Nobelius Heritage Park

5 Crichton Road, Emerald

Conservation Management Plan



Report Prepared for

Cardinia Shire Council

October 2020

Table of Contents	Page No.
1.0 Introduction	2
1.1 Background and Brief	2
1.2 Aboriginal Cultural Heritage	2
1.3 Study Area	3
1.4 Methodology	3
1.5 Current Listings and Controls	3
1.6 Acknowledgements	3
2.0 History	5
3.0 Nobelius Heritage Park Physical Description	15
4.0 Assessment and Comparative Analysis	29
5.0 Statement of Significance	32
6.0 Conservation Policies	35
7.0 Conservation Actions	40
Bibliography	47
Appendix A: Heritage Victoria Register H2285	
Appendix B:	
Burra Charter 2013	
Nobelius Heritage Park plan	
Emerald Lake Precinct plan	

Plant list

Cover Image: View of Packing Shed from the north

1.0 Introduction

The aim of this study is to prepare a Conservation Management Plan for Nobelius Heritage Park. The Conservation Management Plan is to provide Council with a clear understanding of the requirements around significant infrastructure and vegetation to assist in guiding all future development and maintenance upgrades.

1.1 Background and Brief

Council has approved a 2020-2030 Strategic Plan for the Emerald Lake Precinct which includes Nobelius Heritage Park. A priority action of the Strategic Plan is the development of a Master Plan which will be informed by preparation of the Conservation Management Plan (CMP). The CMP is to take into consideration the history as well as current and future use of the park, including infrastructure and significant vegetation.

Preparation of the CMP is to include review of all data and information available from Council, as well as reference to the Cardinia Shire Planning Scheme Heritage Overlay and other key regulatory requirements. The Local Heritage Study, updated in 2015, is also to be taken into consideration. Note that a separate CMP has been undertaken for Emerald Lake Park (CDA 2020). An associated CMP for the Puffing Billy Railway Corridor (Biosis 2018) has been completed but was not commissioned by Cardinia Shire.

1.2 Aboriginal Cultural Heritage

This Conservation Management Plan focuses on the heritage of Emerald Lake Precinct since European settlement around 1835. But for thousands of years before the arrival of Europeans, the land was home to members of the greater Kulin nations. Across the wider Cardinia Shire the Bunurong, Boonwurrung and Wurundjeri are the Traditional Owner groups. We respectfully acknowledge all Traditional Owners.

For millennia, the traditional custodians have cared for country and water, practicing culture, sharing lore, stories, ritual and passing on crucial knowledge to other generations so they might also care and manage the diverse ecology around them. With European settlement many traditional systems were disrupted, and people forcibly and often violently displaced from their lands. Truth-telling is an important basis to move forward. The Traditional Owner organisations representing the three groups are a terrific source of information for the public to learn from, and we encourage people to engage with them, so that they can learn directly from Aboriginal perspectives, about culture, education, land management, history and more.

The Wurundjeri Woi Wurrung Aboriginal Heritage Council is the Registered Aboriginal Party recognised by the Victorian Government for much of Emerald. At the time of writing this document however, an official determination about which Aboriginal Party represents the land upon which Emerald Lake Precinct is situated, has yet to be made.

More information on the Aboriginal cultural heritage of Emerald Lake Precinct is included in a separate study; *Aboriginal Cultural Heritage – Preliminary Research for Emerald Lake Precinct* and this will also inform actions in the subsequent Emerald Lake Precinct Masterplan.

1.3 Study Area

Nobelius Heritage Park is approximately 4 hectares in area and was a portion of C.A. Nobelius' Gembrook Nurseries which covered 650 hectares in 1921. The land is owned by Cardinia Shire Council. The park is accessed at its south-western corner off Princess Avenue / Crichton Road, Emerald. Princess Avenue forms the western boundary and Emerald Lake Road (in part) forms the northern boundary. Nobelius Heritage Park abuts the western end of the Emerald Lake Park. The southern boundary is formed by the Puffing Billy Railway line.

1.4 Methodology

Assessment of the park and the preparation of a Statement of Cultural Significance have been undertaken with reference to the processes and criteria outlined in *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013,* and its associated guidelines.

It should be noted that the impact of COVID 19 from mid-March 2020 has placed limits on site inspections and face-to-face meetings with Council staff and stakeholders.

1.5 Current Heritage Listings and Planning Controls

Cardinia Shire Planning Scheme, BMO: Bushfire Management Overlay

Cardinia Shire Planning Scheme, PPRZ: Public Park and Recreation Zone

Cardinia Shire Planning Scheme, Heritage Overlay HO273: Former Nobelius Nursery, Packing Shed and Railway Siding

Cardinia Shire Planning Scheme, Significant Landscape Overlay SLO1: Puffing Billy Tourist Railway Scenic Corridor

Victorian Heritage Register H2285

1.6 Acknowledgements

This report has been prepared by Tim Vernon and Barrie Gallacher of CDA Design Group Pty Ltd, Landscape Architecture & Urban Design. Valuable assistance has been provided by the following:

Cardinia Shire (Samantha Cross, Janene Vurlow, Stephanie Langton)

Carl Stemp (jnr) – son of former assistant curator Emerald Lake Park

Emerald Museum – historical images and reports (Pauline Murphy, Lynn Schrull, Carey Williams, Phil Jackson)

Graeme Legge – Emerald historian

Heritage Victoria (Jessica Hood, John Hawker)

Homewood Consulting (Belinda Nance)

National Trust of Australia (Victoria)Pty Ltd (Eloise Dowd, Dr Greg Moore)

Nobelius Land Surveyors

Australian Garden History Society (Trevor Pitkin)

2. History

Part 1: Gembrook Nurseries

Emerald Lake Park and the adjacent Nobelius Heritage Park to the west are remnants of the former Gembrook Nurseries established by C.A. Nobelius in the late nineteenth century. At its peak prior to World War I, the nursery covered more than 1,625 acres (650 hectares), employed over 80 staff, and advertised over three million trees for sale. Fruit trees and ornamental trees were supplied to other wholesalers and orchardists, to municipalities in both Victoria and interstate for parks and streets, and to international customers in many countries.

Carl Axel Nobelius had Swedish parents but was borne in Tampere, Finland, in 1851. The family returned to Sweden shortly afterwards and settled in the port town of Gävle on the Gulf of Bothnia in 1866. Carl's father, Carl Petter Nobelius, was a horticulturist and was a first cousin of Alfred Nobel, who bequeathed his fortune to institute the Nobel Prize. Carl Axel Nobelius trained as a gardener.

In 1872 Nobelius migrated to Melbourne. He settled in South Yarra and worked first as a nursery assistant, then later as foreman with the prominent landscaping and nursery firm, Taylor & Sangster of Toorak. The firm had a second nursery at Mt Macedon for growing cool climate exotic trees and shrubs. William Sangster's landscaping projects included "Como" at South Yarra, "Rupertswood" at Sunbury and the Carlton Gardens surrounding the 1880 Melbourne International Exhibition; Nobelius assisted in laying out the Exhibition Gardens (Coulsen 1982, p. 225). Nobelius later worked for South Yarra nurseryman, Joseph Harris, and was introduced to other well-known nurserymen and seed suppliers who would prove invaluable to his future wholesale business.

Nobelius married Emily Brightwell in 1877. The couple had 11 children, 8 of whom survived to adulthood. While still employed by Taylor & Sangster, Nobelius explored the hills north of the Narre Warren railway station at weekends looking for land to start his own nursery. The area around Emerald had experienced a gold rush in 1858 which was short-lived. Land was released from State Forest for subdivision in 1877, with the northern part of Emerald divided into 20 acre holdings. Land costs at this time were rising, due to the 1880s land boom, and cheap land closer to Melbourne was difficult to find. In 1886, Nobelius purchased 63 acres (approx. 25 hectares) of partly-cleared land from an original selector, H.B. Koenig. Nobelius considered that the red-brown, volcanic soil would be ideal for growing fruit trees.

The land was described as "hilly, well-timbered, with gum, messmate, peppermint and box scrub". Nobelius visited each weekend to prepare the land for cultivation, leaving work after lunchtime on Saturdays and returning home on Sunday evenings. Preparation included clearing the undergrowth by burning in early summer, ring-barking trees to kill them before felling, then removing the stumps by charring. A hand-operated winch imported from Germany was later used to remove stumps to speed up the process. Local settlers were employed to assist in clearing operations, including Gus Ryberg's father, Fritz. Once cleared, the land was ploughed with a horse-drawn single furrow mould-board plough, harrowed in bands, then left to fallow over winter.

In 1892, Nobelius moved permanently to Emerald, and initially lived in Koenig's 1880 small house near the corner of (now) Sycamore Avenue and Lakeside Drive; Lakeside Drive was formerly a nursery track. Nobelius named his business "Gembrook Nurseries", as Emerald was part of the Parish of Gembrook, and commenced growing nursery stock on 15 acres (6 hectares) in 1893. He also leased another 86 acres (35 hectares) immediately to the north which he applied to select in 1891. The nursery operated as a wholesale business. A packing shed was constructed a short distance west of the house on (now) Poplar Crescent. Nobelius offered employment in winter during the depression to 30 or 40 local settlers and berry farmers. Local councils and Departments of Lands and Public Works were creating jobs during the depression by developing parks and planting street trees. Nobelius took the opportunity to supply large quantities of ornamental trees to municipal councils throughout Victoria and interstate.

In 1898, the Gembrook Nurseries had 50 acres (20 hectares) under cultivation, growing fruit trees, raspberries and strawberries. Adjoining allotments were purchased in 1900 taking the area to 80 acres (32 hectares). Nobelius was able to build a substantial residence, "Carramar", on a hillside overlooking the nursery from the north. He laid out an extensive display garden adjacent to his home which included his own unique tree and plant varieties plus a huge range of imported exotic species. (Winzenried p.94.)

CA Nobelius was one of several local businessmen who provided submissions on a possible narrowgauge railway line to the Select Committee for Railways in 1896. Prior to this, trees raised by the nursery had to be transported by road some 13 miles to the Narre Warren railway station, on roads that were often impassable in winter. The Committee recognised the transport difficulties for local industry. As a result, the narrow gauge railway line was built from Belgrave to Gembrook and opened in 1900.



Original packing shed in the northern section of the nursery with "Carramar" on top of the hill, c.1900.

The railway served local industries including fruit and berry growing, timber products, commuters and increasing tourist traffic.

By 1903, Gembrook Nurseries advertised one million trees for sale. Thanks to shrewd business acumen, considerable marketing and overseas visits by Nobelius, markets had been established in

other Australian States and overseas with New Zealand, South Africa, India, Japan, Europe and South America. Nobelius imported seeds and plants to grow in his nurseries and experimented with plants to suit local conditions.

In 1904, the Victorian Railways opened a special siding adjacent to the nursery specifically for the loading of Gembrook Nurseries' plants. Nobelius was given permission to build a packing shed on railway land next to the line for preparing millions of seedlings and stocks for world-wide shipment. New land was acquired (leased) to the south of the railway for growing nursery stock with a frontage of more than 3km to the new railway line in 1906. The nursery had grown to more than 200 acres (80 hectares) with 2.5 million trees by 1909. Four of Nobelius' sons were involved in the business: Carl Oscar, Arch, Rupert (Jock) and Cliff.



Packing shed and siding in 1904.

Emily Nobelius died in 1911, aged only 53, and was buried in the Emerald / Avonsleigh Cemetery on Macclesfield Road in Avonsleigh (formerly Nangana Cemetery, Macclesfield). CA Nobelius married Mary Louisa Allison (1858-1937) in 1912. There were no children from this second marriage.

With the possibility of World War I eventuating, Nobelius was concerned that supply of rope and twine used in the nursery for various purposes would become a problem. He imported flax from New Zealand in 1913 and established a 100 acre (40 hectare) plantation along the creek to produce rope fibre. The flax area included part of the site of Emerald Lake and to the north of Emerald Lake Road to Old Gembrook Road. A small dam was constructed to treat flax fibre and a two-storey steam-driven mill for processing the fibre was erected beside the dam. The flax plantation operated from 1913 to 1926.

The Dandenong Advertiser reported in 1911 that 100,000 trees were available including 1,000 different species of fruit trees and 120 kinds of ornamental trees; fruit trees included 300 apple varieties, 61 apricots, 78 cherries, 31 nectarines, 107 peaches, 108 pears and 122 plums. (Cuffley p. 110-111.) By 1914, the nursery employed more than 80 workers and three million trees were advertised for sale. Nobelius also grew berries (raspberry, blackberries, strawberries and mulberries) and experimented with lavender and rosemary. Gembrook Nurseries was not the only nursery in the

district but it was by far the largest and was said to be the biggest nursery in the southern hemisphere. Nobelius provided employment to many people in Emerald and surrounds, including small nursery business owners who had no work in winter. He encouraged others to grow orchards. He donated land and trees for formation of the local sporting reserve (he was a keen cricketer) and provided a loan to build the local hall. He was also elected to the board of the Monbulk Jam Factory, later taken over by the Australasian Jam Company.



SOUTH WEST SECTION.

Part of Nursery in 1910 with the Packing Shed on the railway line and house to rear (believed to have been built for Carl Oscar Nobelius but later occupied by Cliff Nobelius), remnant vegetation to the creek in the foreground. The nursery access track in the centre of the slope is possibly the fore-runner of the current Pine Track. Note the loading ramp and access hatch to the eastern end of the Packing Shed.

World War I devastated overseas markets and the nursery never recovered. Many trees had to be dug out and burnt or ploughed into the ground. CA Nobelius appeared to lose interest in the business towards the end of his life. Nobelius died on 31 December 1921 and was buried with his first wife in the Emerald Cemetery. He left no will, so disposal of his property was taken over by the National Trustees & Executors. The area covered by the nursery extended from the Emerald-Monbulk Road, Nobelius Street and Emerald-Beaconsfield Road in the west to the (now) Emerald Country Resort, Lawsons Road and Auhl Road in the east. It also extended from the northern end of Poplar Crescent to Paternoster Road in the south. The nursery spread over 1,625 acres (650 hectares).

Part 2: Break-up of nursery property - 1922 to 1981

Some of the nursery became residential properties and other areas reverted to farming. The majority of nursery land was eventually sold to two syndicates in 1922-23:

- Emerald Pty Ltd (Dr William Bottomley, Cecil Chambers, AG Lawson, GL Allan) purchased 600 acres (240 hectares) north of Gembrook Road and developed the Emerald Country Club Estate; this included a golf course and properties along Lakeside Drive. "Carramar" was used as a temporary clubhouse until a permanent building was constructed in 1929.
- Nobelius Station Estate (Dr William Bottomley, A Treganowan, BS Stilwell, and later, A Nicholas) purchased some 300 acres (120 hectares) which included the sites of the current Nobelius Heritage Park and Emerald Lake Park.



Gembrook Nurseries Catalogue 1910.

48 catalogues were produced from 1891 to 1039. The catalogues were beautifully produced with cover images featuring apple blossom and included comprehensive information on plants offered for sale. The 1934 catalogue had 54 pages and included the following items and information:

- A tear-out order sheet with an addressed envelope;
- General remarks relating to stock, packing, fumigation, ordering procedure and pricing;
- Description of 37 fruit tree varieties (there were 99 varieties of apple listed);
- Selected colour images of fruit and black & white images of nursery scenes;
- Description of more than 550 species/varieties of ornamental trees, shrubs and conifers;
- Metal garden labels for sale in bulk quantities;
- "A Few Hints to Amateur Planters": advice on soil preparation, planting, spacing distance and pruning.

This catalogue is available to be viewed on line from the State Library of Victoria (https://viewer.slv.vic.gov.au/?entity=IE2629172&mode=browse).



View of Packing Shed, railway line and Cliff Nobelius' house to the right in 1926. Note the size of the abandoned nursery trees in the background.

1924 Arch Nobelius purchased 90 acres (36 hectares) and the nursery continued business as CA Nobelius & Sons. Arch Nobelius was the nursery production manager while Cliff Nobelius acted as business manager. Cliff had studied management and economics at Melbourne University (Ryberg 1998, p. 28).

1927 Nobelius Station opened on the railway line for passengers. The station was further along the line to the east of the Gembrook Nurseries' siding.

1928 Cliff Nobelius purchased a share of the business. The nursery was now operating on the site of the current Nobelius Heritage Park as well as land leased to the south of the railway line. Carl Oscar Nobelius had built a home south of the packing shed overlooking the nursery and packing shed by 1905 and this was later taken over by Cliff. The business office was in the packing shed next to the railway siding and was managed by Cliff's wife, Daisy.

1930s Grandsons of Carl Axel Nobelius joined the nursery staff along with Gus Ryberg. Working conditions were tough with poor remuneration. Gus left the nursery after two and a half years but returned in 1937.

1939 A workers' strike was organised at the CA Nobelius & Sons Nursery over pay and conditions. Gus Ryberg was one of the leaders. The strike achieved a pay rise of sixpence per week for men, but nothing for the women.

1939-1945 World War II. The strike and the war resulted in a further decline in the nursery's business. Staff numbers had fallen from 43 in September 1939 to 15 in 1943.

1955 The nursery was sold to Stan and Les Linton and continued trading as "Nobelius & Sons Nursery". The only freehold land was the 11 acres (4.5 hectares) of the current Nobelius Heritage

Park. Much of the original nursery land had been leased. "Linton's Cottage" was constructed as an office and caretaker's residence. There were 12 workers on the payroll.

1961 Arch Nobelius died.



ORNAMENTAL SECTION. SHOWING RECENTLY ERECTED BUSH HOUSE.

View of a "bush house" extending west to east in the low point of the valley, in the 1930s or '40s. This appears to be a shade structure providing shelter for young plants. The image has been marked up (possibly by Gus Ryberg) to indicate Arch Nobelius' house in the north-western corner of the nursery. Conifers to the Emerald Recreation Reserve to the rear were provided by CA Nobelius. Note the bare ground in the foreground of the image which indicates how often the nursery layout was changed. Rows of ornamental trees are clearly seen to the northern side of the bush house.



View to the west of glass cold frames and sheds, late 1930s.



View of the packing shed from the south-east before restoration c.1955. Note the loading hatch in the east wall which was originally accessed by a ramp from the south. This has been removed and replaced by a chimney. The packing shed was restored by the Puffing Billy Preservation Society in 1983. (Source: 2018 Biosis Report)

1967 Cliff Nobelius died.

1967 The Nobelius & Sons Nursery was sold by Linton Brothers to Ern Smith and traded as "Din San's Nobelius & Sons Nurseries, Emerald".



View of Lintons' nursery from the north in the 1960s. Several of the trees still exist in the valley bottom. The nursery sign faces Emerald Lake Road. Large pines next to the packing shed and railway still exist. Four sheds can be seen but these are now gone. The access road is in its current position.



1972 aerial view of Din San's Nobelius Nurseries, Emerald. West direction is to the top of the page and north is to the right of the image. The Puffing Billy railway line is to the left. Elements that can be seen include the Packing Shed and line of Radiata Pines against the railway, the concrete tank near the intersection of Princess Avenue and Crichton Road, a machinery shed on the site of the museum, glass house and Linton's Cottage. Arch Nobelius' house is in the top corner. Trees with large canopies are in the centre of the image and a strip of trees extends from this towards Emerald Lake Park at the bottom of the image. Parallel to this on the right is a dark strip of vegetation which could be the remnants of bush house planting. Some tree planting in linear strips remain at right angles to contours but much of the nursery is bare ground, illustrating how the nursery layout was continually changing. The aerial view 48 years later in 2020 is vastly different.

1981 The Emerald Museum first opened in a room at the side of the Emerald Hall. It was officially opened by Sir Rupert Hamer. (Ryberg 1998, p. 62)

1981 Din San's nursery closed.

Part 3: Nobelius Heritage Park

The land was purchased by the Shire of Sherbrooke with the assistance of the State Government following a public campaign by Gus Ryberg and Colm Phillips.

1981-82 Gus Ryberg commenced clearing blackberries and doing other maintenance work on a voluntary basis. He was approached by a shire councillor for a proposal to develop the area.

1983 The Puffing Billy Preservation Society "restored" the packing shed.

1988 Nobelius Heritage Nursery's name changed to Nobelius Heritage Park to avoid the implication that it was an operating nursery. Gus Ryberg OAM (1911-2000) was the first voluntary curator of the Park. Carey Williams was to assist Gus from around 1988.

The Emerald Museum was forced to relinquish one of its rooms at the Emerald Hall and moved to Linton's Cottage. This building proved to be unsuitable for storage of records and artefacts.

1990 A trial Salvia plot was planted then the Salvia garden was established in 2008 on behalf of the Ornamental Plant Conservation Association of Australia (now Garden Plant Conservation Association of Australia).

1993 The new Emerald Museum building was constructed in the Nobelius Heritage Park on the site of a former maintenance shed.

1995 Nobelius Heritage Park becomes the responsibility of Cardinia Shire. A management committee was set up for the Park and Museum (*Nobelius Heritage Park and Emerald Museum Committee of Management appointed under Section 86 of the Local Government Act 1989*).

1996-7 A rotunda was constructed in Nobelius Heritage Park as a replica of a former bandstand built in 1913/4 in A'Vard picnic ground, Emerald. The original rotunda was destroyed by fire.

2001 A tree was planted to commemorate the service of Gus Ryberg OAM and a granite rock with a bronze plaque was placed nearby.

2009 Water Saving Urban Design (WSUD) installation by Cardinia Sire and Melbourne Water.

2012 The Carl Axel Nobelius monument, consisting of a tapered granite column from the grave site in the Emerald/Macclesfield cemetery, was moved from its original nursery location to a more central site on the northern side of the east-west pathway. A sundial has been added to the top.

2013 Steps constructed to the north front of the museum.

3. Nobelius Heritage Park Physical Description

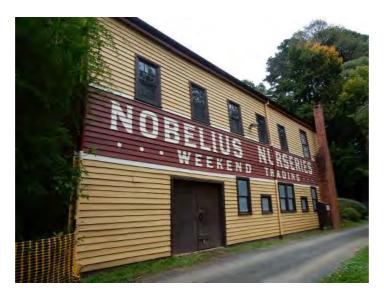
Nobelius Heritage Park and Emerald Lake Park are remnants of the former extensive Gembrook Nurseries established by Carl Axel Nobelius and which operated from 1892 to 1921. Nursery activity continued in part of the Emerald Lake Park area up to 1938, but the Nobelius & Sons nursery in the (now) Nobelius Heritage Park continued until 1981. The nursery extended over 1,625 acres (650 hectares) by 1921 and included up to 3 million trees for sale. Nobelius Heritage Park is defined on the north by Emerald Lake Road, plus four residential blocks to the north-west corner, on the west by Princess Avenue, and on the south by Crichton Road extension and the Puffing Billy narrow gauge railway. The eastern boundary abuts the Emerald Lake Park. The park area is 11 acres (4.5 hectares).

The park is contained within a U-shaped valley with land falling from the surrounding roads on the north, west and south. The bottom of the valley slopes east towards Emerald Lake Park; the low point feeds into a creek. The park is overlooked by the Puffing Billy Railway to the south. Vehicle access is from the south-west corner at the junction of Crichton Road and Princess Avenue. Pedestrians can enter the park from Princess Avenue. It is noted that there is no footpath or vehicle safety barriers along the steep drop-off from Emerald Lake Road.

Landscape elements

1. Hard Landscape

<u>Packing Shed</u> – This building was constructed in 1904 at the time of the formation of the railway siding. The building is on railway land and is not within the park boundary. However, it is a prominent feature of the park, originally visible from many directions, and the only substantial structural element surviving from CA Nobelius' Gembrook Nurseries. Its purpose was for the preparation, packing and loading of bare-rooted trees onto the narrow gauge railway goods wagons. The lower storey included a fumigation chamber where tree consignments could be disinfected prior to dispatch. The upper level contained the nursery's office.



Northern face of Packing Shed. The doors lead to the fumigation chamber.

The packing shed is a two-storey weatherboard building with a main gable roof and a skillion veranda to the railway siding at the upper level. Fascia boards support eaves gutters to the northern and southern sides but there is no eaves overhang. A brick chimney was added in the 1930s to the northwestern corner. A second chimney was added to the east elevation as part of the 1983 restorations. An original pair of loading doors to the first floor level on the east wall, accessed by a ramp from the south, was removed at this time. The hatch and ramp could be seen in earlier images (refer to the History section). An external stair is at the eastern end while the western end is accessed by a series of ramps. The northern wall facing the nursery has six double-hung windows at the upper level; these are divided into 12 panes of glass. The western window is similar but taller than the other five. The ground floor has four-double hung windows without internal divisions; the central window is a pair. There are also two smaller rectangular windows each side of the central window and a pair of double doors to the eastern end. The ground floor was used for fumigation of plant stock prior to despatch when requested by customers.

A large sign painted on the wall bears the legend "Nobelius Nurseries" with "Weekend Trading" in smaller letters underneath. The western end wall has a single 12-light double—hung window at the upper level and a smaller rectangular window below at ground floor level. A single pedestrian door provides access into the building from the ramp. Painted signage states "C.A. Nobelius Gembrook Nurseries Emerald" on both the western and eastern end walls. The eastern end wall is plain except for the central chimney. An original pair of loading doors and an access ramp were removed either before or during the restoration. The southern façade to the siding has a short enclosed weatherboard section to the west end and an open veranda with supported by square timber posts with rounded corners and a small plinth at the base. Photographic evidence (Refer to History Section) shows that the weatherboard section to the western of the wall. The veranda flooring is timber decking; the decking boards are 140mm wide by 50mm thick. The sloping ceiling is lined with timber panelling and appears to be a recent addition. A pair of sliding double doors provides access to the siding platform from the building.



View of Emerald Museum from the north.

Emerald Museum

This building was purpose-built in 1993 as an archival repository and a centre for display of Emerald's history, including significant information and artefacts relating to the operation of Gembrook Nurseries. It was constructed on the site of a former corrugated iron machinery shed, believed to date from c.1955.

The building has a corrugated steel hipped roof with a bullnose veranda to the northern side. Walls are of a dark clinker brick with contrasting cream bricks forming quoins to external corners and framing the northern double doorway. The doors are constructed with vertical boarding and the windows have timber shutters to match. The building has been extended to the south- east. A flight of concrete steps with a central steel handrail and stone facing to side walls provides access down the embankment in front of the museum; the steps to a lower level or terrace were constructed in 2013.

Lintons' Cottage

The cottage is built on the site of a former potting shed to serve as an office and caretaker's residence in 1955 when the nursery was run by S. L. and I. Linton. The building later provided temporary accommodation for the Emerald Museum prior to construction of the new building. The cottage has a corrugated iron skillion roof and the walls are lined with dark green vertical boards. The south-eastern section of the building projects forward to form a set-back for the entry door from the north-east. The doorway is sheltered by the roof overhang supported by a steel post. A horizontal band of windows runs around all sides of the building, commencing with three windows to the south wall and terminating with four windows to the western wall. There is an additional door in the south-western corner which led to a missing car port seen in an earlier image. A low mortared freestone retaining wall to the rear allows the building to sit into the slope. The stone facing to the wall was arranged by Carey Williams.



The cottage is currently used by the Blue Hills Lapidary Club of Victoria Inc.

View of Linton's Cottage from the north-east.

<u>Rotunda</u>

This structure is a replica of a former rotunda built in the A'Vard Picnic Ground in Emerald in 1913/14 but which was later destroyed by fire. The replica was constructed by John Currie in 1996 on the site of a former nursery glasshouse. The octagonal structure is framed by timber posts with eaves bracing and has a dado with decorative wooden saplings. The brick flooring has been recently restored. A bronze plaque is set in the adjacent lawn. A low, dry-freestone retaining wall provides a setting for the rotunda; the wall is in need of repair. Note that this structure has no heritage significance in relation to CA Nobelius' Gembrook Nurseries.



View of rotunda from the east.

Band Platform

A square brick-paved platform is sited north-east of Linton's Cottage and overlooks the picnic area. It is approximately 7m x 7m in area and has treated pine post and rail barriers to the north-west and south-east sides. Carey Williams has advised that this platform was built by Gus Ryberg as a bandstand for annual picnics, often organised by Gus Ryberg. The paving bricks were re-used from the demolished glasshouse formerly on the rotunda site.

Concrete Tank and Bore Pump

These elements provided water for use in the nursery in the 1940s as there was no reticulated water supply for Emerald. Watering was required for young trees that had been lifted from the ground and placed in containers for sale; this was a new development for the nursery. Water was originally provided to the tank by a hydraulic ram pump from a spring in Emerald Lake Park, originally the site of the "Wishing Well". However the Shire of Ferntree Gully disallowed this use. A water diviner found a spring 37m below ground level and the bore was installed on the opposite side of the road from the (now) museum. The bore became obsolete when town water was connected to the park.



Remains of the bore pump. The end of a pipe leading to the concrete tank is to the left of the image.



Image of the lower (eastern) section of the WSUD.

Water-Sensitive Urban Design (WSUD)

Constructed in 2009 to provide treatment for stormwater as part of a Cardinia Shire/Melbourne Water "Living Rivers Stormwater Program". The system is intended to collect stormwater from Emerald-Beaconsfield Road, Crichton Road and Princess Avenue, remove silt and nutrients from the water, and discharge into the head of the creek in the Emerald Lake Park. The main sections of the system follow the low point of the valley. The sections are as follows:

1. Collection of stormwater runoff from Emerald-Beaconsfield Road / Crichton Road / Princess Avenue into a planted swale with rock chutes along Princess Avenue. This open drain extends north as far as the pedestrian entry to the park.

- 2. An underground pipe from the open drain feeds stormwater into a sedimentation pit. The sedimentation pit discharges into a series of rock gabion cascades containing plants to filter out small particles and nutrients.
- 3. A second underground pipe feeds stormwater to a long rain garden divided into compartments with rock gabions. The rain garden also containing plants to filter out small particles and nutrients. From the eastern end of the rain garden, treated water is released into the head of Wishing Well Creek.

The system is in need of maintenance, including removal of autumn leaves, cutting back or replacing overgrown plants to Princess Avenue, replacement of missing or overgrown rain garden plants, and repair of rock surfaces. The sedimentation pit should also be cleaned out. The creek channel in Emerald Lake Park should be reconstructed to prevent erosion.

C.A. Nobelius memorial sundial

The memorial is in the form of a tapered pink granite obelisk with a circular brass sundial on top; it is set into a plain concrete base with a bronze plaque on the southern side. The obelisk is 1.1m high with base dimensions of 350 x 350mm tapering to 270 x 270mm at the top. There is a recessed groove around all sides approximately 100mm from the top. The granite has been tooled on all corners and around the margins of the top section. A simple semi-circular pattern with two small circles above it appears on the lower section of the obelisk. There is also a partly-concealed or buried semi-circular pattern at the base, an indication that the obelisk has been recycled from elsewhere. The piece of granite is said to have come from the Nobelius family grave in the Emerald/ Macclesfield cemetery, a piece damaged by a falling limb. It is possible that this piece may have been on top of the grave monument but has since been replaced by a granite cross. The memorial was previously near the rotunda but was moved to its current location in 2012 and aligned with a view south to the packing shed. The plaque inscription reads: *"Carl Axel Nobelius Memorial Sundial – A tribute to his contribution to the economic and social development of early Emerald and surrounding localities"*.



Image of CA Nobelius memorial.



Detail of base showing part-buried circular pattern.

Gus Ryberg memorial rock

A grey granite rock has been placed at the base of a maple planted to the western side of the drive. A bronze plaque inscription reads: "Acer rubrum (Canadian Maple) planted on 27.7.2001 in memory of Gus Ryberg OAM 1911-2000 as tribute to his outstanding service to the Emerald Community".



Image of memorial rock beside a Canadian Maple

Stone Retaining walls

A low wall to the western side of Linton's Cottage consists of random stone facing with mortar joints to a concrete base wall (construction arranged by C. Williams: pers. comm.). A drystone wall is south and west of the rotunda.

Fences & barriers

The park has no boundary fences other than to private properties to the north-western corner. A line of large square bollards with angled tops separates Nobelius Heritage Park from Emerald Lake Park on the western side; these were implemented by Carey Williams to define the boundary. Post and rail barriers have been offset to prevent direct access where the central east-west pathway crosses the north-south road to the parking area. There are similar fences to the northern side of the museum above a planted embankment, as well as to the western side, and to the northern end of the car park/turning area.



Image of typical post and rail fencing to central pathway.

<u>Pergola</u>



Timber support frame for Kiwi Fruit vines to the north-east of the museum.

Two Kiwi Fruit vines on pergola north-east of the Museum.

<u>Furniture</u>

Three steel-framed picnic tables with benches; both the tables and benches have recycled plastic battens. These are located across the road from Linton's Cottage.

Two seats with steel frames and recycled plastic seat battens are provided to either side of the CA Nobelius memorial. A similar seat at the north end of the Salvia plantation is a memorial to Hilary Weatherhead, botanist and gardener. Four timber seats include two in front of the museum; the latter two were donated by the Emerald Men's Shed.

A steel wheely-bin enclosure/rubbish bin is located in front of Linton's Cottage.

<u>Paths</u>

Paths were originally mown grass but have been converted to a gravel path running west to east through the centre of the park, connecting with Emerald Lake Park walking tracks. The western steeper section of the path leading from a short concrete section at Princess Avenue has an erosion

problem: the gravel surfaced path and the crushed rock to the road way is moved by heavy rain, washing into grass areas. The steep top section of this path needs to be replaced with a sealed asphalt or concrete surface.



Path erosion at Princess Avenue entry.



Steps to north-east of the museum may be from an early nursery pathway, possibly leading up to the Packing Shed.

<u>Steps</u>

A short flight of timber steps with concrete side walls, dating from nursery operations and a possible nursery access pathway leading to the packing shed. The steps are at the base of a shallow embankment to the north-east of the museum.

Driveway, Turning Circle and Parking Areas.

An unformed gravel road leads from the entry gate off Crichton Road and turns to run down a slope past the museum, terminating in an informal turning circle adjacent to Lintons' Cottage and the Band Platform. A steel archway supporting a Wisteria vine causes the road to widen to pass under the arch and alternately around the eastern end above the museum. Parking areas are provided in a marked disabled space in front of the museum and at a lower terrace. Parking at the end of the turning circle is informal and spaces are unmarked. Parking areas are limited and the turning circle may be inadequate for tour buses. The loose gravel surface is subject to erosion after heavy rainfall.

<u>Signage</u>

- Labels to individual trees or groups, and shrubs;
- Directional signs (timber or recycled plastic);
- WSUD metal signs on timber backing posts;
- Nobelius nursery historical information signs on timber backing posts;
- "You are here" park signs.





Examples of interpretation signs relating to former nursery operations.

Archaeological Values

Potential for archaeological investigation across the site may reveal evidence of earlier structures relating to former nursery operations. These include the former drainage channel (now site of the WSUD installation in part), pipelines, terrace steps or nursery path remnants, glasshouse foundations, bush house, linear planting configurations and holding furrows north of the packing shed. A summary of missing elements is as follows:

- East/west drainage channel;
- Machinery shed (museum site);
- Nursery glass house (rotunda site);
- Nursery "bush house" (parallel to lower section of WSUD site);
- Garage or carport on southern side of Linton's Cottage;
- Original nursery paths and access roads.

2. Soft Landscape

The original site for Gembrook Nurseries was on hilly country in the Dandenong Ranges, covered with forest and dissected with stream valleys. The land prior to subdivision was described as "well-timbered, with gum, messmate, peppermint and box scrub". Stream valleys included tall Tree Ferns. Ecological Vegetation Classes (EVCs) may have included Wet Forest (30), Damp forest (29) and Shrubby Foothill Forest (45). All vegetation was painstakingly cleared for cultivation although CA Nobelius ensured that the Tree Ferns remained along streams and elsewhere.

Historical photographs show that the configuration of the nursery was continually changing, both in planting arrangements of young trees and sheds or structures to support the operations. The extent of the remaining 11 acres (4.5 hectares) can be seen in an enlargement of the 1972 aerial photograph (See page 13). Note that there was only one house in the north-western corner (possibly occupied by Arch Nobelius) and this area has since been subdivided further to the east into three additional residential blocks. At the time of the photograph, the nursery was operated by Din San's Nobelius Nurseries, Emerald. Planting beds are aligned in rows at right angles to the contours: these are north/south from Emerald Lake Road and Crichton Road, and east/west from Princess Avenue. The orientation of these planting lines reflects horticultural practices of the day and contributes to the heritage value of the site. There is a block of substantial tree canopies in the centre of the nursery and a narrow band of trees extending from this to the eastern boundary. (The dark rectangular strip to the north of this row of trees, extending to the ELP boundary, is possibly the remains of planting under an earlier "bush house" as mentioned by Glen Brinstead in 2006 as existing before 1955.) Up to three rows of young trees growing south from the Emerald Lake Road would be the existing group of Deodar Cedars. Smaller groves of trees can be seen south of the water tank and around Linton's Cottage.

It is reasonable to assume that some additional planting would have occurred up to the closure of the nursery in 1981 and subsequent takeover by the Shire of Sherbrooke. Fruit tree stocks had been planted in neat rows three feet (0.9m) apart. Trees were lifted in winter to be sold as bare-rooted plants and would not have exceeded 1.8m to 2.4m in height for this reason. From the 1940s, plants were lifted from the ground and sold in pots. When Gus Ryberg took over in the 1980s, he trimmed out a lot of remnant nursery stock and they were sold off by Council. The majority of mature trees and shrubs currently existing have been planted under the direction of Gus Ryberg and his assistant Carey Williams. The intention was to implement different plantings to commemorate both the original nursery practices, with lines of fruit tree stocks and ornamental plants, as well as local Emerald and district plant-based industries such as eucalyptus oil, timber, flax, lavender and rosemary. The park with its collection of mature trees currently appears to have the character of a botanic garden rather than an historic nursery, where plant heights would have rarely exceed 2.4 metres. Trees retained for display purposes would have been allowed to grow taller.

The extent of registration of Heritage Victoria's H2285 lists "the landscape and the mature trees" and does not specify any individual trees other than the National Trust's trees. The Chinese Gooseberry (*Actinidia chinensis*) is referred to in the Statement of Significance.

The Victorian Heritage Register database cites "Nobelius Heritage Park and landscape as significant to the Cardinia Shire".

The National Trust's Register of Significant Trees includes only two trees as follows (a formerly-listed Cut-leaf Black Alder failed in drought and has been removed from the park):

- *Liriodendron tulipifera* 'Aureo-marginatum' (Variegated Tulip Tree), National Trust Significant Tree No. T11137;
- *Knightia excelsa* (Rewarewa), National Trust Significant Tree no.T11138. This tree was reportedly planted by Cliff Nobelius date unknown.

The Homewood report lists 635 trees but excludes tree ferns and shrubs such as camellia, rhododendron, *Viburnum rhytidophyllum, Cornus florida*, Schumann's Abelia, nandina, grevillea, salvia, lavender, rosemary, flax and knifophia. There are approximately 108 different tree species and varieties in the park. Deciduous trees dominate with 59 species while there are 25 species of conifer. The three most predominant tree species planted in the park are *Cedrus deodara* (116), *Betula pendula* (71) and *Acer palmatum* (50).

Prominent stands of trees are as follows:

- *Eucalyptus macarthurii* (Camden Woollybutt) row of 9 trees planted near the northeastern boundary with Emerald Lake Park to commemorate the eucalyptus oil industry;
- *Eucalyptus regnans* (Mountain Ash) row of 13 trees parallel to the *E. macarthurii* row to commemorate the timber industry;
- Malus domestica (Apple) a grove of 15 individual apple varieties in the south-western corner, including 'Brookdale' (labelled), representing the mainstay of Gembrook Nurseries' original business with both orchard tree-growing and fruit production (the nursery offered 207 varieties of apple in 1909);
- Cedrus deodara (Deodar Cedar) (1) Row of 7 trees with relatively large trunk diameters
 parallel to the south-eastern boundary with Emerald Lake Park; these trees are remnants of
 earlier nursery planting;

(2) Up to 3 rows of trees below Emerald Lake Road as seen in the 1972 aerial photograph;(3) Group of trees against Princess Avenue and two groups south of the private properties in the north-western corner;

- *Betula pendula* (Silver Birch) rows of north/south trees parallel to cedars in (2) above and rows of east/west trees south of the eastern WSUD;
- Picea abies (Norway Spruce) a younger stand of 34 trees north of the Silver Birch (above) and east of the cedars in (2) above; note that this species was included in Jo Jenkinson's list of Nobelius Nursery trees only for being present in 2001. However, the tree is listed under the name of Abies excelsa in the 1934 C.A.Nobelius & Sons catalogue and may also occur earlier. Many of the plant names in the catalogue have been changed since 1934;
- *Cupressus sempervirens* (Italian Cypress) two rows of closely–spaced trees south of the museum and planted after 1972;
- Pinus radiata (Monterey Pine) adjacent to the railway line and packing shed.

Remnant trees from earlier nursery plantings in the centre of the park and in a band running east/west as seen in the 1972 aerial photograph. These trees were possibly retained as display examples although there are only 13 mature species as follows:

• *Parrotia persica* (Persian Ironwood), tree no. 22;

- Acer platanoides (Norway Maple), tree no. 23;
- Acer palmatum (Japanese Maple), tree no. 24;
- Parrotia persica (Persian Ironwood), tree no. 26;
- Fagus sylvatica 'Purple Group' (Purple European Beech), tree no. 27;
- Knightia excelsa (Rewarewa), tree no. 66 National Trust Significant Tree;
- *llex cornuta* (Chinese Holly), tree no. 67;
- Arbutus unedo (Irish Strawberry Tree), tree no. 256;
- Acer platanoides (Norway Maple), tree no. 257;
- *Liriodendron tulipifera* 'Aureo-marginatum' (Variegated Tulip Tree) tree no. 263 National Trust Significant Tree;
- Liquidambar styraciflua (Liquidambar), tree no. 295;
- *Hesperocyparis macrocarpa* 'Saligna Aurea' (Weeping Golden Monterey Cypress), tree no. 598;
- Cunninghamia lanceolata (Chinese Fir), tree no. 601;
- *Hesperocyparis macrocarpa* (Monterey Cypress), tree no. 602.

Shrubs and vines:

- Actinidia deliciosa (Chinese Gooseberry), tree no. 636. Planted before 1910 by Arch Nobelius prior to introduction of this species to New Zealand. CA Nobelius first noticed the vine when on a trip to Japan around 1900 and a consignment was ordered soon after, believed to be the first import into Australia and pre-dating the c.1906 commencement of the kiwifruit industry in New Zealand. Two vines (male and female?) are supported by a timber pergola to the north-east of the museum. Glen Brinstead recalls that a row of Kiwi Fruit extended all the way up to the packing shed;
- *Camelia japonica* in several locations: row of 5 old shrubs east of picnic area, 4 newer shrubs north of post and rail fence to path east of entry road, shrubs around water tank. A large *Camellia* is above the retaining wall south of Lintons' Cottage.
- *Corylus avellana* (Hazelnut). A row of up to 26 shrubs on the eastern side of the rosemary and lavender beds.
- Linnaea parvifolia (Schumann's Abelia) north side of the water tank
- *Photinia x fraseri* 'Robusta'. Hedge on north side of path next to rotunda.
- *Rosmarinus officinalis* (Rosemary) and *Lavandula angustifolia* 'Vera' (English Lavender). Plantings established by Gus Ryberg in lines north of the packing shed to represent plants used for cosmetic oil production in the Emerald area;
- *Salvia spp.* (Sage). Planted and maintained by the Salvia Study Group of the Herb Society of Victoria on behalf of the Garden Plant Conservation Association of Australia This planting has no connection with CA Nobelius or the former nursery.
- *Viburnum rhytidophyllum* (Leather-leaf Viburnum) near the eastern boundary, north of the east/west path.
- *Wisteria sinensis* (Chinese Wisteria). Growing as an archway over the entry off Crichton Road, supported by two steel pipe frames, with steel mesh between, spanning 7.5m.

WSUD planting:

The prime purpose of plants within the WSUD is to filter out nutrients and sediments from storm water run-off prior to discharging the water into Wishing Well Creek. Planting density needs to be increased to ensure that the wetland function performs properly.

The drainage swale parallel to Princess Avenue is lined with *Knifophia spp*. (Red-hot Poker) along with other plants including *Grevillea*, *Eremophila* and a *Leptospermum obovatum*.

Phormium tenax (NZ Flax) has been planted at the upper end of the western WSUD installation and at the sides of the lower end of the eastern WSUD.

The main species planted within the cascades and rain gardens is *Lomandra longifolia* (Spiny-headed Mat-rush).

(Note that the WSUD installation needs considerable maintenance to restore rock placement, to remove weeds, to replace missing plants, and to upgrade the outfall to the creek in Emerald Lake Park. The diversity of planting within the swales should be increased. These installations should be cleaned out and re-planted every 5 years.)



Flax plants in front of the Packing Shed.

4. Assessment and Comparative Analysis

Nobelius Heritage Park is located on part of the former Gembrook Nursery established by C.A. Nobelius in 1892. Vast areas of indigenous forest were cleared for the nursery operations. In 1921, the year of Nobelius' death, the operation covered 650 hectares and had previously advertised over three million trees for sale. In 1908, Nobelius also established an extensive apple orchard on 600 acres (240ha) by the Tamar River in northern Tasmania. The orchard had 40,000 trees and was reputed to be the largest single block private orchard in the world. (Jenkinson, p. 32)

No other nursery of this period can compare with the extent of the Gembrook Nursery operation at its peak, which had developed an international reputation and was considered to be the largest in the southern hemisphere. The nursery had developed links with overseas markets, including USA, South Africa, South America, UK, Canada, Europe, Asia, India and New Zealand. It imported new varieties of plant stock from France, USA, Russia, UK, Canada, Japan and New Zealand. The nursery had a reputation for the reliability and cleanliness of its plant stock. World War I devastated the nursery's export business.

The nursery was broken up when CA Nobelius died in 1921. 300 acres (120 hectares) were purchased by the Nobelius Station Estates. Arch Nobelius purchased 90 acres (36 hectares) in 1924. Nursery operations continued in part, including the growing of flax in the eastern section until 1926. Cliff Nobelius purchased a share of the business in 1928. Many of the nursery trees were removed, burnt or ploughed into the ground, presumably because they had grown too large for sale. The Shire of Ferntree Gully purchased 117 acres (47 hectares) for the development of a public park in 1938/39. Nursery operations continued as C.A. Nobelius & Sons Nursery until 1955 when it was sold to the Linton Brothers. The Lintons in turn sold the nursery in 1967 and it continued in business as Din San's C.A. Nobelius & Sons Nurseries until it finally closed in 1981. The nursery now only consisted of 11 acres (4.5 hectares) and was purchased by the Shire of Sherbrooke. The nursery opened as a heritage and passive recreation area in 1988.

Comparisons with other Victorian nurseries

The earliest nursery known to be established in Victoria was **Charles Wyatt's** Frogmore Nursery at Fyansford in 1858; the nursery specialised in vines and fruit growing (Victorian Heritage Register H2060). **John Smith** commenced a nursery at Riddell's Creek in 1863 which became a major supplier of fruit trees in Victoria; the nursery expanded into ornamental trees and plants (Victorian Heritage Register H2060). **Taylor & Sangster** had the 2 acre (0.8 hectare) Vice-Regal Nurseries in Toorak, commenced in 1865, where C.A. Nobelius was employed. A second nursery was established at Macedon for cool climate plants in 1875; seven trees in the nursery site are on the National Trust's Significant Tree Register. (National Trust G13111.) This nursery had an important influence on plantings in the district and influenced the kind of garden landscape which became typical of the Dandenong Ranges. **J.C. Cole** established the Belgrave Nursery (1879-1891) which specialised in growing fruit. Mossvale Park north-east of Leongatha in Gippsland has some interesting parallels with Nobelius and his nursery. **Francis Moss** commenced nursery development in 1888 in 1,000 acres (400 ha) of virgin bush. In 1903 there were plans to produce 250,000 fruit trees, including 120,000 apples, pears, cherries, peaches and apricots. The nursery was converted to a park in 1946 (Woorayl Shire Historical Society). **C.A. Nobelius** encouraged the planting of many other orchards in

the Emerald district, but these were for fruit production and growing ornamental trees for sale rather than growing of fruit trees. His Gembrook Nurseries supplied fruit trees to orchardists and ornamental trees throughout Australia and overseas; many shire councils, the Melbourne Botanic Gardens, Fitzroy Gardens, Burnham Beeches, Emerald Golf and Country Club were among the nursery's customers.

Criteria for Assessment of Cultural Heritage Significance

(Based on a document adopted by the Heritage Council of Victoria on 17 August 2008.)

Criterion A Importance to the course, or pattern, of Victoria's cultural history.

The former Nobelius Nursery is part of the vast Gembrook Nurseries established by Carl Axel Nobelius from 1892. In the early twentieth century it was one of Australia's foremost plant nurseries, described in 1920 as the largest in the southern hemisphere. It was the originator of an extensive range of exotic plants and fruit trees, supplied other nurseries of the era, and influenced gardens, parks, streetscapes and orchard planting throughout Australia. The nursery exported to the USA, South America, South Africa, New Zealand, Europe and Asia. Through the supply of exotic trees to municipalities in many parts of Australia, Gembrook Nurseries had a significant influence on Victoria's landscapes, including public parks, private gardens, orchards, avenues of honour and tree-shaded streets.

Criterion B Possession of uncommon, rare or endangered aspects of Victoria's cultural history.

The former Nobelius Nursery is significant for the retention of trees and other plantings from the time of occupation by Nobelius and his sons, including a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria, as well as remnants of old nursery stock.

Criterion D Importance in demonstrating the principal characteristics of a class of cultural places or environments.

The former Nobelius Nursery has scientific (botanical) significance for its site layout and linear planting, which demonstrate early methods of nursery production, cultivation and plant handling.

Criterion H Special association with the life or works of a person, or group of persons, of importance in Victoria's history.

The nursery is significant for its association with Carl Axel Nobelius, who is important for his contribution to the Belgrave to Gembrook narrow gauge railway line, now part of the Puffing Billy Railway. This was a facility sought and heavily used by Nobelius in his nursery business, and included a siding serving his adjacent packing shed, and also provided the local farming, timber and nursery industries with easier access to their markets and so contributed to the development of the Emerald region. Nobelius is significant in the horticultural history of Victoria for his investigations into plant selection, particularly their suitability for local climates. He imported kiwi fruit vines from Japan in 1900 and 1903 prior to the introduction of this species to New Zealand in 1904.

5. Statement of Significance

What is significant?

Nobelius Heritage Park is an 11 acre (4.5 hectare) remnant of the former CA Nobelius' Gembrook Nurseries in Emerald. The nursery operation commenced in 1892 and expanded from 60 acres (25 hectares) to be around 1,625 acres (650 hectares) by 1920, becoming one of Australia's foremost plant nurseries of the early twentieth century.

Carl Axel Nobelius purchased 60 acres (25 hectares) of forested land near Emerald in the southern Dandenong Ranges in 1886. After clearing the land he established a small nursery and commenced operations in 1892 as Gembrook Nurseries, named after the local Parish. The business grew rapidly as more land was purchased or leased then cleared. Road transportation of fruit and nursery stock to Narre Warren Station by bullock train was almost impossible in winter. Nobelius became a strong advocate for the construction of the narrow gauge railway line from Belgrave to Gembrook, now known as the Puffing Billy Railway. The line was built in 1900 and Nobelius was given permission to build a siding and packing shed in 1904 adjacent to land newly-acquired for the nursery. Nobelius travelled widely to collect seeds and import many varieties of trees, particularly to suit local conditions. His nursery was known for high standards of cultivation and tree stock management. During winter, when tree stock was lifted from the ground, Nobelius gave employment to many small growers in the Emerald district when they had no other source of income. Nobelius also had further influence in the local region by encouraging growers to establish nurseries, by support for the berry industry, through providing land for the development of a public oval and providing a loan to build a community hall. By the start of World War I, the nursery held two million stock trees, produced a large quantity of fruit, supplied fruit trees and ornamental trees to orchardists and councils within Victoria, and conducted a huge export trade with other Australian states and overseas. In 1920 the nursery was said to be the largest in the southern hemisphere and included the land now occupied by the Emerald Golf and Country Club Resort, and Emerald Lake Park. However, the outbreak of World I largely destroyed the export trade, and after Nobelius' death in 1921, the nursery and orchards were subdivided and sold. Nobelius' sons, Arch and Cliff, regained control of this small part of the nursery and continued in business until 1955. The nursery was sold, first to Les and Ian Linton, then to Din San Nurseries in 1967 and it ultimately closed in 1981. Following a public campaign, the last remnant of the historic nursery was purchased by the former Sherbrooke Council to become a public park, focussing on the history of the area and its horticultural industries. The Emerald Museum was constructed in 1993 to house an important collection of relics from the Nobelius Nursery including ledgers, wages books, stock records from the 1890s, original catalogues, label machine, tools and photographs, and is considered to be a unique record of the nursery industry in Victoria.

The Nobelius Heritage Park retains many examples of the trees planted by Nobelius and his sons, including a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria. It also retains remnants of old nursery stock and features characteristics of the former nursery such as rows of trees planted at right angles to the contours. A dominant element in views from the nursery site is the two-storey timber packing shed adjacent to the Nobelius Siding on the Puffing Billy Railway. Many of the plants in the park were planted after the Nobelius era. There are plantations of

eucalypts, fruit and ornamental trees, lavender, rosemary, New Zealand Flax established by Gus Ryberg, the initial voluntary curator for the park who once worked for the Nobelius Nursery; the plantings are reminders of former Nobelius ventures and other local industries. More recently, a collection of Salvia species has been planted and maintained by the Salvia Study Group of the Herb Society of Victoria on behalf of the Garden Plant Conservation Association of Australia.

This site is part of the traditional land of the Kulin Nation.

How is it significant?

The former Nobelius Nursery is of historic and scientific (horticultural) to the state of Victoria and of local social and aesthetic significance to the Emerald community.

Why is it significant?

The former Nobelius Nursery is of state historical significance as important surviving evidence of the extensive Gembrook Nursery operations in Emerald established by CA Nobelius from 1886. In the early twentieth century it was one of Australia's foremost plant nurseries, and was described in 1920 as the largest nursery in the southern hemisphere. It was the originator of an extensive range of exotic plants and fruit trees, supplied other prominent nurseries of the era, and influenced garden and orchard plantings throughout Australia as well as exporting to the USA, South America, South Africa, New Zealand, Europe and Asia. Through the supply of exotic trees to municipalities in many parts of Australia, the Nobelius Nursery had a significant influence on Victoria's landscapes, including public parks, private gardens, orchards, avenues of honour and tree-shaded streets. The nursery is significant for its association with Carl Axel Nobelius, important for his association with the Belgrave to Gembrook narrow gauge railway line, now part of the Puffing Billy Railway. This was a facility sought and heavily used by Nobelius in his nursery and orchard business. It included a siding serving his packing shed and also provided the local farming, timber and nursery industries with easier access to their markets and so contributed to the development of the Emerald region.

The former Nobelius Nursery has state scientific (botanical) significance for its site layout and linear planting, which demonstrate early methods of nursery production, cultivation and plant handling. It is significant for the retention of trees and other plantings from the time of operation by Nobelius and his sons, including a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria, as well as remnants of old nursery stock, Victoria's first plantings of Chinese Gooseberry (Kiwi Fruit, *Actinidia chinensis*), and a recent collection of Salvia species and cultivars.

The former Nobelius Nursery has local social significance for its association with Carl Axel Nobelius and his contribution to the Emerald community: through his connection with establishment of the Puffing Billy Railway, through encouraging the growing of orchards, through his connections with the berry growing association, through providing winter employment for small farmers and growers, and for his contribution to development of the local sporting ground and community hall.

The former Nobelius Nursery is of local aesthetic significance for its scenic qualities associated with a U-shaped valley, views and vistas within and beyond the park including from the Puffing Billy railway, remnant large trees and a peaceful area for passive recreation. The park shares its eastern

boundary, and origin, with Emerald Lake Park and its unique forest of exotic remnant nursery trees and re-growth indigenous vegetation.

6.0 Conservation Policies

6.1 Introduction

The following conservation policies have been developed to provide direction and guidelines for the conservation of the heritage significance for Nobelius Heritage Park. Cardinia Shire Council has the responsibility for implementing these policies, which should form the basis of consideration for any current or future works. The following policies are not exhaustive with regard to works; rather they seek to identify priorities for immediate and future works and to set a framework for an overall strategy for the conservation of the park and its elements.

6.2 General Policies

These general policies are intended to provide a basis for which the specific policies for individual elements of the park have been formulated. Those elements identified as being of significance should be retained and conserved in accordance with the conservation policies of this plan, and should be considered in, and form the basis of, future management of the complex.

Nobelius Heritage Park is made up of elements that provide demonstrable evidence of its significance, including several layers of historical development. Individually and collectively these elements contribute to the overall cultural significance of the park. Acknowledgement of their significance should be the basis of, and a guide to, the future approaches to conservation works, management, interpretation, adaptation and development of the complex. Specific conservation objectives should be to:

- Retain and enhance the existing cultural heritage values of Nobelius Heritage Park;
- Retain the sense of place of the park and its environs;
- Retain all fabric identified as of primary significance;
- Preferably retain all fabric of contributory significance. However, sympathetic alterations and additions could be made if it would enable appropriate adaptive re-use or development.

The guidelines contained in the Burra Charter should be used to determine the acceptability of any proposed conservation works and/or adaptive uses of the complex.

6.3 Significant Areas and Elements

The main periods of significance for the Nobelius Heritage Park are as follows:

(1) The Gembrook Nurseries/CA Nobelius era from 1903, following expansion of the original nursery area to the south, including the narrow-gauge railway line and beyond;

(2) The continuing nursery, initially under management of Arch and Cliff Nobelius after 1921 and subdivision of the land, reduction in size of the nursery after purchase of the western portion by the Shire of Ferntree Gully in 1939, then sale to Lintons (1955), then Din San(1967), and final closure in 1981;

(3) The development of Nobelius Heritage Park after purchase by Sherbrooke Council from 1981.

In the development of the conservation policy, it is usual to assign levels of significance to structures and landscape elements in order to provide guidance with regard to conservation actions. These levels of significance are *primary*, *contributory* and *little or no significance*.

Primary Significance

Elements of primary significance are those that are of individual *historical*, *aesthetic*, *scientific* or *social* significance. They are essential to an understanding of the heritage significance of the Nobelius Heritage Park and are largely intact. These include:

- Original nursery site of 4.5 ha (part of the vast nursery area from 1903) in a U-shaped valley and part of the continuing nursery from 1921 to 1981;
- Relationship and connection to the railway line, especially visual links and vistas from the train into the former nursery;
- Packing Shed and railway siding (although not within the site);
- Relationship and connection to Emerald lake Park, formerly part of the original nursery;
- Remnant mature nursery trees planted in rows prior to 1981;
- Remnant mature nursery trees planted east/west in the central section prior to 1981;
- Emerald Museum contents (but not the building) ledgers, catalogues, historic photographs, label machine, nursery tools, etc.;
- Chinese Gooseberry / Kiwi Fruit, first planted in the CA Nobelius era;

Elements of primary significance should be retained and conserved.

Contributory Significance

Elements of contributory significance are those that are important in contributing to the cultural significance and interpretation of the park, or elements that are original but have been altered, or are elements of *historic*, *aesthetic*, *scientific* or *social* interest. These include the following:

- Lintons' Cottage;
- Trees planted in rows since 1981 representing original nursery practice;
- Apple varieties, one of the principal species of trees produced by the Nursery;
- Flax plants parallel to the Packing Shed;
- Shrubs such as *Camellia*, subject to further identification;
- Concrete tank and bore pump, an innovation in nursery practice from the 1940s;
- Archaeological evidence of previous nursery systems, holding furrows, drainage channels, steps and paths.

Elements of contributory significance should preferably be retained and conserved.

Little or No Significance

Elements of little or no significance are those which were originally minor in nature, are of more recent origin, or which have been substantially altered. These include:

- Emerald Museum building;
- Rotunda;

- Band platform;
- Memorials;
- Stone retaining walls;
- Water sensitive urban design structures and swale;
- Timber bollards;
- Timber post and rail fencing;
- Furniture picnic tables and seats;
- Signage;
- Road and parking areas;
- Pathways;
- Shrubs planted since 1980;
- Rosemary and lavender;
- Salvia collection.

Elements of little or no significance may be retained, altered or removed as required (subject to Heritage Victoria's approval).

6.4 Setting

The Nobelius Heritage Park's setting should be retained to maintain its aesthetic qualities and amenity. This includes the U-shaped valley with open sloping lawns planted with specimen trees and the line of shrubs extending up to the Packing Shed. It also includes the eastern boundary with Emerald Lake Park. Consideration should be given to removal of tree species which are over-represented (e.g. Deodar Cedars (116), Silver Birches (71), and Japanese Maples (50)). Note that Norway Spruce was not in the early Nobelius catalogues but may have had a name change from *Abies excelsa* to *Picea abies* (refer to Jo Jenkinson's list of trees in the appendix to the NHP 2006 Vegetation Management Plan). Selective clearing of trees would enable some of the specimen trees to expand and allow them to be fully appreciated. The view from the Puffing Billy Railway line into the park should not be obscured by new landscape elements or features (although the existing row of large Monterey Pines next to the Packing Shed currently screens much of the view). It is noted that the appearance of the nursery, as it was in 1921 dominated by young fruit trees, has been almost totally changed due to growth of both remnant nursery trees and those trees planted in later stages of the nursery's development.

6.5 Future Development

There are planning constraints in relation to future development of Nobelius Heritage Park. The site is included on the Victorian Heritage Register H2285 and has restrictions on work that can be carried out without a permit from Heritage Victoria. The following Cardinia Shire planning overlays relate to Nobelius Heritage Park:

- Bushfire Management Overlay;
- Significant Landscape Overlay SLO1;
- Heritage Overlay HO273;
- Public Park & Recreation Zone.

Permits will be required for any works which may affect the significance of the Nobelius Heritage Park, including removal of any trees or shrubs, both from Heritage Victoria and Cardinia Shire.

Future development should be undertaken in a co-ordinated and planned manner in accordance with an agreed master plan. The overriding focus is to maintain the park for passive recreation and as a place for botanical education. A heritage consultant should be involved in planning of future development as well as providing advice for maintenance issues.

6.6 Risks

The following risks need to be taken into consideration for protection of the park's heritage assets:

- Climate change climate change and associated drought will affect vegetation with reduced rainfall resulting in loss of soil moisture, increase in temperatures and tree decline. Damage from storm events, including hail and strong winds, is likely to increase and affect the large number of mature and senescing trees.
- Fire drier conditions increase the risk of fire resulting from lightning strikes or arson. Fine fuel build-up on the eastern boundary with Emerald Lake Park, and under the pines adjacent to the packing shed, poses a threat and needs to be monitored.
- Vandalism includes deliberate damage to buildings, vegetation and site furniture. Graffiti to buildings and site furniture is also poses a potential risk. Presence of permanent staff is recommended for visible security reasons.
- Flooding possible flooding of the central part of the park with an increase in storm events.
 Past storm events have resulted in erosion of paths and spreading of crushed rock into lawns.
- Insect & pathogen attack to vegetation. Exotic insect pests may provide a conduit for tree diseases. Regular inspections should be conducted for evidence of attack by Elm Leaf Beetle, and if present, treatment should be carried out accordingly. Similarly, regular monitoring for signs of any Cypress Canker, Honey Fungus (*Armillaria spp.*) or Cinnamon Fungus (*Phytopthora cinnamomi*) and other *Phytopthera* species need to be conducted and appropriate action taken early if discovered.
- Weed invasion of all areas, particularly to the lawns in the northern section. Imported soil or mulch has potential to introduce new diseases and weeds.
- Senescing trees susceptible to storm damage, bushfire, insect attack, fungal disease or death resulting in limb drop or tree collapse.

6.7 Interpretation

Visitors to the park should be informed about the heritage values of the park and be encouraged to protect and maintain them. Interpretation signage at main park entries is of particular importance. The information signs with historical details of the Nobelius Nursey should be maintained and additional signs should be included to enhance interpretation.

Interpretation includes the provision of labels to National Trust listed trees as well as to other significant representative trees in the park. Tree labels provide botanical information for botanically-minded visitors, students and school children.

Advances in digital technology need to be recognised. Consideration should be given to the inclusion of digital interpretation systems, such as "augmented reality", within an overall interpretation strategy.

6.8 Adoption and Review

Cardinia Shire Council, the managers of Nobelius Heritage Park, (via the Nobelius Heritage Park and Museum Committee of Management) should adopt and implement the policies in this Conservation Management Plan. The conservation policies should be subject to review at a minimum five-yearly intervals. Should circumstances affecting the park change within this time, the policies should then be reviewed accordingly.

6.9 Repairs and Maintenance

All repairs and maintenance should be carried out with regard to the significance of the place and the conservation policies of this Conservation Management Plan. Regular maintenance and monitoring of the various elements as identified in this report will ensure that the significant fabric does not deteriorate and that it is properly conserved. Primary and contributory elements and their fabric should be conserved in accordance with the Burra Charter and the conservation policies of this report. Maintenance personnel should be supervised by staff with both horticultural and heritage qualifications.

To achieve a proper maintenance regime, a cyclical inspection and maintenance program should be put in place to ensure that the gardens and other significant hard landscape elements are kept in good condition to slow deterioration of their fabric. An important pre-requisite for the development of a maintenance program is the engagement of an arborist with heritage experience to monitor the ongoing condition of all trees and to carry out any associated works. All tree pruning must be done in accordance with AS4373 Pruning of Amenity Trees. As previously noted, no trees can be removed without first obtaining a permit from Heritage Victoria or a Cardinia Shire Council Planning Permit.

General maintenance (mowing, weeding, mulching, watering, clipping of formal hedges, rubbish removal, re-surfacing of paths, repair, cleaning and replacement of drains, erosion control works) can be carried out in accordance with the conservation policies of this report but must be supervised by a conservation specialist. Cardinia Shire Council needs to ensure that sufficient and experienced maintenance contractors are employed and that they provide regular reports on actions proposed or taken, including photographic evidence.

An appropriate maintenance program should include a detailed listing of all maintenance tasks with frequency of actions, including monitoring, for a minimum 5 year period.

7.0 Conservation Actions

7.1 Introduction

Conservation Actions have been divided into two levels of priority – <u>Essential & Immediate Works</u> and <u>Future Works</u>.

Essential and Immediate Works should be undertaken immediately to ensure **safety** for the users of the site and to ensure the physical integrity of the existing fabric. Future Works are less urgent and are not necessarily fundamental to ensuring the physical integrity of existing fabric and may include reconstruction and other works that enhance the appearance and useability of the place. Future Works are recommended where funds permit.

Level 1 Essential and Immediate Works

• Trees.

Refer to the Homewood Consulting: *Arboricultural Assessment and Report*, 2020. This report includes conditions and permit requirements for tree works relating to Heritage Victoria's Registration, H2225, Cardinia Shire Council's Significant Landscape Overlay (SLO1) and Heritage Overlay HO273. It also includes current condition reports for each identified tree, recommended tree protection zones, and recommended works for management purposes including monitoring condition, cabling, pruning, lopping or removal for safety reasons. Appointed arborists should have demonstrated experience in working within heritage landscapes.

Attention is drawn to paragraphs 4.2. Tree Details, 4.3. Significant Trees, 5. Risk Assessment and 6. Recommended Works in the above report.

Trees in lawns should have their trunks surrounded by circles of organic mulch with a minimum radius of 1.5m and depth of 100mm - to conserve moisture, to control weed growth, to eliminate competition from grasses, to reduce root compaction by mowers and maintenance vehicles, and to protect trunks from mower damage. Mulch must be set back a minimum of 150mm from trunks.

Ongoing monitoring of significant trees is essential, as these are generally mature, and should be carried out on an annual basis. Note that the appointed arborist may be required to assess damage after severe winds or storm damage, and should also be required to visit the site to report on trees after such events.

Refer to Permit Exemptions of H2285 in relation to tree works and the need to provide reports to Heritage Victoria.

• Footpath surface stabilisation and accessibility

The steep section of pathway leading into the park from Princess Avenue needs to be resurfaced in asphalt or concrete with a non-slip surface, both for safety purposes and maintenance reasons. Heavy rainfall has resulted in erosion of gutters to the side of the path and spreading of crushed rock onto lawns and under picnic tables. The crushed rock needs to be removed from the lawns to avoid damage to mower blades. The path gradient must be checked, and if it exceeds 1 in 20, the installation of handrails will be required to both sides in accordance with Australian Standard 1428.1-2009 Design for access and mobility. Other gravel-surfaced paths need to be reviewed for stability.

• Water Sensitive Urban Design (WSUD)

Urgent maintenance is required to the stormwater swales and rain gardens to reduce the impact of heavy rainfall and potential flooding events and to increase efficiency of the installation. Actions include:

- Re-shaping of the swale parallel to Princess Avenue including removal of weed species, replace rocks as necessary, trim or renovate adjacent vegetation including replacement;
- Cleaning autumn leaves and rubbish from inlet drains to the rain gardens as well as outlet gratings;
- Replacement and infill planting to increase plant density in the rain gardens, both within the main channel and to the sides;
- Reconstruction of the outfall to the creek in Emerald Lake Park to reduce erosion. This includes removal of young self-sown trees, such as beech, that obstruct flow.

• Fire management strategy

A fire management strategy is essential to provide protection for visitors, staff and heritage assets. The strategy should include consideration of emergency responses during extreme fire danger days and for actions to reduce fire risk.

Actions during extreme fire danger days:

- Nominate fire wardens to manage emergency response actions during the fire season. Duties will include regular site inspections, calling for fire brigade response or other emergency vehicles, directing emergency vehicles, monitoring evacuation procedures;
- Identify a safe assembly area for visitors and staff;
- Establish an evacuation procedure including search of buildings and remote areas to ensure that all people are accounted for;
- Closure of the museum and park.

Reduction of fire risk:

- Reduce fine fuel load where possible, including under pine trees (pine needles and sticks/branches with less than 10mm diameter). Mow grass when more than 150mm high and collect clippings;
- Rake up leaves and dispose, preferably to compost;
- Install fire sprinklers to protect heritage buildings and structures (if not already existing);
- Review locations of fire hose reels, hydrants and hand-held extinguishers and ensure that regular inspections are carried out.

Level 2 Future Works

Packing Shed

The Packing Shed is the most significant structure remaining from the Nobelius Nursery and is closely linked with the original nursery operations. The two-storey building is at the top of the southern slope and can be seen from many parts of the park. It has the potential to provide interpretation opportunities relating to the original nursery operations and supported by the Museum collections. The Packing Shed is not within the park boundaries but is on Puffing Billy Railway land, and adjacent to the siding constructed specifically for the Gembrook Nurseries. It is recommended that negotiations be held with the Emerald Tourist Railway Board for potential access to the facility for interpretation purposes.

Cliff Nobelius' Residence

The original residence occupied by Cliff Nobelius still exists to the south-west of the Packing Shed and the railway line: "Twin Oaks" on Emerald-Beaconsfield Road and the corner of Albert Road. However, this property did not appear in the Council's heritage study. This property has no heritage protection yet it contains some very large trees and rare shrubs. While not part of this CMP, it is recommended that a heritage study should be carried out on behalf of Cardinia Shire Council.

• Tree replacement & maintenance.

Refer to the Arborist Assessment and Report by Homewood Consulting (2020). Note that this is a very large document with 1,673 pages and 164MB of data; it has not been included as an appendix to this report. Refer also to maintenance requirements under Level 1 above.

Prepare a strategy for long-term replacement planting of trees with cultural heritage significance. Replacement will be required where trees have suffered severe storm damage, are in serious decline due to senescence or disease, or have died. Trees shall be replaced with the same species, where practicable, except those which have serious weed potential. Cuttings of significant trees should be grown in advance for replacement purposes to maintain genetic provenance; this will need to be done by a specialist nursery. Trees do not have to be replaced in the exact locations, although they should be within the same alignment of linear planting; trees to be removed would need stumps and large roots ground out to at least 300mm or more below the surface, while it has to be recognised that soil nutrients would have been severely depleted by large trees growing in that location over time.

Records should be maintained for any significant tree prior to its removal, including location, dimensions of tree (height, diameter at breast height, canopy spread), reason for removal and photographs of condition.

Construction of any new buildings or structures plus cable trenching for any new services with the potential to affect root zones must be designed to occur outside any tree protection zones for significant trees. Any works must be supervised by a qualified arborist. New structures must obtain a permit from Heritage Victoria prior to any works proceeding.

• New Planting

The 2006 Vegetation Management Plan (Outside Room) suggests the development of a strategy to review the pallet of species planted within the park so as to better represent species historically planted by CA Nobelius.

There are many species planted in the park (mainly by Gus Ryberg and Carey Williams) that either reference the Nobelius Nurseries' practices or other industries in the Emerald region – timber, eucalyptus oil, lavender, rosemary, flax, etc. It has to be remembered that the main Gembrook Nurseries' business was the production of fruit trees for sale, requiring them to be lifted from the ground before they grew too large to handle. The layout of the park with trees in rows at right angles to contours reflects the nursery practices but the large size of many of the current trees makes it hard to understand and visualise how the nursery operated. Of course, there are many photographs in the Museum and on information panels to show the original scale of trees and the nursery atmosphere. Still, many species are over-represented in the park, such as the Deodar Cedars, Silver Birches and Japanese Maples. It is suggested that such species should be selectively cleared and replaced with a greater variety of fruit trees to return the park to a clearer representation of the original orchard planting. Fruit trees for fruit production will need intensive maintenance and will provide the opportunity for community groups or school group involvement; this also presents the possibility for sale of produce to assist in cost recovery, a practice that exists at Werribee Park, for example.

An accessions policy should be implemented to record species palette objectives (e.g. fruit trees and ornamental trees known to be grown by Nobelius). Details must include species name, source (purchase or donations), date of planting, and location within the park.

The selection of species for their drought tolerance due to climate change may take priority over trees which are more suited to wetter climates.

• Additional Plant Research.

The Homewood Consulting arborist report specifically excluded identification of trees or shrubs with trunk diameters less than 200mm or plants less than 8m in height. Specialist horticulturalists need to be engaged to complete the identification of plants that fall into this category.

The identification of Camellia cultivars should take place while the plants are flowering – in the autumn to spring period. (John Hawker has advised that Jenny Happell, a volunteer guide at the Royal Botanical Gardens Melbourne, is an expert on Camellia identification. She has expressed interest in providing this service.) Similarly, a number of Apples and Flowering Cherries could be further identified to variety level.

While the majority of the 636 trees in the Homewood Consulting report are easily identified, identification of some plants should be further checked for subspecies or cultivar names. In

addition, small trees or plants not included in the Homewood report should be identified; an example is the Tree Fern near the centre of the park.

• Weed control.

Regular inspections should be carried out to monitor weed growth and control weeds as necessary, particularly near the boundary with Emerald Lake Park. This is particularly relevant to grass areas in the northern and north-eastern section of the park. Inspections should be done on a quarterly basis and details recorded with photographs. Refer to weed control management policies in *Australis Biological: Emerald Lake Park – Revised weed control strategy 2019-2024, June 2019.*

Any imported soil or mulch should be sterilised prior to delivery to site.

• Water Sensitive Urban Design (WSUD).

Engage a civil engineer to review the design and operation of the system and provide a report to improve efficiency and provide greater control for storm events. A regular maintenance routine should be developed.

• Gravel surfaces to paths, road and turning circle.

Paths with high pedestrian use should have asphalt (or concrete) non-slip surfaces to minimise maintenance. Recycled plastic or steel edges should be provided for asphalt. Steep paths or steps should be provided with handrails in accordance with AS 1428.1-2009 where the path gradient exceeds 1 in 20.

A traffic consultant should be engaged to review the current roadway surface and width, turning circle efficiency and parking areas. Consideration needs to be given to allowances for an increase in visitor vehicles and mini-buses. Any increases in parking areas or road surface width or surfacing material will need to obtain approval from Heritage Victoria.

Water bore.

Provide new surroundings to the bore and pump to provide protection from mowers and to exclude grass. This could take the form of a rectangular recycled plastic edging (or steel) frame filled with compacted gravel (50mm minimum depth).

Install an interpretation sign to explain the origin and purpose of the bore and pump.

Furniture.

All furnishings (seats, picnic tables, waste containers, etc.) should be utilitarian, low maintenance, and of consistent design suitable for the heritage setting. Furniture design should not be mock "heritage".

Picnic tables should have extended ends to allow for wheelchair access.

Seats generally throughout the park must be placed so that the level seat surface is a maximum of 450mm above ground level. High-use seats should be provided with a concrete or compacted gravel base to minimise grass wear underneath and make mowing easier.

Additional Research – CA Nobelius Memorial.

Undertake research to determine the connection with the CA Nobelius memorial to the grave marker in the Emerald/ Macclesfield Cemetery. Jo Jenkinson's NHP guide and Context's 2004 Strategic Conservation Plan both refer to the pink granite stone as having come from the cemetery. The reports state that part of the grave marker was damaged by a falling limb, so the Nobelius family agreed to have the piece used as a memorial in Nobelius Heritage Park. However, while the granite is the same colour, this does not appear to be likely as the tapered column shape bears no relationship to the form of the grave marker and the patterns tooled on the stone memorial are different; refer to the description in Physical Description. If the column was placed on top of the marker it would have been out of proportion; the marker is currently topped by a granite cross. Note that this marker was erected for Nobelius' first wife, Emily, in 1911; CA Nobelius and names of other family members have been added subsequently. There is no separate memorial for CA Nobelius in the cemetery which is surprising, given his contribution to the Emerald community.

• Interpretation

The park has the appearance of a botanical garden but without any associated research facilities. Further interpretation is required to highlight the heritage significance of the park. It is important to provide such information to visitors when the Museum is closed. The following interpretation issues should be considered to provide information to visitors and to encourage use for botanical, educational and hobbyist purposes by a range of community groups:

- Install labels to identify National Trust Significant Trees and to at least one representative tree in a group of similar species. Information should include botanical name, common name, plant family and country of origin;
- Revise the existing self-guided brochure and provide numbered marker posts to correspond with the plan. Revise the plan in accordance with the new survey. Make corrections to plant names including correct botanical nomenclature;
- Review the implementation of digital interpretation such as "augmented reality";
- Upgrade the main entry experience, including interpretation signage, at Crichton Road and to the entry path from Emerald Lake Park to reinforce the heritage aspects of the park. The sign needs updating to reflect the new survey layout ;
- Provide interpretation signage to Lintons' Cottage;
- Provide interpretation signage to the water bore and concrete water tank;
- Provide interpretation signage to orchard plantations;
- Provide interpretation signage to the flax plants in front of the Packing Shed;

• Negotiate with the Emerald Tourist Railway Board to explore the possibility of access to the Packing Shed for interpretation purposes.

The flight of steps leading down to a small grassed area or terrace north of the Emerald Museum does not connect to any pathway but is an extension of a small parking area off the entry road. This area has potential for development of interpretation displays, a possible meeting point for tours, a place for occasional gatherings or small events, or simply a pleasant resting location. Paving, seating and perimeter planting could provide a useful space connected to the Museum. An additional path link or steps could be constructed to connect with the east/west path below.

• Labour and Resources.

Investigate the appointment of a paid full-time curator in recognition of the park's heritage significance to the State of Victoria. The position should be for a qualified horticulturalist having experience and training with heritage sites. Consideration should also be given to the appointment of a paid assistant curator to share duties. Office facilities would need to be provided. Permanent staff duties would include consideration of the following:

- Regular monitoring and reporting on conditions in the park (storm damage to trees, shrubs, structures, gravel surfaces, weeds, pathogen attacks, vandalism, etc.);
- Acting as fire wardens;
- Provide visitor information when the museum is closed;
- Provision of visible staff presence for security purposes;
- Conduct tour groups as appropriate, including casual visitors, community groups and school groups;
- Arrange for, and supervise maintenance by, Council contractors (mowing, weed control, WSUD maintenance, rubbish removal, cleaning of furniture, removal of crushed rock from grass areas, repairs to structures, etc.);
- Provide input into planning of any heritage works including the introduction of additional plants to better reflect the Nobelius Nursery's planting palette. This will involve liaising with Heritage Victoria and obtaining any necessary permits;
- Maintain a plant accessions register for any new plants;
- Preparation of annual budgets and grant applications for heritage works;
- Liaise with the Nobelius Heritage Park and Emerald Museum Committee of Management;
- Liaise with volunteers and community groups.

Consider the establishment of a Friends Group for Nobelius Heritage Park to provide volunteer support for the permanent staff.

• Art Works.

Prepare a policy for introduction of art works or sculpture. The policy should address both relevance of any proposed works to Nobelius Heritage Park as well as suitable locations for any installations in a heritage setting without compromising significance of the site.

Bibliography / References

Aitken, R & Looker, M eds.: *The Oxford Companion to Australian Gardens*. Oxford University Press 2002.

Coulsen, Helen: Story of the Dandenongs 1838-1958. Longman Cheshire 1982 ed.

Cuffley, Peter: That Little Train: the Puffing Billy Railway 1900-1953. Five Mile Press 1987.

Emerald in Focus: A Photographic History. Nobelius Heritage Park & Emerald Museum 2006.

Heritage Council of Victoria: Landscapes of Cultural Heritage Significance: Assessment Guidelines, 2015.

Jenkinson, Jo: Nobelius Heritage Park: An Illustrated Guide. Emerald Museum 2002.

Legge, Graeme: *Emerald Lake Park*. Article in Signpost Community Magazine Inc., July 2013 Volume 110.

National Trust of Australia (Victoria): Register of Significant Trees.

Ryberg, Gus: Been There, Done That! An Autobiography. Emerald Museum 2000.

Ryberg, Gus: The Four W's - What, When, Where & Who. Emerald Commercial Group 1988.

Spencer, Roger: Horticultural Flora of South-eastern Australia – vols 1-5. UNSW Press.

Walker, M & Marquis-Kyle, P: *The Illustrated Burra Charter: Good Practice for Heritage Places.* Australia ICOMOS Inc 2004.

Winzenried, A.P.: *The Hills of Home: A Bicentennial History of the Shire of Sherbrooke*. Griffin Press, SA, 1988.

Reports

Australis Biological: *Emerald Lake Park – Revised weed control strategy 2019-2024*, June 2019.

Cardinia Shire Council: Emerald Lake Park Strategic Plan 2013-18.

Context Pty Ltd: Collection Significance Assessment, Emerald Museum, 2015.

Context Pty Ltd: *Emerald Lake Park & Landscape (Part Nobelius Nursery) Cardinia Heritage Study.* Updated 2011.

Context Pty Ltd: Nobelius Heritage Park Strategic Conservation Plan, 2004.

Ecology Partners: Emerald Lake Park Vegetation Management Plan, Emerald Victoria, July 2010.

Graeme Butler & Associates: Nobelius Heritage Park Cardinia Heritage Study. Pages 20-25, 1998.

Homewood Consulting Pty Ltd: Arborist Assessment of Trees at Emerald Lake Precinct, June 2020.

Olsen, K: Nobelius Heritage Park Vegetation Management Plan 2006.

VHR Registration H2285: Former Nobelius Nursery, Packing Shed and Railway Siding. June 14, 2012.

Biosis Pty Ltd: Conservation Management Plan for Puffing Billy Railway, Victoria, 2018.

APPENDIX A

FORMER NOBELIUS NURSERY, PACKING SHED AND RAILWAY SIDING





Nobelius_nursery_May_2010

Nobelius_nursery_May_2010

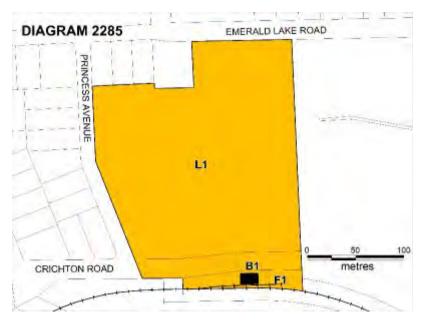






Nobelius_nursery_May_2010 Nobelius

Nobelius_nursery_May_2010 IMG_6917.jpg



nobelius plan.jpg

Location

EMERALD LAKE ROAD and PRINCESS AVENUE EMERALD, Cardinia Shire

Municipality

CARDINIA SHIRE

Level of significance

Registered

Victorian Heritage Register (VHR) Number

H2285

Heritage Overlay Numbers

HO273

VHR Registration

June 14, 2012

Heritage Listing

Victorian Heritage Register

Statement of Significance

Last updated on - January 7, 1997

What is significant?

This remnant of the former Nobelius Nursery, now known as the Nobelius Heritage Park, is a four hectare remnant of the once vast Gembrook Nurseries, developed from 1886 by Carl Axel Nobelius (1851-1921), which became one of Australia's foremost plant nurseries of the early twentieth century.

Carl Nobelius bought 25 ha of forested land near Emerald in 1886, established first a small orchard and in 1892 the Gembrook Nursery, named after the Parish. The business grew rapidly, and to avoid the difficulties of road transportation for his fruit and nursery stock Nobelius became a strong advocate for the construction of the narrow gauge railway line, now known as the Puffing Billy line. By 1900 the line was built and in 1904 permission was given to Nobelius to build a siding and packing shed adjacent to land newly-acquired for the nursery. By World War I the nursery, which was run as a family business by Nobelius and his four sons, held two million stock trees, produced large quantities of fruit, and conducted a huge export trade with other Australian states and overseas. In 1920 the nursery was said to be the largest in the southern hemisphere, and at its greatest extent covered 650 hectares, including the land occupied by the present Emerald Lake Park and Emerald Country Resort. However the outbreak of World War I largely destroyed the export trade, and after Nobelius's death in 1921 the nursery and orchards were subdivided and sold. Nobelius's sons Cliff and Arch regained control of this small part of the nursery and continued the business until 1955. The nursery closed in 1981 after two changes of ownership and the last remnant of the historic nursery was purchased by the former Sherbrooke

Council to become the Nobelius Heritage Park, which focuses on the preservation and recording of the history of the area and its horticultural industries. The Museum contains an important collection of relics from the Nobelius Nursery, which includes ledgers, wages books, stock records dating from the 1890s, original catalogues, tools and photographs, and is considered to be a unique record of the nursery industry in Victoria.

This remnant of the former Nobelius Nursery is located in the Dandenong Ranges east of Melbourne. It retains many examples of the trees planted by Nobelius and his sons, including two notable specimens: a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria; and an outstanding specimen of the cut-leaf black alder (*Alnus glutinosa* 'Laciniata'). It also retains remnants of old nursery stock and features characteristic of the former nursery such as rows of trees planted at right angles to the contours. A dominant element in views from the nursery site is the two-storey timber packing shed adjacent to the Nobelius Siding on the Puffing Billy Railway. Many of the plants in the park were planted after the Nobelius era. There are plantations of lavender, rosemary, raspberries, eucalypts, New Zealand flax and fruit and ornamental trees established by Gus Ryberg, who once worked for the Nobelius nursery, as reminders of former Nobelius ventures and other local industries.

This site is part of the traditional land of the Kulin Nation.

How is it significant?

The former Nobelius Nursery is of historical and scientific (botanical) significance to the state of Victoria.

Why is it significant?

The former Nobelius Nursery is historically significant as part of the vast Gembrook Nursery established by Carl Axel Nobelius from 1886. In the early twentieth century it was of one of Australia's foremost plant nurseries, and was described in 1920 as the largest nursery in the southern hemisphere. It was the originator of an extensive range of exotic plants and fruit trees, supplied other prominent nurseries of the era, and influenced garden and orchard plantings throughout Australia, as well as exporting to the USA, South America, South Africa, New Zealand, Europe and Asia. Through the supply of exotic trees to municipalities in many parts of Australia the Nobelius Nursery had a significant influence on Victoria's landscapes, including public parks, private gardens, orchards, avenues of honour and tree-shaded streets. The nursery is significant for its association with Carl Nobelius, important for his association with the Belgrave to Gembrook narrow gauge railway line, now part of the Puffing Billy Railway. This was a facility sought and heavily used by Nobelius in his nursery and orchard business, and included a siding serving his packing shed, and also provided the local farming and nursery industries with easier access to their markets and so contributed to the development of the Emerald region. Nobelius is significant in the horticultural history of Victoria for his investigations into plant selection, particularly their suitability for local climates.

The former Nobelius Nursery has scientific (botanical) significance for its site layout and linear planting, which demonstrate early methods of nursery production, cultivation and plant handling. It is significant for the retention of trees and other plantings from the time of occupation by Nobelius, including a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria, and an outstanding specimen of the cut-leaf black alder (*Alnus glutinosa* 'Laciniata'), as well as remnants of old nursery stock, Victoria's first plantings of Chinese Gooseberry (Kiwi fruit, *Actinidia chinensis*), and a recent collection of *Salvia* species and cultivars.

Permit Exemptions

General Conditions: 1. All exempted alterations are to be planned and carried out in a manner which prevents damage to the fabric of the registered place or object. General Conditions: 2. Should it become apparent during further inspection or the carrying out of works that original or previously hidden or inaccessible details of the place or object are revealed which relate to the significance of the place or object, then the exemption covering such works shall cease and Heritage Victoria shall be in accordance with it. Note: A conservation plan provides guidance for the management of the heritage values associated with the site. It may not be necessary to obtain a heritage permit for certain works specified in the management plan. General Conditions: 4. Nothing in this determination prevents the Executive Director from amending or rescinding all or any of the permit exemptions. General Conditions: 5. Nothing in this determination exempts owners or their agents from the responsibility to seek relevant planning or building permits from the responsible authorities where applicable. Landscape Maintenance : * The process of gardening, including mowing, hedge clipping, bedding displays, removal of dead shrubs and replanting the same species or cultivar, disease and weed control, and maintenance to care for existing plants. * Repairs, conservation, and maintenance to hard landscape elements, buildings and structures, fountains and monuments, steps, paths, paths and gutters, drainage and irrigation systems, edging,

fences and gates. * Removal of dead or dangerous trees and vegetation, works to maintain fire safety and to conserve significant buildings and structures and emergency works, provided a report is submitted to the Executive Director within 21 days. * Replanting the same plant species which conserves the significant landscape character and values including specimen trees, avenues, rows, shrubberies, flower beds, and lawns, provided a list and plan is submitted to the Executive Director for approval. * Management of trees in accordance with Australian Standard; Pruning of Amenity Trees AS 4373-1996. * Management of trees in accordance with Australian Standard: Protection of Trees on Development Sites AS 4970-2009 * Subsurface works involving the installation, removal or replacement of watering and drainage systems or services, outside the canopy edge of significant trees in accordance with .AS4970 and on the condition that works do not impact on archaeological features or deposits. * Removal of plants listed as noxious weeds in the Catchment and Land Protection Act 1994 * Vegetation protection and management of the possum and rabbit population. * Repainting the same colour of previously painted surfaces Minor Works : Note: Any Minor Works that in the opinion of the Executive Director will not adversely affect the heritage significance of the place may be exempt from the permit requirements of the Heritage Act. A person proposing to undertake minor works must submit a proposal to the Executive Director. If the Executive Director is satisfied that the proposed works will not adversely affect the heritage values of the site, the applicant may be exempted from the requirement to obtain a heritage permit. If an applicant is uncertain whether a heritage permit is required, it is recommended that the permits co-ordinator be contacted.

Theme

3. Connecting Victorians by transport and communications 4. Transforming and managing the land

Construction dates	1900, 1904,
Heritage Act Categories	Registered place,
Other Names	NOBELIUS HERITAGE PARK,
Hermes Number	3706
Property Number	

History

CONTEXTUAL HISTORY

During the nineteenth century there were several major commercial nurseries in Victoria. The early nurserymen introduced exotic plants, took part in acclimatisation experiments, developed hybrids, promoted the use of trees for both fruit production and ornamental purposes and examined the growth habits and suitability of plants for different climatic zones and soil types, and in doing so contributed to horticultural knowledge in the new colony. Some nurseries, notably that of Sangster, were also responsible for the design of many gardens. The nurseries were responsible for changes to the natural landscape by providing plants for private and public landscaping. Many significant trees are located in areas which were once part of these commercial nurseries, although it is not always clear who planted them.

Nobelius, Carl Axel (1851-1921)

(from entry in ADB by R F Ericksen)

Carl Axel Nobelius (1851-1921), orchardist and nurseryman, was born in 1851 in Finland, eldest child of a horticulturist. He was trained in horticulture and in February 1871 arrived in Melbourne. He was employed first in the Toorak nurseries of Taylor & Sangster. Later he moved to the nurseries of Joseph Harris in South Yarra, a step that had consequences, because Harris was an important influence in forging close links between himself, Brunning, Rimington, Cheeseman and Nobelius. Before 1900 these men were to control much of the nursery trade in Melbourne and were largely responsible for its successful combination of aggressive business drive, massive exports, strict quality control and restless inventiveness.

In about 1884 Nobelius bought land near Emerald in the Dandenong Hills and for years went each Saturday afternoon by train to Narre Warren terminus and then walked sixteen miles (26 km) to his land, where he cleared, cultivated and planted before walking back to catch the Sunday night train. By 1890 he had established his business at Emerald; fifty acres (20 ha) of orchard and nursery were under cultivation and he was doing well with raspberries and strawberries as well as hard fruit for the markets in Melbourne and Sydney. One handicap was the cost of carting his produce to Narre Warren by bullock drays, but he told the parliamentary standing committee on railways in 1898 that 'all these ranges ought to be planted with apples [which] are not suffering from the drought this year in the slightest'. In 1903 he was able to advertise a million trees for sale. By 1914 his 'Gembrook Nurseries' held two million stock trees, produced quantities of apples and pears, and conducted a huge export trade with other Australian States and overseas with New Zealand, South Africa, India, Japan, Europe and South America. The size of export is indicated by annual shipments of 400,000 tree stock to South Africa alone.

Nobelius's experimental skill and persistent advertising persuaded countless Australian country towns to line their streets with European shade trees and he made other contributions to Victorian horticulture, including a revival in the cultivation of flax. But the great heart of his business was the propagation and sale of fruit trees and fruit tree stock, augmented by a large apple and pear orchard which he established at Freshwater on the Tamar River in Tasmania.

The nurseries, which were run as a family business by Nobelius and four sons, and which sometimes employed almost every wage-earner within reach, dominated the economic and social life of the Emerald-Gembrook district. The high period ended when the outbreak of World War I in August 1914 destroyed the export trade and compelled contraction and reorganization, but in 1920 the nursery was said to be still the largest south of the equator.

Nobelius died of pneumonia at his home in Emerald on 31 December 1921. By direction of his will the nurseries and orchards were sold and the proceeds divided within the family. A son regained control of the central nursery and held it until 1955.

HISTORY OF PLACE

In 1877 land was released for subdivision and sale from the Dandenong State Forest, which included part of the Emerald area. In 1886 Carl Nobelius purchased from an earlier fruitgrower, H B Koenig, about 25 hectares of hilly, mostly heavily forested land, in what was later to become the Emerald Country Resort, with the help of a loan from his employers Taylor & Sangster. While still working at Taylor & Sangster's South Yarra nursery Nobelius began clearing his land at weekends, travelling by train on Saturday afternoons to the Narre Warren station, riding or walking the 25 km to Emerald, and catching the train back on Sunday evenings. He occupied a cottage built by Koenig in 1880. By 1890 he had established a small orchard of 6 hectares. He also leased another 35 ha immediately north of the Koenig allotment, which in 1891 he applied to select.

By 1892 Nobelius had established his own nursery business in Emerald, called Gembrook Nurseries after the name of the Parish, and with his wife and children (he was to have eleven, eight of whom survived) moved into a cottage on the corner of Sycamore Avenue and Lakeside Drive at Emerald. By 1898 the Gembrook Nursery comprised 20 ha, and in 1900 Nobelius purchased the freehold title. In 1898 as the nursery continued to prosper Nobelius was able to build an impressive 16-room house, Carramar, with an extensive garden of ornamental plants, both of which survive, on a hillside overlooking the nursery from the north. In 1900 he purchased adjoining allotments, with the nursery area increasing to 32 ha. By 1907 he claimed to have cleared a total of 121 ha (300 acres).

Nobelius travelled widely to promote his business, advertised widely and circulated attractive catalogues with tempting descriptions of the fruits from the trees available. The success of the nursery was also due to the reliability and cleanliness of its stock, and to Nobelius's shrewd business sense, which enabled the business to grow throughout the 1890s depression by selling large numbers of trees to local and state governments, which created jobs by developing parks and planting street trees.

Nobelius obtained seed from parks and orchards, from well-known suppliers of the day and from the fruit processing industry. He experimented with new varieties, importing from various parts of the world, for example apples from Sweden, France, the USA, Russia, the Baltic, Bohemia, England, New Zealand and Canada; and peaches from France, England, the USA and NZ, amongst others. As well as serving local needs, trees were exported overseas, including to the USA, New Zealand, South Africa, South America, Europe and Asia.

Nobelius was a strong advocate for the construction of a railway line to Emerald, to avoid the difficulties of transporting trees 25 km over rough tracks to the railway at Narre Warren. Construction of the narrow gauge line from Ferntree Gully through Emerald to Gembrook (later known as 'Puffing Billy') began in 1898 and in 1900 the narrow gauge line reached Gembrook, and in 1901 the Emerald station was opened. In 1904 a siding was built adjacent to the nursery and Nobelius was given permission to build a packing shed next to the line, bordering land newly acquired for the nursery.

By 1903 Nobelius was advertising that he had one million trees for sale. Between 1903 and 1906 he acquired new land to the south for growing nursery stock, known as the 'New Nurseries'. This had a frontage of more than 3 km to the new railway line. By 1909 the nursery had grown to more than 80 ha and two and a half million trees, with three million trees for sale just before World War I.

At its peak before World War I the nursery employed more than eighty workers, encouraging the growth of the town of Emerald and providing winter employment to many local fruit growers. Nobelius ventured into other business areas, including flax for the manufacture of rope and twine, rosemary and lavender for the cosmetic industry and berry growing, but fruit and ornamental trees were the mainstay of his enterprise.

At the beginning of the war Nobelius established a 40 hectare plantation of New Zealand Flax along the creek in what is now Emerald Lake Park. A small dam was made and a two-storey timber mill built below the present causeway across the lake for processing the raw fibre, and this operated from 1913 to 1926. The processed fibre was sent to Donaghy's Rope Works in Geelong or Kinnears in Melbourne to be made into rope and twine. The local eucalyptus oil industry led to the establishment of rosemary and lavender plantations in the present Lake Park area, but these enterprises collapsed during the war.

At the beginning of World War I two million trees had been planted on 180 hectares, including 50 hectares purchased in the late 1890s, the area now known as Emerald Lake Park. However the war devastated overseas markets, and the nursery never fully recovered. The beech, oaks, chestnuts and maples ploughed into the ground during this time have mingled with tree ferns and native shrubs to create a distinctive deciduous forest. Towards the end of World War I Nobelius was to supply trees for avenues of honour in many country towns.

Following the death of Nobelius in 1921, the Nobelius estate was sold to two syndicates. One acquired about 240 ha north of the Gembrook Road to form the Emerald Country Club Estate, including the present golf course and the residential properties along Lakeside Drive. In 1924 Carl's son Arch Nobelius acquired 36 ha. The rest of the property, consisting of one block of 35 ha, one of 70 ha and sheds, and one containing a house and 25 ha, purchased by another syndicate, included the area covered by the present Emerald Lake Park and the Nobelius Heritage Park. The second syndicate included Alfred Nicholas, who purchased many of the trees for his garden at Burnham Beeches from the Nobelius Nursery.

The second syndicate, headed by W.H.Treganowan was encouraged by the Nobelius family and others to develop their land as a park. A.V. Nobelius (a son) and a surveyor named Web supervised this development, during which several attempts to establish a main lake in the area failed and the idea was abandoned. The Emerald Progress Association pressured local shires to approach the Victorian State Government to acquire the area as a park. They were successful and in 1939 the purchase was made and further development began. A new lake of 3.5 acres was finally established by the Ferntree Gully Council, a small nursery was established to supply trees for replanting and Emerald Lake Park was opened to the public in 1941.

The nursery continued to operate, on the site of the present Nobelius Heritage Park and on additional leased land to the south of the railway line, under the name of C A Nobelius and Sons. It remained a family business, managed by Carl's sons Arch and Cliff Nobelius. The nursery's business office was located in the packing shed, with Cliff's wife, Daisy in charge.

The business remained largely wholesale. Major customers were still parks and gardens and retail nurseries, as well as orchardists. The Emerald Country Club was an important customer during the 1930s and early 1940s. In the 1930s trees were still being still being supplied to customers overseas, but with World War II this largely stopped. Late in 1939 there was an unprecedented strike by the nursery workers over low pay and poor conditions, and although the workers' demands were met (but only for the men, not the women) many of the workers eventually left, and new staff were difficult to attract. By 1943 only 15 staff remained.

The nursery continued to operate under the Nobelius family until 1955, when it was sold to nurserymen S and L Linton & Son of Clayton, though they kept the business name of C A Nobelius & Sons. The nursery was by now only 4.5 ha, with much of the former nursery land leased out. The Lintons built the cottage now known as Linton's cottage on the site of a former potting shed to serve as an office and caretaker's residence.

In 1967 the business was sold to Din San Nurseries, and it became Din San's Nobelius Nurseries, Emerald. In 1981 the nursery closed and the owners applied to subdivide the land for residential blocks. However a public campaign began to save it, it was purchased by the Shire of Sherbrooke with help by the State Government, and in 1988 it opened as a heritage and passive recreation area. Gus Ryberg, a former nursery employee became the voluntary curator, and developed a plan for the park that aimed to preserve the nursery environment as a reminder of its origins, for example planting in rows as for the nursery planting, while replacing old plantings and establishing new commemorative plantings. A row of apple trees commemorates the importance of both nursery production and fruit growing in the Emerald district. A row of raspberries commemorates the berry industry, in which Carl Nobelius played a significant role. Two rows of eucalypts, mountain ash (*Eucalyptus regnans*) and messmate (*Eucalyptus obliqua*), have been established to commemorate the timber industry that once thrived in the area. A row of Camden woollybutt (*Eucalyptus macarthuri*) at the eastern end of the park commemorates the importance of the one of Nobelius's less successful enterprises, but one that was significant elsewhere in Emerald. Continuing the Nobelius tradition of experimentation, a garden of salvias was planted in 1989 to trial and display a collection of the genus *Salvia* (sage) on behalf of the Garden Plant Conservation Association of Australia.

(The history above was added 14/2/2012. The section below was in Hermes before the above was added.)

Nobelius Heritage Park, Emerald (bounded by Emerald Lake Road, Princess Avenue, Emerald Lake Park and the Puffing Billy railway line), is a remnant of the former Gembrook Nurseries Emerald, established c1886 by Carl Axel Nobelius (1851-1921) and developed into Victoria's, and possibly Australia's, foremost plant nursery operation of its time. While Nobelius' early operations were initially developed on land elsewhere in Emerald, cultivation of this site is known to have been established c1903, in an expansion which formed the most important phase and the 'peak years' in the development of the Gembrook Nurseries. The scale and extent of Nobelius' operations, demonstrated in the records of his extensive export markets, included USA, South America, South Africa, Europe and Asia, India and New Zealand. During the First World War (1914-18) the loss of overseas markets led to a decline in the Victorian and Australian nursery business. Nevertheless, Nobelius' drive to further expand business continued, for example, as shown by the purchase of land and development of apple orcharding operations in Tasmania which are thought to have constituted the largest of their kind at the time in the Southern Hemisphere. A significant figure in the development of Emerald and its community, Nobelius successfully lobbied for the establishment of the narrow gauge railway line (originally running from Ferntree Gully to Gembrook and now commonly associated with Puffing Billy) as a key facility for the transport and distribution of nursery plants as well as other local agricultural products. The railway was heavily used by Nobelius in his nursery and orchard business, and a siding and at least one packing shed adjacent to the Park remain from this period. The timing of purchase of the Nobelius Heritage Park land, with direct railway frontage, correlates directly with the establishment of the rail operations, and shows a clear anticipation by Nobelius of the economic potential this new service could offer. After Nobelius' death, nursery operations were purchased by a syndicate, and continued on this site under various names and owners (and over various areas of land), including as Nobelius Stations Estates (on land including the present Park site) and Emerald Pty Ltd. Nobelius' sons Cliff and Arch were involved in the operations at least at a site management level if not in ownership. Nursery operations on-site were continued under the Nobelius name from 1955 by Linton & Son, and subsequently by E. Smith when it functioned as the Din San's Nurseries Emerald until 1981. In 1981, Nobelius Heritage Park was purchased by the former Sherbrooke Shire in response to community lobbying and with State financial assistance, to commemorate and salvage land associated with the once-great nursery operations of Nobelius.

Assessment Against Criteria

a. Importance to the course, or pattern, of Victoria's cultural history

The former Nobelius Nursery is part of the vast Gembrook Nursery established by Carl Axel Nobelius from 1892. In the early twentieth century it was of one of Australia's foremost plant nurseries, and was described in 1920 as the largest nursery in the southern hemisphere. It was the originator of an extensive range of exotic plants and fruit trees, supplied other prominent nurseries of the era, and influenced garden and orchard plantings throughout Australia, as well as exporting to the USA, South America, South Africa, New Zealand, Europe and Asia. Through the supply of exotic trees to municipalities in many parts of Australia the Nobelius Nursery had a significant influence on Victoria's landscapes, including public parks, private gardens, orchards, avenues of honour and tree-shaded streets.

b. Possession of uncommon, rare or endangered aspects of Victoria's cultural history.

The former Nobelius Nursery is significant for the retention of trees and other plantings from the time of occupation by Nobelius, including a rare Rewarewa (*Knightia excelsa*), the largest specimen of this rare tree in Victoria, and an outstanding specimen of the cut-leaf black alder (*Alnus glutinosa* 'Laciniata'), as well as remnants of old nursery stock.

c. Potential to yield information that will contribute to an understanding of Victoria's cultural history.

d. Importance in demonstrating the principal characteristics of a class of cultural places or environments.

The former Nobelius Nursery has scientific (botanical) significance for its site layout and linear planting, which demonstrate early methods of nursery production, cultivation and plant handling.

e. Importance in exhibiting particular aesthetic characteristics.

f. Importance in demonstrating a high degree of creative or technical achievement at a particular period.

g. Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons. This includes the significance of a place to Indigenous peoples as part of their continuing and developing cultural traditions.

h. Special association with the life or works of a person, or group of persons, of importance in Victoria's history.

The nursery is significant for its association with Carl Nobelius, who is important for his association with the Belgrave to Gembrook narrow gauge railway line, now part of the Puffing Billy Railway. This was a facility sought and heavily used by Nobelius in his nursery and orchard business, and included a siding serving his adjacent packing shed, and also provided the local farming and nursery industries with easier access to their markets and so contributed to the development of the Emerald region. Nobelius is significant in the horticultural history of Victoria for his investigations into plant selection, particularly their suitability for local climates.

Plaque Citation

This is a remnant of the once vast Gembrook Nursery, developed by Carl Nobelius from 1886, which became one of Australia's major nurseries and was influential in the plantings of the state's gardens, landscapes and orchards.

Extent of Registration

1. All of the land marked L1 on Diagram 2285 held by the Executive Director being all of Consolidation Plan 247552, and part of the road reserve of Crichton Road and part of Lot 1 on Title Plan 515885 bounded to the

south by, but not including, the railway mainline

2. All of theformer packing shedmarked B1 and the railway siding marked F1 on Diagram 2285 held by the Executive Director

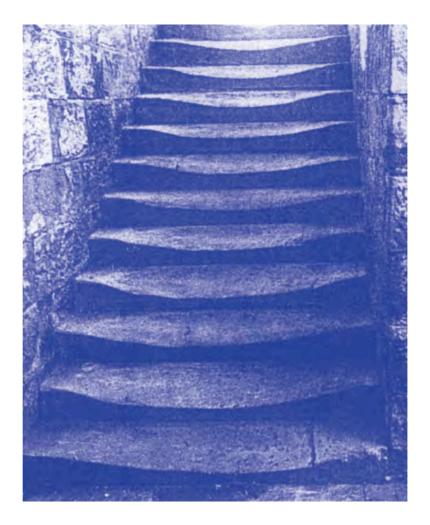
General: The landscape and the mature trees

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place data owner.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online<u>http://planningschemes.dpcd.vic.gov.au/</u>

THE BURRA CHARTER

The Australia ICOMOS Charter for Places of Cultural Significance 2013





Australia ICOMOS Incorporated International Council on Monuments and Sites

ICOMOS

ICOMOS (International Council on Monuments and Sites) is a non-governmental professional organisation formed in 1965, with headquarters in Paris. ICOMOS is primarily concerned with the philosophy, terminology, methodology and techniques of cultural heritage conservation. It is closely linked to UNESCO, particularly in its role under the World Heritage Convention 1972 as UNESCO's principal adviser on cultural matters related to World Heritage. The 11,000 members of ICOMOS include architects, town planners, demographers, archaeologists, geographers, historians, conservators, anthropologists, scientists, engineers and heritage administrators. Members in the 103 countries belonging to ICOMOS are formed into National Committees and participate in a range of conservation projects, research work, intercultural exchanges and cooperative activities. ICOMOS also has 27 International Scientific Committees that focus on particular aspects of the conservation field. ICOMOS members meet triennially in a General Assembly.

Australia ICOMOS

The Australian National Committee of ICOMOS (Australia ICOMOS) was formed in 1976. It elects an Executive Committee of 15 members, which is responsible for carrying out national programs and participating in decisions of ICOMOS as an international organisation. It provides expert advice as required by ICOMOS, especially in its relationship with the World Heritage Committee. Australia ICOMOS acts as a national and international link between public authorities, institutions and individuals involved in the study and conservation of all places of cultural significance. Australia ICOMOS members participate in a range of conservation activities including site visits, training, conferences and meetings.

Revision of the Burra Charter

The Burra Charter was first adopted in 1979 at the historic South Australian mining town of Burra. Minor revisions were made in 1981 and 1988, with more substantial changes in 1999.

Following a review this version was adopted by Australia ICOMOS in October 2013.

The review process included replacement of the 1988 Guidelines to the Burra Charter with Practice Notes which are available at: australia.icomos.org

Australia ICOMOS documents are periodically reviewed and we welcome any comments.

Citing the Burra Charter

The full reference is *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance,* 2013. Initial textual references should be in the form of the *Australia ICOMOS Burra Charter,* 2013 and later references in the short form (*Burra Charter*).

© Australia ICOMOS Incorporated 2013

The Burra Charter consists of the Preamble, Articles, Explanatory Notes and the flow chart.

This publication may be reproduced, but only in its entirety including the front cover and this page. Formatting must remain unaltered. Parts of the Burra Charter may be quoted with appropriate citing and acknowledgement.

Cover photograph by Ian Stapleton.

Australia ICOMOS Incorporated [ARBN 155 731 025] Secretariat: c/o Faculty of Arts Deakin University Burwood, VIC 3125 Australia

http://australia.icomos.org/

ISBN 0 9578528 4 3

The Burra Charter

(The Australia ICOMOS Charter for Places of Cultural Significance, 2013)

Preamble

Considering the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1964), and the Resolutions of the 5th General Assembly of the International Council on Monuments and Sites (ICOMOS) (Moscow 1978), the Burra Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) on 19 August 1979 at Burra, South Australia. Revisions were adopted on 23 February 1981, 23 April 1988, 26 November 1999 and 31 October 2013.

The Burra Charter provides guidance for the conservation and management of places of cultural significance (cultural heritage places), and is based on the knowledge and experience of Australia ICOMOS members.

Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility.

Who is the Charter for?

The Charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

Using the Charter

The Charter should be read as a whole. Many articles are interdependent.

The Charter consists of:

٠	Definitions	Article 1		
		A 11 1 0 10		

- Articles 2–13 **Conservation Principles** ٠ **Conservation Processes** ٠
- Articles 14-25 • Articles 26-34
- **Conservation Practices**
- The Burra Charter Process flow chart.

The key concepts are included in the Conservation Principles section and these are further developed in the Conservation Processes and Conservation Practice sections. The flow chart explains the Burra Charter Process (Article 6) and is an integral part of the Charter. Explanatory Notes also form part of the Charter.

The Charter is self-contained, but aspects of its use and application are further explained, in a series of Australia ICOMOS Practice Notes, in The Illustrated Burra Charter, and in other guiding documents available from the Australia ICOMOS web site: australia.icomos.org.

What places does the Charter apply to?

The Charter can be applied to all types of places of cultural significance including natural, Indigenous and historic places with cultural values.

The standards of other organisations may also be relevant. These include the Australian Natural Heritage Charter, Ask First: a guide to respecting Indigenous heritage places and values and Significance 2.0: a guide to assessing the significance of collections.

National and international charters and other doctrine may be relevant. See australia.icomos.org.

Why conserve?

Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations in accordance with the principle of inter-generational equity.

The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

Article 1. Definitions

For the purposes of this Charter:

- 1.1 *Place* means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.
- 1.2 *Cultural significance* means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the *place* itself, its *fabric*, *setting*, *use*, *associations*, *meanings*, records, *related places* and *related objects*.

Places may have a range of values for different individuals or groups.

- 1.3 *Fabric* means all the physical material of the *place* including elements, fixtures, contents and objects.
- 1.4 *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance*.
- 1.5 *Maintenance* means the continuous protective care of a *place*, and its *setting*.

Maintenance is to be distinguished from repair which involves *restoration* or *reconstruction*.

- 1.6 *Preservation* means maintaining a *place* in its existing state and retarding deterioration.
- 1.7 *Restoration* means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.
- 1.8 *Reconstruction* means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material.
- 1.9 *Adaptation* means changing a *place* to suit the existing *use* or a proposed use.
- 1.10 *Use* means the functions of a *place*, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

Explanatory Notes

Place has a broad scope and includes natural and cultural features. Place can be large or small: for example, a memorial, a tree, an individual building or group of buildings, the location of an historical event, an urban area or town, a cultural landscape, a garden, an industrial plant, a shipwreck, a site with in situ remains, a stone arrangement, a road or travel route, a community meeting place, a site with spiritual or religious connections.

The term cultural significance is synonymous with cultural heritage significance and cultural heritage value.

Cultural significance may change over time and with use.

Understanding of cultural significance may change as a result of new information.

Fabric includes building interiors and subsurface remains, as well as excavated material.

Natural elements of a place may also constitute fabric. For example the rocks that signify a Dreaming place.

Fabric may define spaces and views and these may be part of the significance of the place.

See also Article 14.

Examples of protective care include:

- maintenance regular inspection and cleaning of a place, e.g. mowing and pruning in a garden;
- repair involving restoration returning dislodged or relocated fabric to its original location e.g. loose roof gutters on a building or displaced rocks in a stone bora ring;
- repair involving reconstruction replacing decayed fabric with new fabric

It is recognised that all places and their elements change over time at varying rates.

New material may include recycled material salvaged from other places. This should not be to the detriment of any place of cultural significance.

Use includes for example cultural practices commonly associated with Indigenous peoples such as ceremonies, hunting and fishing, and fulfillment of traditional obligations. Exercising a right of access may be a use.

- 1.11 *Compatible use* means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.
- 1.12 *Setting* means the immediate and extended environment of a *place* that is part of or contributes to its *cultural significance* and distinctive character.
- 1.13 *Related place* means a *place* that contributes to the *cultural significance* of another place.
- 1.14 *Related object* means an object that contributes to the *cultural significance* of a *place* but is not at the place.
- 1.15 *Associations* mean the connections that exist between people and a *place*.
- 1.16 *Meanings* denote what a *place* signifies, indicates, evokes or expresses to people.
- 1.17 *Interpretation* means all the ways of presenting the *cultural significance* of a *place*.

Conservation Principles

Article 2. Conservation and management

- 2.1 *Places* of *cultural significance* should be conserved.
- 2.2 The aim of *conservation* is to retain the *cultural significance* of a *place*.
- 2.3 *Conservation* is an integral part of good management of *places* of *cultural significance*.
- 2.4 *Places* of *cultural significance* should be safeguarded and not put at risk or left in a vulnerable state.

Article 3. Cautious approach

- 3.1 *Conservation* is based on a respect for the existing *fabric, use, associations* and *meanings*. It requires a cautious approach of changing as much as necessary but as little as possible.
- 3.2 Changes to a *place* should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 4. Knowledge, skills and techniques

4.1 *Conservation* should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the *place*.

The Burra Charter, 2013

Explanatory Notes

Setting may include: structures, spaces, land, water and sky; the visual setting including views to and from the place, and along a cultural route; and other sensory aspects of the setting such as smells and sounds. Setting may also include historical and contemporary relationships, such as use and activities, social and spiritual practices, and relationships with other places, both tangible and intangible.

Objects at a place are encompassed by the definition of place, and may or may not contribute to its cultural significance.

Associations may include social or spiritual values and cultural responsibilities for a place.

Meanings generally relate to intangible dimensions such as symbolic qualities and memories.

Interpretation may be a combination of the treatment of the fabric (e.g. maintenance, restoration, reconstruction); the use of and activities at the place; and the use of introduced explanatory material.

The traces of additions, alterations and earlier treatments to the fabric of a place are evidence of its history and uses which may be part of its significance. Conservation action should assist and not impede their understanding.

4.2 Traditional techniques and materials are preferred for the *conservation* of significant *fabric*. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.

Article 5. Values

- 5.1 *Conservation* of a *place* should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.
- 5.2 Relative degrees of *cultural significance* may lead to different *conservation* actions at a place.

Article 6. Burra Charter Process

- 6.1 The *cultural significance* of a *place* and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy. This is the Burra Charter Process.
- 6.2 Policy for managing a *place* must be based on an understanding of its *cultural significance*.
- 6.3 Policy development should also include consideration of other factors affecting the future of a *place* such as the owner's needs, resources, external constraints and its physical condition.
- 6.4 In developing an effective policy, different ways to retain *cultural significance* and address other factors may need to be explored.
- 6.5 Changes in circumstances, or new information or perspectives, may require reiteration of part or all of the Burra Charter Process.

Article 7. Use

- 7.1 Where the *use* of a *place* is of *cultural significance* it should be retained.
- 7.2 A *place* should have a *compatible use*.

Explanatory Notes

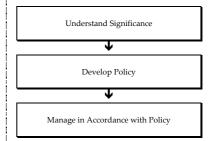
The use of modern materials and techniques must be supported by firm scientific evidence or by a body of experience.

Conservation of places with natural significance is explained in the Australian Natural Heritage Charter. This Charter defines natural significance to mean the importance of ecosystems, biodiversity and geodiversity for their existence value or for present or future generations, in terms of their scientific, social, aesthetic and life-support value.

In some cultures, natural and cultural values are indivisible.

A cautious approach is needed, as understanding of cultural significance may change. This article should not be used to justify actions which do not retain cultural significance.

The Burra Charter Process, or sequence of investigations, decisions and actions, is illustrated below and in more detail in the accompanying flow chart which forms part of the Charter.



Options considered may include a range of uses and changes (e.g. adaptation) to a place.

The policy should identify a use or combination of uses or constraints on uses that retain the cultural significance of the place. New use of a place should involve minimal change to significant fabric and use; should respect associations and meanings; and where appropriate should provide for continuation of activities and practices which contribute to the cultural significance of the place.

Article 8. Setting

Conservation requires the retention of an appropriate *setting*. This includes retention of the visual and sensory setting, as well as the retention of spiritual and other cultural relationships that contribute to the *cultural significance* of the *place*.

New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.

Article 9. Location

- 9.1 The physical location of a *place* is part of its *cultural significance*. A building, work or other element of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
- 9.2 Some buildings, works or other elements of *places* were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other elements do not have significant links with their present location, removal may be appropriate.
- 9.3 If any building, work or other element is moved, it should be moved to an appropriate location and given an appropriate *use*. Such action should not be to the detriment of any *place* of *cultural significance*.

Article 10. Contents

Contents, fixtures and objects which contribute to the *cultural significance* of a *place* should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and *preservation*; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.

Article 11. Related places and objects

The contribution which *related places* and *related objects* make to the *cultural significance* of the *place* should be retained.

Article 12. Participation

Conservation, interpretation and management of a *place* should provide for the participation of people for whom the place has significant *associations* and *meanings,* or who have social, spiritual or other cultural responsibilities for the place.

Article 13. Co-existence of cultural values

Co-existence of cultural values should always be recognised, respected and encouraged. This is especially important in cases where they conflict.

Explanatory Notes

Setting is explained in Article 1.12.

For example, the repatriation (returning) of an object or element to a place may be important to Indigenous cultures, and may be essential to the retention of its cultural significance.

Article 28 covers the circumstances where significant fabric might be disturbed, for example, during archaeological excavation.

Article 33 deals with significant fabric that has been removed from a place.

For some places, conflicting cultural values may affect policy development and management decisions. In Article 13, the term cultural values refers to those beliefs which are important to a cultural group, including but not limited to political, religious, spiritual and moral beliefs. This is broader than values associated with cultural significance.

Conservation Processes

Article 14. Conservation processes

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a *use*; retention of *associations* and *meanings*; *maintenance*, *preservation*, *restoration*, *reconstruction*, *adaptation* and *interpretation*; and will commonly include a combination of more than one of these. Conservation may also include retention of the contribution that *related places* and *related objects* make to the *cultural significance* of a *place*.

Article 15. Change

- 15.1 Change may be necessary to retain *cultural significance*, but is undesirable where it reduces cultural significance. The amount of change to a *place* and its *use* should be guided by the *cultural significance* of the place and its appropriate *interpretation*.
- 15.2 Changes which reduce *cultural significance* should be reversible, and be reversed when circumstances permit.
- 15.3 Demolition of significant *fabric* of a *place* is generally not acceptable. However, in some cases minor demolition may be appropriate as part of *conservation*. Removed significant fabric should be reinstated when circumstances permit.
- 15.4 The contributions of all aspects of *cultural significance* of a *place* should be respected. If a place includes *fabric, uses, associations* or *meanings* of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.

Article 16. Maintenance

Maintenance is fundamental to *conservation*. Maintenance should be undertaken where *fabric* is of *cultural significance* and its maintenance is necessary to retain that *cultural significance*.

Article 17. Preservation

Preservation is appropriate where the existing *fabric* or its condition constitutes evidence of *cultural significance*, or where insufficient evidence is available to allow other *conservation* processes to be carried out.

6 — Australia ICOMOS Incorporated

Explanatory Notes

Conservation normally seeks to slow deterioration unless the significance of the place dictates otherwise. There may be circumstances where no action is required to achieve conservation.

When change is being considered, including for a temporary use, a range of options should be explored to seek the option which minimises any reduction to its cultural significance.

It may be appropriate to change a place where this reflects a change in cultural meanings or practices at the place, but the significance of the place should always be respected.

Reversible changes should be considered temporary. Non-reversible change should only be used as a last resort and should not prevent future conservation action.

Maintaining a place may be important to the fulfilment of traditional laws and customs in some Indigenous communities and other cultural groups.

Preservation protects fabric without obscuring evidence of its construction and use. The process should always be applied:

- where the evidence of the fabric is of such significance that it should not be altered; or
- where insufficient investigation has been carried out to permit policy decisions to be taken in accord with Articles 26 to 28.

New work (e.g. stabilisation) may be carried out in association with preservation when its purpose is the physical protection of the fabric and when it is consistent with Article 22.

Article 18. Restoration and reconstruction

Restoration and *reconstruction* should reveal culturally significant aspects of the *place*.

Article 19. Restoration

Restoration is appropriate only if there is sufficient evidence of an earlier state of the *fabric*.

Article 20. Reconstruction

- 20.1 *Reconstruction* is appropriate only where a *place* is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the *fabric*. In some cases, reconstruction may also be appropriate as part of a *use* or practice that retains the *cultural significance* of the place.
- 20.2 *Reconstruction* should be identifiable on close inspection or through additional *interpretation*.

Article 21. Adaptation

- 21.1 *Adaptation* is acceptable only where the adaptation has minimal impact on the *cultural significance* of the *place*.
- 21.2 *Adaptation* should involve minimal change to significant *fabric*, achieved only after considering alternatives.
- Article 22. New work
- 22.1 New work such as additions or other changes to the *place* may be acceptable where it respects and does not distort or obscure the *cultural significance* of the place, or detract from its *interpretation* and appreciation.
- 22.2 New work should be readily identifiable as such, but must respect and have minimal impact on the *cultural significance* of the *place*.

Article 23. Retaining or reintroducing use

Retaining, modifying or reintroducing a significant *use* may be appropriate and preferred forms of *conservation*.

Article 24. Retaining associations and meanings

- 24.1 Significant *associations* between people and a *place* should be respected, retained and not obscured. Opportunities for the *interpretation*, commemoration and celebration of these associations should be investigated and implemented.
- 24.2 Significant *meanings*, including spiritual values, of a *place* should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.

Explanatory Notes

Places with social or spiritual value may warrant reconstruction, even though very little may remain (e.g. only building footings or tree stumps following fire, flood or storm). The requirement for sufficient evidence to reproduce an earlier state still applies.

Adaptation may involve additions to the place, the introduction of new services, or a new use, or changes to safeguard the place. Adaptation of a place for a new use is often referred to as 'adaptive re-use' and should be consistent with Article 7.2.

New work should respect the significance of a place through consideration of its siting, bulk, form, scale, character, colour, texture and material. Imitation should generally be avoided.

New work should be consistent with Articles 3, 5, 8, 15, 21 and 22.1.

These may require changes to significant fabric but they should be minimised. In some cases, continuing a significant use, activity or practice may involve substantial new work.

For many places associations will be linked to aspects of use, including activities and practices.

Some associations and meanings may not be apparent and will require research.

Article 25. Interpretation

The *cultural significance* of many *places* is not readily apparent, and should be explained by *interpretation*. Interpretation should enhance understanding and engagement, and be culturally appropriate.

Conservation Practice

Article 26. Applying the Burra Charter Process

- 26.1 Work on a *place* should be preceded by studies to understand the place which should include analysis of physical, documentary, oral and other evidence, drawing on appropriate knowledge, skills and disciplines.
- 26.2 Written statements of *cultural significance* and policy for the *place* should be prepared, justified and accompanied by supporting evidence. The statements of significance and policy should be incorporated into a management plan for the place.
- 26.3 Groups and individuals with *associations* with the *place* as well as those involved in its management should be provided with opportunities to contribute to and participate in identifying and understanding the *cultural significance* of the place. Where appropriate they should also have opportunities to participate in its *conservation* and management.
- 26.4 Statements of *cultural significance* and policy for the *place* should be periodically reviewed, and actions and their consequences monitored to ensure continuing appropriateness and effectiveness.
- Article 27. Managing change
- 27.1 The impact of proposed changes, including incremental changes, on the *cultural significance* of a *place* should be assessed with reference to the statement of significance and the policy for managing the place. It may be necessary to modify proposed changes to better retain cultural significance.
- 27.2 Existing *fabric, use, associations* and *meanings* should be adequately recorded before and after any changes are made to the *place*.
- Article 28. Disturbance of fabric
- 28.1 Disturbance of significant *fabric* for study, or to obtain evidence, should be minimised. Study of a *place* by any disturbance of the fabric, including archaeological excavation, should only be undertaken to provide data essential for decisions on the *conservation* of the place, or to obtain important evidence about to be lost or made inaccessible.

Explanatory Notes

In some circumstances any form of interpretation may be culturally inappropriate.

The results of studies should be kept up to date, regularly reviewed and revised as necessary.

Policy should address all relevant issues, e.g. use, interpretation, management and change.

A management plan is a useful document for recording the Burra Charter Process, i.e. the steps in planning for and managing a place of cultural significance (Article 6.1 and flow chart). Such plans are often called conservation management plans and sometimes have other names.

The management plan may deal with other matters related to the management of the place.

Monitor actions taken in case there are also unintended consequences.

28.2 Investigation of a *place* which requires disturbance of the *fabric*, apart from that necessary to make decisions, may be appropriate provided that it is consistent with the policy for the place. Such investigation should be based on important research questions which have potential to substantially add to knowledge, which cannot be answered in other ways and which minimises disturbance of significant fabric.

Article 29. Responsibility

The organisations and individuals responsible for management and decisions should be named and specific responsibility taken for each decision.

Article 30. Direction, supervision and implementation

Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.

Article 31. Keeping a log

New evidence may come to light while implementing policy or a plan for a *place*. Other factors may arise and require new decisions. A log of new evidence and additional decisions should be kept.

Article 32. Records

- 32.1 The records associated with the *conservation* of a *place* should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.
- 32.2 Records about the history of a *place* should be protected and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.

Article 33. Removed fabric

Significant *fabric* which has been removed from a *place* including contents, fixtures and objects, should be catalogued, and protected in accordance with its *cultural significance*.

Where possible and culturally appropriate, removed significant fabric including contents, fixtures and objects, should be kept at the place.

Article 34. Resources

Adequate resources should be provided for conservation.

Words in italics are defined in Article 1.

Explanatory Notes

New decisions should respect and have minimal impact on the cultural significance of the place.

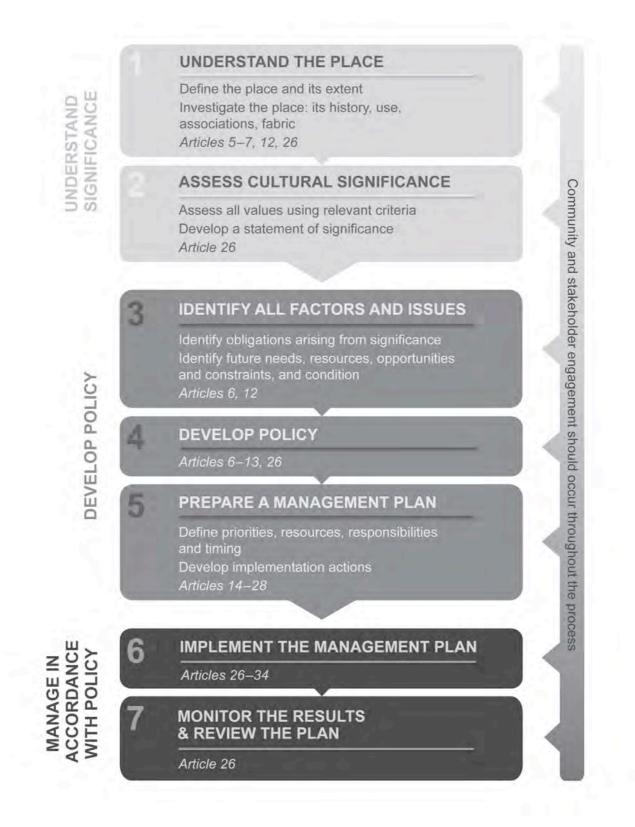
The best conservation often involves the least work and can be inexpensive.

The Burra Charter Process

Steps in planning for and managing a place of cultural significance

The Burra Charter should be read as a whole.

Key articles relevant to each step are shown in the boxes. Article 6 summarises the Burra Charter Process.









X

 \bigcirc

Ρ

êlê

0

0

3

4

6

6

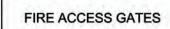
1

8

9

10

-



WISHING WELL

CAR PARK

MUSEUM TOILET BLOCK

WSUD

LINTON'S COTTAGE

ROTUNDA

CONCRETE TANK

BORE PUMP

FLAX PLANTS

C.A NOBELIUS MEMORIAL

GUS RYBERG MEMORIAL

KIWI FRUIT

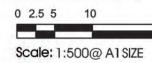
BAND PLATFORM

CREEKS PLOTTED INDICATIVELY ON THIS PLAN -DERIVED FROM NEARMAP AERIAL IMAGE

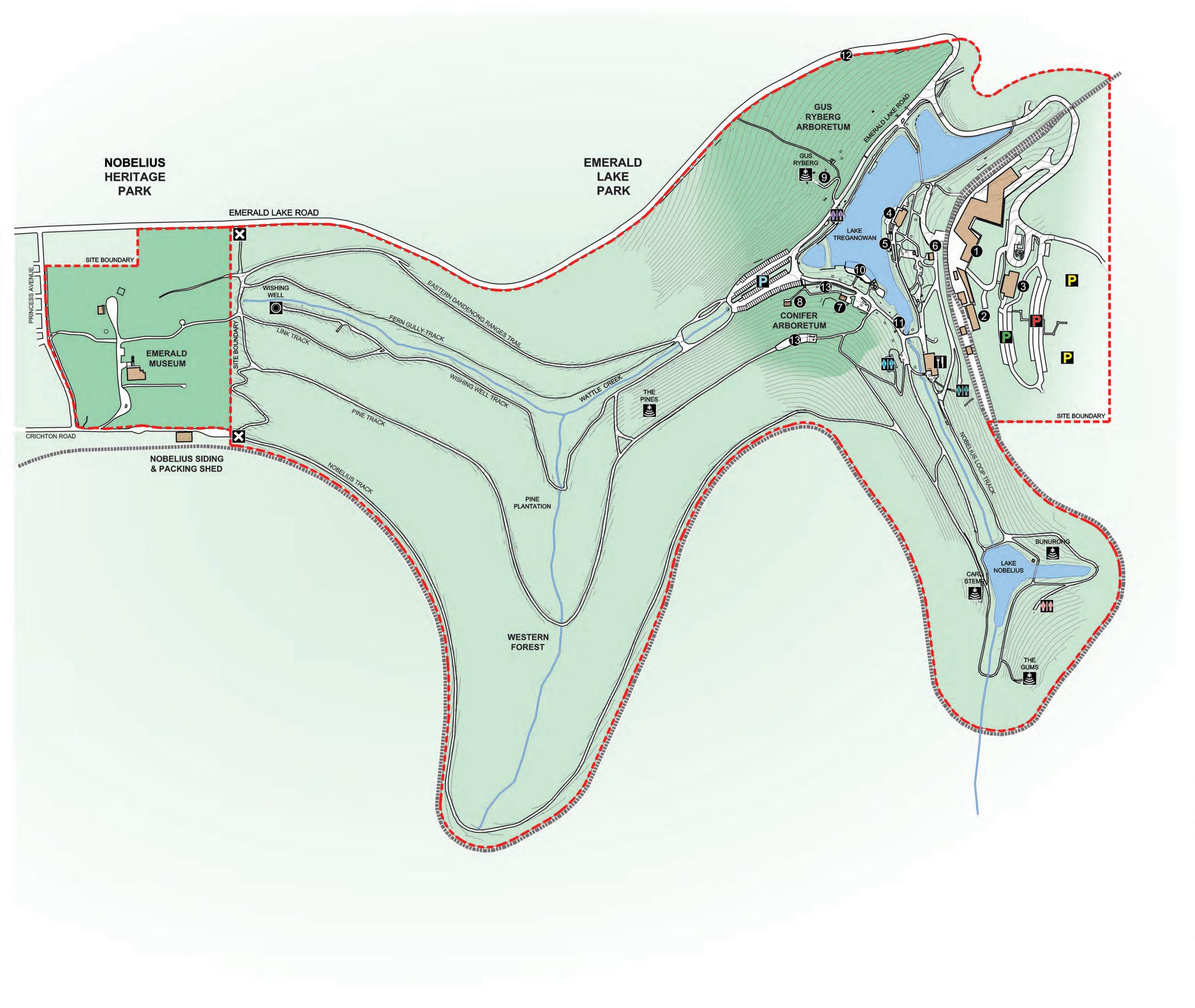
PUFFING BILLY RAIL TRACK PLOTTED INDICATIVELY ON THIS PLAN -DERIVED FROM NEARMAP AERIAL IMAGE

SITE BOUNDARY

NOBELIUS HERITAGE PARK PART PLAN



25m



LEGEND .∈))) Ψ١ × \bigcirc **†**|† Ŷ **†**|† **†**|† P P P P 1 **2 3** 4 5 6 0 SITE BOUNDARY

	AMPHITHEATRES
	EMERALD LAKE PARK CAFE
	FIRE ACCESS GATES
	WISHING WELL
	LAKE NOBELIUS TOILET BLOCK
]	CAFE TOILET BLOCK
	BANDSTAND TOILET BLOCK
	LAKE TREGANOWAN TOILET BLOCK
	LAKESIDE CAR PARK
	BELLBIRD CAR PARK
]	LION'S DEN CAR PARK CONCEPT ONLY& SUBJECT TO CHANGE
	MODEL RAILWAY CAR PARK CONCEPT ONLY& SUBJECT TO CHANGE
	PUFFING BILLY LAKESIDE VISITOR CENTRE
]	LAKESIDE STATION
]	MODEL RAILWAY
	LAKESIDE OFFICE
	LAKESIDE PADDLEBOATS
	BOATSHED SHELTER
	POOLSIDE SHELTER
	LAKESIDE SHELTER
	MURALS
	WADING POOL
	BANDSTAND ROTUNDA
	TICKET BOX
	PLAY & FITNESS EQUIPMENT
]	LAKES PLOTTED INDICATIVELY ON THIS PLAN - DERIVED FROM NEARMAP AERIAL IMAGE
	CREEKS PLOTTED INDICATIVELY ON THIS PLAN - DERIVED FROM NEARMAP AERIAL IMAGE
	PUFFING BILLY RAIL TRACK PLOTTED INDICATIVELY ON THIS PLAN - DERIVED FROM NEARMAP AERIAL IMAGE

EMERALD LAKE PRECINCT PLAN



Nobelius Heritage Park

Tree List from Homewood Consulting Arborist Report

Botanical name	Common name	Botanical name	Common name
Abies alba	Silver Fir	Cupressus sempervirens	Italian Cypress
Abies nordmanniana	Caucasian Fir	Cupressus sempervirens 'Stricta'	Pencil Pine
Abies pinsapo	Spanish Fir	Cupressus sempervirens 'Swane's Golden'	Swane's Golden Pencil Pine
Acer japonicum	Full Moon Maple	Eucalyptus macarthurii	Camden Woollybutt
Acer negundo	Box Elder	Eucalyptus obliqua	Messmate Stringybark
Acer palmatum	Japanese Maple	Eucalyptus radiata	Narrow-leaved Peppermint
Acer platanoides	Norway Maple	Eucalyptus regnans	Mountain Ash
Acer rubrum	Canadian Maple	Fagus sylvatica 'Purple Group'	Purple Beech
Acer saccharinum	Silver Maple	Fraxinus angustifolia	Narrow-leaved Ash
Acer tartaricum	Amur Maple	Ginkgo biloba	Maidenhair Tree
Alnus cordata	Italian Alder	Gleditsia triacanthos	Honey Locust
Alnus glutinosa	Black Alder	Gleditsia triacanthos 'Elegantissima'	Thornless Compact Gleditsia
Araucaria heterophylla	Norfolk Island Pine	Hesperocyparis arizonica	Arizona Cypress
Arbutus unedo	Irish Strawberry Tree	Hesperocyparis arizonica 'Glabra'	Smooth Arizona Cypress
Betula papyrifera	Paper Birch	Hesperocyparis macrocarpa	Monterey Cypress
Betula pendula	Silver Birch	Hesperocyparis macrocarpa 'Saligna Aurea'	Weeping Monterey Cypress
Brachychiton acerifolius	Illawarra Flame Tree	llex cornuta	Chinese Holly
Callitris columellaris	Coastal Cypress Pine	Knightia excelsa	Rewarewa
Catalpa bignonioides	Indian Bean Tree	Liquidambar styraciflua	Liquidamber
Cedrus atlantica	Atlas Cedar	Liriodendron tulipifera	Tulip Tree
Cedrus atlantica f. glauca	Blue Atlas Cedar	Magnolia acuminata	Cucumber Tree
Cedrus deodara	Deodar	Magnolia grandiflora	Bull Bay
Celtis australis	European Nettle Tree	Magnolia liliiflora	Lily-flowered Magnolia
Cercis canadensis	Red Bud	Magnolia x soulangeana	Saucer Magnolia
Cercis siliquastrum	Judas Tree	Malus x domestica	Apple
Chamaecyparis Iawsoniana	Lawson's Cypress	Malus ioensis 'Plena'	Bechtel Crab
Chamaecyparis obtusa	Hinoki Cypress	Nothofagus cunninghamii	Myrtle Beech
Cinnamomum camphora	Camphor Laurel	Nothofagus fusca	Red Beech
Cornus capitata	Evergreen Dogwood	Nyssa sylvatica	Tupelo
Corylus avellana	Hazelnut	Parrotia persica	Persian Ironwood
Corymbia ficifolia	Red-flowering Gum	Photinia x fraseri 'Robusta'	Chinese Hawthorn
Cotinus coggygria	Smoke Bush	Picea abies	Norway Spruce

Crataegus laevigata	English Hawthorn	Pinus canariensis	Canary Island Pine
Crataegus monogyna	Мау	Pittosporum eugenioides 'Variegatum'	Silver Tarata
Cryptomeria japonica	Japanese Cedar	Platanus occidentalis	American Sycamore
Cryptomeria japonica 'Elegans'	Plume Cedar	Platanus x acerifolia	London Plane
Cunninghamia Ianceolata	Chinese Fir	Populus alba	White Poplar
xCupressocyparis leylandii	Leyland Cypress	Populus deltoides	Cottonwood
Cupressus cashmeriana	Kashmir Cypress	Populus nigra var. Italica	Lombardy Poplar
Botanical name	Common name		
Populus yunnanensis	Chinese Poplar		
Prunus 'Elvins'			
Prunus cerasifera 'Nigra'	Purple Cherry Plum		
Prunus persica	Peach		
Prunus serrulata	Japanese Flowering Cherry		
Pyrus communis	Common Pear		
Quercus 'Macedon'			
Quercus alba	White Oak		
Quercus coccinea	Scarlet Oak		
Quercus macrocarpa	Burr Oak		
Quercus palustris	Pin Oak		
Quercus rubra	Red Oak		
Sequoiadendron giganteum	Giant Redwood		
Sorbus aucuparia	Common Rowan		
Syzygium oleosum	Blue Lillypilly		
Taxus baccata	English Yew		
Thuja plicata	Western red Cedar		
Tilia cordata	Small-leaved Linden		
Toona sinensis			
Ulmus glabra	Wych Elm		
<i>Ulmus glabra</i> 'Camperdownii'	Weeping Elm		
Ulmus glabra 'Lutescens'	Golden Wych Elm		
Ulmus minor 'Variegata'	Silver Elm		
Ulmus parvifolia	Chinese Elm		
Ulmus x hollandica	Dutch Elm		