re-pointed in mortar matching the original in accordance with HTCs (referenced above). The original pointing mortar may have been a NHL – analysis is needed to confirm this. And any modern mortars and renders should be removed first.
 - New renders should be in accordance with HTC1 (Repointing with Lime Mortars). It is noted that these HTC are an alternative performance solution to Australian Standards. NHL 5 is likely to have equivalent strength to the strength requirements of the remaining Australian Standards that are not covered by the HTCs.

- The two options presented appear to be over engineered given the use of water only in the top approximately 250mm. Is there a reason why the whole tank needs to be filled with water? Could a solution be found that only requires water in that top section where the plants are growing? An alternative design could involve a self-supporting galvanised steel cylinder (without a base) that sat in the bottom, and had a welded support system for the platform on which the water/plants were placed. Water would only need to sit at the top level not the full extent of the tank. The steel structure could cap over the top of the brick and then the bluestone capping could be placed on top. This would be much more readily reversible and would likely have a similar or longer lifespan to the rubber solution. It would be good to spend some time discussing this at the meeting.
- Another alternative, if it was demonstrated that the tank was required to be completely filled with water, could be to first render the bricks with NHL then apply a sealant of choice over the NHL ensuring that it does not cover the bluestone. The surface of modern sealants may be easier to clean. The NHL 5 could act as a backup waterproofing layer when the modern sealant fails (as they all do) and would make it easier to remove and reapply the modern sealant without damaging the brick. This option would likely require more ongoing maintenance and monitoring, but could be more reversible than the rubber. However it doesn't address the decking requirement for the plants.

Garden landscape treatment

- The cement slab near top ground level of the tank would need to be separated from the historic materials to avoid salt entering the historic masonry.
- The design and presentation of the proposed cement slab around the fountain should be reduced to the minimum extent possible. It would be preferable to have more soft surface such as grass than large extents of hard surface.

Historic pipes

- Can you confirm the status of the pipework – are the exposed pipes original to the structure, and are they all still fully operational and connected to underground pipes? Have any been replaced? Do any need replacing in the proposal?
- There is concern that the rust in the pipes might cause damage to the masonry with water running through them. Has this been investigated?
- NHL5 could be used to fill in any gaps and hold the pipes in place if required.

A meeting was then held online on 30 May 2023 to further discuss design options for refilling the Day Basin, with Hepburn Shire, Heritage Vicotria, GbLA and GML Heritage attending. Key points discussed were:

- The engineering requirements for filling the Day Basin and the potential for these to have undesirable heritage impacts.

- The possibility of abandoning the proposal to refill the Day Basin (on the basis of the engineering requirements for achieving this as presented by Hepburn Shire, and the possible merits of adopting a more interpretive approach to this element).
- Erection of a fence around the Day Basin (supported by historical precedent as recorded in the CMP), and an appropriate look and feel for such a fence from a heritage perspective.
- The challenges of not re-filling the Day Basin with water in terms of stakeholder expectations (including those of funding stakeholders, Regional Development Victoria, Friends of Wombat Hill, and Bendigo Bank).

At the meeting Heritage Victoria offered to contribute a written response outlining Heritage Victoria's general position on refilling the Day Basin with water versus a more interpretive approach.

Address and location description: The Daylesford Botanic Gardens is bounded by Daley Street, Hill Street, Frazer Street and Central Springs Road, Daylesford, Hepburn Shire.

The site comprises an area of 10.4 hectares located at the top of a hill and incorporates the 1884 garden plan by noted landscape designer William Sangster. The site includes formal garden beds, a central lawn area, extensive tree planting, a circuitous carriage driveway and path layout, an oval reservoir, circular Day Basin, a fernery with cascade (not operational) and built structures including the 1938 Pioneer Memorial Tower, 1988 conservatory and a replica rotunda. A works depot includes a residence, sheds, glasshouses and nurseries.

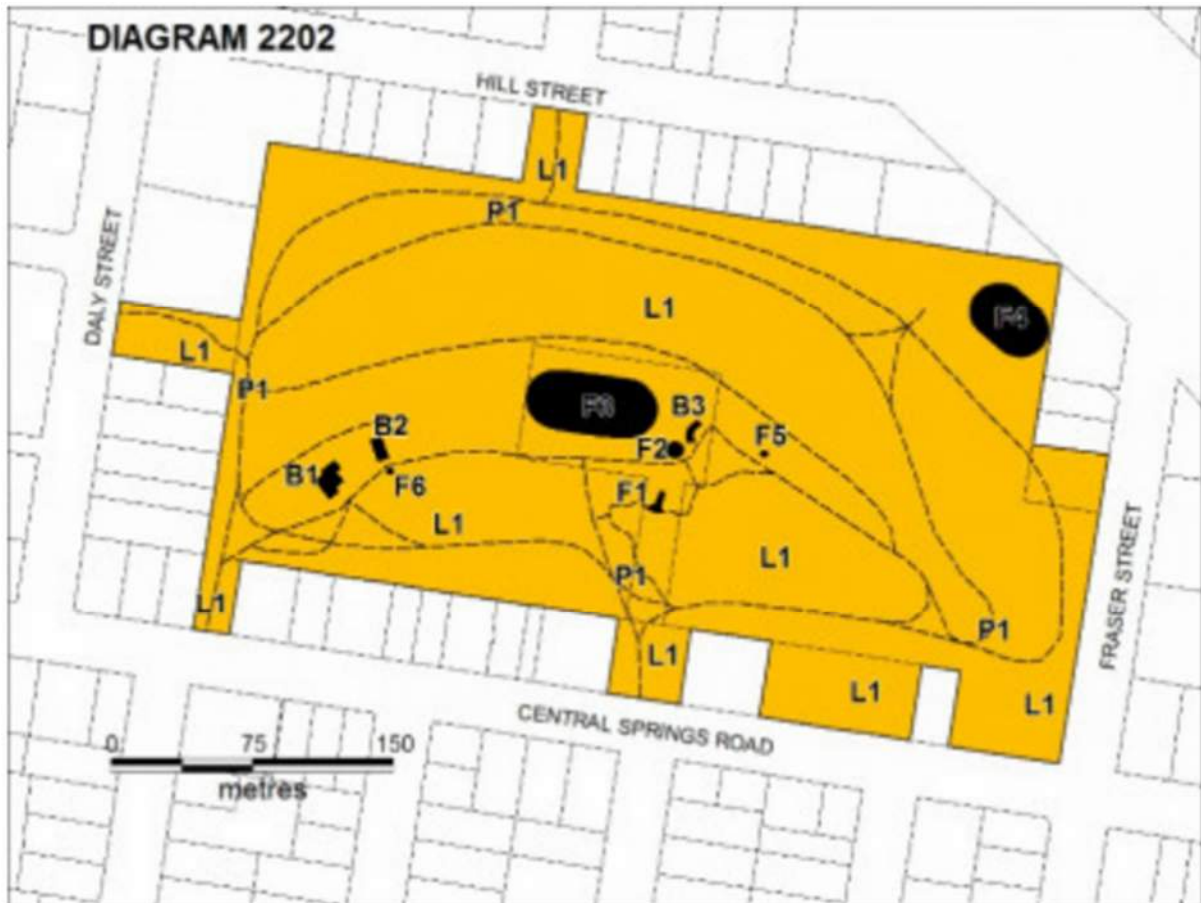


Figure 1.1. Map showing the extent of registration for H2202. Note the fernery and cascade (F1), the circular Day Basin (F2) and Pioneer Memorial Tower (B3). (Source: H2202, Victorian Heritage Database)

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All photographs are by GML unless otherwise acknowledged.

Prepared for: GbLA Landscape Architects

Date: 30 November 2023

1.3 Study area

The subject site is the Daylesford Botanic Gardens, within the Hepburn Shire Local Government Area (LGA). The study area is located approximately in the centre of the garden grounds and is positioned to the southeast of the main water reservoir (Figure 1.2).

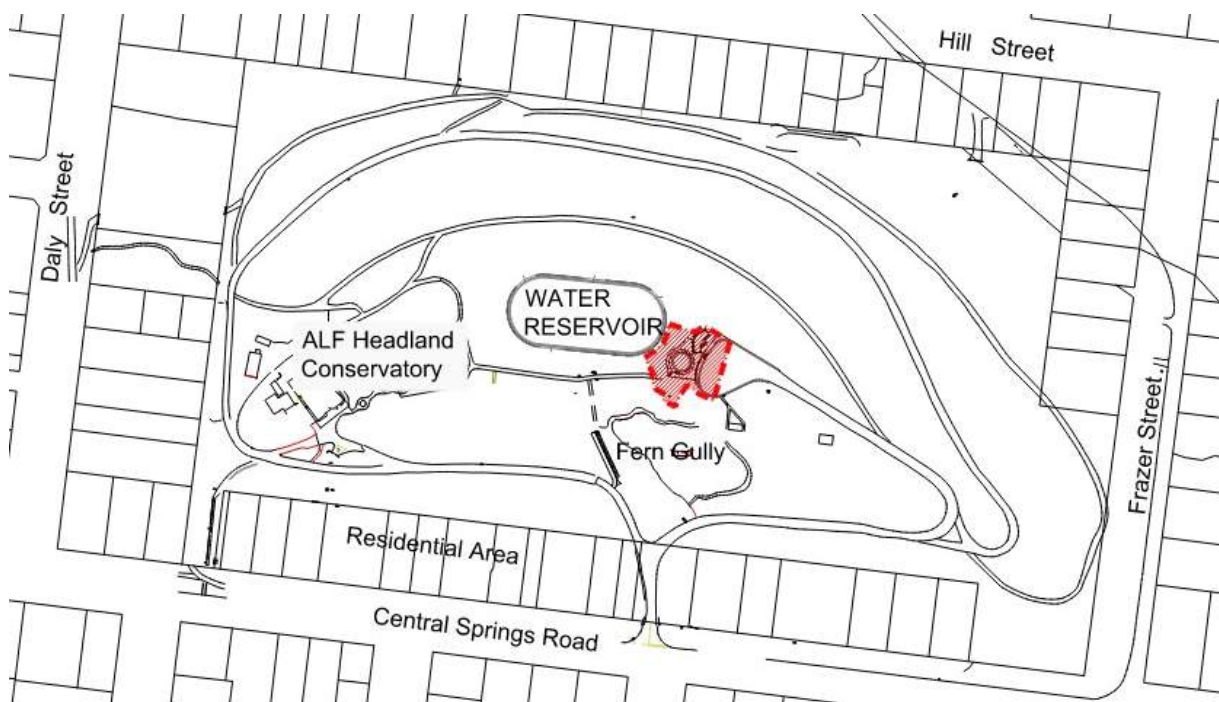


Figure 1.2 Site plan of Daylesford Botanic Gardens, excerpt of drawing number L0. The area of works is shaded red. (Source: GbLA, 2023)

1.4 Methodology and scope

This report has been prepared with reference to the following documents and guidelines:

- *Heritage Victoria Guidelines for preparing heritage impact statements* (June 2021);
- the *Australia ICOMOS Burra Charter, 2013* (the Burra Charter);
- Standards Australia, AS 4970-2009 Protection of Trees on Development Sites; and
- 'Wombat Hill Botanic Gardens, Daylesford Conservation Management Plan' (December 2007).

The HIS considers the impacts to the Circular Day Basin and forecourt and the Pioneer Memorial Tower.

The site was visited by Juliet Berry in January 2022.

An initial pre-application meeting was held with Heritage Victoria on 3 March 2022. In attendance were:

- Katrina Dernelley, Acting Senior Heritage Officer, Permits, Heritage Victoria;
- Christina Dyson, Senior Associate, and Juliet Berry, Consultant, GML Heritage; and
- Annette Warner, Associate, and Ashley Sheldrick, Director, GbLA.

An additional pre-application meeting was held on site with Hepburn Shire and Heritage Victoria on 21 April 2023.

A further meeting was held on 30 May 2023 to discuss changes to the project scope. In attendance were:

- Jessica Hood, Principal Heritage Permits, Heritage Victoria;
- Christina Dyson, Senior Associate, GML Heritage,
- Annette Warner, GbLA; and
- Lee Kosky, Tristan May and Sean Ludeke, Hepburn Shire Council.

GML worked closely with GbLA on the development of the landscape works that took into account the cultural heritage values of the Daylesford Botanic Gardens, including the Day Basin, Pioneer Memorial Tower, landscape elements, paths, water features and views. This was an iterative process with heritage considerations (among others) feeding into the development and revision of the various landscape proposals, as well as the treatment of the reintroduction of a water feature with a relationship to the Day Basin as considered in this HIS.

This report has not assessed the archaeological potential of the site (Aboriginal or historical) nor any archaeological impacts of the proposed works. No consultation with the Aboriginal community or other stakeholders has been undertaken.

1.5 Background documents

1.5.1 Contextual and supporting documentation

Key background documents informing the development proposal from a heritage perspective are:

- 'Wombat Hill Botanic Gardens Masterplan', February 2017, L&L Design for Hepburn Shire Council;

- 'Wombat Hill Botanic Gardens, Daylesford Conservation Management Plan' December 2007, Lee Andrews & Associates Heritage Consulting; and
- Daylesford Botanic Gardens—Victorian Heritage Register report(VHR H2202)

Masterplan

Since February 2017, development of the Daylesford Botanic Gardens has been informed by Hepburn Shire Council's masterplan for the Wombat Hill Botanic Gardens (L&L Design, 2017). The masterplan builds on the framework of the nineteenth-century botanic garden to provide an overarching strategy for maintaining the ongoing use of the place by engaging and attracting people through the communication of the place's history and stories. Specifically, the masterplan addresses suggestions for treatment of the Day Basin and surrounding areas:

This now empty basin is to be restored as an ornamental lily pond and connected by an open rill to the Fernery Cascade. The Day Basin and adjacent Pioneer Memorial Tower will be linked through decorative planting beds and the redesign of the top carpark to reduce its visual impact and provide a more sympathetic entrance (L&L, 2017:ii).

The overarching theme of the masterplan is to reactivate the gardens, bringing an element of water back to the Day Basin and reinstating its connection to the fernery.

Recommendations include:

- commissioning a feasibility study into the restoration of water to the Day Basin and the best methods for achieving this; and
- connecting the Day Basin to the Fernery Cascade through an open fill with viewing platform and upper pond.

Planting design guidelines

The Masterplan provides Planting Design Guidelines which state that planting should reflect the Gardensque character of the place, and carried out with consideration of horticultural suitability and botanical richness, to designs by professional designers.

Victorian Heritage Register

The VHR report for the Daylesford Botanic Gardens sets out the statement of significance for the place, which has also informed the assessment of impacts in this HIS.

Key aspects of the cultural heritage significance of Daylesford Botanic Gardens of particular relevance to this HIS are the:

- Day Basin;
- Pioneer Memorial Tower;

- landscape elements;
- paths;
- water features; and
- views.

Wombat Hill Botanic Gardens, Daylesford Conservation Management Plan

A CMP for the state heritage listed Wombat Hill Botanic Gardens, Daylesford (called the Daylesford Botanic Gardens in this HIS) has been prepared by Lee Andrews & Associates Heritage Consulting for Hepburn Shire Council in 2007.

The CMP outlines priority actions needed to protect the identified values of Daylesford Botanic Gardens as it balances its roles in supporting botanic study and passive recreation.

The proposed works at Daylesford Botanic Gardens which are the subject of this HIS respond to the following recommended actions outlined in the CMP:

Priority 3: Actions which enhance and extend the Gardens' cultural significance. These identify important landscape elements which have been altered or lost and which, because of their cultural significance, should be reconstructed where possible.

- Carry out additional works in the Fernery, including reinstating the Cascade, to improve its aesthetics, and augment its plantings
- Restore the Circular Day Basin (filled with irrigation water) as a major water feature, with fountain, perimeter planting and landscaping
- Implement planting based on a comprehensive plant management programme (see Priority 2), including shrub beds, borders, trees and floral displays

History of the place:

A brief timeline extract taken from CMP is in Table 1.1 below.

Table 1.1 CMP timeline extract.

Year	Description
1854	reservation of Wombat Hill as a site for the Government Camp and Police Reserve Camp and Police Reserve (50 acres) apparently set aside in Fraser's 1854 survey in the wake of gold discoveries in 1851 [Aitken, 1997]
1861	Site of police reserve reduced; leaving a large reserve for Botanical Gardens
1862	Gardens reserved
1867	Central section of the Gardens reservation was excised and temporarily reserved for the Victorian Water Supply purposes
1882	Circular Day Basin constructed
1884-1948	Redesigned by William Sangster, Features of Sangsters design included an open-air fernery (which was later roofed with slats) with cascade and pool, decorative beds including parterres of flowers and a rosary, a second lower carriage drive and increased and improved tree planting.
1938	Pioneer War Memorial tower officially opened

Heritage advice

GbLA also requested GML prepare initial heritage advice to feed in to the design development process. The advice was provided in the format of a memorandum (dated 17 February 2022), and included:

- An outline of William Sangster’s design principles and ethos, and 19th century fernery design, and other relevant historical details.
- Summary of key sections of the Conservation Management Plan (2007), VHR place citation and other documentation.
- Opportunities and limitations arising from the significance of individual elements pertinent to the scope of the concept design and design development.

2 Cultural heritage significance

2.1 Cultural heritage significance of Daylesford Botanic Garden VHR H2202

The historic significance of Daylesford Botanic Gardens is recognised at the state level as a fine example of a regional botanic garden which retains evidence of the original 1884 layout and design by the noted landscape designer William Sangster. The recognition of the historic, scientific (botanical) and aesthetic significance of Daylesford Botanic Gardens is derived from its extensive collection of conifers and cool climate plants; its rarity as a surviving example of a plan of the prolific garden designer William Sangster; and its prominence as a local landmark which is a rare example of a botanic garden spectacularly sited on an extinct volcanic cone providing panoramic views and vistas within and out of the gardens and from the township.

Central to protecting the cultural heritage values of Daylesford Botanic Gardens is ensuring a balance across its many values.

The statement of significance for Daylesford Botanic Gardens (VHR H2202) in the Victorian Heritage Register is as follows:

2.1.1 What is significant?

The Daylesford Botanic Gardens cover an area of 10.4 hectares and are bounded by Daley Street, Hill Street, Frazer Street and Central Springs Road. The site on the summit of the extinct volcano of Wombat Hill at an elevation of 667.8 metres, provides a rich soil, cool climate growing conditions, a favourable aspect and excellent views to the surrounding countryside and over the Daylesford township.

The land was first set aside in 1854, reserved as public garden in 1862, and developed from c.1865. The Gardens were extended slightly in 1870 and 1883 and developed with input from noted nineteenth century landscape designer, William Sangster, in 1884-85 whose original plan survives.

Due to the Daylesford Botanic Gardens being sited on top of a hill, the layout of the Gardens is not immediately apparent but several distinct areas can be determined. The central lawn area on the south side has display garden beds, the Alf Headland Conservatory constructed in 1988 to house the annual display of tuberous begonias, and a replica rotunda erected in 1993. The works depot area consists of the curator's residence built in 1948, large sheds, glass houses and two open nurseries. The Pioneers'

Memorial Tower built in 1938 offers the opportunity for views across the Gardens and distant landscape, and a place to picnic on the north east side.

Adjacent is the Circular Day Basin dating from 1882 which is the earliest known structure to remain in the gardens, although no longer in use. To the west is the large Oval Reservoir constructed in 1888-89 which holds some of Daylesford's water supply with the smaller Lower Service Basin c.1969 to the north, both of which were roofed in the 1990s. One of the main features of the gardens is the extant fernery with cascade, (not operational) designed by Sangster in 1884-85, located on the southern side of the hill. A circuit path meanders through this area and leads back to the road and into the formal garden area from the Pioneers' Memorial Tower. Much of the existing path layout, including the carriage driveway lined with an avenue of Dutch Elms, have been retained from the nineteenth century, together with the extensive tree planting including many species of conifers, other mature trees and cool climate plants.

2.1.2 How is it significant?

The Daylesford Botanic Gardens are of historic, scientific (botanic), and aesthetic significance to the State of Victoria.

2.1.3 Why is it significant?

The Daylesford Botanic Gardens are historically significant as a fine example of a regional botanic garden demonstrating the typical characteristics of a carriage drive, informal park layout, decorative structures and works such as the memorial tower, conservatory, rotunda, cascade and fernery, which contrasts with the open lawns planted with specimen trees, areas of intensive horticultural interest and close proximity to a township developed during the mid to late nineteenth century. The Daylesford Botanic Gardens are historically significant for the design input by noted landscape designer William Sangster, and for the survival of his 1884 plan, which is a rare example of a plan from this prolific garden designer. The Daylesford Botanic Gardens are of scientific (botanic) significance for the extensive conifer collection and cool climate plants. The Gardens contain an outstanding collection of conifers and other mature trees, many of which were donated by renowned botanist Ferdinand von Mueller. Significant trees include *Pinus ponderosa* (Western Yellow Pine), *Pinus coulteri* (Big Cone Pine), two *Abies nordmanniana* (Caucasian Fir), *Abies pinsapo* (Spanish Fir) and a *Cedrus atlantica* f. *glauca* (Blue Atlas Cedar), *Pinus wallichiana* (Bhutan Pine), *Pinus pinaster* (Maritime Pine), *Sequoiadendron giganteum* (Giant Redwood), (Monkey Puzzle) and *Aesculus hippocastanum* (Horse Chestnut), many the largest or finest examples in Victoria. Other outstanding trees include a *Tilia cordata* (Small-leaved European Linden), a row of *Cupressus lusitanica* (Mexican cypress), a *Quercus robur* (English Oak) planted in 1863, avenues of Dutch Elms and a rare *Quercus leucotrichophora* (Himalayan Oak).

The Daylesford Botanic Gardens are of aesthetic significance as a rare example of a botanic garden spectacularly sited on an extinct volcanic cone which allows a panoramic view, aided by the 1938 Pioneers' Memorial Tower, as well as vistas within and out of the gardens and from the township to the gardens. As the most prominent local landmark, the Garden's vertical dominance in the landscape provides a dark contrast to the elms avenues, oaks and other deciduous species.

2.2 Wombat Hill Conservation Management Plan significance

The following statement of cultural significance is taken from the Wombat Hill Botanic Gardens, Daylesford CMP (2007).

Statement of cultural significance

Wombat Hill Botanic Gardens, Daylesford, set aside in 1854 as a Camp and Police Reserve, reserved as a public garden in 1862 (and slightly extended in 1870 and 1883), and developed as a botanic and public garden with design input from William Sangster in 1884-85, is of:

LOCAL cultural significance.:

Socially:

- as an integral part of the physical and community fabric of the Daylesford area, reflected in its ongoing importance to the community both as a landmark and for passive recreation, demonstrated by its continuing popularity amongst the residents of Daylesford and district, and reinforced by the formation of the Friends of Wombat Hill Botanic Gardens.

Historically and aesthetically:

- as the visual and historic focus of the historic nineteenth century Wombat Hill Gardens Precinct.

STATE cultural significance:

Historically:

- as an integral part of the Victorian network of regional botanic gardens, established between 1849 and 1886, and unique in Australia; it remains as a fine representative example of a regional 'botanic' garden, a garden type best exemplified in Australia by the collection of such gardens created in colonial Victoria; typical characteristics of regional botanic gardens which are demonstrated at Wombat Hill include a carriage drive, informal park layout, decorative structures and works such as the rotunda, tower and fernery with cascade, contrast between open lawns planted with specimen trees and areas of

intensive horticultural interest, and a location in proximity to a township developed during the mid to late nineteenth century;

- for the design input from William Sangster, notable nineteenth century Victorian landscape designer, and the surviving plan of his 1884 design, a rare example of a plan from this prolific designer;
- for its close association with nineteenth century health-based tourism in Victoria, and in particular the Daylesford / Hepburn Springs region.

Historically and aesthetically:

- for its intact late nineteenth century open-air fernery, complete with rockeries, intricate paths, water features, and mature canopy planting, and presenting as a rare example of its type in Victoria.

Historically and aesthetically (architecturally):

- for the 1938 Pioneers' Memorial Tower, dedicated as a memorial to the early pioneers of the district, and built by sustenance workers in the Great Depression.

Aesthetically:

- as a rare example of a public garden spectacularly sited on an extinct volcanic cone.

Scientifically (geologically):

- for its location on Wombat Hill – a fine example of a composite lava and scoria volcano, complete with surveyed crater and evidence of neighbouring pyroclastics deposit, and part of the geologically rich Daylesford region.

NATIONAL cultural significance

Scientifically (botanically):

- as one of the finest examples of a nineteenth century pinetum in Australia, an unusual garden type in this country, and exemplified by its collection of mature trees, many of which were donated by renowned botanist Ferdinand von Mueller for the purpose of acclimatisation, display and distribution, and a number of which have been recognised as individually significant specimens. These include *Pinus ponderosa* (Western Yellow Pine), *Tilia cordata* (Small-leaved European Linden), *Pinus coulteri* (Big Cone Pine), *Abies nordmanniana* (Caucasian Fir) x 2, *Abies pinsapo* (Spanish Fir—the largest known in Australia), *Cedrus atlantica* f. *glauca* (Blue Atlas Cedar), and *Pinus wallichiana* (Blue or Himalayan Pine). Some 15 additional specimens are also considered worthy of individual recognition;
- for its collection of mature elms dating back to the nineteenth century, which form part of a genetically important, shrinking global repository.

2.3 Other recognition

2.3.1 National Trust

Daylesford Botanic Gardens (Property No G13087) is recognised by the National Trust as being of State Historic and representative significance.

2.3.2 World Heritage

Daylesford Botanic Gardens is not in a World Heritage Environs Area. Therefore, s.73(1)(a) of the Victorian *Heritage Act 2017* does not apply.

2.4 How significance is embodied in the place

The state significance of Daylesford Botanic Gardens is embodied in the landscape qualities of the place; its use as a place of recreation and for its botanic interest; in the nineteenth-century layout of the gardens including the paths and carriageway; views; conservatory; replica rotunda; Pioneer Memorial Tower, circular Day Basin, oval reservoir; lower service basin; fernery and cascade (not operational); extensive tree planting; associations with prolific landscape designer William Sangster; and physical evidence of the place's history and historic uses.

Significance is embodied in the place as a whole, its original extent (boundaries), and individual elements and other aspects of the place (including the landscape character) which survive from or transmit its values as a nineteenth century regional botanic garden. These include (with elements of particular relevance to the proposed works emphasised):

- the carriage drive;
- the informal park layout (as opposed to a strongly geometrical layout with axial vistas, for example), specifically:
 - the **straight summit path**;
 - the summit walk around the perimeter of the oval reservoir (upper and lower paths);
 - the **asphalt surfacing** and terracotta spoon drains to the straight summit path (the terracotta spoon drains noted in the CMP were not observed onsite in January 2022);
 - the **rock edging to the fernery path**; and
 - the tradition of a hierarchy of paths.

- the **memorial tower** (opened 1938): original fabric of significance includes the unpainted finish, remaining cyclone wire panels and pipe handrails, and the stone foundation plaque and brass direction plate;
- the conservatory;
- the rotunda;
- **cascade and fernery**, in particular any surviving remnants of early design input by garden designer William Sangster (1831–1910);
- the **circular Day Basin**, the earliest-known structure in the garden, including brick fabric and infrastructure and remnant piping;
- the remnants of a distinctive character / sense of place to the cascade and fernery, and the contrast between this and other areas in the gardens such as open lawns planted with specimen trees and other areas of intensive horticultural interest;
- the collection of conifers and other mature trees in the gardens; and
- the views from the top of the memorial tower which enable visitors to look out from the gardens above the tree canopy.

2.4.1 Relative significance of specific elements

Specific element (extracted from CMP 2007 where relevant to the proposed works) are noted as follows:

Elements of primary cultural significance for which conservation is essential are as follows:

- Asphalt surfacing and terracotta spoon drains to straight summit path
- Original fabric of the Pioneers’ Memorial Tower, including unpainted finish, remaining cyclone wire panels and pipe
- Pioneers’ Memorial Tower views
- The Circular day basin’s brick fabric and infrastructure, including remnant piping
- Fernery location, rock work, path, and cascade
- Tree canopy over fernery

Items of no appreciable cultural significance which may be retained or removed are as follows:

- Current cyclone fencing and gates
- Carpark at base of Pioneers’ Memorial Tower

Items ranked as intrusive should be removed or altered to minimise adverse impacts. The elements within the Gardens which are intrusive are as follows:

- Cyclone fencing around the Oval Reservoir and Circular Day Basin

Items whose alteration or loss has reduced or jeopardised the cultural significance of the place should be reconstructed if at all feasible, and if reliable documentary evidence of their original form exists to guide reconstruction. The elements within the Gardens whose alteration or loss has reduced or jeopardised the cultural significance of the place are as follows:

- Loss of the Circular day basin’s water
- Loss of the Circular day basin’s central fountain
- Loss of the Circular day basin’s working association with the Fernery cascade
- Loss of the Circular day basin’s function as a garden ornament
- Loss of functioning cascade and goldfish pool

2.5 Existing conditions

2.5.1 Site and setting

The site is located on Wombat Hill in Daylesford on a high point in the gardens. The location offers picturesque views over the township and surrounding landscape. The site includes part of an existing asphalted carpark adjacent to a grassed area which contains the brick Circular Day Basin, which is fenced off, and the Pioneer Memorial Tower. The Oval Reservoir is located directly adjacent, to the east and an asphalt pathway is oriented east–west through the site. The surrounding landscape includes areas of lawn, manicured hedges and a mixture of mature trees (including mixed conifers, elms).

Photographs were taken by GML on 20 January 2022 unless noted otherwise. Recent photos obtained by GbLA on site in November 2023 appear below in Figures 2.1 to 2.12.



Figure 2.1 View of day basin looking east (GbLA, November 2023).



Figure 2.2 View of outer edge of day basin (GbLA, November 2023).



Figure 2.3 Detail view of day basin interior and pipe (GbLA, November 2023).



Figure 2.4 View of day basin pit cover (GbLA, November 2023).



Figure 2.5 View of day basin interior and pipe (GbLA, November 2023).



Figure 2.6 Detail of day basin brick base (GbLA, November 2023).



Figure 2.7 View from carpark (GbLA, November 2023).



Figure 2.8 View of asphalt path (GbLA, November 2023).



Figure 2.9 Fallen tree, looking towards tower (GbLA, November 2023).



Figure 2.10 View towards top of cascade (GbLA, November 2023).



Figure 2.11 Barrier at top of cascade (GbLA, November 2023).



Figure 2.12 View of cascade from below (GbLA, November 2023).

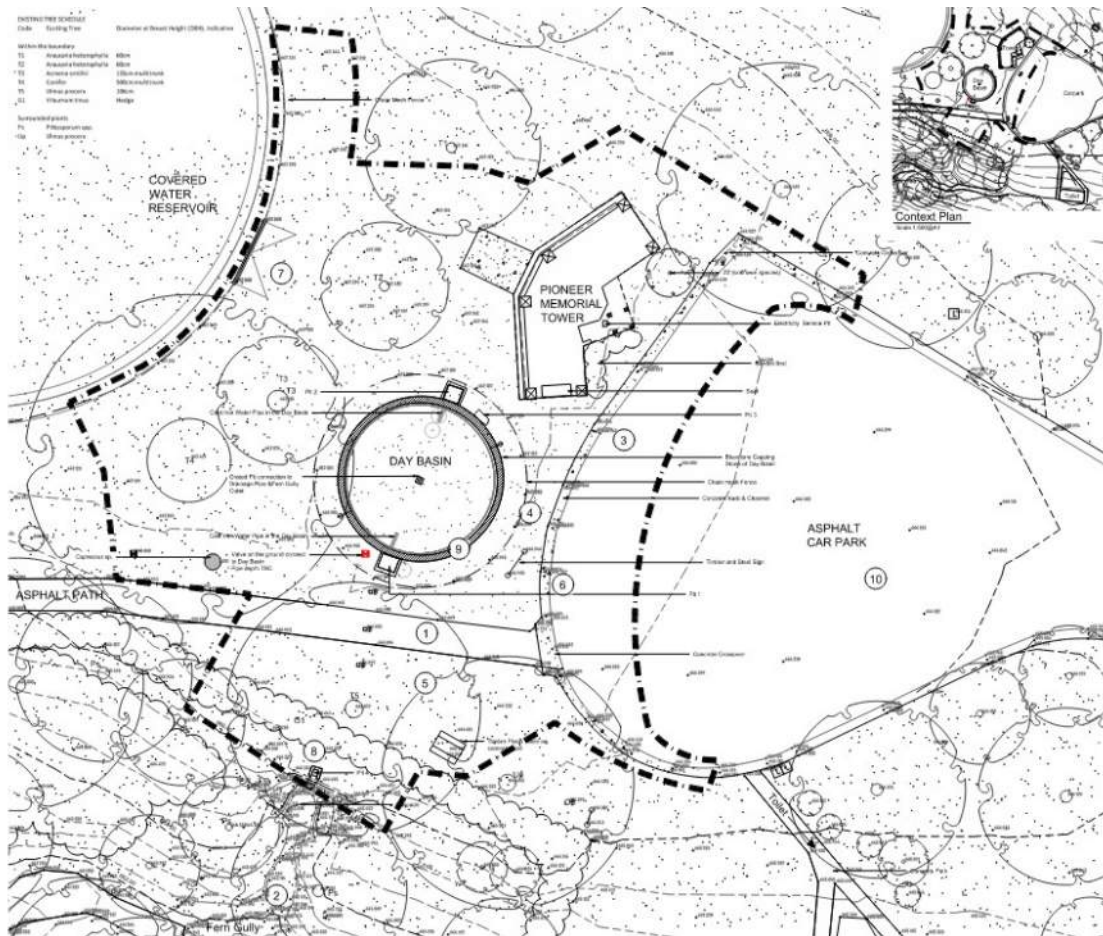


Figure 2.13 Excerpt of landscape drawing number L1.1—existing conditions plan of Daylesford Botanic Gardens. The area of works is outlined with black dashed line. (Source: GbLA, 2023)



Figure 2.14 View of the Circular Day Basin looking down from the Pioneer Memorial Tower, with asphalt pathway above, and canopies of the surrounding trees. (Source: GML 2022)



Figure 2.15 View of the asphalt path leading from the carpark between the Day Basin and fernery. (Source: GML 2022)



Figure 2.16 View of the Day Basin looking south, showing brick fabric, bluestone capping and a water pipe. (Source: GML 2022)



Figure 2.17 View of Day Basin fabric and bluestone capping looking north, with the oval reservoir and Pioneer Memorial Tower in the background. (Source: GML 2022)



Figure 2.18 View of the inside of the Day Basin with the oval reservoir behind, looking northwest. (Source: GML 2022)



Figure 2.19 View of the Day Basin's brickwork. (Source: GML 2022)



Figure 2.20 View of the Pioneer Memorial Tower and cyclone fencing surrounding the Day Basin from the carpark. (Source: GML 2022)



Figure 2.21 View of the reservoir behind the Day Basin (Source: GML 2022)



Figure 2.22. View from the Pioneer Memorial Tower. (Source: GML 2022)



Figure 2.23. View from the Pioneer Memorial Tower. (Source: GML 2022)



Figure 2.24 View of the Pioneer Memorial Tower from the Day Basin. (Source: GML 2022)



Figure 2.25 View of the Day Basin from the top of the Pioneer Memorial Tower. (Source: GML 2022)



Figure 2.26 View from below the top of the Cascade (towards future balustrade).



Figure 2.27 Rock edging of the top pool of the cascade (for context only).



Figure 2.28 Gravel path with rock edging in the fernery (for context only).



Figure 2.29 View along the meandering path in the fernery showing some fern species.



Figure 2.30 Seating embedded within the wall along the path edge in the fernery.

Note that figures 2.26 – 2.30 are for information and context only, and are out of the area of works.

2.6 Current use

The Daylesford Botanic Gardens are used by the community as a place for recreation, leisure and sightseeing. The 1882 Day Basin was previously used as reserve water storage for the township and also served as a decorative water feature but is presently empty. The Pioneer Memorial Tower is open to the public to climb and take in the view of the surrounding gardens and landscape of Daylesford.

2.7 Opportunities and constraints arising from significance

The CMP for the Daylesford Botanic Gardens outlines the obligations arising from the outstanding cultural significance of the site, including the recognition of this significance as a major determinant in its future management and development. Retention of its original design intent and recognition of its diverse and evolving significance, as well as the activities undertaken and the understanding of that recognised significance (listed in the section above), will form the basis for any conservation actions and future development.

Opportunities and constraints associated with cultural heritage significance are informed by the significance of the gardens as a whole and the relative significance rankings for individual elements and their component parts.

Generally, elements identified as having **primary** significance will need to be retained and conserved, and impacts on their physical fabric should be avoided.

Elements identified as **intrusive** generally present an opportunity for enhancing significance through their removal or alteration.

Elements noted as **lost** may present an opportunity to recover or enhance significance if the lost element can be returned (based on historical evidence) or in some way interpreted.

2.7.1 Opportunities arising from current conditions

The site was visited by GML in January 2022, focusing on areas pertinent to the proposal including the Day Basin, Pioneer Memorial Tower and its surrounding setting, and the Fernery and Cascade (at the time of the initial site visit, the Fernery and Cascade were included—but are now not included—in the scope of work). Each element has a distinct contribution to the character of the gardens as a whole.

The Day Basin and Pioneer Memorial Tower sit centrally within the Gardens, at the top of the hill, beside an asphalted carpark area with public toilets. It is an arrival point to the Gardens. From this elevated area there are views above the tree canopy accessed by climbing to the top of the tower. Lawn surrounds the Day Basin and Pioneer Memorial Tower; coverage is patchy. The cyclone fencing (not significant) around the Day Basin and the weediness of the place have adverse visual impacts and detract from the arrival experience and from the Day Basin itself.

Overall, the area of the Day Basin and Pioneer Memorial Tower lacks unity and cohesion and there is a sense of neglect and disrepair.

2.7.2 Opportunities—conservation policy

The following extracts from the conservation policy, pertinent to the works area and proposed works, are taken from the CMP (2007). In the provision of iterative heritage advice, the analysis and assessment of heritage impacts has been informed by this policy.

Policy Area 1: Landscape

Garden layout and circulation, Garden frontages and entrances, Landscape character and plant collections, Fernery and Cascade, Summit (including Central Lawn and Pioneers' Memorial Tower), Curator's Residence and Works Depot, Alf Headland Conservatory and Public Amenities and Infrastructure (p 276).

Items whose alteration or loss has reduced or jeopardised the cultural significance of the place should be reconstructed if at all feasible, and if reliable documentary evidence of their original form exists to guide reconstruction:

- Lost paths, terracotta spoon drains and rock edging
- Some loss of view lines because of tree growth, including from the lower platform of the Pioneers' Memorial Tower and across the Gardens to the west
- Loss of views across and down onto the (until recently) uncovered water of the Oval Reservoir
- Removal of directional plate from Pioneers' Memorial Tower
- Loss of diversity of ferns originally in the Fernery
- Loss of decorative timber lattice-work roof over Fernery
- Loss of functioning cascade and goldfish pool
- Loss of scoria path surfacing in Fernery
- Loss of seating along Fernery path
- Loss of the Circular day basin's water

- Loss of the Circular day basin’s central fountain
- Loss of the Circular day basin’s working association with the Fernery cascade
- Loss of the Circular day basin’s function as a garden ornament
- Replacement of original pipe railings and cyclone mesh panels in Pioneers’ Memorial Tower with new railings and door c.2004
- Additional plaques (?) removed from walls of Pioneers’ Memorial Tower
- Seating around walls inside ground level entry area of Pioneers’ Memorial Tower
- Loss of seating in Fernery recesses

Reconstruction of missing fabric should only be carried out where:

- (a) the interpretation of the Gardens is significantly enhanced
- (b) this would be sympathetic to the immediate surrounding area
- (c) there is significant documentary and physical evidence and
- (d) the work is carried out in accordance with the Burra Charter

Policy 1e: Summit (including the Central Lawn and Pioneers Memorial Tower) aims:

To conserve an historic area in the Gardens and recreate a highly integrated and functional landscape of the highest quality suitable for increased passive recreation.

Action items associated with this policy include the following:

- Refill Circular Day Basin with supplementary water for irrigation, create flower border around rim, remove fence and fit mesh barrier just below water surface for safety, fit fountain (possible involvement of local artisans). Interpret as earlier known surviving structure in the Gardens.
- Replace bare compacted areas of earth (where grass has been) around Pioneers’ Memorial Tower and Circular Day Basin / information board with combination of mulch, display flower beds and paths
- Improve landscaping around base of Tower (integrated with improved new path network and landscaping works—see path layout plan).

2.7.3 Opportunities relating to the design—fernery and cascade

This portion of the project is no longer in the scope of works. However, the current works proposed for the Day Basin anticipate future works to the Fernery and Cascade, through

the inclusion of a channel connecting the Day Basin up to and stopping at the top of the Cascade.

The Fernery and Cascade at Daylesford Botanic Gardens, together with the 1880s carriage drive, are the primary surviving elements from William Sangster's 1884 redesign of the gardens.

A key objective of the fernery and cascade portion of the project is to interpret the character of a nineteenth-century fernery, increasing the diversity of fern, and fern-like, species over time.

Other objectives could include:

- Retain specimens that appear to be early plantings
- Increase the number of ferns building upon existing ferns
- Increase the mixture of fern/fern-like plant forms and scales (some good structural plants exist already which could be enhanced by introducing additional plants with different forms and sizes)
- Reinstate the water cascade

Plant selection criteria for infill species

Knowledge of the planting style, typical species and the overall aesthetic of a late nineteenth-century fernery has informed the plant selection criteria.

Key objectives:

- Increased numbers of ferns and fern-like plants
- Greater species diversity
- Layering and density of planting
- Historically appropriate plants that were available in the late 1880s (avoid modern varieties and cultivars)
- Unity, cohesion and continuity across the fernery as a whole

Infill species may also need to be chosen for the following characteristics:

- Suitability to current and projected future micro and macro-climatic conditions
- Availability
- Non-spreaders—species should spread slowly or grow in a contained manner to reduce maintenance inputs
- Growing well under comparable conditions—the current planting has survived drought conditions

2.7.4 Opportunities and constraints relating to the design—Day Basin

Constructed in 1882, the Day Basin, first known as the Service Reservoir, is a circular brick structure surrounded with a bluestone coping; the bottom is also brick. There are two large pipes protruding from base of one of the walls. Exposed wire protrudes from the concrete edge. The Day Basin no longer contains water.

There is debris (organic and inorganic litter and weeds) inside the Day Basin. The Day Basin is surrounded by a 1.5-metre black cyclone fence which has a double gate that is padlocked shut. It is the earliest known structure that remains in the gardens.

Ranking of cultural significance for the Day Basin

Primary significance: conservation essential

- The circular Day Basin’s brick fabric and infrastructure, including remnant piping

Intrusive: removal or alteration to minimise adverse impacts

- Cyclone wire fencing around the circular Day Basin

Lost elements: reconstruction desirable

- Circular Day Basin’s water
- Circular Day Basin’s central fountain
- Circular Day Basin’s working association with the Fernery Cascade
- Circular Day Basin’s function as a garden ornament

A key objective of the works around the Day Basin is to reinstate the element of water. There are significant constraints related to the reintroduction of water to the Day Basin. In May 2023, the Day Basin was filled with water and monitored for leakage. It was found that, in its current state, the day basin cannot retain water. Alternative solutions were explored and are outlined further in Section 3.4 of this report.

Other objectives include:

- Reintroduction of the connection between the Day Basin and cascade
- Introduction of improved landscaping which unites and connects the disparate elements on the summit (the cascade, Day Basin and Pioneer Memorial Tower)
- Reintroduction of a decorative water element to the Day Basin
- Improved public access and circulation

Future objectives (not part of this scope of work) include:

- Introduction of interpretive devices
- Conservation works

2.7.5 Opportunities—use of rock

The CMP (2007) describes the use of rock as follows:

Rock has been traditionally used both as a practical and readily available building material and as an ornamental garden element in the Gardens. This can be seen in various historic photographs of the Gardens where it forms edging to paths and beds, retaining walls, decorative structures, and a 1930s lily pond and ‘rock garden’.

The extant examples of this rock work contribute to the rustic quality of the Gardens, while the later use of timber sleepers illustrates the evolution of popular fashionable materials which require less craftsmanship than did the early stone work.

Ranking of cultural significance

Primary significance: conservation essential

- Tradition of using rock as an ornamental and practical construction material
- Pipe and rock arbours
- Rockwork in the fernery

No appreciable significance: retention or removal depending on other priorities

- Timber retaining walls

Lost elements: reconstruction desirable.

- Lily pond and rock garden
- Rock edging to paths

Other opportunities and constraints

- Consider lighting as a form of interpretation which emphasises the materiality and form of the Day Basin
- Quantify the reduction in paving from the original proposal in response to Heritage Victoria’s preliminary feedback
- Reintroduce the decorative or interpretive element of water to the Day Basin
- Reconnect reticulated water to the cascade
- Reintroduce a meaningful connection between the cascade and the Day Basin

- Improve the impression of 'benign neglect' of the degraded landscape around the tower and reservoirs, unifying the elements and providing a sense of connection between them
- Undertake interpretation
- Consider conservation works to the Day Basin's heritage fabric

3 Proposal

3.1 Documentation

This report has assessed the impact of the proposed works on the heritage place and on objects in the vicinity of the site based on the following documentation. The documents are included in Appendices A, B and C.

Landscape documentation

Wombat Hill Botanic Garden, Daylesford—Day Basin and Forecourt—Landscape Construction Documentation 'For Approval' issue dated 05.12.2023, prepared by GbLA:

- L0 Cover & Drawing Schedule
- L1.1 Existing condition
- L1.2 Existing Site Condition Photos
- L1.3 Existing Condition – Water & Drainage Assets
- L1.4-L1.5 Existing Condition – Day Basin Sections
- L2.1 Site Protection Envelope Plan
- L2.2 Site Demolition Plan
- L2.3 Overall Layout Plan
- L2.4 Overall Grading & Drainage Plan
- L2.5 Overall Landscape & Surface Finishes Plan
- L2.6 Day Basin Details Plan
- L3.1 Day Basin Landscape Planting Plan
- L3.2 Garden Bed Planting Plan
- L3.3 Planting Schedule
- L4.1-L4.3 Landscape Sections; and
- L5.1-L5.9 Construction Details.

Structural engineering documentation

Wombat Hill Botanic Garden Basin & Forecourt Daylesford dated 14.11.2023, prepared by Don Moore & Associates Consulting Structural & Civil Engineers:

- S1 Rev. A, General notes
- S2 Rev. A, General notes
- S3 Rev. A, Plan of Day Basin
- S4 Rev. A, Details—1
- S5 Rev. A, Details—2
- Project Advice No. 1A dated 30 October 2023

Irrigation drawings

Wombat Hill Botanic Gardens—Day Basin Drawings dated 03.10.2023, prepared by Make It Wet!, irrigation design consultants:

- 1016-DD-01 issue G Pumpsets and pipework
- 1016-DD-02 issue G Pumpsets and pipework
- Specification of Works, 'Rill Pumping Specification Wombat Hill Botanic Gardens Daylesford', dated September 2023

3.2 Description of the proposed works

The proposed works comprise a combination of hard and soft landscaping works and irrigation systems in the vicinity of the Circular Day Basin and Pioneer Memorial Tower. The works include the creation of an operational, low, circular stone rill surrounding the Day Basin and a channel which connects to the cascade. A system of pipes and pumps will facilitate the reticulation of water around the rill and to the cascade. Steel balustrades are incorporated into the plan to prevent access and for public safety.



Figure 3.1 Site plan of the proposed development, GbLA drawing L2.3. (Source: GbLA, 2023)

3.2.1 Demolition and temporary works

Tree, plant and shrub removal

Some removal of shrubs and one small tree is required to facilitate the works and prepare for new areas of planting, paving and landscape features.

One existing small tree is to be removed and transplanted. The tree is currently located directly adjacent to the Pioneer Memorial Tower on the east side. This tree will be relocated to another area of the gardens in consultation with Council.

An area of planting directly adjacent to the Pioneer Memorial Tower on the east side is to be removed.

An area of shrubs to be removed to the south of the Day Basin near the top of the Fernery Cascade is to be removed, constituting an area of approximately 5.6 metres long by 2.3 metres wide. This will be removed for the safety works to take place, but then replanted. The visual impact of the new balustrade will be mitigated by the new hedge planting over time.

An area of site clearing constituting 205 square metres is proposed in the area immediately surrounding the Day Basin and Pioneer Memorial Tower.

Trees and shrubs proposed to be removed are shown in the following drawings:

- L2.2 Site Demolition Plan

Demolition of elements

The following elements are proposed to be demolished:

- existing cyclone wire security fencing surrounding the Day Basin;
- a section of kerbing and an area of asphalt on the west side of the carpark;
- a section of asphalt path to the south of the Day Basin; and
- an area of site clearing around the Day Basin and Pioneer Memorial Tower.

Excavation works for new pavement, new rill water feature and garden beds to take place in this area.

The following elements will be removed stored, or retained for reinstatement:

- the main sign east of carpark (stored);
- a small sign and bollard south of carpark (stored); and
- bollards across asphalt path. A new removable bollard will be installed in the asphalt path.

Locations and extent of elements for demolition are shown on L2.2 Site Demolition Plan.

Temporary works

Additional temporary works (in addition to the main works zone) will be required for:

- temporary fencing around the perimeter of the works zone
- tree protection temporary fencing
- temporary fall zone protective fencing
- temporary walkway locations outside the works zone boundary to the north and west.

Locations are shown in the GbLA drawing L2.1 Site Protection Works Plan, 13.11.2023.

The temporary works will be established at the commencement of the project and removed after the completion of works.

Establishment of Tree Protection Zones

Tree Protection Zones (TPZs) will be established prior to the commencement of works and be in place during the demolition and construction works phases. GbLA have estimated TPZs based on methodology outlined in *AS4970-2009 Protection of Trees on Development Sites*.

3.2.2 Construction of the water feature and elements surrounding the Day Basin

A carved bluestone rill water feature has been designed to surround the existing Day Basin. Water will flow through the rill following an undulating pattern (see Figure 3.2) and into a steel channel leading to the top of the existing cascade. A pump is to be located in a balance tank situated beneath new paving.



Figure 3.2 Sample of bluestone rill similar to that proposed – preliminary design work. (Source: GbLA, 2023)

The circular nature of the Day Basin is emphasised by the design of the elements surrounding it. These elements include a steel safety balustrade, low rill garden bed and the bluestone rill. The three distinct elements are arranged as a series of concentric circles surrounding the Day Basin’s bluestone edging (Figure 3.3). The rill ‘marsh garden’ incorporates three segments of themed planting: mineral springs and indigenous species; Australian species; and ornamental and exotic species. The safety balustrade is designed in slimline steel plate with 5-millimetre rods to minimise the visual impact while protecting the Day Basin from public access.

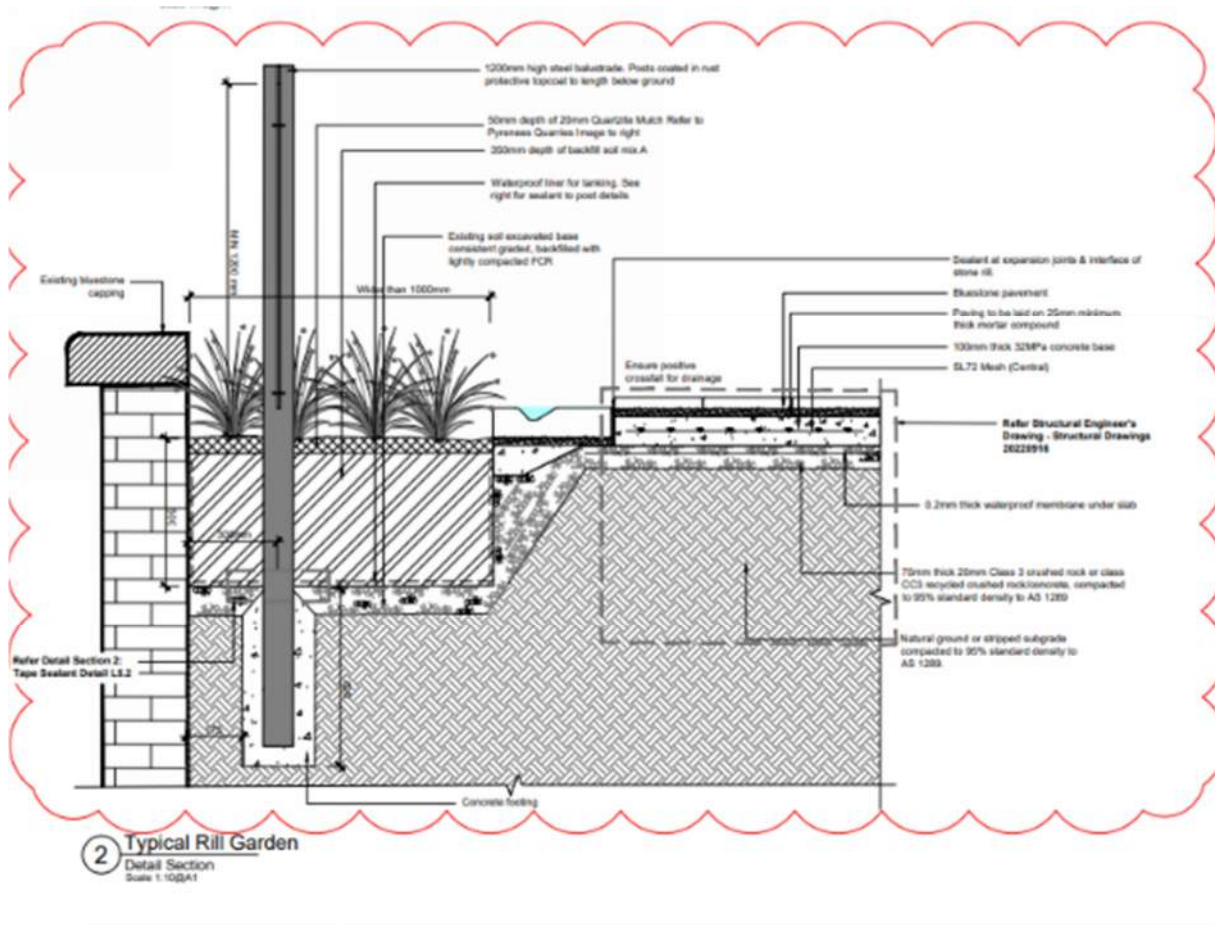
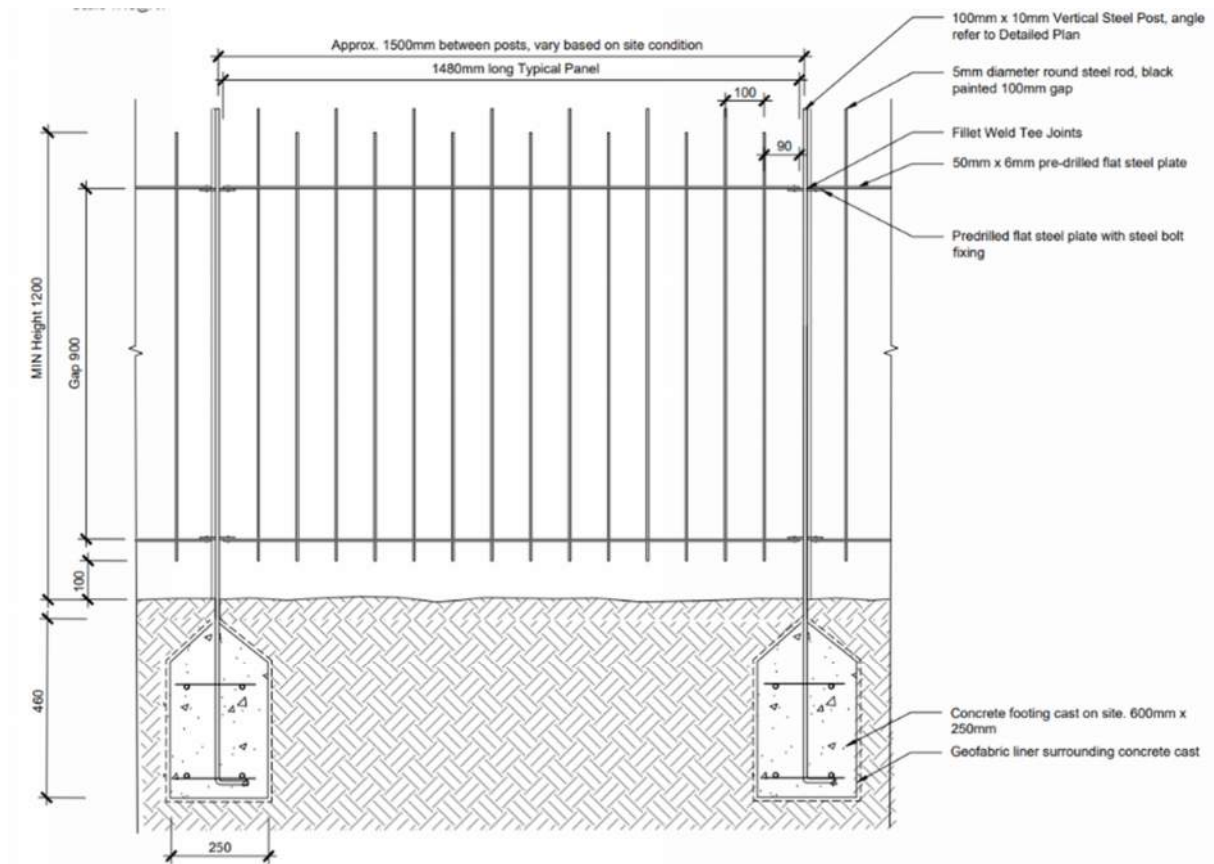


Figure 3.3 Detail showing section through proposed balustrade, bluestone rill and garden surrounding Day Basin, excerpt from GbLA drawing L5.2. (Source: GbLA, 2023)

The bluestone rill diverts towards the asphalt path to the south of the Day Basin where it flows under a bespoke stainless-steel grate and connects to a stainless-steel channel which curves in a sinuous path towards the top of the cascade. A fine-leaved, low growing *Lomandra* (*Lomandra* 'Shara') will provide a uniform planted edge that will screen the supports of the channel to is intended to provide a 'floating' effect. A steel safety balustrade, softened by linear hedge planting, is proposed at the top of the cascade (Figure 3.4).



2 FE02 Steel Balustrade
 Details
 Scale 1:10@A1

Figure 3.4 Proposed design for steel balustrade at the top of cascade, excerpt of GbLA plan L5.8, refer GbLA plan L2.5 for the extent. (Source: GbLA, 2023)

No works are currently proposed to the interior of the Day Basin.

Irrigation and pumping system

A pumping system is designed to circulate water from the rill above ground to the top of the cascade (looping back underground), reintroducing the element of water and reinforcing the connection between the Day Basin and the cascade. The main water system bypasses the Day Basin, and a balance tank has been introduced to ensure that they system has a constant water supply; it houses the submersible pump that enables the water flow. There is a 'marsh system' dripper irrigation system in conjunction with a garden bed liner to keep the marsh planting moist and excess water flows are piped to the stormwater system.

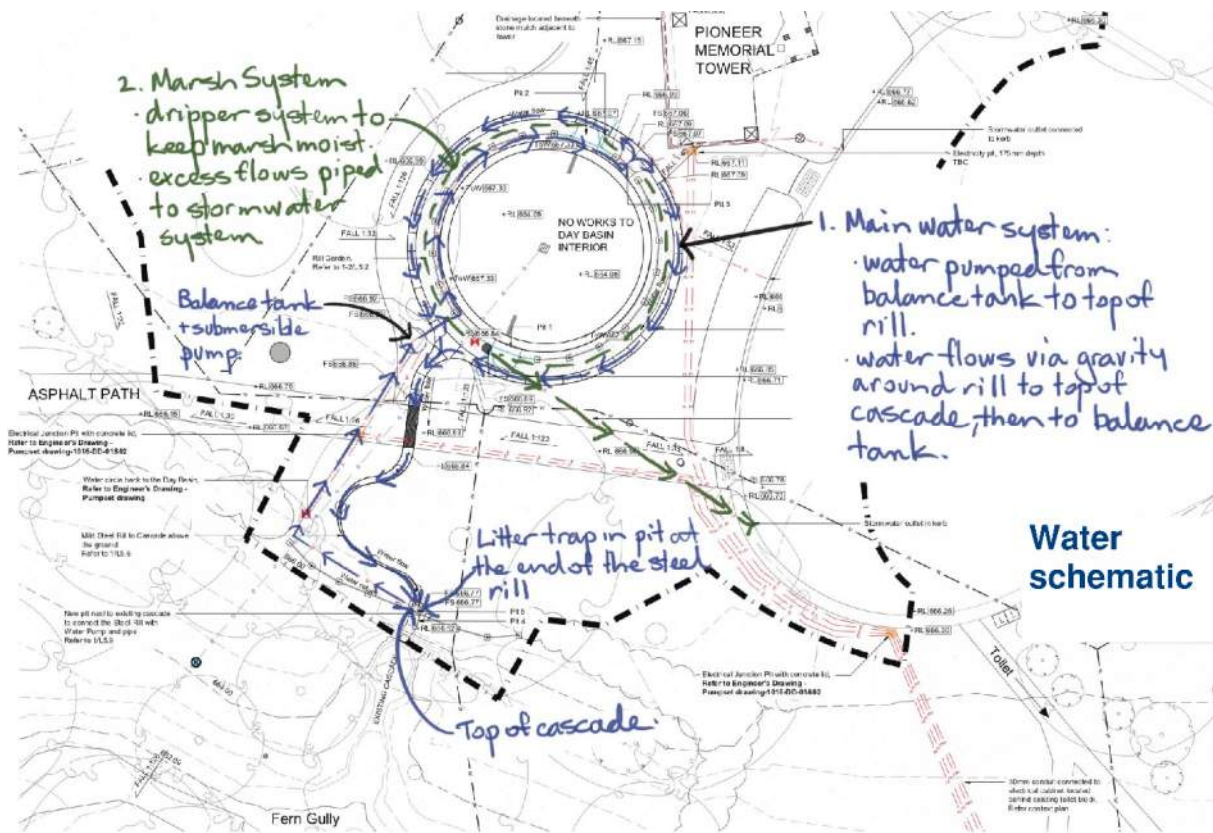


Figure 3.5 Proposed water flow from the rill to top of the cascade, excerpt of GbLA sketch plan (Source: GbLA, 2023)

Materiality and design

The materiality of the bluestone rill responds to the bluestone capping which surrounds the Day Basin. The design of the rill is contemporary so as to differentiate this element from the heritage fabric of the Day Basin. The steel balustrades surrounding the Day Basin and protecting the edge of the cascade area are of a contemporary design which minimises visual impact on the integrity of the Day Basin and the gardens more generally. The supporting posts are slim 100-millimetre by 10-millimetre sections and the infill uprights consist of 5-millimetre steel rods in a black finish.

The stainless-steel channel introduces a contemporary material which is also used for the grate traversing the asphalt path. The design of these elements incorporates a curved and sinuous pattern to reflect the flow of water in an interpretive way.

3.2.3 Hard and soft landscaping works and planting

The setting of the Day Basin and Pioneer Memorial Tower is proposed to be landscaped. The landscape works respond to the CMP by integrating the built form of these elements in a more cohesive way and improving the aesthetic appearance of the area. Existing mature trees will be retained, and the landscape design considers and integrates these into the design.

An area of bluestone paving laid in an ashlar pattern will extend from the asphalt path at the south of the Day Basin, following the curve of the Day Basin and the edge of the asphalt carpark through to the Pioneer Memorial Tower. The extent of paving has been reduced from earlier designs in response to feedback from Heritage Victoria.

Mulched beds have been incorporated at the kerbside of the carpark and between the tower and carpark. A combination of organic and stone mulch has been proposed; these ornamental garden beds provide textural contrast to paving and soften the foreground view of the proposed works. Ornamental conifer species have been selected, which complement the adjacent Arboretum planting (adjacent to but outside of the works area).

Tea Olive (*Osmanthus ilicifolius*) hedge planting is proposed in a curve following the covered water reservoir. This species appears in the Taylor and Sangster *Catalogue of Choice Plants* (1912). *Viburnum tinus* has been selected for the hedge planting at the top of the cascade; it is an example of a species which is present within the Daylesford Botanic Gardens.

The 'Turf Establishment Area' between the new works and grassed area will be seeded post-construction to remediate the grassed area abutting the bluestone paving.

The combination of low and medium height planting around the perimeter of the Day Basin reinforces its circular form and is consistent with the CMP policy for the Day Basin. The mixed but overall low heights of the perimeter planting will allow for views to the exposed external brickwork and bluestone capping of the Day Basin and into the Day Basin from the surrounding area, providing opportunities to appreciate the form and materials of the Day Basin interior.

The themed collections of marsh plants for the Rill Garden interprets the role of the Day Basin as a water feature in the gardens. A themed collection of plants is also responsive to and appropriate in the context of the botanic garden. The species diversity of the planting proposed around the perimeter of the Day Basin is consistent with the Masterplan objectives for botanical richness and horticultural suitability to new planting.

3.3 Heritage advice and design input

GbLA engaged the services of GML to provide heritage advice that would ensure that the development of the works would respond well to the heritage context. Heritage input into the design has included detailed iterative advice on the design, scale, form, character, detail and materiality.

Heritage advice was provided at key points in the project's development, including the exploration of filling the Day Basin with water and recommendations relating to Heritage Victoria's request for the consideration of conservation works to the Day Basin.

GbLA provided GML with draft versions of drawings detailing the proposed works, including sketch designs of key elements, various issues of schematic design and proposed options for design details, for review and feedback at key points in the design development stages.

3.4 Options considered

The proposed scope of works for the area surrounding the Day Basin and Pioneer Memorial Tower have been carefully developed by GbLA, with iterative heritage advice provided by GML over a period of approximately 18 months. Input has been provided by specialists including a structural engineer and Make It Wet!, a company specialising in irrigation design.

The design for the area of works has been developed to respond to the identified heritage values of the Daylesford Botanic Gardens, with reference to the statement of significance and the 2007 CMP.

Rill alignment

Two early options were considered for the landscaping treatment around the outer edge of the Day Basin, as shown in Figures 3.6 and 3.7.

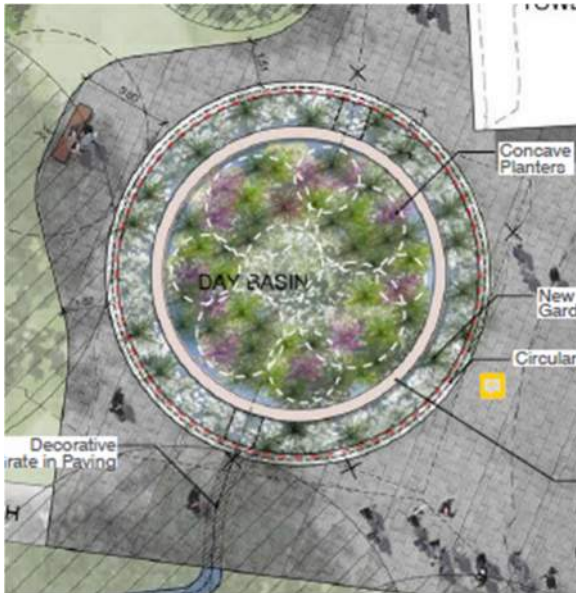


Figure 3.6 Detail of Landscape Conceptual Plan MP1 (11.02.2022) showing the circular rill option.

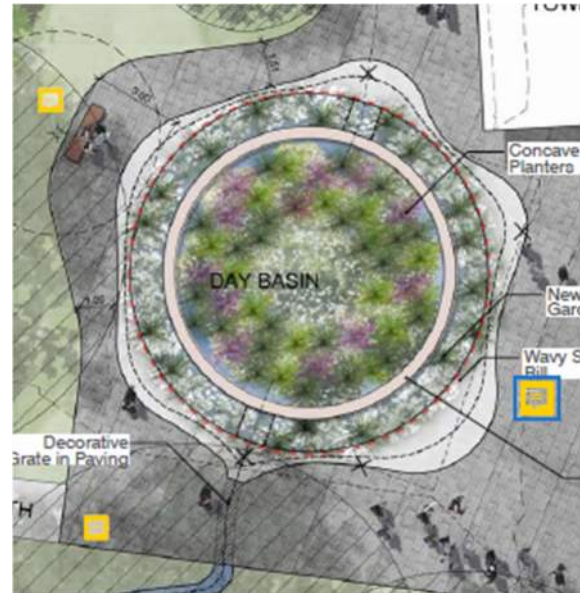


Figure 3.7 Detail of Landscape Conceptual Plan MP2 (11.02.2022) showing the wavy rill option.

Advice to GbLA was that the circular rill appeared preferable on heritage grounds because it could serve to reinforce the circular form of the Day Basin, whereas the wavy rill might overwhelm or compete visually with the circular physical form of the Day Basin.

Early advice from Heritage Victoria in relation to the scheme shown in Figures 3.2 and 3.7 was that the coverage over the surface of the Day Basin by planting was too extensive, and ideally any planting would retain visibility of the interior and materiality of the Day Basin walls. The concave planters and extent of planting were revised accordingly (and later deleted from the proposal).

Areas of paving

The extent of paving has been reduced from earlier designs in response to feedback from Heritage Victoria. Pavement area has been reduced from 181 sqm to 127sqm, a reduction of 54sqm.

Paths

GML provided feedback to GbLA relating to the linear nature of the existing asphalt pathway to ensure that the legibility of the directional path was not lost. The design was adjusted to accommodate the original orientation of the path and retention of a section of the existing asphalt path.

Filling the Day Basin

Filling the Day Basin with water was one of the project's original intentions. Recovery of the Day Basin's function was considered a positive heritage outcome that was also consistent with recommendations in the 2007 CMP. The 2007 CMP identifies the following lost elements associated with the Day Basin, the reconstruction of which would be desirable:

- water;
- central fountain;
- working association with the Fernery Cascade; and
- its function as a garden ornament.

Early design concepts explored the opportunity to provide a water system which would serve to refill the Day Basin, restore the water connection between the Day Basin and the top of the cascade, and animate the water with small fountain features (see Figure 3.8). Advice was sought by GbLA from Steve Duggan from make it wet, on the feasibility of this option. Discussions were held with Council representatives and inspections and tests were conducted.

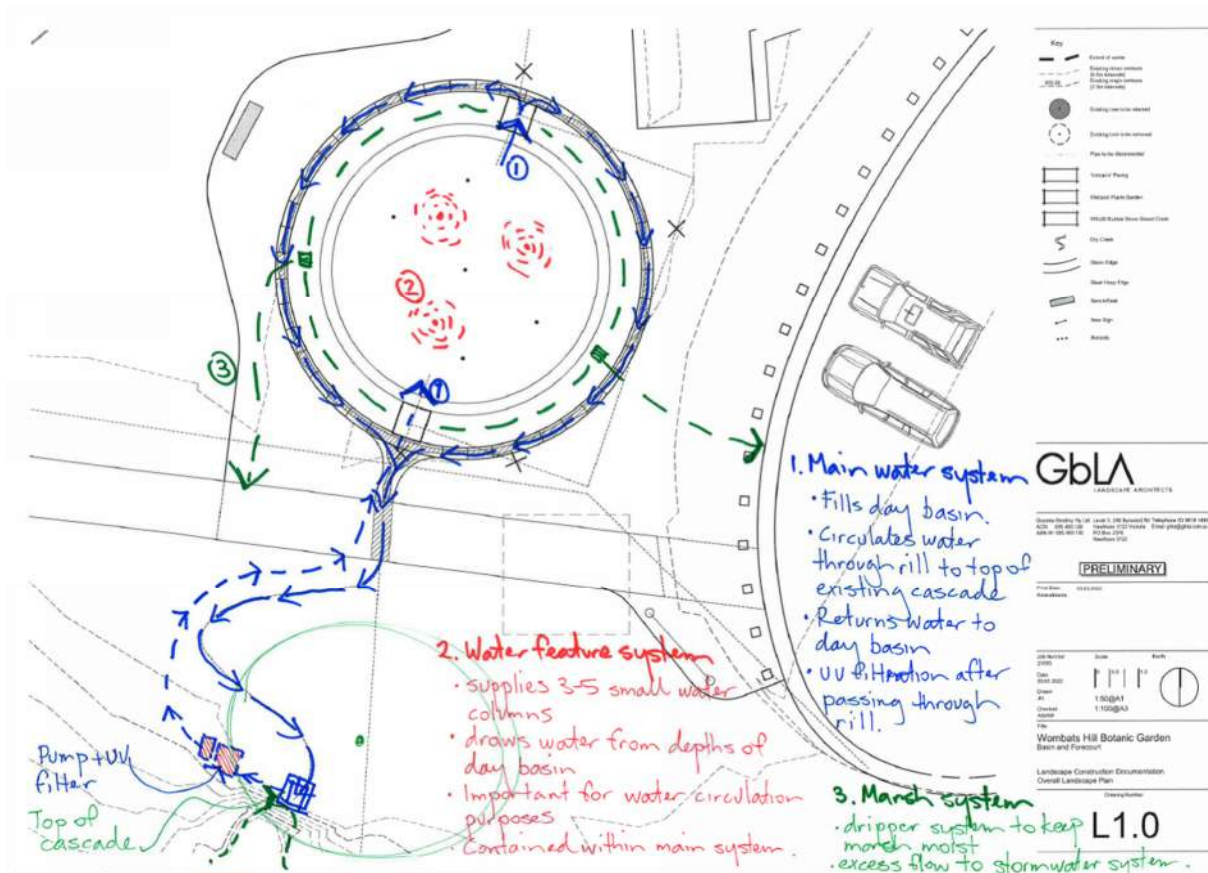


Figure 3.8 Early schematic design for filling the Day Basin (3 March 2022). (Source: GbLA)

The incorporation of water in the early designs was carefully considered to assess any adverse physical impacts on the original fabric of the Day Basin. Tests were conducted separately to unobtrusively seal the bricks (off site) and, later, to determine the current capacity of the Day Basin to hold water and significant leakage was detected.

Various methods of containing the water within the Day Basin were modelled, including the incorporation of a rubber lining and treatment of the brickwork to create an impervious layer.

After careful evaluation, it was concluded that a solution which did not have an adverse impact on the appearance and/or fabric of the day basin could not be achieved. It was decided to limit the introduction of water to the surrounding rill as a decorative and interpretive water feature and to provide a connection to the cascade. Consequently, no works are proposed to the interior of the Day Basin.

Conservation works to the fabric of the Day Basin may be considered in the scope of future works.

3.5 Construction methodology and sequencing of works

Project Management and Inspections

- Works are to be managed by Hepburn Shire Project Manager, Lee Kosky
- Site inspections by GbLA Landscape Architects as required.
- Site inspections by Structural Engineer as required
- Confirmation of Scope and Extent of Works with contractor
- Documentation of heritage fabric completed for record prior to any works

Works Area Establishment & Protection

- Install perimeter Extent of Works fence (to Australian Standards) and tree protection fencing, (including signage), to areas shown on Protection Plan
- Access and drop off of materials to be to/from Car park and manual installation only within protected works site
- Protection of existing Day Basin bluestone edges to include geofabric or other felted wrap to protect stone edges from chipping or other damage
- Protection of existing concrete surfaces and edges to Pioneer Memorial Tower
- Establish clear access points in perimeter works fence
- Establish materials storage and site shed in adjacent car park, not within works zone
- Install protective walkway to Australian Standard as indicated on drawings

Demolition and Excavation

- Demolition to be by qualified personnel, for example tree works by qualified arborist, transplanting by Hepburn Shire horticulturist, other plant removals using hand dig methods only
- Removal of existing asphalt path, concrete kerb and asphalt car park to use hand machinery (saw cut asphalt, crow bar, wheelbarrow)
- Removal of existing turf surface using hand dig methods only
- Works adjacent to existing trees, external edges of Day Basin and external edges of Pioneer Memorial Tower to be completed using hand dig methods only and careful use of any steel-edge tools to ensure no marking
- Protection of surfaces adjacent to any ground excavation to be undertaken immediately such as fastening protection fabric with tape or other removable system to ensure coverage of surfaces
- Monitoring / documentation of structures using before/after photography to determine if any movement or other change – If this is detected works are to stop immediately and structural engineer informed.

Site Levelling and Set out

- Levelling to be achieved using surveyor level or similar, mini excavator (Compact Dingo Mini Skid Steer or similar to be confirmed contractor) – all large equipment prohibited from site. Machinery to access site from car park
- Set out to be using builders' lines and survey informed by landscape/structural engineer/ irrigation designer drawings provided for construction
- Pavement, balustrade, stone, steel rill and planting set out to be confirmed in accordance with drawings prior to installation.

Installation

- Levels around existing fabric to be finished to previous levels at interface with Pioneer Memorial Tower and design levels around Day Basin in accordance with structural engineer drawings. Materials consolidated appropriately and to Australian Standards to prevent slump or sink
- Materials to be installed in accordance with Australian standards where required, landscape architect, structural engineer and irrigation designer drawings
- Works to be properly finished, with appropriate site inspections and sign-offs undertaken at hold points
- Plants are mulched and watered immediately upon completion of planting
- Kerbs and asphalt reinstated for car park
- Tactiles are installed to Australian Standards
- Asphalt footpath is reinstated to original alignment.

Finishing and Clean up

- Surfaces are cleaned and rubbish is removed and disposed of appropriately
- Protective Fencing is removed
- Protective materials to bluestone capping and Pioneer Memorial Tower removed
- Temporary walkway is removed and turf reinstated

Site is opened and pedestrian access unimpeded.

Reporting

- Heritage Victoria is advised on completion of the works and all site inspections are completed.

3.6 Reasons for the proposed activity

The proposed works aim to contribute to Hepburn Shire Council's improvements to the Daylesford Botanic Gardens by enhancing the visitor experience of this popular destination. They will provide a more accessible area for visitors, enhance the appearance and condition of the forecourt of the Pioneer Memorial Tower and Day Basin and reinstate the connection between the Day Basin and the Cascade. Hepburn Shire Council has committed to upgrading the area to capitalise on the natural and designed beauty of the Daylesford Botanic Gardens.

3.6.1 Conservation Management Plan

The proposed works respond to some of the key action items identified in 'Policy Area 1: Landscape' in the 2007 CMP which was commissioned by the Hepburn Shire Council. These are outlined in detail in Section 4 of this report.

3.6.2 Community involvement

The Friends of Daylesford's Wombat Hill Botanic Gardens is a group of local community members formed in 1995 to promote the Daylesford Botanic Gardens and support its preservation and enhancement. The group has raised significant funds to help support the works financially.

4 Impacts of the proposal and mitigation measures

The following impacts have been identified to support an assessment against sections 101(2) and 191(3) of the *Heritage Act 2017*.

4.1 Conservation analysis and management strategies

In this section, compliance of the proposal is assessed against the relevant clauses of the CMP. Policies and/or strategies that are relevant to the proposal are listed in the tables below and the full list of policies is included in the CMP.

The CMP for the Daylesford Botanic Gardens identifies a number of heritage management policies and strategies to guide future change at the site and appropriately manage key elements of heritage value.

The overview outlined below describes the response of the proposed development against the relevant policies contained in 'Section 8.2 Policy Area 2: Management' of the CMP.

4.1.1 Response to relevant policies

The following relevant policies and actions have been extracted from the CMP. Responses to actions that may need consideration in the current context of the gardens and proposed works is provided by GML in the right-hand column:

Actions	Response
Annual general maintenance plan	It is recommended that maintenance of the new assets including maintenance of the planting and hedges be integrated into any maintenance plan for the gardens.
Annual tree maintenance plan including tree works record	Update maintenance plan to include establishment pruning and ongoing maintenance of the new hedges.

Policy 2d: Maintenance To provide a high standard of care for all physical elements in the Gardens through implementation of a range of carefully developed short and long term plans and the keeping of current records.

Tree replacement and propagation plan	Not applicable
Plant acquisition plan	Plant procurement is part of early works and will be undertaken by Shire of Hepburn as it involves Field collection and propagation of local provenance plant material. Species not of local provenance will be sourced from other botanic gardens or trade
Weed assessment plan	Weed assessment and removal will be undertaken during a 13 week establishment period and ongoing maintenance will be undertaken by Hepburn Shire.
Weed management plan	Removal of weeds in the Day Basin would be desirable but removal methods will be important and should be informed by professional advice. Removal methods should avoid harm to significant fabric. For example, select herbicides should be used to poison weeds that cannot be removed without damaging the structure, and left in situ.
Water management plan	Review and update any existing water management plan for the gardens to ensure adequate management of new water feature.
Create computerised plant database using Tree List 2007 as basis	Update existing plant database to include newly introduced plants.
Complete labelling of trees	Not applicable
Label all plants in gardens	A planting plan with species has been made available to Shire of Hepburn. Final outcomes for labelling and Interpretation to be confirmed. It is recommended that appropriate plant labels be added to garden beds.

Policy 3a: Synergies, strategic alliances and linkages

To create opportunities for collaboration between arts, cultural, educational and environmental programmes in a botanical setting

Actions	Response
Improve signage and physical access between gardens and points of high visitation	Hard landscaping and works to paths and kerbs provides improved access for visitors. The incorporation of tactile ground surface indicators (TGSIs) and areas of level paving improve safety and circulation. Two existing interpretive and wayfinding signage panels will be removed. There is an opportunity for future

	wayfinding and directional signage to be designed as part of a future interpretation plan.
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Policy 3b: Promotion and interpretation

To promote and increase the botanical, educational and recreational opportunities offered by the Gardens for the enjoyment of visitors and the community.

To provide accurate and current information about the Gardens’ history, development and cultural significance to visitors and the wider community

Actions	Response
Complete the erection of interpretative signage in the gardens, based on existing styles	<p>Two existing interpretive and wayfinding signage panels will be removed as they are old and dated. It is recommended that an interpretation plan be developed which would include interpretive signage and other creative opportunities to embed interpretive elements within the landscape. This would become part of a future stage of works.</p> <p>The design of the rill, garden beds and channel to cascade provides an integrated interpretive approach to the reinstatement of the connection of the Day Basin to the cascade and reintroduces water as a decorative element.</p> <p>The design reconnects elements within the area of works, including the relationship of the Day Basin to the tower and encourages users to experience the place.</p>

The draft masterplan developed by Lee Andrews & Associates for the 2007 CMP (p340) recommends the following for works in the area of the Day Basin and Pioneer Memorial Tower:

- Improve landscaping around base of Tower, integrated with improved new path network and landscaping works. Replace bare compacted areas of earth (where grass has been) around Pioneers’ Memorial Tower and circular Day Basin with combination of mulch, display flower beds and paths;
- Refill with supplementary water for irrigation, create flowering shrub border around rim, remove fence and fit mesh barrier just below water surface for safety, fit new fountain (possible involvement of local artisans). Interpret as earliest known surviving structure in the Gardens;

- Screen fence surrounding Oval Reservoir using closely clipped maidenhair Creeper grown on the fence to create a 'hedge', plant slopes with massed flowering shrubs. Reinststate the summit perimeter path. Continue lower path around perimeter or reservoir as a circuit. Interpret reservoir; and
- Restore directional sign on the Pioneer's Memorial Tower and interpret the views to the public through a board or sign at the Tower's base and at the summit.

The proposal responds to the above recommendations by improving the landscaping around the Day Basin and Pioneer Memorial Tower. The bare compacted areas of earth would be replaced with areas of paving, mulch and garden beds. Paving has been incorporated instead of paths in order to provide an accessible surface connecting the Day Basin with the Pioneer Memorial Tower and an existing asphalt path. Areas of paving have been kept to a minimum and reduced from earlier design options. An area of ornamental garden planting between the paved area and the carpark helps to soften the appearance of hard landscaping.

Although it was not found to be feasible to refill the Day Basin, the design for the surrounding bluestone rill water feature introduces the element of water and reconnects the Day Basin with the Cascade and Fernery. The low planting around the rim includes flowering plants and a circular garden bed divided into three themed segments planted with Mineral Springs and indigenous species, Australian species, and ornamental and exotic species.

Screening of the fence around the Oval Reservoir is achieved by incorporating a hedge planting of Tea Olive (*Osmanthus ilicifolius*).

Directional signage and interpretation would be part of a future stage of works.

4.2 Tree removal

One small sapling is marked for relocation. This is currently growing close to the base of the tower and is not a great specimen. It will be relocated in consultation with Council to a location within the gardens but outside the area of works. This is appropriate and is considered a positive heritage outcome.

One overhanging tree branch is to be removed with the advice of a qualified arborist to facilitate pedestrian access around the Day Basin. This will have a minimal impact on the heritage significance of the landscape elements and is considered appropriate to improve public access and safety.

All other trees are to be retained and protected. Hand-dig methods are documented as being required when carrying out works adjacent to structures and the tree protection zones.

4.3 Temporary works and protection measures

A temporary walkway and fencing is documented on GbLA drawing number L2.1. Temporary fencing will surround the Day Basin and Pioneer Memorial Tower and the entirety of the works area. Tree protection fencing will be installed to help avoid impacts on significant trees.

It is recommended that notes are added to the drawing to provide clarity that there are to be no works impacting the bluestone capping around the edge of the Day Basin and that it is marked as existing to remain and protected for the duration of the works. GbLA has confirmed the following protection measures.

- Access and drop off of materials to be to/from Car park and manual installation only within protected works site
- Protection of existing Day Basin bluestone edges to include geofabric or other felted wrap to protect stone edges from chipping or other damage
- Protection of existing concrete surfaces and edges to Pioneer Memorial Tower
- Establish clear access points in perimeter works fence
- Establish materials storage and site shed in adjacent car park, not within works zone
- Install protective walkway to Australian Standard as indicated on drawings.

The structural engineer's advice in PAN01 related to the protection of the Day Basin and Pioneer Memorial Tower is to be followed. It is recommended that protection measures for the bluestone capping around the Day Basin outlined in the construction methodology be followed.

The potential impact of any heavy machinery in the vicinity of the Day Basin and Pioneer Memorial Tower should be assessed and mitigated.

The above measures and considerations are considered adequate for mitigating adverse impacts on the cultural heritage significance of the place.

4.4 Impacts on mature trees

Tree Protection Zones (TPZ) are indicated in drawing L2.1 Site Protection Works Plan. The trees nominated for protection are appropriate.

There is potential for the proposed works to encroach into the TPZs of two existing trees; circled blue in the image below.

Prior to any works commencing, it is recommended that TPZs (for all retained trees) be defined in accordance with Australian Standard for Tree protection on development sites (AS4970-2009) by Council’s arborist. Recommendations to mitigate identified impacts from encroachment of site clearing and paving works into the TPZ of these two trees should be implemented.

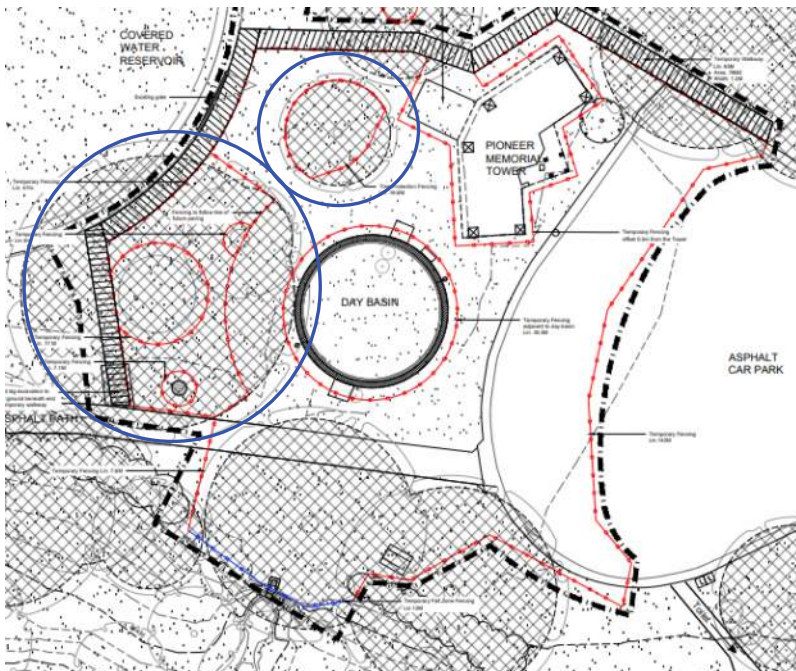


Figure 4.1 Detail from Drawing L2.1 showing existing trees to be retained and indicating in blue, two trees that may require closer assessment of impacts by Council’s arborist and potential implementation of mitigative measures as a result of encroachment of site clearing works and paving into the TPZ.

4.5 Demolition

Demolition works are minimal and have been limited to those required to carry out the works as described on drawing L2.2 Site demolition plan.

Proposed demolition includes the:

- removal of wire fencing around the Day Basin;
- areas of site clearing will be established with reference to the Structural Engineering drawings and the Construction Methodology outlined in section 3.5. Depth of excavation will vary across site. Finish surface levels or design levels have been provided to ensure even drainage and crossfalls to DDA requirements and to meet existing levels at extent of works interface.
- removal of a section of asphalt path;
- demolition of a section of kerb and asphalt in the carpark;
- removal of a section of planting against the tower; and
- removal of a section of shrubs at the top of the cascade.

Most of the elements proposed for demolition do not contribute to the cultural heritage significance of the place. The wire security fence surrounding the Day Basin is an intrusive element and its removal will improve the appearance of the place and increase visibility of the Day Basin.

Asphalt surfacing is noted in the CMP as being of primary cultural significance. A section of the asphalt path is noted for demolition, this is to facilitate the new landscape installation of connecting steel rill and ornamental grate. The removed section of pathway will be reinstated with an asphalt surface following the original orientation. A new steel edge to retain and define the shape of the asphalt path has been included for the section to the east of the ornamental grate.

The above minor demolition work is necessary for the installation of hard and soft landscaping elements and to facilitate the installation of electrical and hydraulic services and drainage. Confirmation of machinery to be used should be obtained and assessed prior to works commencing.

Elements noted for removal including the asphalt path, kerb and carpark surface will be reinstated as part of the works.

Planting against the tower will be reinstated in the form of new mulched garden beds. The shrubs at the top of the cascade will be replaced by new hedge planting as noted on drawing L3.2 Landscape planting plan.

It is recommended that the structural engineer's advice in PAN01 related to the procedures and criteria for works in the vicinity of the Day Basin and Pioneer Memorial Tower is followed. Hand-dig methods should be strictly followed in the vicinity of the Day Basin and Pioneer Memorial Tower.

It is noted that the protective fencing around the Day Basin and Pioneer Memorial Tower encroaches on areas which are marked for 'site clearing'. It is recommended that

mitigation measures are put in place to ensure the protection of these elements during any works which are carried out prior to the installation of protective fencing.

Mitigation measures outlined in the construction methodology include the following:

- Demolition to be by qualified personnel, for example tree works by qualified arborist, transplanting by Hepburn Shire horticulturist, other plant removals using hand dig methods only.
- Removal of existing asphalt path, concrete kerb and asphalt car park to use hand machinery (saw cut asphalt, crow bar, wheelbarrow).
- Removal of existing turf surface using hand dig methods only,
- Works adjacent to existing trees, external edges of Day Basin and external edges of Pioneer Memorial Tower to be completed using hand dig methods only and careful use of any steel-edge tools to ensure no marking. Protection of surfaces adjacent to any ground excavation to be undertaken immediately such as fastening protection fabric with tape or other removable system to ensure coverage of surfaces.
- Monitoring / documentation of structures using before/after photography to determine if any movement or other change – If this is detected works are to stop immediately and structural engineer informed.
- Levelling to be achieved using surveyor level or similar, mini excavator (Compact Dingo Mini Skid Steer or similar to be confirmed contractor) – all large equipment prohibited from site. Machinery to access site from car park.
- Set out to be using builders' lines and survey informed by landscape/structural engineer/ irrigation designer drawings provided for construction.

4.6 Construction

The new works, including landscaping and reintroduction of a circular water feature connecting the Day Basin to the Cascade, will have an overall positive impact on significance and in the landscape.

There are a number of factors driving the design:

- positive impacts relating to access and equality including level surfaces and TGSIs;
- alignment with the objectives and policies outlined in the CMP;
- providing an improved visitor experience;
- improving the neglected nature of the area; and
- connecting the elements and providing an improved sense of visual unity.

The installation of the footings for the balustrade around the Day Basin have the potential to impact the Day Basin’s fabric. The potential of works in the vicinity of the Day Basin and Pioneer Memorial Tower to impact these heritage items requires that protection measures are put in place.

Mitigation measures include a review which has been provided by a structural engineer, nominating procedures and criteria. These include hand-dig measures and other procedures for works in the vicinity of the Day Basin and Pioneer Memorial Tower, and protection to the perimeter bluestone capping at the top of the Day Basin (refer PAN.01 Rev A in Appendix B).

Structural engineering documentation has also been provided in relation to paving (refer structural documentation in Appendix B).

The new works around the Day Basin have the potential to obscure the view of the Day Basin. To mitigate this, the design of the safety balustrade allows for vision through it by using slim profile solid steel sections rather than larger profile hollow sections. This is to make the overall effect less visually obtrusive. Sightlines have been considered in placing the balustrade which will ensure vision to the interior of the Day Basin is not obstructed (refer Figure 4.2).

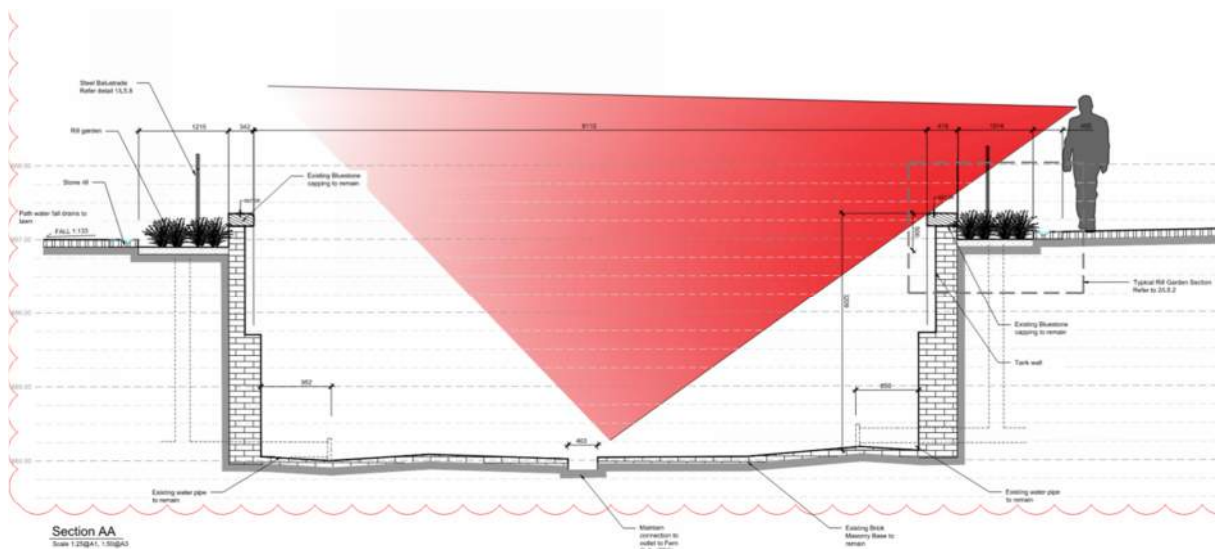


Figure 4.2 Diagram depicting sightlines into the Day Basin, excerpt of GbLA plan L4.1 (Source: GbLA, 2023)

There are no works proposed to the interior of the Day Basin. The inability to find a solution which would see water restored to the Day Basin means that its fabric is not subject to intervention; however, it is recommended that a scope of conservation works

is developed by an appropriately qualified conservator and implemented in accordance with identified conservation priorities and available Council funds.

It is recommended that the protection measures to safeguard the bluestone capping are further articulated prior to works commencing.

Mitigation measures and safeguards to retain and protect cultural heritage values have been put in place. This includes the following:

- detailed advice from structural engineer Don Moore & Associates (PAN1A dated 30 October 2023) in relation to works in the vicinity of the Day Basin and Pioneer Memorial Tower;
- hand-dig measures in the vicinity of significant elements;
- Prior to any works commencing, it is recommended that TPZs (for all retained trees) be defined in accordance with Australian Standard for Tree protection on development sites (AS4970-2009) by Council's arborist. Recommendations to mitigate identified impacts from encroachment of site clearing and paving works into the TPZ of the two trees identified in section 4.4 earlier, should be implemented;
- site protection works as described on drawing L2.1, including tree protection fencing, temporary fencing adjacent to the Day Basin and Pioneer Memorial Tower and temporary walkways providing ground protection;
- notes on the drawings identifying that the works are subject to a heritage permit and so structures, surfaces, materials and planting needs to be protected and approval sought prior to undertaking works; and

4.7 Signage

Existing signage at the site is to be removed and stored but is not planned to be reinstalled, nor is any new signage planned at this stage of the works. Future wayfinding and directional signage and interpretation devices should align with an interpretation plan.

It is recommended that interpretive elements be provided for the Day Basin and forecourt area to communicate the cultural heritage values of the place.

4.8 Services

Electrical and plumbing services including pits for equipment will be provided. These services will be concealed as part of the works and will have a minimal impact on the visual aesthetic of the place. Pit lids will be in bluestone to match existing.

No new lighting has been allowed for as part of the works.

Conduit for electrical work has been incorporated to facilitate the installation of lighting in the future.

4.9 Landscaping and planting works

The planting plan and selection of plant species for the study area has been informed by relevant documents and guidelines, which is appropriate.

Planting themes for the Day Basin rill garden will be appropriate for the context of a botanic garden. The selection of species has been informed by the Taylor and Sangster *Catalogue of Choice Plants* (1912) and P Jones's (1982) *Planting c1850–1900 A Guide to the Restoration and Rehabilitation of Early Style Australian Gardens and Man-Made Landscapes* (1982, Technical Bulletin 4.1 National Trust of Australia [Victoria]). Weeds have been excluded from selection. The opportunity to focus on and contrast indigenous, Australian and exotic species has been explored. Where possible, plants will be collected and sourced from local indigenous nurseries.

The use of hedging is appropriate to the gardens. The CMP notes the tradition of using clipped hedging to partition areas of the gardens as having primary significance; it is an important part of the character of the gardens. Early images of the reservoir do not show a hedge, but there is a nineteenth-century reference to ornamental fencing being installed around it. Given that the reservoir is now covered, a hedge (as opposed to transparent ornamental fencing) would be appropriate. The reservoir would remain visible through the existing gates, with the gateway to be retained.

The selection of *Osmanthus ilicifolius* is a historically appropriate species choice. While not recorded in the plant survey conducted in 2007 by John Beetham, it was available at the Taylor and Sangster nursery in 1865.

The use of *Viburnum tinus* for the hedge above the cascade is an appropriate species choice for the gardens. Hedges were an original feature of the gardens and their shape and use as spatial delineation would be an appropriate landscape element.

Overall, the proposed planting will result in positive impacts as it aligns with the objectives of the CMP in terms of planting patterns, plant associations and plant selection for the area surrounding the Day Basin and Pioneer Memorial Tower. Namely, the proposed hedging is consistent with objectives to reinforce existing themes and plant species that are known to have been popular in the Daylesford Botanic Gardens in the past.

The themed collections of marsh plants for the Rill Garden interprets the role of the Day Basin as a water feature in the gardens. A themed collection of plants is also responsive to and appropriate in the context of the botanic garden. The species diversity of the planting proposed around the perimeter of the Day Basin is consistent with the Masterplan objectives for botanical richness and horticultural suitability to new planting.

New plantings have been selected and sited to integrate the elements and will not visually intrude on the sense of open space.

The area of proposed paving is intended to provide an even pedestrian surface in a bluestone material which references the early materials used on the site, is high quality and is used in a contemporary fashion. It will improve the visitor experience which is a positive impact and has been limited to the area directly surrounding the Day Basin, connecting it to the Pioneer Memorial Tower. The new ornamental garden beds will provide textural contrast to the paving and soften the foreground view of the paved area.

5 Assessment against the Heritage Act 2017

Section 101 of the *Heritage Act 2017* sets out the considerations which must be made in determining permit applications. The following information is provided for the purpose of assessing the effect on the cultural heritage significance of the Daylesford Botanic Gardens.

5.1 Reasons why the proposed works should be supported

The proposed works constitute an overall improvement of the landscape in the vicinity of the Day Basin and Pioneer Memorial Tower at the Daylesford Botanic Gardens and have been informed by the CMP for the place.

Although the filling of the Day Basin was not deemed to be feasible, the reintroduction of the element of water via the bluestone rill responds partially to the identified cultural significance of the Day Basin as a decorative feature. The re-linking of the Day Basin with the Cascade is also made possible by the installation of the sculptural bluestone rill and stainless-steel channel. This serves to reintroduce, in an interpretive way, the lost elements of one of the Day Basin's functions as a garden ornament, along with its working association with the Cascade and Fernery as noted in the CMP (p 160).

The CMP describes the cyclone wire fence around the circular Day Basin as an intrusive element, which is proposed to be removed as part of the works, and is a positive outcome. The design for the garden bed, balustrade and rill surrounding the Day Basin respond to the form and circular nature of the Day Basin and is not too overwhelming. The physical fabric of the Day Basin is not affected by the works.

The CMP notes the 'benign neglect' evident at the summit area and notes that 'landscaping and path definition is required around the base of the Tower and reservoirs' (p 299). The works respond to this recommendation by providing an improved visitor experience, easier access around the site and by addressing the neglected nature of the landscaping with the introduction of hard and soft landscaping, structured garden beds and planting.

5.1.1 Extent to which the application affects the cultural heritage significance of the registered place

The cultural heritage significance of the place is affected, in that it will be protected and enhanced.

The views from the Pioneer Memorial Tower towards the Day Basin will be improved by the proposed works. There is no physical impact on the Day Basin and Pioneer Memorial Tower as the works do not propose any changes to the physical fabric of these structures.

The delivery of water to the cascade via the stainless-steel channel which connects to the bluestone rill is proposed to be returned to a subsurface balance tank. This arrangement anticipates future reinvigoration of one of the main features of the gardens. The cascade will operate independently of the rill system, but will be perceived as connected.

The existing path layout is affected by the excavation of a section of the asphalt; however, this will be reinstated with new asphalt. The configuration and direction of the path will be maintained.

The botanic significance will be retained and enhanced. Only one small shrub-like tree, in addition to *Agapanthus* sp. is marked for removal; this has been deemed non-significant and is growing close to the Pioneer Memorial Tower. The use of hedges and appropriately themed garden bed planting is a positive outcome. An area marked for turf establishment surrounding the area of works will be seeded post-construction.

The historic significance of the Daylesford Botanic Gardens will be retained and enhanced. The elements identified as being of primary significance—the Pioneer Memorial Tower, Day Basin and Cascade—will be retained and unified in an aesthetically improved landscaped setting. The plant selection in the rill garden provides an area of horticultural interest and enhances the passive recreation experience of visitors.

The aesthetic significance of the place is enhanced by works which constitute an improvement to the previously 'neglected' appearance of the area.

As noted in Section 2, the existing wire fence surrounding the Day Basin has been identified as an intrusive element and its removal is a positive outcome.

There have been changes to the gardens over time as it constitutes a living and evolving landscape. It is important that these changes are carefully managed and that the proposed design has been informed by relevant documents including the CMP. The proposed design and improvement in visitor experience supports the continuing and evolving use of the gardens as a place of passive recreation.

5.1.2 Reasonable and economic use

Reasons why the proposed works should be supported are related to reasonable use, required to be considered under Section 101(2)(a) of the Victorian *Heritage Act 2017*).

If the proposal is refused, the effect on the reasonable use of the registered place would be that this part of the Daylesford Botanic Gardens would be limited in its capacity to support the ongoing use and enjoyment of the place for passive recreation by diverse visitors to the gardens.

As demonstrated in Section 3.2.3, areas of bluestone paving link the built elements with pathways to provide an improved pedestrian surface for visitors, replacing uneven areas of compacted ground and patchy grass. There are changed requirements relating to standards associated with use and diversity, inclusion and safety which the upgrade is seeking to address via improved level pedestrian surfaces, compliant balustrades, ground surface tactile indicators and improved kerbs from the carpark that are designed to be compliant with the relevant current codes and standards.

For the Daylesford Botanic Gardens to endure as a botanic garden with the integral purpose of public passive recreation as well as continuing to be relevant to future communities of users, it too needs to evolve as a living landscape. To be retained as a static place would be out of step with the principles and specific management measures outlined in the CMP.

5.1.3 Public authority

Daylesford Botanic Gardens is a Crown land reserve and the landowner is the Victorian Department of Energy, Environment and Climate Action (DEECA). The responsible land manager is Hepburn Shire Council.

5.1.4 World heritage

The registered place is not in a World Heritage Environs area.

5.1.5 Relevant matters

The project will be a co-funded cooperative between Regional Development Victoria, Friends of Wombat Hill Botanic Gardens and Hepburn Shire Council.

Hepburn Shire Council will manage the project.

6 Conclusion and summary of impacts and recommendations

6.1 Conclusion

This HIS has identified and assessed the heritage impacts of the works proposed to the significance of the Daylesford Botanic Gardens. There will be no permanent detrimental impacts on the cultural heritage significance of the place as a result of the proposed works.

The Circular Day Basin, Pioneer Memorial Tower and Cascade (and Fernery) are of primary significance and contribute strongly to the cultural heritage significance of the Daylesford Botanic Gardens; they will be retained, enhanced and integrated as elements within the designed landscape. No works are proposed to the fabric of the Day Basin or Pioneer Memorial Tower. No works are proposed for the Fernery.

The design responds sensitively to the setting and cohesively integrates the significant elements into the landscape. This will result in an aesthetically improved setting which addresses the neglected appearance of the area as noted in the CMP and at the site inspection in 2022.

The design and layout of the proposed works and the associated landscaping and plant selection are well considered and respond positively to the environs and the context of the botanic gardens. The bluestone rill and surrounding garden bed enhance the shape of the Day Basin and are a contemporary interpretation of its previous function. The selection of materials and finishes used for the rill, paving, stainless-steel channel and steel balustrade is sympathetic and does not overwhelm the significant early fabric of the place.

The removal of the intrusive mesh fence and replacement of a lower balustrade with a contemporary design and high quality material constitutes a positive heritage outcome as it opens views into the Day Basin.

The visual impact of the new safety balustrade along the top of the cascade will be mitigated by the new hedge planting over time.

Trees and other plants that contribute strongly to the cultural heritage significance of the Daylesford Botanic Gardens will be retained and appropriately managed for the duration of the works.

The new works will change the appearance of the area; however, this will constitute an improvement to a previously neglected landscape. Garden beds will incorporate a palette of planting to enhance the collection, and areas of paving will provide a more accessible and level pedestrian surface for visitors. Providing for the use of ongoing passive recreation is a crucial part of retaining and enhancing the cultural heritage significance of the Daylesford Botanic Gardens.

As demonstrated in Section 4, the proposed works on the site would result in minimal heritage impacts to the Day Basin, Pioneer Memorial Tower and their environs.

Mitigation measures proposed for the pre-construction and construction phases include the installation of temporary walkways and fencing, TPZs and recommended hand-dig excavation measures as set out in the project advice notice (PAN) provided by the structural engineer.

6.2 Summary of recommendations

To further minimise or mitigate the potential heritage impacts of the project and to protect heritage elements, the following actions are advised to be implemented before construction:

- finalise protection measures for the heritage fabric of the bluestone capping around the Day Basin;
- confirm any machinery to be used in the vicinity and mitigation measures to protect heritage elements;
- ensure the structural engineer's advice in PAN01 related to the procedures and criteria for works in the vicinity of the Day Basin and Pioneer Memorial Tower is carefully communicated to all stakeholders and contractors and followed. Hand-dig methods should be strictly followed in the vicinity of the Day Basin and Pioneer Memorial Tower;
- it is noted that the protective fencing around the Day Basin and Pioneer Memorial Tower encroaches on areas which are marked for 'site clearing'. It is recommended that mitigation measures are put in place to ensure the protection of these elements during any works which are carried out prior to the installation of protective fencing;
- prior to any works commencing, it is recommended that TPZs (for all retained trees) be defined in accordance with Australian Standard for Tree protection on development sites (AS4970-2009) by Council's arborist. Recommendations to

mitigate identified impacts from encroachment of site clearing and paving works into the TPZ of the two trees identified in section 4.4 should be implemented;

- implement site protection works as described on drawing L2.1, including tree protection fencing, temporary fencing adjacent to the Day Basin and Pioneer Memorial Tower and temporary walkways providing ground protection;
- provide notes on the drawings identifying that the works are subject to a heritage permit and so structures, surfaces, materials and planting needs to be protected and approval sought prior to undertaking works;
- maintenance of the new assets including maintenance of the planting and hedges should be integrated into any maintenance plan for the gardens;
- update maintenance plan to include establishment pruning and ongoing maintenance of the new hedges;
- review and update any existing water management plan for the gardens to ensure adequate management of new water feature;
- update existing plant database to include newly introduced plants;
- provide appropriate plant labels to garden beds; or provide a planting plan that communicates plant names which can be implemented as part of a future interpretation strategy
- an interpretation strategy and plan be developed, based on existing styles, to further enhance and communicate the cultural heritage significance of the Day Basin, Pioneer Memorial Tower and Fernery Cascade within the setting of the Daylesford Botanic Gardens should be developed; and
- it is recommended that sensitive conservation works be undertaken as a future stage of works to conserve and protect the significant fabric of the Circular Day Basin. The works should be guided by an experienced and suitably qualified heritage conservation professional, taking into consideration the following:
 - repointing of the brickwork where needed (in line with Heritage Technical Codes HTC1 and HTC2 using lime mortar or hydraulic lime mortar only. No silicone, mastic, cement-based mortars or cement added to lime mortars);
 - Weed removal should be informed by professional advice, and removal methods should avoid harm to significant fabric. For example, select herbicides should be used to poison weeds that cannot be removed without damaging the structure, and left in situ;

- Repairs to the basin floor might also be considered depending on the condition of the basin floor;
- Assessment of the blackening/staining to the upper walls by a conservator, and treatment or gentle cleaning if recommended by them, ensuring processes that will cause irreversible damage are avoided (such as high pressure cleaning or sandblasting). A specialist will be able to discern whether an active/passive/no treatment would be preferable. For example, biological growth (algae, lichens, moss etc.) can be best left in place as removal may cause additional damage to the material beneath.
Overcleaning or inappropriate use of cleaning materials can cause damage.
- it is recommended that sensitive conservation works be undertaken as a future stage of works to conserve and protect the significant fabric of the Pioneer Memorial Tower.

Overall, and considering the above recommendations, the proposed development is considered to have an acceptable and positive impact on the heritage values of the Daylesford Botanic Gardens.

Appendix A – Wombat Hill Forecourt & Day Basin – Landscape documentation package

Appendix B - Wombat Hill Forecourt & Day Basin – Structural engineering documentation package

Appendix C - Wombat Hill Forecourt & Day Basin – Irrigation documentation package