

CARLTON GARDENS NORTH - LIGHTING UPGRADE

HERITAGE IMPACT STATEMENT



March 2024

Prepared by:

Parks and City Greening Branch
City of Melbourne
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Date:

March 2024

Project details

Heritage Impact Statement for:
Royal Exhibition Building and Carlton Gardens

Victorian Heritage Register Number:

H1501

This Heritage Impact Statement forms part of a permit application for:

Installation of 8 new park lights on the north east path, four new activity lighting poles and one replacement lighting pole in the playground and picnic area precinct.

Pre-application meeting number:

P39198

The below is an edited summary of feedback provided by Heritage Victoria following a pre-application meeting on 1 February 2024:

- The works will require a permit application.
- Any application should rationalise the number and height of lighting poles, demonstrating the minimum number of lights proposed balanced with compliance requirements.
- The design of any new lighting poles should be contemporary and recessive in the landscape.
- Physical impacts on trees must be minimised and any application should discuss tree protection measures. It is likely that submission of a Tree Protection Plan would be required as part of permit conditions if the application is approved.
- Demonstrate how the proposed lighting considers any proposed tree succession planting locations.
- Consider addressing reasonable use considerations under s101(2)(b) of the Act, demonstrating how refusal of the application may limit the continued reasonable use of the heritage place into the future.

Address and location description:

The proposal is for Carlton Gardens North (1-111 Carlton Street, Carlton VIC 3053), bounded by Carlton Street to the north, Nicholson Street to the east, Rathdowne Street to the west, and the Melbourne Museum and Exhibition Reserve to the South.

Refer Figure O1 below.

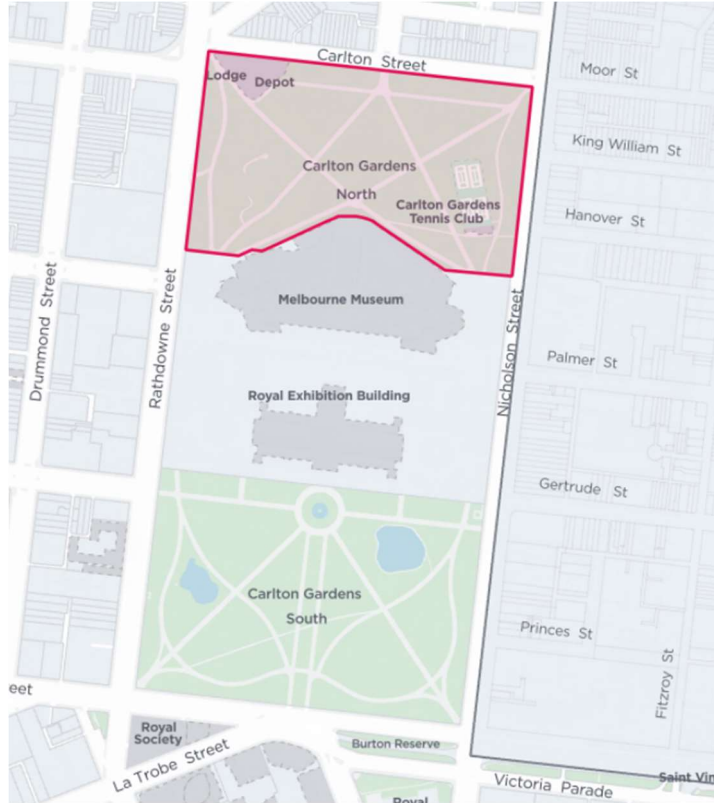


Figure O1. Context plan of Carlton Gardens North

Significance of the place or object

The cultural heritage significance of the place or object

The Royal Exhibition Buildings and Carlton Gardens were inscribed on the UNESCO World Heritage List on 1 July 2004. The same area is included on the VHR list at VHR 1501.

The site was inscribed under Criterion (ii) of the Operational Guidelines for the UNESCO World Heritage Convention (1972) as follows:

The Royal Exhibition Building and the surrounding Carlton Gardens, as the main extant survivors of a Palace of Industry and its setting, together reflect the global influence of the international exhibition movement of the 19th and early 20th centuries. The movement showcased technological innovation and change, which helped promote a rapid increase in industrialisation and international trade through the exchange of knowledge and ideas.

The following is an excerpt from the Statement of Significance for The Royal Exhibition Buildings and Carlton Gardens (VHR 1501) as it relates to Carlton Gardens:

What is significant?

Superintendent Charles La Trobe first planned the 26 hectare site of the Carlton Gardens in 1839 as part of the green belt encircling Melbourne which included Batman Hill, Flagstaff Gardens, Fitzroy Gardens, Treasury Gardens and the Domain. The original layout of the gardens was by Edward La Trobe Bateman and dates to 1856. Further redesign and planting took place under the direction of the State's leading landscape designers and horticulturists, including Clement Hodgkinson, William Sangster, Nicholas Bickford, John Guilfoyle and architect Joseph Reed. Reed and Sangster, who was also a nurseryman, worked in conjunction to ensure a suitable setting for the building, planning gardens, paths, entrances and other features. As well as the Royal Exhibition Building and the 1891 Curator's Lodge, first lived in by John Guilfoyle, the gardens contain three important fountains: the Hochgurtel Fountain, designed for the 1880 Exhibition by Joseph Hochgurtel; the French Fountain; and the Westgarth Drinking Fountain. The original perimeter fence was removed in about 1928 leaving only a small remnant and all of the bluestone plinth.

How is it significant?

The Royal Exhibition Buildings and Carlton Gardens are of historical, architectural, aesthetic, social and scientific (botanical) significance to the State of Victoria.

Why is it significant?

The Carlton Gardens, the setting for the Royal Exhibition Building, are aesthetically significant for their nineteenth century 'Gardenesque' style featuring specimen trees, parterre garden beds, in a symmetrical design with the use of axial views and foci. The landscape features outstanding tree avenues, rows and specimen trees on the lawns, a curator's lodge, two lakes with islands, shrubberies and elaborate annual bedding displays along the southern promenade. The nineteenth century path layout is enhanced by magnificent avenues of trees, including the grand avenue of 26 Plane trees which frames the Exhibition Building dome, Elms, Cedar, White Poplar, English Oak and an uncommon avenue of 35 Turkey Oaks. Carlton Gardens is notable for the creative achievement demonstrating skilful garden design, and a landscape character which features plantings of Pines, Cedar, Araucaria, Cypress, Gums, Figs, Pepper trees, Elms, Planes, Oaks, Poplars, Canary Island Date palms and Washington palms, that display contrasting colours and forms which enhances the Gardens, Royal Exhibition Building and the local urban area.

The Carlton Gardens are of scientific (botanical) significance for their outstanding collection of plants, including conifers, palms, evergreen and deciduous trees, many of which have grown to an outstanding size and form. The elm avenues of *Ulmus procera* and *U. x hollandica* are significant as few examples remain world wide due to Dutch elm disease. The Garden contains a rare specimen of *Acmena ingens* (only five other specimens are known), an uncommon *Harpephyllum caffrum* and the largest recorded in Victoria [Removed Sept 2010], *Taxodium distichum*, and outstanding specimens of *Chamaecyparis funebris* and *Ficus macrophylla*, south west of the Royal Exhibition Building.

The Royal Exhibition Building and the Carlton Gardens are of social significance for their continuing involvement in the lives of Victorians. The buildings have hosted countless major exhibitions as well as other community uses such as an influenza hospital, wartime military use, migrant reception centre and a venue for several events during the 1956 Olympic Games. The gardens have been enjoyed by visitors for passive recreation, entertainment and social interaction and have been the venue for the successful International Flower and Garden Show.

Existing condition of the place or object

Pathway lighting

The current pathway layout in Carlton Gardens North substantially reflects the pattern of re-instatement of the Gardens undertaken by Nickolas Bickford in 1892. Many primary paths are lit with modern style park lights to provide access in and through the gardens. This existing public lighting utilises LED decorative post top fixtures (CoM 'Park Light') mounted on 5.5m poles. The public lighting pole layouts have generally been located at regular spacings on opposing sides of the primary pathways, with minor adjustments in configuration to accommodate the mature tree avenues where required.



Figure 02. Existing Park Light in Carlton Gardens North (left image), and unlit north-east path (right image).

A recent lighting audit undertaken in Carlton Gardens North demonstrated that the lighting levels to the currently unlit pathway adjacent the tennis courts are not consistent with Australian Standards recommended lighting standards (AS 1158.3.1 [Category P] - Lighting Subcategory PP4).

Activity lighting

The playground current receives direct lighting from a single 70W metal halide floodlight on a 10m high pole, located to the western side of the main southern section of playground which provides inconsistent lighting across this portion of the playground. The adjacent toddler play area, swings area, and adjacent bench seating are currently not directly lit, and receive only inconsistent spill lighting. The existing basketball half court is unlit, and receives only spill lighting from adjacent avenue parklights. Refer figures 03-05 for photos of relevant areas.



Figure 03. Existing floodlight adjacent playground on 10m pole.



Figure 04. Existing unlit half basketball court and picnic area.



Figure 05. Existing unlit toddler play and swings area of playground.

Current use of the place or object

Carlton Gardens North continue to be used as a public garden for passive and active recreation. The Gardens include facilities for both formal and informal active recreation, including the Carlton Gardens Tennis Club, a playground, and a small informal basketball court.

Proposal

The proposed works

This proposal is to implement lighting improvement actions from the endorsed Carlton Gardens Master Plan (2022), to improve safety, accessibility and amenity for pedestrians and recreational users of the gardens. This follows the recent completion of lighting audit of Carlton Gardens North to holistically inform any planned lighting improvements, as proposed in Recommendation 3.7 of the Master Plan and supported by Policy 3.10 Presentation from the Heritage Management Plan (HMP) ("Design replacement and upgrades of existing lighting on a holistic basis in order to achieve a consistent presentation and experience of the Gardens").

Recommendation 3.8 of the Master Plan describes the specific lighting improvement actions proposed in this project as follows:

- *Installing new park lights along the north-east path from the tennis club to the corner of Carlton and Nicholson streets*
- *Providing additional general lawn lighting to improve recreational amenity in the playground, ball court and picnic area precincts, so that these areas can be used for longer periods, particularly in winter months.*

North-east path lighting

Eight 5.5m high park lights are proposed, as shown on the accompanying plans. The poles and fixtures are proposed to match the existing park lighting in Carlton Gardens, with a "Brunswick Green" powdercoat finish (refer Figure 06 below). The poles are to be set back 1.5m from the path edge, with spacings of approximately 20-30m to match the presentation of existing avenue lighting, avoid tree structural root zones, and provide proposed lighting levels that will meet current Australian Standards public lighting category PP4. Light poles are proposed on alternating sides of the path to match other comparable avenues in Carlton Gardens North. Like the rest of the pathway lighting these lights will operate all night.

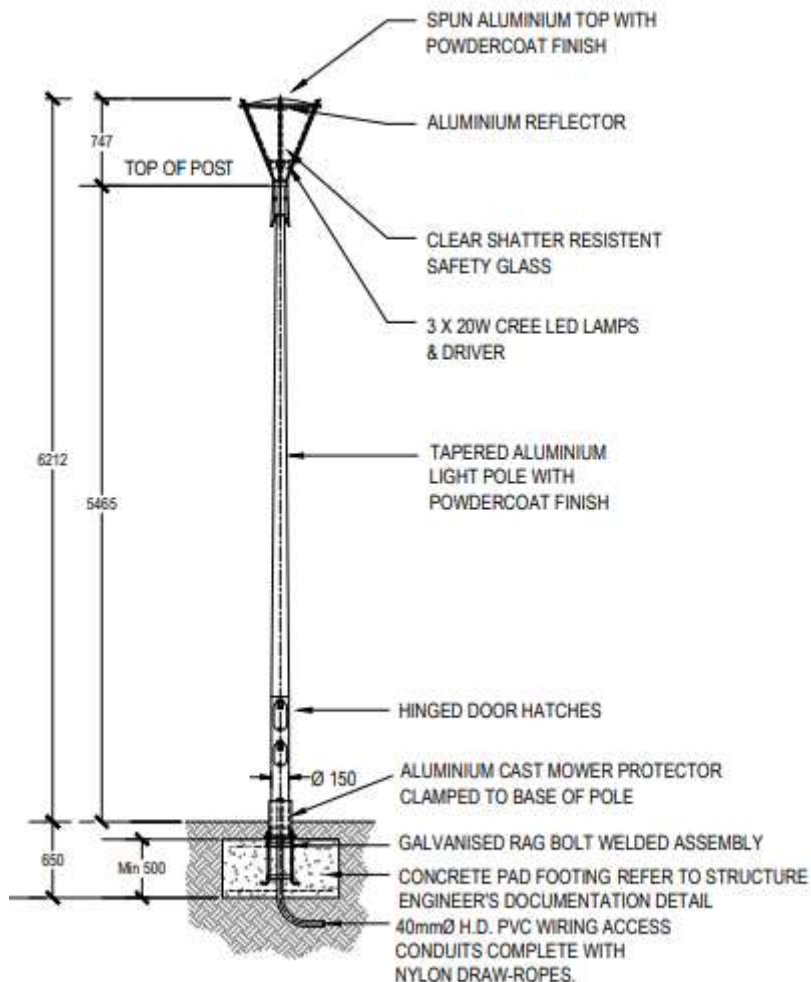


Figure 06. Proposed north-east path park lighting.

Activity lighting

Three new and one replacement lightpole are proposed for the playground area, and one new light is proposed to service the existing half basketball court and picnic area. These poles will be situated in lawn areas. These lightpoles are nominated to be 10m high tapered poles with "Brunswick Green" powdercoat finish to match existing park lighting (refer Figure 07 below). Three of the poles are nominated to have two lighting fixtures mounted, and two are will have four fixtures mounted. They will be programmed to turn off by 10 pm.

Use of 10m poles minimises the number of poles required to provide adequate lighting, whilst remaining below the surrounding existing tree heights or expected mature heights to minimise visual intrusion. The proposed lights will not impede the proposed tree planting included in the draft Carlton Gardens Tree Replacement Plan, currently under review by Heritage Victoria. One of the poles on the western side of the playground is proposed to replace an existing floodlight, which is nominated for removal. The pole nominated for removal is not identified as being of heritage significance in the Heritage Management Plan. The light pole proposed for the small basketball court is offset from the centre of the court to ensure it is located outside the root zones of the adjacent significant *Ficus platypoda*.

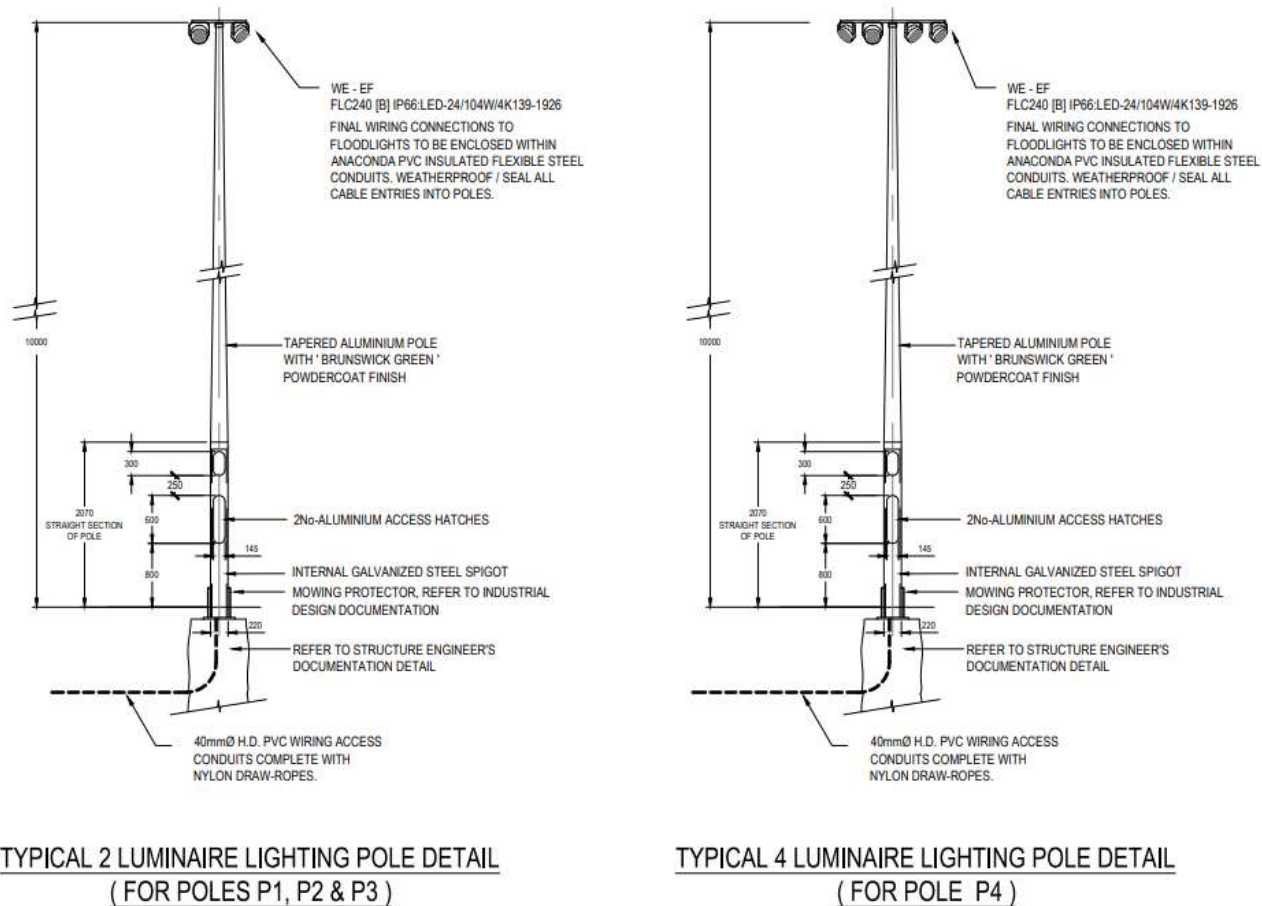


Figure 07. Proposed recreation lighting.

Installation method

All lighting and conduits would be installed following proven standard City of Melbourne methodologies, as recently demonstrated with the replacement lighting installation on Hotham Walk in Fitzroy Gardens. Installation methods to minimise risk to existing trees would include non-destructive digging for pole footing locations, and boring for conduits.

The boring process utilises a horizontal directional technique to simultaneously bore and pull conduit through in sections without the need to open trench. It is undertaken in straight-line sections from pole to pole. Typically for lighting works boring would be undertaken below the tree root zone at a depth of 600mm, but to minimise any potential impact on trees we propose to undertake it at 1000mm depth (refer Figure 08 below).

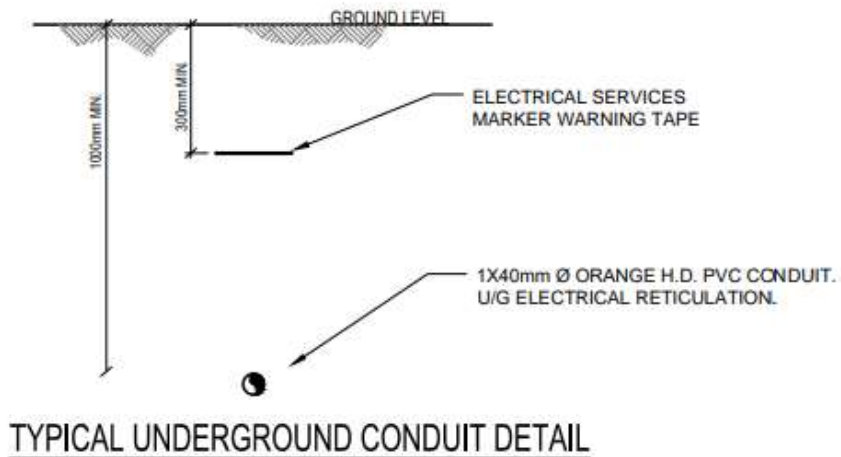


Figure 08. Proposed underground conduit detail at 1m depth

All intrusive works are proposed outside of tree Structural Root Zones (SRZ). A Tree Protection Management Plan (TPMP) will be prepared and submitted to Heritage Victoria to guide any construction activity that encroaches a Tree Protection Zones (TPZ) of trees, prior to any works commencing on site.

Options considered

Avenue lighting

The primary option was to use identical lighting in a similar arrangement to the other pathways. Alternative approaches were not investigated because of potential impacts to tree canopy from higher poles and the need to meet required light standards. The spacing of light poles in the proposal is comparable to other established avenues in Carlton Gardens North and South.

Activity Area

The Master Plan purpose is to allow the community the reasonable use of these facilities for a longer period of the day than currently, as supported by the community during the development of the 2022 Master Plan. The use of fewer poles to provide sufficient lighting in the recreation area is not feasible as it would necessitate increasing the height of the proposed poles above 10m, resulting in greater potential for visual intrusion

Lighting to the entirety of the half basketball court area was also investigated, but as these would have tree impacts this option was not further pursued.

Information to support an assessment against sections 101(2) and 101(3) of the Heritage Act 2017

Impact of the proposal on the cultural heritage significance of the place or object

There will be no detrimental impacts on the cultural heritage significance of the place as a result of the proposed works. The Gardens have been lit for many years, the current park lighting within Carlton Gardens North is part of the City of Melbourne's standard parks and gardens furniture set, and is not part of the historic fabric of the Gardens. Currently there are

44 park lights in Carlton Gardens North, so the new lighting reflects a minor increase. There is currently one activity light in the playground / picnic areas, increasing to 5, as guided by the Carlton Gardens Master Plan. There will be little change in the overall heritage presentation and experience of the north Carlton Gardens North from these additions. This additional lighting will not impact on the presentation of the Royal Exhibition Building (REB) in any way as the Melbourne Museum complex separates this part of the Gardens from the REB.

The proposal is consistent with relevant Heritage Management Plan Policies, including:

3.4.2 Recreation in the Carlton Gardens -

Policy: Continue the ongoing use of the Carlton Gardens as a place of recreation.

The policy discussion recognises the use of the playground and basketball court, and as fitting "broadly into the tradition of passive recreation and social interaction in the Carlton Gardens". It further notes that "the principle of maintaining general public access and use is fundamental to the significance of the place". The proposed lighting supports this recreational use.

3.4.3 Public Access

Policy: Continue to provide, and maximise, public and visitor access to the REB and Carlton Gardens.

The policy discussion notes that "continuing to provide and improve public access is critical to enhancing and disseminating an understanding and appreciation of the site and of the history of the REB and Carlton Gardens". The proposed lighting will improve public access to and through the gardens.

3.10 Presentation

Policy (abridged): Maintain feature and path lighting to the Carlton Gardens. Design replacement and upgrades of existing lighting on a holistic basis in order to achieve a consistent presentation and experience of the Gardens.

The policy discussion includes the note that "lighting the Carlton Gardens is important from both an aesthetic perspective and for security purposes.", and that "new lighting equipment and strategies should be implemented holistically, considering the overall presentation of the gardens, contemporary accessibility and functional requirements". The proposed lighting design is based on a lighting audit conducted on both Carlton Gardens North and South, and utilises existing light pole and fixture designs, supporting a holistic approach to lighting in the gardens.

4.10.4 Site security

Policy: An appropriate level of security should be maintained on site to support safe public access to the place and minimise the potential for vandalism.

The policy discussion highlights that "the maintenance of appropriate levels of site security is important to the management of the REB and Carlton Gardens and is particularly important in supporting ongoing public access (which itself is a key heritage objective) and reducing the risk of vandalism to significant building fabric and landscape elements". The proposed lighting will improve safe public access and use of the place, and reduce the potential for vandalism through increased passive surveillance.

The proposal is consistent with Heritage Victoria's Principles for considering change to places in the Victorian Heritage Register, including:

Principle 2. A cautious approach

The proposed lighting design utilises the minimum number of poles required to meet Australian Standards for lighting public paths, and required for reasonable use of playground and basketball court, prioritising existing significant heritage trees and views.

Principle 3. Protect significant settings and views

The proposed lighting design:

- avoids adversely impacting 'views, vistas, or visual relationships between heritage elements'
- utilises proven City of Melbourne methodologies to minimise any risk to existing trees.
- avoids impact on the existing significant trees (root zones) and views (minimising heights of poles).

Principle 4. Respectful change and new built form

The proposed lighting design:

- Is of a scale that is appropriate to the surrounding place, and does not create adverse visual impacts
- Utilises the existing City of Melbourne 'Park Light' and pole colours
- Proposes light locations that avoid impacts on the existing surrounding significant trees (root zones) and views (minimising heights of poles), and is spaced consistently with other park lighting in the gardens.

Provide reasons why the proposed works should be supported. Reasons must address the matters which the Executive Director is to consider under s101(2) including:

Refusal of the application may limit the continued reasonable use of Carlton Gardens North by:

- preventing the installation of new lighting to meet current Australian Standards requirements;
- impacting on the ongoing public safety and accessibility for those using the avenue path; and
- restricting the ability for the public to utilise recreational facilities within the gardens in the evening through winter months, in keeping with their acknowledged use in summer.

Impacts to world heritage

The registered place is located within a World Heritage Environs Area ('Royal Exhibition Building and Carlton Gardens'). The proposal does not affect the world heritage values of the listed place. Please see assessment against principles in the World Heritage Management Plan above.

Reasons may address the matters which the Executive Director may consider under s101(3) including:

The proposed works will have no impact on adjacent or neighbouring heritage places.

Summary of impacts and conclusion

The proposed lighting works will not impact on the heritage significance of the site. The proposal is consistent with the Heritage Management Plan and Heritage Victoria's Principles for considering change to places in the Victorian Heritage Register, and implements actions

from the endorsed Carlton Gardens master Plan, one component of the World Heritage Management plan

The current park lighting within Carlton Gardens North is part of the City of Melbourne's standard parks and gardens furniture set, and is not part of the historic fabric of the Gardens. Proposed lighting is holistically considered, following a lighting audit completed on Carlton Gardens North and South, and maintaining consistent lighting types, pole colours and spacings to other existing lit avenues. The proposed lighting will improve accessibility and safety of visitors to the gardens, aligning with current Australian Standards for public lighting and consistent with the Heritage Management Plan's policies regarding public access to the gardens, site security and support for recreation.

Proposed lighting around the playground, basketball court and picnic facilities is designed to avoid physical impact on the existing trees, and visual impact to the place and will be programmed to turn off overnight. The basketball court and playground are both identified in the Royal Exhibition Building and Carlton Gardens World Heritage Management Plan as being of no significance. Poles are to be located outside of tree root zones, with consideration to proposed tree replacement planting, and pole heights have been designed to balance the visual impact of the lighting, and minimising the number of poles required.

For the proposed avenue park lighting, all light poles have been located between existing trees, avoiding Structural Root Zones, and minimising risk to Tree Protection Zones. Lighting installation methods would minimise risk to existing trees through use of non-destructive digging for pole footing locations, and boring at 1m depth for conduits.