EDEN GARDENS RENEWAL PROJECT



VISUAL IMPACT ASSESSMENT

Prepared for: THUNDERBIRDS ARE GO PTY LTD Atf GARDENERS TRUST By:



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1 INTRODUCTION

Eden Gardens is an established retail plant nursery complex located at 307 Lane Cove Road, Macquarie Park, NSW. In early 2021, a development application (DA) was lodged to Ryde Council for "alterations and additions" to the garden centre. The DA (Ref: LDA2021/0095) is currently under assessment. It incorporates:

- Alterations and additions to the existing garden centre including:
 - Retention of the existing at grade parking spaces fronting Lane Cove Road and the underground
 - o parking spaces directly below
 - Excavation to provide additional underground spaces on the north-east of the site
 - Provision of end of trip facilities and service rooms in the basement level
 - Alterations and additions of the existing main garden centre building located on the west of the
 - site including amendments to the garden centre store, café, amenities, food and beverage venue,
 - o neighbourhood shops and provision of a winter garden
 - Expansion of the existing function spaces in the south-west of the site
 - Provision of a new outdoor garden centre, including nursery, in the north-west of the site
 - A multi-level car park in the mid-north of the site with rooftop activity and wellness zone, and
 - Provision of a storage room, loading bay, waste room and rock climbing wall at the ground level of the proposed multi-storey car park.
- Construction of a new 18-storey commercial office building in the centre of the site.
- A new restaurant including outdoor and indoor dining spaces in the mid-east of the site. (Noting the fit-out of the restaurant does not form part of this DA and will be subject of separate approval).
- Landscape works in various places and retention of existing display gardens.

(Statement of Environmental Effects, City Plan, March 2021, P.9)

OG Urban has been commissioned by Thunderbirds Are Go Pty Ltd Atf Gardeners Trust (the applicant) to carry out investigations into the potential visual impacts of the proposed commercial office building on the local and regional landscape of the Eden Gardens complex.

1.1 THE SUBJECT SITE AND ITS CONTEXT

The subject site is illustrated in Figure 1-1. It incorporates a single parcel of land with a total area of 2.468 hectares. In its current form the Eden Gardens complex incorporates a retail nursery, restaurant, function centre, international grade display gardens and staff office facilities.

The site is bounded by Lane Cove Road to the north west, the M2 Motorway and its verge to the south west and the Lane Cove National Park to its north east and east. In its location on the corner of the M2 Motorway and Lane Cove Road, the Eden Gardens site is a key site and a visual marker for pedestrian and vehicular traffic in the broader locality.





Figure 1-1 Site location and context - regional - subject site indicated with red cross (Source: Google Earth)



Figure 1-2 Site location and context - subject site edged red (Source: Google Earth)



2 PROCESS

The process for assessment of the visual impacts of this proposal has involved an assessment of existing conditions in the locality of the site, along with assessment of the likely visibility of the completed development in its locality and its impacts on local and regional views.

The process incorporates the following tasks:

2.1 Assessment of existing conditions

- Review the existing planning controls and strategies that apply to the site and its locality, including specific controls that are relevant to visual and landscape quality.
- Carry out a site and area inspection to assess the visual character of the locality with regard to:
 - Existing built form
 - Open space
 - Building to open space relationship
 - View lines towards the development site
 - \circ Permissible development in the vicinity which could impact on local visual quality.
- Prepare a Geographical Information System (GIS) based visual catchment diagram to indicate land within the locality of the site from which the development in its proposed form would be potentially visible.

2.2 Assessment of impacts of the proposal on local views

- Identification of representative locations within the identified visual catchment that may be impacted by the development with regard to visual quality.
- Identification of critical viewpoints toward the development site.
- Preparation of locationally accurate computer generated photomontages from each of the agreed critical viewpoints. These photomontages have been prepared in accordance with the NSW Land and Environment Court Guidelines for Use of Photomontages.
- Assessment of the potential visual impacts of the proposal with respect to:
 - Viewpoint sensitivity the capacity of the visual environment to absorb change (as viewed from the agreed critical viewing points)
 - Change magnitude the amount of change that would be experienced as a result of the implementation of the proposal (carried out with the aid of survey accurate photomontages prepared from agreed critical viewing points)
 - $\circ~$ The visual quality of the changed visual environment in comparison with the environment prior to development.
- Identification of mitigation measures to address any unacceptable impacts on views that may result from implementation of the Concept Proposal in its current form.

2.3 VISUAL IMPACT ASSESSMENT

The visual impact of the proposal has been assessed from each identified viewpoint as a composite of the sensitivity of the viewing location to change (visual sensitivity assessment) and the assessed magnitude of the change (Change magnitude assessment). This information has been presented as commentary for each viewpoint and as an overall assessment of the impact of the Proposal on local and regional landscape and visual character.

The above described exercise has been carried out for the following categories of views:

• close views – up to 1km from the Proposal site boundaries.



- medium distant views at distances between 1km and 2kms from the development site.
- distant views representative viewpoints up to 3kms from the site.



3 EXISTING CONDITIONS

3.1 URBAN PLANNING CONTEXT

The site is zoned B7 - Business Park under the *Ryde Local Environmental Plan, 2014* (Figure 3-1). It is surrounded by a mosaic of zonings including the E1 – National Parks zone to its east and R4 – High Density Residential to its north west (on the western side of Lane Cove Road) and SP2- Infrastructure zones for the A3 Lane Cove Road and the M2 Motorway immediately to its east and south. Notably, although separated by the M2 Motorway, the site is part of the B7 zoned Macquarie Business Park which extends south of the site on the southern side of the Motorway.



Figure 3-1 Land zoning (local) (Ryde Local Environmental Plan, 2014)

Figure 3-2 indicates that the site is also in close proximity to the B3 zoned Macquarie Park Business Core and the B4 Mixed Use zone that incorporates the Macquarie University campus and the Macquarie University Hospital.

The Ryde Development Control Plan, 2015 incorporates planning and design guidelines for concentrations of development within the LGA. Part 4.5 of the DCP includes controls for the area designated as the Macquarie Park Corridor. The Eden Gardens site is adjacent to, but not within, the Macquarie Park Corridor. However, it follows from its Business Park zoning that controls in the DCP would be relevant to the site. Having said this, there are no controls in the DCP that apply to specifically to visual quality.





Figure 3-2 Land zoning (regional) (Department of Planning, Industry & Environment – Planning Portal)

3.2 LOCAL VISUAL CHARACTER

3.2.1 Existing character

The area in the vicinity of the Eden Gardens site displays a range of visual character types based on landscape, landuse and topography. Figure 3-3 is an analysis of the locality based on visual character. It is followed by photographic and written descriptions of each of these.





Figure 3-3 Local visual / landscape character

Brief descriptions and typical photographs to represent the visual character of each of the identified character types in the locality of the Eden Gardens site follow.



Low density residential – moderate to steep topography



Much of the land to the north and east of the Eden Gardens site is occupied by well established residential areas in the moderate to steeply sloped topography associated with the Lane Cove River and its tributaries. These areas are of moderate to high landscape / visual quality and would be sensitive to visual impacts from development



Low density residential – undulating topography



Residential areas south west of the Eden Gardens site occur on largely undulating land. Substantial tracts of vegetation characterise the locality, in streets and gardens and particularly in the creek valleys that transverse the area. Views towards high density residential and commercial development are available intermittently through the area.

High density residential



High rise, high density residential and mixed use precincts have developed north east of Epping Road and in the vicinity of the Eden Gardens site along Lane Cove Road. Visual character in these areas has changed dramatically over the last ten to fifteen years. Due to their high visibility they are now a substantially dominant component of an emerging visual character of the broader locality.



EDEN GARDENS, LANE COVE ROAD, MACQUARIE PARK, NSW – VISUAL IMPACT ASSESSMENT

Commercial









Institutional – health and education



The Macquarie University and Macquarie Hospital complex occupies a large area of land to the west of the Macquarie Park business centre. The complex is of very high visual / landscape quality, incorporating well designed buildings in a masterplanned setting of well connected and coordinated urban spaces.





The Macquarie Park Cemetery and Crematorium is a major piece of community infrastructure serving the residents of northern Sydney. The Cemetery is a broadly varying landscape incorporating traditional memorial style interment areas, mausoleums and lawn burial areas. Verges to the Cemetery are well treed but views of surrounding development are available from most of the cemetery grounds.



4 VISIBILITY OF THE PROPOSED DEVELOPMENT

Separate visual catchment diagrams have been generated at radii of 1 km, 2 kms and 4kms from the development site using Light Detection and Ranging (LIDAR) data and Geographical Information System (GIS) technology. The diagrams indicate likely visibility of the developed site based on electronic mass modelling prepared by DKO Architects. It is to be noted that the viewshed diagrams indicate elements that would be visible from observer points at the upper level of the proposed building. LIDAR data incorporates existing built form and vegetation in viewsheds so that the diagrams indicate the upper levels of trees and buildings that would be visible from the top of the building. Conversely, the diagrams represent locations where the proposed building would be visible from the tops of trees and buildings in the viewshed. Essentially the diagrams indicate a "most visible" scenario. In practice, the proposed building will be less visible by observers at ground level. The diagrams provide a tool that is subject to on-ground testing for verification of the actual visibility of the developed site.

With this proviso, the diagrams indicate that the developed site has the potential to be variably visible from the local area. Specific commentary on potential visibility of the development for each diagram is provided below.







The viewshed diagram at Figure 4-1 indicates that the developed site would potentially be visible from its immediate surrounds and intermittently from elevated locations and local streets. The proposed commercial tower will potentially be visible from elevated parts of the Lane Cove National Park and existing low density residential areas to its north and east, from Lane Cove Road and parts of the M2 Motorway, from northern portions of the Macquarie Park Cemetery complex and from existing commercial and high density residential areas to the north east, east and south east. Again it is to be noted that the actual level of visibility of the developed site from these locations is subject to verification by on ground site and area inspections.



Figure 4-2 Visibility at 2km radius – proposal site indicated by red cross (GIS Environmental Consultants, 2022)

The diagram at Figure 4-2 indicates that at distances between 1 & 2kms the developed site would potentially be intermittently visible from low density residential areas in all directions, from the Macquarie Park town centre and the Macquarie University campus and from elevated portions of the Lane Cove National Park.







The level of visibility of the proposed commercial tower on the site diminishes significantly at distances greater than 3kms (Figure 4-3). The tower may be visible from some low density residential areas and some open recreation areas such as golf courses or playing fields. In these views the developed site would be a small component of broad, expansive views and, in the medium term, would form a part of a mosaic of high rise development including the Macquarie Park town centre and existing / proposed developments further to the east.



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5 VIEW ANALYSIS

Critical viewpoints within the identified view catchment have been selected through a process of analysis of the visibility diagrams to identify representative viewpoints that would:

- Be likely to be subject to changes in views as a result of the development; and
- Be sensitive to these changes to views as a result of the expectations of viewers.

Selected viewpoints are indicated on Figures 5-1. Photomontages have been prepared from most of these viewpoints to illustrate the changes to these views that would result from implementation of the proposed development. These are included in Section 6 of the report.



Site location
VP1 – Tunks Hill Picnic Area
VP2 – Tuckwell Park
VP6 – St Crispens Green

Figure 5-1 Selected viewpoints - 1km radius

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VP3 – Lane Cove Rd north of site VP4 – Lane Cove south of site VP 5 – Macquarie Park Cemetery





 Site location
 VP7 – Macquarie University Library VP8 – Westbourne Rd Killara VP9 – Lovat St West Pymble

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Figure 5-2 Selected viewpoints – 2-3km radius



6 VISUAL IMPACT ASSESSMENT

Consistent with current best practice in visual assessment, this assessment of the likely impacts of the Eden Gardens renewal proposal on local visual quality has been carried out via a process of qualitatively assessing:

- Viewpoint sensitivity the level of value that viewers would be likely to attribute to the quality of views from a given location.
- Change magnitude the amount of change to views from given locations that would likely result from implementation of the proposed development.
- Composite impact level a value judgement based on the assessed sensitivity of the viewpoint and the amount of change that would be likely to occur to the specific view or views from similar locations.

Impacts on each view have been graded as Low, Moderate or High.

This approach is consistent with the process adopted by NSW Roads and Maritime Services in *Guideline for landscape character and visual impact assessment – Environmental impact assessment practice note EIA-NO4* (December 2018). The process is currently accepted as appropriate for visual impact assessment in New South Wales.

Following is an assessment against these criteria for each adopted viewpoint. To assist in the assessment, photomontages have been prepared by visualisation specialists, Virtual Ideas. These have been prepared over base photographs of existing views taken in the direction of the Eden Gardens site from the critical viewpoints. Base photos have been taken using a camera lens with a 24mm focal length. Each viewpoint selected for preparation of photomontages has been accurately positioned locationally and topographically via survey. The approximate location of the viewpoints is indicated in Figures 5-1 and 5-2. Appendix A is a report by Virtual Ideas and the survey team that includes a detailed description of the methodology for preparation of the photomontages along with accurate coordinates of each viewpoint.

6.1 SELECTION OF VIEWPOINTS

In order to gain a representative understanding of the impacts of this proposal on its visual environment, locations within the identified viewshed of the tower building have been selected in the following broad categories:

- Close views from recreational lands adjacent to or close to the site.
- Views from major roads orientated towards the site.
- Views from local institutional / commercial facilities.
- Mid distant and distant views from residential areas within the viewshed.

Representative viewpoints have been selected from each of these broader locations for analysis of visual impacts. The results of this assessment follows.



6.2 CLOSE VIEWS

6.2.1 VIEWPOINT 1 – TUNKS HILL PICNIC AREA, LANE COVE NATIONAL PARK

Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Close views from recreational lands adjacent to or close to the site				
Viewpoint 1	Moderate - high	High	Moderate - high	

Viewpoint location

The Tunks Hill picnic area is located on the western edge of the Lane Cove National Park and shares its western boundary with the Eden Gardens site. Viewpoint 1 is located at a barbecue shelter in the northern portion of the picnic area, west of the Tunks Hill Road carparking area at a distance of approximately 130m from the site of the proposed Eden Gardens tower.



Viewpoint sensitivity: Moderate - High

Lane Cove National Park is a regionally significant conservation and recreational area and an Item of Heritage Significance. The level of visitation to the site is very high and visitors would have high expectations with regard to the quality of the visual and landscape environment.

The Tunks Hill picnic area is one of approximately 16 designated picnic areas within the National Park (Lane Cove National Park fact sheet – <u>www.nationalparks.nsw.gov.au</u>). The picnic area includes picnic shelters and barbecues, amenities and a designated car parking area.



The Park website describes the area as having

"Great views of Chatswood, free barbecues and space for up to 300 people ..."

It is notable that the National Park website calls up views of the Chatswood CBD skyline as a specific attraction for the Tunks Hill picnic area. The visual environment and expectations of visitors to this specific picnic area are distinct from other parts of the National Park in that:

- The picnic area is the only such area within the park that is elevated and adjacent to developed private land. Expectations of visitors to this area with regard to views and visual character will differ from other more remote and natural bushland parts of the National Park. Consequently, visitors would be expected to be less sensitive to the visibility of built elements in the landscape than they would be in the more natural parts of the Park.
- Unlike most other areas within the Park, a specific attraction of this picnic area is the availability of views towards the an urban city skyline.
- The view towards the Chatswood skyline is orientated to the east, a direction away from the boundary with the Eden Gardens site.

Given the specific factors described above, it is reasonable to expect that visitors to the area would have somewhat lower expectations regarding naturalness of views from the Tunks Hill picnic area than from other locations within the Lane Cove National Park. On this basis it is considered that the visual sensitivity of the area would be moderate to high.





Figure 6-1 Viewpoint 1 – base photo



Figure 6-2 Viewpoint 1 – photomontage (Virtual Ideas)



Change magnitude: High

The proposed building will present as a significant new built element on the western edge of the Tunks Hill Picnic Area. It will be a new skyline element and will occupy a significant component of the existing sky views in these close views. The building will, however, be partially screened and softened as a built element by existing large trees within the Park. And it will be progressively further screened as new trees proposed on the Eden Gardens reach maturity.

The magnitude of change to the visual environment of this location as a result of implementing the proposal is considered to be high.

Composite impact level: Moderate to high

6.2.2 VIEWPOINT 2 – Tuckwell Park barbecue area.

Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment	
Close views from recreational lands adjacent to or close to the site				
Viewpoint 2	Moderate	Moderate	Moderate	

Viewpoint location

Tuckwell Park is a public recreation area located directly opposite the Eden Gardens site on the corner of Fontenoy Road and Lane Cove Road. Viewpoint 2 is at a barbecue area adjacent to a basketball court on the south western part of the Park.



Viewpoint sensitivity: Moderate.

Tuckwell Park supports a cricket pitch, a basketball court, a local playground, an amenities building and parking area. A band of mature native trees forms a visual screen on the park verges to Lane Cove and Fontenoy Roads. It is notable that the land surrounding the park is zoned R4-High Density Residential under the Ryde LEP (Figure 3-1). Land on the other two boundaries of the Park is developed with medium to high density housing, including the 8 storey Macquarie Gardens residential apartment complex which is a significant built element in views to the south. As a mainly active recreation area with no existing access to long range views, it is considered that users of the park with have moderate expectations with regard to visual quality. This would be further tempered by the presence of the Macquarie Gardens complex in southern views. On this basis, the visual sensitivity of this location is considered to be moderate.





Figure 6-4 Viewpoint 2 – base photo



Figure 6-5 Viewpoint 2 – photomontage (Virtual Ideas)



Change magnitude: Moderate - High

Comparison between the base photo and photomontage from Viewpoint 2 illustrates that the proposed building will be a new skyline built element in views to the east. The majority of the skyline will, however, remain clear and more than 50% of the mass of the building will be screened by the existing stand of mature trees on the eastern and southern boundaries of the Park. With these mitigating factors in place, the magnitude of change to views from this locality is considered to be moderate.

Composite impact level: Moderate

6.3 VIEWS FROM MAJOR ROADS

6.3.1 VIEWPOINT 3 – Lane Cove Road median, north-east of the Eden Gardens site Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Views from major roads orientated towards the site				
Viewpoint 3	Moderate	Moderate	Moderate	

Viewpoint location

From the north, Lane Cove Road ascends towards the Eden Gardens site from its Lane Cove River crossing at De Burghs Bridge. Axial views towards Eden Gardens are not available from the road until it ascends out of the valley and begins to vear to the south west. Viewpoint 3 provides a typical view to the site from the median between the two carriageways at this point.



Viewpoint sensitivity: Moderate.

Travellers heading north to south towards the Eden Gardens site on Lane Cove Road move through a mosaic of landscapes from low density suburban housing north of the Lane Cove valley to the bushland of the valley and National Park. With movement south out of the valley, the dominance of the National Park bushland landscape decreases and is replaced with the highly urbanised environment of the Macquarie Park business district. The Eden Gardens site is at a transition point between these two visual landscapes. As such, there would be expectations from viewers that the landscape is transitioning at



this viewpoint. Based on this expectation of change, the visual environment at and within the vicinity of Viewpoint 3 is considered to have a moderate visual sensitivity.



Figure 6-6 Viewpoint 3 – base photo



Figure 6-7 Viewpoint 3 – photomontage (Virtual Ideas)



Change magnitude: Low - Moderate

The proposed building will be new built element on the skyline where visible from travellers on Lane Cove Road moving south. However, for most of the length of Lane Cove Road to the north of the site, the building would be screened from view by topography and existing vegetation. Notably, in the Lane Cove River valley, where the visual environment is at its most natural, the building will be completely screened from view. The photomontage illustrates that when the building comes into view from the road it is largely screened by existing foreground trees in the National Park.

On this basis, it is considered that the change magnitude of the proposal in views on Lane Cove Road from the north is low to moderate.

Composite impact level: Low - Moderate

6.3.2 VIEWPOINT 4 – Bus stop on Lane Cove Road.

Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Views from major roads orientated towards the site				
Viewpoint 4	Low - moderate	Moderate	Moderate	

Viewpoint location

Viewpoint 4 is on the pedestrian footpath, adjacent to an existing bus stop, close to the intersection with Talavera Road and approximately 440m south west of the Eden Gardens site. The viewpoint provides an example of a typical axial view that would be experienced by travellers approaching the site from the south west on Lane Cove Road.



Viewpoint sensitivity: Low to moderate

This sector of Lane Cove Road passes through the Macquarie Park business park. The area is highly urbanised, supporting a series of medium to high rise commercial and mixed use buildings. Visitors to the area would have an expectation that high rise development would be likely to continue in the locality. Levels of sensitivity to new development would be low but would be contingent on new



development being of high design quality. The visual sensitivity of the area is considered to be low to moderate.



Figure 6-8 Viewpoint 4 – base photo



Figure 6-9 Viewpoint 4 – photomontage (Virtual Ideas)



Change magnitude: Moderate

The photomontage illustrates that the proposed building will present as a significant new built element on the skyline in views for travellers moving north on Lane Cove Road. The building would be well separated from other existing high rise buildings to the south. The M2 Motorway road reserve, located immediately south of the Eden Gardens site, provides a buffer to development that ensures this relationship with other built form in the business park will remain and the new building would present as an isolated sculptural element in these views. Contingent on achieving a high quality design, the proposed building is considered to have a moderate and potentially positive impact on visual quality in these views.

Composite impact level: Moderate

6.4 VIEWS FROM LOCAL INSTITUTIONAL / COMMUNITY FACILITIES.

6.4.1 VIEWPOINT 5 – Macquarie Park Cemetery

Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Views from local institutional / commercial facilities				
Viewpoint 5	Moderate	Low	Low	

Viewpoint location

The Macquarie Park Cemetery occupies an area of approximately 60ha and is located approximately 600m south east of the Eden Gardens site. It is a major memorial park for the northern suburbs of Sydney. A representative viewpoint has been chosen on the north western edge of the cemetery on the basis that this point would be the closest to the proposed new building.



Viewpoint sensitivity: Moderate

Visitors to a cemetery would be expected to be moderately sensitive to the quality of its visual environment and surrounds. Existing visual quality within the Macquarie Park Cemetery and its surrounds is variable. Internally, the visual environment is of medium to high quality, incorporating well



designed interment spaces of varying ages, good quality landscape treatment and a moderately attractive internal circulation system and amenities. Detractors from visual quality within the Cemetery include high tensile transmission easements and some visually overcrowded burial areas.

The visual environment surrounding the cemetery is also of variable quality and includes view of transmission lines, industrial and commercial buildings (see Section 3.2.1). A waste treatment facility adjoins the northern boundary of the cemetery, although it is screened from view by topography and a berm along the northern cemetery boundary.



Figure 6-10 Viewpoint 5

Change magnitude: Low

A photomontage of the proposal has not been prepared from the Northern Suburbs Cemetery site as it has been concluded that the proposed building would only be likely to be visible from a small area on the northern boundary and from that location, external views out of the cemetery would not be of consequence.

Composite impact level: Low



6.4.2 VIEWPOINT 7 – Macquarie University Library forecourt Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Views from local institutional / commercial facilities				
Viewpoint 7	High	Low	Low	

Viewpoint location

The forecourt of the Macquarie University Library has been selected as a representative location on the campus that has an orientation in the direction of the Eden Gardens site and would be expected to have a high level of visitation.



Viewpoint sensitivity: High

The Macquarie University campus is a high quality visual environment incorporating design excellence in building, urban and landscape design. Students, staff and visitors to the University would be expected to have a high sensitivity to impacts on views from within the campus.





Figure 6-11 Viewpoint 7 – base photo



Figure 6-12 Viewpoint 7 – photomontage (Virtual Ideas) – Proposed building outlined with a white dashed line



Change magnitude: Low

The photomontage indicates that the proposed building on the Eden Gardens site would be screened by existing vegetation and topography and would not be visible from Viewpoint 7. There is some potential that the proposed building would be partially visible from some elevated locations within the Macquarie University campus, such as from the upper floors of some buildings, but it is unlikely that the building would be visible from the public domain. On this basis, it is considered that the magnitude of change to views from the campus resulting from the proposal would be low.

Composite impact level: Low

6.5 MID DISTANT / DISTANT VIEWS FROM RESIDENTIAL AREAS

6.5.1 VIEWPOINT 6 – St Crispens Green, West Lindfield

Assessment summary

Viewpoint	Visual sensitivity		Composite impacts assessment	
Mid distant and distant views from residential areas within the viewshed				
Viewpoint 6	Moderate - high	Low - moderate	Low - moderate	

Viewpoint location

St Crispens Green is a public park in an elevated location above an established low density residential area in West Lindfield. The park is above Albert Drive which is a residential street supporting houses which back onto the Lane Cove National Park and are located directly east of the Eden Gardens site. There is potential for the proposed commercial tower on the Eden Gardens site to be visible across the Lane Cove River valley from the locality, and specifically from these houses on the eastern side of Albert Drive.



Viewpoint sensitivity: Moderate - high

Views towards the east from Albert Drive and its vicinity are generally natural, and would generally include bushland in the Lane Cove National Park as a dominant foreground element. Skyline views from the locality would, however, be likely to include high rise development in the Macquarie Park business park. The sensitive elements in these views that would contribute to local visual quality would be the bushland foregrounds within the National Park. The skyline views have been largely impacted by high rise development and would be less contributory to the visual quality. The sensitivity of the locality to changes to views is considered to be moderate to high.




Figure 6-13 Viewpoint 6 - base photo



Figure 6-14 Viewpoint 6 – photomontage (Virtual Ideas) – outline of proposed building indicated with a white dashed line.



Change magnitude: Low - Moderate

The photomontage over the view from St Crispens Green towards the Eden Gardens site indicates that in this instance, the proposed building would be screened from view by existing large scale trees on the eastern side of the park. It is possible, however, that the building would be visible as a new skyline element in views looking east from residences in the locality where screening from trees does not occur. Given the significant presence of large trees in the National Park, it is likely that such views would be intermittent only. The likely change magnitude to these views resulting from the proposal is thus considered to be low to moderate.

Composite impact level: Low to moderate.

6.5.2 VIEWPOINT 8 – Westbourne Road, Killara Assessment summary

Viewpoint	Visual sensitivity	0	Composite impacts assessment
Mid distant and distant views from residential areas within the viewshed			
Viewpoint 8	High	Low	Low

Viewpoint location

Viewpoint 8 is a representative example of distant views from established low density residential areas north east of the site. The selected viewpoint is on Westbourne Road near its intersection with the Pacific Highway at Killara. The highway follows a north-south ridgeline and the viewpoint provides an example of potential views towards the proposed building from these elevated locations.



Viewpoint sensitivity: High

The long established low density residential suburbs along the Pacific Highway ridge are of high visual and landscape quality. Residents and visitors to the area would have high expectations for visual quality and would be sensitive to impacts on views. Visual sensitivity is considered to be high.





Figure 6-15 Viewpoint 8 - base photo



Figure 6-16 Viewpoint 8 – photomontage (Virtual Ideas) – Proposed building outlined with a red dashed line



Change magnitude: Low

The photomontage from Viewpoint 8 indicates that the proposed new building at Eden Gardens would be screened by topography and vegetation and would not be visible (outline of building indicated on the photomontage by a red dashed line). There is some potential for the building to be visible from other locations in the area, but where visible, the tower would be a very small component of large, expansive views that would likely include the Macquarie Park centre as a backdrop. The overall impact of the proposal on these views is considered to be low.

Composite impact level: Low

6.5.3 VIEWPOINT 9 – Lovat Street, near corner of Yanko Road, West Pymble Assessment summary

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Mid distant and distant views from residential areas within the viewshed			
Viewpoint 9	High	Low	Low

Viewpoint location

Viewpoint 9 provides an example of views from established residential areas north of the site and south east of the Pacific Highway ridgeline. Yanko Road extends north east from Lane Cove Road and follows a series of deep valleys and ridges around the Lane Cove River and its tributaries. Lovat Street is at the highpoint of one of these ridges where views to the Edens Gardens site would potentially be available.



Viewpoint sensitivity: High

Similar to Killara, West Pymble is an established residential neighbourhood characterised by high quality residences in an established low density, heavily treed environment. Sensitivities to impacts on views would be high.





Figure 6-17 Viewpoint 9

Change magnitude: Low

No photomontage has been prepared from Viewpoint 9 as it is clear that views of the proposed development would be screened by existing buildings and vegetation and would not be available. Intermittent views may be available from some locations in the area but these are also likely to be largely screened by local trees. Overall change to views from the locality is expected to be of low magnitude.

Composite impact level: Low



6.6 SUMMARY OF VISUAL IMPACTS

The table below summarises the assessment of impacts of the proposal on the selected viewpoints.

Viewpoint	Visual sensitivity	Change magnitude	Composite impacts assessment
Close views from recreat	tional lands adjacent to or	close to the site	
Viewpoint 1	Moderate - high	High	Moderate - high
Viewpoint 2	Moderate	Moderate	Moderate
Views from major roads orientated towards the site			
Viewpoint 3	Moderate	Moderate	Moderate
Viewpoint 4	Low - moderate	Moderate	Moderate
Views from local institutional / commercial facilities			
Viewpoint 5	Moderate	Low	Low
Viewpoint 7	High	Low	Low
Mid distant and distant views from residential areas within the viewshed			
Viewpoint 6	Moderate - high	Low - moderate	Low - moderate
Viewpoint 8	High	Low	Low
Viewpoint 9	High	Low	Low



7 CONCLUSION

This study of the likely visual impacts of a proposal to construct a commercial tower within the grounds of the Eden Gardens nursery complex at Lane Cove Road, Macquarie Park has been prepared to support a broader development application to Ryde City Council for alterations and additions to the greater Eden Gardens site (LDA2021/0095). The study has been carried out to address a request for additional information made by Council to assist with its assessment of the development application. The visual impact assessment is specific to the proposed commercial tower and does not address the other components of the DA.

The assessment has been carried out with the aid of electronically generated photomontages over a series of photos from surveyed locations taken with a 24mm focal length lens.

In summary, the conclusions of the visual impacts of the proposal are:

- The site is zoned B7-Business Park under the *Ryde Local Environmental Plan, 2014.* It is located on the northern edge of the Macquarie Park Business Park, which extends to the south and west on the southern side of the M2 Motorway. There are no controls in the Ryde LEP or the Ryde Development Control Plan that specifically apply to visual impacts of new development within the Business Park. In this regard, the proposal is not inconsistent with the LEP and DCP.
- The proposed commercial tower on the Eden Gardens site would be variably visible in its locality.
 - In close views (less than 1km from the site) the proposal will present as a significant new built element in the landscape. In views from the Lane Cove National Park, it will only be visible from close quarters but, where visible, will significantly change the visual environment as a new urban element in a largely natural landscape. Impacts on these views will be influenced by two mitigating factors:
 - the proposed tower would only be visible from the edge of the Park where it interfaces with urban zoned land and expectations for the naturalness of views would be correspondingly tempered; and
 - the views from these areas tend to be orientated across the Lane Cove River valley and away from the tower site.

Composite impacts on these views are considered to be moderate to high but acceptable given the above described mitigating factors.



- In views from the road and recreation areas to the north and east, the tower will be partially screened by foreground vegetation but will be visible as a new built element above the treeline. From the south, the building will be a prominent new built element but it will appear in the context of a significantly urbanised visual environment that includes numerous other medium to tall buildings. Composite visual impacts of the proposal from and these locations are considered to be moderate.
- Impacts on views from existing institutional and commercial facilities in the locality have been found to be low as the building would either not be visible or would be visible only intermittently and in the context of other existing built form.
- Composite impacts on views from mid-distant and distant low density residential have been found to be either low to moderate, where the building would be intermittently visible across the Lane Cove River valley or low, where the building would be screened by existing topography and / or vegetation and would not be visible.
- The Macquarie Park locality is in a state of transition from low density residential to high density residential / commercial. Aside from the protected natural areas within the Lane Cove National Park and the established low density residential areas to the north, the area is subject to significant and ongoing changes to its visual environment. In this context, there would be an expectation that tall buildings will be part of the emerging visual landscape. The proposed tower on the Eden Gardens site is consistent with this emerging environment.
- The overall impact of the proposal on the visual quality of its environment is considered to be acceptable.



EDEN GARDENS RENEWAL PROJECT



APPENDIX A

PHOTOMONTAGE AND METHODOLOGY REPORT – VIRTUAL IDEAS

Eden Gardens, Macquarie Park

Visual impact photomontage and methodology report

VIRTUAL IDEAS



1. INTRODUCTION

This document was prepared by Virtual Ideas to demonstrate the visual impact of the proposed development of Eden Gardens, located at 307 Lane Cove Road, Macquarie Park NSW with respect to the existing site conditions.

We understand that the purpose of the report will be for construction of a multi-storey, mixeduse development in the Macquarie Park.

2. OUR EXPERTISE

Virtual Ideas is an architectural visualisation company that has over 15 years experience in preparing visual impact assessment content and reports on projects of major significance that meet the requirements for relevant local and state planning authorities.

Our reports have been submitted as evidence in proceedings in both the Land and Environment Court and the Supreme Court of NSW. Our director, Grant Kolln, has been an expert witness in the field of visual impact assessment in the Supreme Court of NSW.

Virtual Ideas' methodologies and outcomes have been inspected by various court appointed experts in relation to previous visual impact assessment submissions, and have always been found to be accurate and acceptable.

3. PHOTOMONTAGE METHODOLOGY

The following describes the process that we undertake to create the photomontage renderings that form the basis of this report.

3.1 DIGITAL 3D SCENE CREATION

The first step in our process is the creation of an accurate, real world scale digital 3D scene that is positioned at a common reference point using MGA-56 (GDA 94) coordinates system.

We use a variety of data from various sources to create the 3D scene, most commonly survey data from registered surveyors, 3D photogrammetric models of cities and building 3D models supplied by Architects. In some cases where 3D data does not exist we are required to create 3D models from 2D cad data. A detailed description of the various data sources used in this report can be found in Appendix A to C.

All data is imported into the 3D scene at real world scale and positioned to a common reference point. This common reference point is established by using the MGA-56 (GDA 94) coordinates system. When we receive data sources that are not positioned to MGA-56 (GDA 94) coordinates we use common points in the data sources that can be aligned to points in other data sources that are positioned at MGA-56 (GDA 94). This can be data such as site boundaries and building outlines. Descriptions of how we have aligned each data source can also be found in 3.4.

Once the various data sources have been imported and positioned with reference to each other, we then create digital 3D cameras in the 3D scene. The camera locations selected for the 7 photomontage locations in this report, have been recommended by OG Urban, taking into consideration the topology of the site, the future built form, residential properties adjacent to the site and existing vegetation. These positions have been approved by our client and the planner.

3.2 SITE PHOTOGRAPHY

Using the 3D scene digital camera locations as our reference, we then capture site photography from locations as close as possible to the digital camera locations. In some cases we may need to modify the location due to site conditions that were not visible prior to conducting the photo shoot.

Camera lenses for each photograph are selected taking a variety of factors into consideration including the distance from the site, the size of the proposed development with respect to existing built form and landscape and any specific planning authority requirements.

In some cases a specific lens requirement set by planning authorities may not produce a photomontage that is effective for visual impact assessment. In the cases where we are required to satisfy a specific lens stipulation, and we consider that this is not effective for assessment of visual impact, we will either outline the extent of the longer lens or provide a separate cropped image at the required focal length.

Full meta data of the photographs are recorded during the site photography. The critical data we extract is data, time, and lens width or field of view.

3.3 SITE AND PHOTOGRAPHY LOCATION SURVEY

To correctly adjust the digital cameras in our 3D scenes to match the positions of the site photography, we engage a registered surveyor to survey all camera locations and reference this survey to MGA 56 (GDA 94) coordinates.

In addition to the camera locations we also instruct the surveyor to survey selected features that are visible in the photographs from each individual location. This might include building corners, kerb lines, posts etc.

This survey data can be found in Appendix B.

3.4 ALIGNMENT OF 3D SCENE TO PHOTOGRAPHY

To align the 3D scene to the photograph we first import the site and photography location survey data into the 3D scene. We then load the photograph into the background of the corresponding 3D scene camera view, ensuring that the aspect ratio and lens setting match. The 3D scene camera is moved to the surveyed position and rotated so that the surveyed feature locations match the same features in the photograph. Additional surveyed data can be used to assist alignment such as existing site surveys and photogrammetric 3D models.



Image showing site boundary of Eden Centrev from 3d Model (Green) aligned to survey drawing from Chadwickcheng Consulting Survey(Red Lines).

3.5 RENDERING AND PHOTOMONTAGE CREATION

After the camera alignment we add materials and lighting to the 3D scene.

Materials were applied following the information from architectural drawings by DKO

A digital sunlight systems is added in the 3D scene to match the ligting direction of the sun in the photograph. This is done using the software sunlight system that mathes angle using location data and time and date information. This data is extracted from the metadata of the site photographs.

Images are then rendered from the software and layered over the photograph. In some cases additional linework may be added to show where proposed build form behind existing context.

4. MAP OF PHOTOGRAPHY LOCATIONS



Camera Positions

- 1. Tunks Hill Picnic Area
- 2. Tuckwell Park
- 3. Lane Cove Road Northern Position
- 4. Lane Cove Road Southern Position
- 5. St Crispens Green
- 7. Macquarie University Library

4. MAP OF PHOTOGRAPHY LOCATIONS



Camera Position 8. Westbourne Rd

5.1 CAMERA POSITION 1

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Tunks Hill Picnic Area
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	59.34m
Focal length in 35mm Film	24mm



5.1 CAMERA POSITION 1

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



5.2 CAMERA POSITION 2

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Tuckwell Park
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	60.21m
Focal length in 35mm Film	24mm

5.2 CAMERA POSITION 2

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



5.3 CAMERA POSITION 3

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Lane Cove Road Norther
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	55.28m
Focal length in 35mm Film	24mm

ern Position

5.3 CAMERA POSITION 3

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



5.4 CAMERA POSITION 4

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Lane Cove Road Souther
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	48.2m
Focal length in 35mm Film	24mm

ern Position

5.4 CAMERA POSITION 4

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



5.5 CAMERA POSITION 6

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	St Crispens Green
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	53.93m
Focal length in 35mm Film	24mm

Outline of proposed development of Eden Gardens

5.5 CAMERA POSITION 6

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT





Outline of proposed development of Eden Gardens

5.6 CAMERA POSITION 7

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Macquarie University Library
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	70.25m
Focal length in 35mm Film	24mm

Outline of proposed development of Eden Gardens

5.6 CAMERA POSITION 7

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



Outline of proposed development of Eden Gardens

5.7 CAMERA POSITION 8

ORIGINAL PHOTOGRAPH



ALIGNMENT OF SURVEYED POINTS



ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



3D VIEW LINE INFORMATION

Photo Date:	15th June 2022
View Location:	Westbourne Rd
Camera Used:	Sony ILCE-7RM4A
Camera Lens	FE 24-70mm F2.8 GM
Camera RL:	100.7m
Focal length in 35mm Film	24mm

Outline of proposed development of Eden Gardens

5.7 CAMERA POSITION 8

ORIGINAL PHOTOGRAPH WITH PROPOSED DEVELOPMENT



Outline of proposed development of Eden Gardens

6.1 APPENDIX A: 3D SCENE DATA SOURCES

A.1 - 3D model of proposed development of Eden Gardens

File Name:220610_12010_307 Lane Cove Road - Macquarie Park - Site Model with Site
BoundarySupplied by:OG UrbanFormat:3d ObjectAlignment:MGA 56 GDA94

A.2 - Survey drawing of Eden Gardens

File Name:	37174D2-MGA
Author:	Chadwickcheng consulting Survey
Format:	DWG
Alignment:	MGA 56 GDA94

A.3 - Survey drawing of photography points

File Name:	21544photolocation 1
Author:	CMS
Format:	DWG
Alignment:	MGA 56 GDA2020, converted to MGA 56 GDA 94



6.2 APPENDIX B: SITE SURVEY SUPPLIED BY CHADWICKCHENG CONSULTING SURVEY

6.3 APPENDIX C: PHOTOGRAPHY SURVEY BY CMS

CMS Surveyors Pty Limited A.B.N. 79 096 240 201 LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS SURVEYORS Page 1 of 2 Date: 20-06-2022 Our Ref: 21544 Photo Locations Studio 71/61 Marlborough Street Surry Hills NSW 2010 Dear Reena Dhupar, RE: PHOTO LOCATIONS - Eden Gardens, Macquarie Park As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations for Eden Gardens, Macquarie Park. Co-ordinates are MGA 56 (GDA 2020) and elevation to Australian Height datum (AHD). Measurements were taken using theodolite measurement and GNSS measurements. DWG of locations has also been supplied. Point Easting Northing Reduced Level Photo Point Number (RL) 1000 327395.658 6260619.873 Ground RL 58.64 PHOTO 1 1002 327380.524 6260617.488 58.67 CONCRETE 1003 327384.044 6260617,189 61.36 ROOF 327384.336 6260616.031 ROOF 1004 60.86 1005 327367.235 6260632.325 59.41 POST 2000 327969.943 6260746.183 Ground RL 52.33 PHOTO 6 2001 327868.998 6260730.488 54.71 ROOF 2002 327886.88 6260746.366 53.83 BEAM 2003 327910.139 6260772.649 54.89 ROOF 2004 327911.321 6260786.498 57.73 POLE 57.28 2005 327921.364 6260790 992 POLE 327339.046 3000 6260859.04 Ground RL 53.68 PHOTO 3 327332.335 6260813.334 65.84 3001 POLE

Surveyors SNSW

HEAD OFFICE

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COOTAMUNDRA Incorporating PENGELLY & GRAY 90 Wallendoon St, COOTAMUNDRA NSW 2590 Ph: 02 6942 3395 Fax: 02 6942 4046 Email: co



Note: R.L. shown on the report for photo locations are ground levels. Camera height should be added to the supplied RL of each corresponding photo location

Yours faithfully, CMS Surveyors Pty Limited Damon Roach



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6.60	PHOTO 4
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	POLE
	CHIMNEY
8.61	PHOTO 2
	WATER STATION
	STONE
	GOAL POST
	BASKETBALL BACKBOARD
	BASKETBALL BACKBOARD
	PHOTO 7
	POLE
	POLE
	CONCRETE
	TOP FENCE
	TOP FENCE

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