

Proposed Data Centre, Lane Cove West, NSW 2066 - Section 4.55 Modification

SSD 9741

VISUAL IMPACT ADDENDUM REPORT - PROPOSED SECTION 4.55 MODIFICATION

COMPARISON AGAINST Approved Scheme

Report Ref: **AVIA01**

Prepared for

GREENBOX

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1.0 INTRODUCTION

1.1 Project Background

This Visual Impact Addendum Report relates to a proposed S4.55 modification to the approved SSD 9741 at 1 Sirius Road, Lane Cove West. This comprises of a data centre, including two data halls, tech office, generator halls, substations, internal road and associated earthworks and landscaping.

A request for Secretary's Environmental Assessment Requirements (SEARs) was submitted to the Department of Planning and Environment (DoPE) in Nov 2018. An extensively detailed Landscape and Visual Impact Assessment was carried out for the original SSD 9741 submission. This report should be read as an addendum to the original LVIA01 report which relates to the Approved Scheme.

This addendum report aims to provide the following information regarding the proposed S4.55 modification:

Urban Design and Visual :

- a visual impact assessment (including photomontages and perspectives) of the section 4.55 development layout and design (buildings and storage areas), including height, colour, scale, building materials and finishes, signage and lighting, having regard to surrounding residential receivers, particularly in terms of potential impacts on:

- nearby public and private receivers
- significant vantage points in the broader public domain

- the analysis will be compared against the original approved project. This will allow for a comparison between the proposed and approved design and a judgement of any visual impacts created by the new development.

For a detailed summary of the S4.55 design changes refer to section 5.0.

1.2 This Report and Author

Geoscapes Pty Ltd, has been commissioned by A W Edwards on behalf of Greenbox, to produce a Visual Impact Addendum Report for the above proposed modification. This report has been written by Ben Gluszkowski (Director and Registered Landscape Architect) who has over 15 years' experience in the field of Landscape Architecture. He has previously been involved in high profile LVIA's on developments within the UK, including the M1 & M62 motorway road widening, several wind farms and energy from waste facilities (EFW).

Within Australia, Ben has completed LVIA's for Logos Property Group. These were submitted as part of an Environmental Impact Assessment (EIA) for State Significant Development (SSD) to the Department of Planning and Environment. He has also recently written an LVIA for Snackbrands Australia, Jaycar and Kemps Creek.

Geoscapes have also prepared Section 4.55 landscape design drawings. These documents detail landscape treatments to the site exterior, and should be read in conjunction with this report. Proposed landscape treatments have not changed significantly over the Approved Scheme.

2.0 METHODOLOGY OF ASSESSMENT

2.1 Guidelines

VIA does not follow prescribed methods or criteria. This assessment is based on the principles established and broad approaches recommended in the following documents:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA) – Third Edition (LI/IEMA 2013)
- The Landscape Institute Advice Note 01 (2011) Photography and Photomontage in Landscape and Visual assessment.

In accordance with GLVIA3 the assessment methodology is tailored to the specific requirements of the Proposed Development, its specific landscape context and its likely significant effects. The methodology used for this assessment reflects the principal ways in which the Proposed Development is considered likely to interact with existing landscape and visual conditions as a result of:

- The permanent introduction of a data centre into the existing landscape/townscape and visual context.

Landscape assessment is concerned with changes to the physical landscape in terms of features/elements that may give rise to changes in character. Visual appraisal is concerned with the changes that arise in the composition of available views as a result of changes to the landscape, people's responses to the changes and to the overall effects on visual amenity. Changes may result in adverse (negative) or beneficial (positive) effects.

The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above, information and data analysis techniques, uses subjective professional judgement and quantifiable factors wherever possible, and is based on clearly defined terms (refer to glossary).

As stated in paragraph 1.20 of the GLVIA:

"The guidance concentrates on principles while also seeking to steer specific approaches where there is a general consensus on methods and techniques. It is not intended to be prescriptive, in that it does not follow a detailed 'recipe' that can be followed in every situation. It is always the primary responsibility of any landscape professional carrying out an assessment to ensure that the approach and methodology adopted are appropriate to the particular circumstances."

This LVIA written by Geoscapes is considered to use a methodology and approach that is appropriate to this type of development.

2.2 Computer Generated Visualisations - Photomontages

Section 4.55 photomontages have been produced from the same locations as those carried out for the original approval in report LVIA01.

Photography for the photomontages was undertaken by Geoscapes using a Canon 60D (DSLR) camera. A 50 mm focal length prime lens was attached to the Canon. For Viewpoint 2 a drone with a 26mm focal lens was used, due to inaccessibility of that location.

Photomontages have been prepared to create "simulated" views of the proposed development. Although these do not claim to exactly replicate what would be seen by the human eye, they provide a useful "tool" in analysing potential visual impacts from receptor locations.

Those viewpoints selected for photomontages, have been presented in this report alongside the Approved Scheme on the same sheet for ease of comparison. The computer-generated images include a representation of landscape mitigation both immediately following installation (which have been described as year 0) and at a mature age of 15 years. It is important to note, that the year 15 images are simulations of how proposed landscaping may appear at a selected viewpoint. The final appearance of landscape mitigation will be based on many factors, including growth rates, maintenance and environmental conditions.

The assessment undertaken at year 15 assumes that such mitigation has had the opportunity to establish, mature and become effective. For the purposes of most LVIA's, year 15 effects are also taken to be the 'residual effects' of the development. Residual effects are those which are likely to remain on completion of the development and are to be given the greatest weight in planning terms. Any visual impacts determined from viewpoint locations (which have been assessed in section 7.0 of this report), are based on the year 15 residual effects. In certain photomontages there may be little or no difference between Year 0 or Year 15 images, this may be due to the development being partially obscured, that there is no proposed landscaping on a particular side of a development or that landscaping would be behind existing landscaping in the foreground.

The horizontal field of view within the photomontages exceeds the parameters of normal human vision. However, in reality the eyes, head and body can all move and, under normal conditions, the human brain would 'see' a broad area of landscape within a panoramic view. Each of the photomontage panoramas within this report (with the exception of Viewpoint 2 which is wider) has a horizontal viewing angle of 67°, a single photographic image from a 50mm lens has a horizontal viewing angle of 39.6°.

Whilst a photomontage can provide an image that illustrates a photo realistic representation of a development, in relation to its proposed location and scale relative to the surrounding landscape, it must be acknowledged that large scale objects in the landscape can appear smaller in photomontage than in real life. This is partly due to the fact that a flat image does not allow the viewer to perceive any information relating to depth or distance.

An extract taken from the Photography and Photomontage in Landscape and Visual Impact Assessment, Landscape Institute Advice Note 01/11 states that:

'it is also important to recognise that two-dimensional photographic images and photomontages alone cannot capture or reflect the complexity underlying the visual experience and should therefore be considered an approximate of the three-dimensional visual experiences that an observer would receive in the field'.

2.3 Visual Receptor Sensitivity

People's (visual receptors) overall visual sensitivity has been assessed by combining consideration of their visual susceptibility with the value or importance that they are likely to attribute (or not) to their available views.

Factors which influence professional judgement when assessing the degree to which a particular view can accommodate change arising from a particular development, without detrimental effects would typically include:

- Judgements of value attached to views take into account recognition of the value attached to particular views e.g. heritage assets or through planning designations; and
- Judgements of susceptibility of visual receptors to change is mainly a function of the occupation or activity of people experiencing the view at particular locations; and the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.

Assessment of the sensitivity of visual receptors may be modified (either up or down) by consideration of whether any particular value or importance is likely to be attributed by people to their available views. For example, travellers on a highway may be considered likely to be more sensitive due to its scenic context or residents of a particular property may be considered likely to be less sensitive due to its degraded visual setting.

Typically, sensitivity of visual receptors may be judged to be very high, high, medium, low or very low. Definitions of these indicative categories as appropriate to this assessment are set out in the table opposite.

Table: Visual Receptor Sensitivity

Category	Definition
Very High	Designed view to or from a heritage / protected asset. Key protected viewpoint e.g. interpretive signs. References in literature and art/or guidebooks and tourist maps. Protected view recognised in planning policy designation [LEP, DCP, DoPE]. Views from the main living space of residential properties, state public rights of way e.g. bush trails and state designated landscape feature with public access. Visitors to heritage assets of state importance.
High	View of clear value but may not be formally recognised e.g. framed view of high scenic value from an individual private dwelling or garden. It may also be inferred that the view is likely to have value e.g. to local residents. Views from the secondary living space of residential properties and recreational receptors where there is some appreciation of the landscape e.g. golf and fishing. Local public rights of way and access land. Road and rail routes promoted in tourist guides for their scenic value.
Medium	View is not promoted or recorded in any published sources and may be typical of the views experienced from a given receptor. People engaged in outdoor sport where an appreciation of the landscape has little or no importance e.g. football and soccer. Road users on main routes (Motorway/Freeway/Highway) and passengers on trains.
Low	View of clearly lesser value than similar views experienced from nearby visual receptors that may be more accessible. Road users on minor roads. People at their place of work or views from commercial buildings where views of the surrounding landscape may have some importance.
Very Low	View affected by many landscape detractors and unlikely to be valued. People at their place of work or other locations where the views of the wider landscape have little or no importance.

For the visual receptors identified, the factors above are examined and the findings judged in accordance with the indicative categories below in the table to determine the magnitude of change.

Table: Visual Receptor Magnitude of Change Criteria

Category	Definition
Very High	There would be a substantial change to the baseline/Approved Scheme, with the proposed development creating a new focus and having a defining influence on the view. Direct views at close range with changes over a wide horizontal and vertical extent.
High	The proposed development will be clearly noticeable and the view would be fundamentally altered by its presence. Direct or oblique views at close range with changes over a noticeable horizontal and/or vertical extent.
Medium	The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor. Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
Low	The proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component. Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
Very Low	The proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the approved situation. Long range views with a negligible part of the view affected.

In some cases, there may be no magnitude of change and the view will be unaffected by the development (e.g. development would be fully screened existing woodland). In this case a category of 'no change' will be used.

2.4 Significance of the Impact

For each receptor type, the sensitivity of the location is combined with the predicted magnitude of change to determine the level of effect on any particular receptor. Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the level of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in the table below:

Receptor for Sensitivity	Magnitude of Change					
		Very High	High	Medium	Low	Very Low
	Very High	Substantial	Major	Major/Moderate	Moderate	Moderate/Minor
	High	Major	Major/Moderate	Moderate	Moderate/Minor	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor	Minor Negligible
	Low	Moderate	Moderate/Minor	Minor	Minor Negligible	Negligible
	Very Low	Moderate/Minor	Minor	Minor Negligible	Negligible	Negligible/None

In all cases, where overall effects are predicted to be moderate or higher (shaded grey), this will result in a prediction of a significant effect in impact terms. All other effects will be not significant. If a view from a receptor is judged to be 'no change' in the category of Magnitude of Change, then the significance of impact will automatically be none.

In certain cases, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change in the view or effect upon landscape receptor will be significant or not and, where this occurs, it is explained in the assessment.

Visual effects are more subjective as people's perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, Geoscapes will exercise objective professional judgement in assessing the significance of effects and will assume, unless otherwise stated, that all effects are adverse, thus representing the worst-case scenario. The significance of visual impacts are assessed against the proposed development in isolation only.

2.5 Visualisation of the Development

Morphmedia were engaged to develop a digital three-dimensional model using Autodesk 3Ds Max. The model included all aspects of the proposed development combined with the landscape design and mitigation proposed by Geoscapes.

Views were generated from the model that matched the camera positions of photographs taken from selected viewpoints. These were then combined with the photographs to create simulated views of the proposal.

Photomontage figures are intended to be printed at A3 and to be held at a comfortable distance by the viewer, this is generally accepted by current guidelines to be anywhere from 300mm to 500mm away from the eyes and held in a flat projection.

2.6 Assessment of Visual Impact

The visual impact from receptors has been assessed based on the criteria described in Section 2.4. As per the original Approved Scheme, the following list of visual receptors have been selected for assessment.

- Lane Cove Bush Walk, Lane Cove West (VP1)

- Arise Meriton, Lane Cove West (VP2)
- Lane Cove Valley Walk, Lane Cove North (VP3)
- Magdala Park, North Ryde (VP4)
- Honeywell Office, North Ryde (VP5)
- Ryde Gardens, North Ryde (VP6)
- 44 Cox Road, East Ryde (VP7)
- 282 Pittwater Road, East Ryde (VP8)
- 102 Melba Drive, East Ryde (VP9)
- Great North Walk Position 1, East Ryde (VP10)
- Great North Walk Position 2, East Ryde (VP11)

All 11 viewpoint locations have been selected for photomontage.

Refer to section 7.0 for a detailed visual impact assessment from the receptors.

2.7 Selected Viewpoints – Receptor Locations

The symbols and numbering in Figure 1, indicates the locations of the viewpoints and photomontages that have been selected for a Visual Impact Assessment (VIA). These are the same viewpoints that were selected in the original SSD 9741 LVIA01 report.

From viewpoint locations, photomontages have been generated to represent as closely as possible views of the proposed Section 4.55 development following construction at year 0 and at year 15. Year 15 photomontages are used to simulate proposed landscape mitigation at maturity.

Refer to the visual impact assessment at Section 7.0 of this report and the corresponding viewpoints 1 to 11.

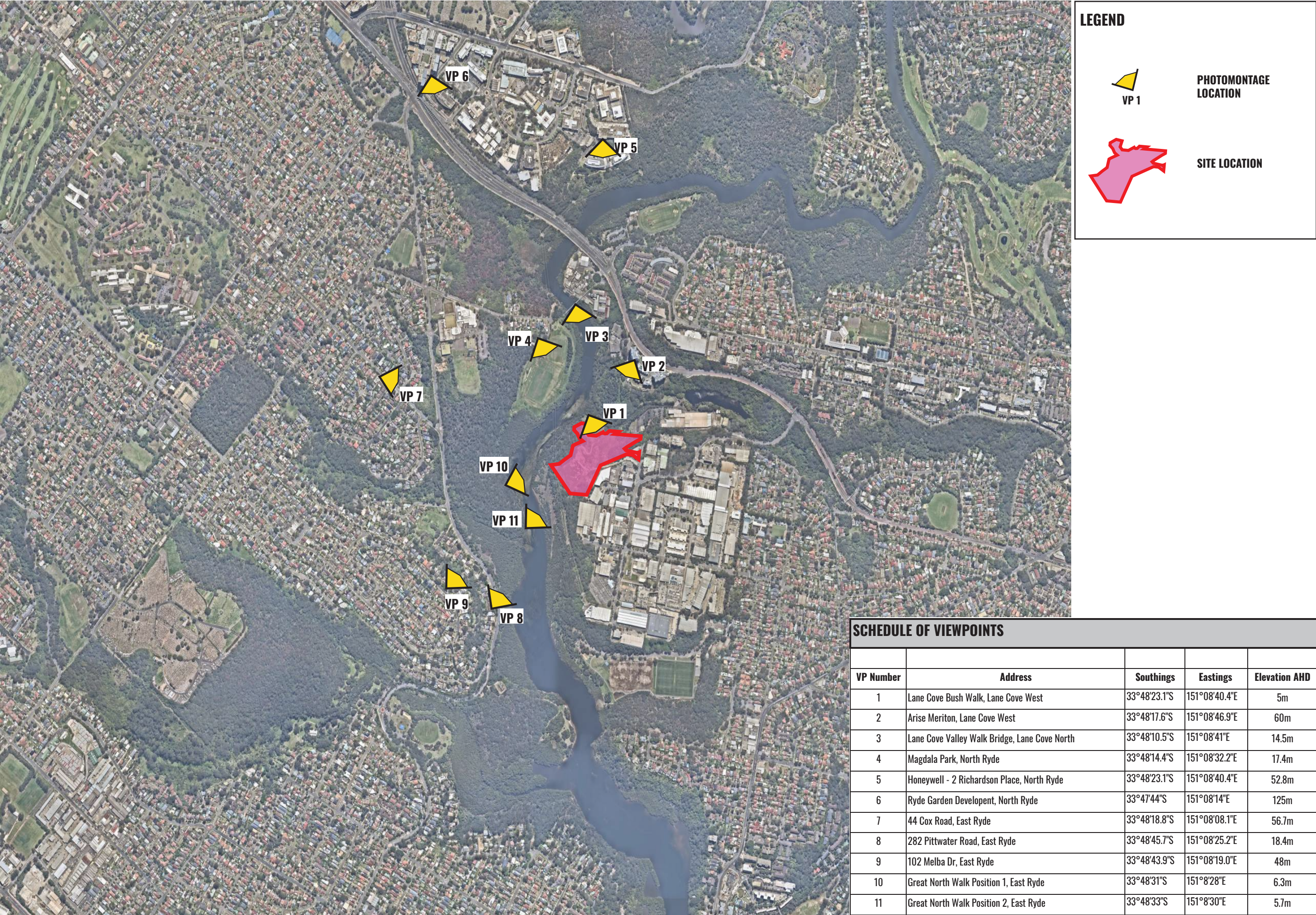


Figure 1: Viewpoint Locations

4.0 DEVELOPMENT PROPOSALS

The following information is based on an assessment of the SSD Modification drawings provided by GreenBox Architecture.

4.1 Overall Design Proposals - Section 4.55 Modification

The proposed modifications to the original SSD approval are a product of a change in essential infrastructure equipment associated with the project. The original proposed scheme included Medium Voltage emergency generators which provide backup power supplies to the site in the event of a major disruption to the authority supply. The proposed modifications replace the MV generators with Low Voltage generators. The direct outcome of this replacement is an increase in the number of generators required to effectively power the entire site. In addition to the increase in generator numbers and associated flow on effects, the revised drawings include other modifications to the original scheme.

In summary, the proposed changes include:

- Previous building phases A, B and C, have been rationalised into 2 phases; buildings A and B.
- External plant platforms revised to suit the increase in generator numbers. The increase has necessitated additional levels to the external plant and equipment platforms. Increase from two to four levels on the west; five levels to the north; and 6 levels to the east. The footprint area has increased slightly to accommodate the required numbers. Overall height of the plant platforms aligns with existing parapet levels on the building. Overall numbers of generators increased from 80 to 116. The LV generators are smaller in physical size and capacity.
- Diesel fuel storage, originally located externally as approved under SSD-9741; has been located within the building on level 1. These consist of 16 individual steel tanks located on the northern side of level 1. The diesel store will be bunded to contain any potential fuel leaks or spills.
- In addition to the increase in generators, all previous switchgear and power train units have also been transferred to the external plant decks. This allows the western zone in level 1 to be deleted with the exception of the Diesel store. The zone in the eastern end will be utilised for additional data halls. The addition of data halls to L1 will require the lowest level to be set at RL 8.40, previously 9.90.
- Relocation of required carparking to the west and north faces of the building. Carparking moved to allow for water storage tanks at western end of carparking area.
- Provision of safety barrier to north and south faces of the roof level. Due to proximity of mechanical plant, perforated screens added to prevent potential falls.
- Goods lift (one off) extended to service roof area, to facilitate maintenance access.
- Passenger lift added to southern side to facilitate pedestrian access to all levels.
- Minor position adjustment to western fire trail to accommodate revised plant platforms.

There are no impacts on the previous approach for landscaping works. Civil works wrt to stormwater management remains unchanged, bulk excavation levels adjusted to suit levels associated with platform modifications and L1 modifications.

Additional Information for Incorporation into relevant discipline reports:

- BCA/Fire Engineering: Lithium batteries will be stored within data halls at some point in the future. AirTrunk to provide types and quantities. Implications to be covered in relevant reports.

- Bushfire tank on roof level will be increased in capacity to approx. 150,000 litres (final size to be confirmed). This doubles as a redundant water supply for internal sprinklers in the event mains supply to sprinkler system fails.

- With diesel tanks moving internally, steel tanks will revert to single walled with leak detection provided to the room itself. Room to be 4 hour rated.

4.2 Height / Scale

The design proposes a Data Centre with two main data halls, main office, substation, loading docks, plant equipment, car parking and road access. The total site area is 39,453m² of which 14,119m² is counted as deep soil. The total landscape area is 14,296m² which represents 36.24% of the site area. The main buildings facades are orientated in a northwesterly direction facing the river.

The development has six data halls A to F, these have a max roof height of 37.6m AHD. The data halls combined create a footprint of approximately 175m x 62m.

The development has been designed to work with the natural topography of the site. By setting the development down into the site, this will ensure that the roof level does not protrude higher than the adjacent existing building of No. 1 Apollo Place. No 1. Apollo place has a roof height of 39m AHD and other similar types of building further to the south east are taller.

By not building the proposed roof level above the height of existing development, the proposed Data Centre should not create a large magnitude of change over a vertical extent within certain view corridors for individuals looking views towards the site.

4.3 Colour / Materials & Finishes

The colours, materials and finishes have been selected to consider the surrounding bushland in which the development will be situated. Building facades contain four colours of painted concrete, which are intended to be distributed randomly. These colour tones contain a mixtures of grays and greens to visually break up the long facade and match with colors of the surrounding bush. This should help to recess the build forms into the landscape.

4.4 Signage & Lighting

Signage will not form a large or dominate component of the development. Any signs will be subtle, will not be visually obtrusive and will most likely represent the style of other signage in the area.

Lighting will be restricted to allow access at night, this is likely to be general lighting to the carpark areas and entry point to the building. This should not adversely increase light spill or affect nearby visual receivers.

4.5 Noise Screening

As per the recommendations of the Operational Noise Assessment.

4.6 Summary

Overall it is judged that the architectural design of the buildings for the proposed data centre, considers the surrounding context and landscape in which it is located. By terracing the building heights down towards Lane Cove River and using natural tones and colours, visual impacts have been considered by the design team and mitigation proposed. Existing bushland and vegetation associated with Lane Cove River will help to screen the building for the majority of view corridors and a large percentage of deep soil area has been provided in which to plant new landscaping.

5.0 LANDSCAPE STRATEGY, DESIGN AND MITIGATION

Landscape design and strategy is based on the same approach as the Approved Scheme and follows the same principles as laid out in report LVIA01. Plans have been updated to reflect the Section 4.55 design.

5.1 Bushfire Requirements

The following information has been provided by the Bushfire Consultants - Travers Bushfire and Ecology:

The site boundary is to be treated as an Inner Protection Area (IPA) and fuel loads within the IPA are to be maintained so it does not exceed 4t/ha.

Trees are to be maintained to ensure:

- Canopy cover does not exceed 15%
- Trees (at maturity) do not touch or overhang the building
- Tree canopies (at maturity) should be well spread out and not form a continuous canopy
- Lower limbs should be removed up to a height of 2m above ground
- Preference should be given to smooth barked and evergreen trees.

Shrubs are to be maintained to ensure:

- Large discontinuities or gaps in vegetation
- Shrubs should not be located under trees
- Shrubs should not form more than 10% of ground cover
- Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of vegetation.

Grass is to be maintained to ensure:

- A height of 10cm or less
- Leaves and debris is removed.

A 4m wide fire access track has also been included within the design. This will be a grassed track with reinforcement under in the form of a plastic support grid. This will provide the necessary sub grade support for a firetruck while still allowing grass to grow through.

5.2 Vegetation Management Plan (VMP)

A vegetation management plan has been produced by Traver Bushfire and Ecology. Landscape planting design will follow requirements of the VMP. Refer to report REF: 18AWE02V.

5.3 Strategy and Mitigation

To help mitigate views from particularly the north and west, native endemic planting has been introduced to help provide screening of the development. This will allow for large endemic canopy tree planting (in uncontaminated areas) and this would be expected to reach a mature height of between 15m to 25m. This will help to filter views of the development from potential visual receivers. An area identified as contaminated land within the VMP, cannot contain new tree planting, only shrubs and groundcovers. Refer to Travers VMP report REF: 18AWE02V.

5.4 Detailed Landscape Proposals

Please refer to landscape design Section 4.55 documentation LDA-00 to LDA-07 prepared by Geoscapes, for detailed landscape proposals.

6.0 LANDSCAPE IMPACT ASSESSMENT

6.1 Significance of Impact

The sensitivity of the landscape has been assessed within the baseline to be **medium** (see LVIA01). From understanding the development proposals, mitigation and the existing industrial / commercial character of adjacent developments to the east, the magnitude of change is judged to be **medium**. The introduction of the development is not uncharacteristic of the surrounding industrial context in which it will sit. Through the use of complementary natural colour tones and materials, the development should blend into the natural bushland background. The significance of landscape impact therefore, is judged to be **moderate/minor**.

7.0 VISUAL IMPACT ASSESSMENT S4.55 PROPOSAL

7.1 Viewpoint 1



Viewing Location	Lane Cove Bush Walk, Lane Cove West - Looking Southeast
GPS	33°48'23.1" S 151°08'40.4" E
Elevation (Eye-level)	5m AHD
Date and Time of Photograph	27th Nov 2018 - 12.04pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 4, 4a (4a is a separate figure additional to this report that shows a wider angle of view)

Visual Description

Approx. Viewing Distance from Site Boundary	16m
View description & prominence of the development	This visual receptor is located along Lane Cove Bush Walk at a close distance to the northern site boundary. The bush walk extends from Blackman Park Playground, along the west side of Lane Cove River to the Junction of Epping and Mowbray Road. The walk opens up to a grassed area immediately to the north of the development boundary. The approved development is clearly seen in the immediate foreground of the image, to the right and left of the image bushland is seen along Lane Cove River.

Significance of Visual Impact of Approved Scheme	Major/moderate (refer to assessment of visual impacts in previous LVIA01 report)
Section 4.55 Visual Receptor Sensitivity	Lane Cove Bushwalk is a state public right of way and is referenced in on-line media, state and council DCP's and literature, tourist maps and walking maps. It passes through bushland close to the waters edge of Lane Cover River Foreshore and crosses close to the bottom of the development site at approximately a distance of 16m. It is regarded as environmentally and visually highly sensitive within state and local planning controls and policies. However, at this particular location the Approved Scheme significantly affects the view. There are other much more attractive views and vistas along other parts of the bush walk and this location represents just one small part of the walk. With the introduction of the Approved Scheme into the view, it is judged that the that the sensitivity for this receptor to the development would be low .
Section 4.55 Magnitude of Change	The proposed section 4.55 development will still be clearly noticeable with a large horizontal and vertical extent of the view affected and views are at very close range. However, it will not present a significantly different view than the Approved Scheme in terms of scale. The increased number of generators do produce more areas of shadow and a more complex facade is presented to the viewer. Therefore, the magnitude of change for this visual receptor is judged to be medium .
Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 4 and 4a, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor .



Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 4: Viewpoint 1 - Lane Cove Bush Walk, Lane Cove West - Looking Southeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.2 Viewpoint 2

Viewing Location	Arise Meriton, Lane Cove West - Looking Southwest
GPS	33°48'17.6" S, 151°08'46.9"E
Elevation (Eye-level)	60m AHD
Date and Time of Photograph	21st Nov 2018 -2.54pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 5

Visual Description

Approx. Viewing Distance from Site Boundary	300m
View description & prominence of the development	This view was taken alongside the Meriton building. This was achieved by flying an aerial drone to approximately half the height of the building, in order to represent what views would be experienced by residential tenants of apartments facing south towards the site. It is important to note that not all residents facing south will have views of the development, some apartments on lower levels will have views obscured by existing vegetation. The site is prominent in the foreground of the view corridor of the baseline image opposite. To the right Lane Cove River and Magdala Park can be seen surrounded by bushland. The the left of the image are commercial and industrial buildings within Lane Cove Business Park. In the background the suburbs of Lane Cove, East Ryde and Hunters Hill are visible. As can be seen in Approved Scheme photomontage, the data centre sits centrally in the image.

Significance of Visual Impact of Approved Scheme	Moderate (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	With the introduction of the Approved Scheme into the view, it is judged that the that the sensitivity for this receptor to the development would be medium .
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Section 4.55 Magnitude of Change	The proposed section 4.55 scheme is visually similar to the approved project, the additional generators change the appearance of the facade, but this is not greatly dissimilar to the approved image. Therefore, the magnitude of change for this visual receptor is judged to be low .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 5, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 5: Viewpoint 2 - Arise Meriton, Lane Cove West - Looking Southwest (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.3 Viewpoint 3

Viewing Location	Lane Cove Valley Walk Bridge, Lane Cove North - Looking South
GPS	33°48'10.5" S, 151°08'41" E
Elevation (Eye-level)	14.5m
Date and Time of Photograph	27th Nov 2018 - 10.44am
Approved Scheme & Section 4.55 Photomontage Figure	Figure 6

Visual Description

Approx. Viewing Distance from Site Boundary	410m
View description & prominence of the development	Lane Cove Valley Walk connects a network of bushwalks within the immediate area and provides access across the Lane Cove River via a pedestrian bridge. Views would be experienced by users on marine craft such as boats and kayaks. The Approved Scheme is seen clearly in the center of the baseline image opposite, with the building stack at No 5. Apollo place in the background. To the left and right is dense bushland associated with the River.

Significance of Visual Impact of Approved Scheme	Moderate (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	Lane Cove Valley Bush Walk is a state public right of way and is referenced in on-line media, state and council DCP's and literature, tourist maps and walking maps. The view contains protected bushland either side of Lane Cove River and views of the water itself. However, industrial development associated with Lane Cove business park can be seen centrally in the view including the Approved Scheme, this has somewhat influenced the natural appearance and quality of view. Nevertheless, it is judged that the sensitivity for this receptor to the development would still be high .
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Section 4.55 Magnitude of Change	Although the facade of the building does slightly alter in appearance from the Approved Scheme, it can be argued that the proposed Section 4.55 development does not appear to substantially alter the view. Therefore, magnitude of change is expected to be very low .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 6, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

7.4 Viewpoint 4

Viewing Location	Magdala Park, North Ryde - Looking Southeast
GPS	33°48'14.4" S, 151°08'32.2" E
Elevation (Eye-level)	17.4m
Date and Time of Photograph	27th Nov 2018 - 10.23am
Approved Scheme & Section 4.55 Photomontage Figure	Figure 7

Visual Description

Approx. Viewing Distance from Site Boundary	350m
View description & prominence of the development	Magdala Park is located on the eastern side of the development site and Lane Cove River. It is predominantly used for recreation and there are several pitches for sports related activities. The site is open and does experience direct views of the Approved Scheme. In the center of the background of the baseline image, the approval site is seen along with 2 Apollo Place, 5 Sirius Road and other commercial buildings. Bushland at the edge of the western shoreline is situated within the foreground, which provides some visual screening of the development site.

Significance of Visual Impact of Approved Scheme	Moderate/minor (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	People using the park will generally be involved in outdoor sports and other recreational activities. The appreciation of the landscape for these users groups, may have little or no importance. The view has already been affected by industrial and commercial development, with buildings situated along Sirius road clearly seen. It is judged that the sensitivity for this receptor to the development would be medium . This is the same rating as the Approved Scheme.
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Section 4.55 Magnitude of Change	From the photomontage opposite, it is apparent that the proposed section 4.55 development is visually similar in scale to that of the Approved Scheme. The additional generators do create a more open facade to the building however, there is no significant increase to the vertical or horizontal extent of the development in the view. Therefore, the magnitude of change is expected to be low .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 7, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 7: Viewpoint 4 - Magdala Park, North Ryde - Looking Southeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.5 Viewpoint 5

Viewing Location	Honeywell Office - 2 Richardson Place, North Ryde - Looking Southeast
GPS	33°48'23.1"S, 151°08'40.4"E
Elevation (Eye-level)	52.8m AHD
Date and Time of Photograph	4th Dec 2018 - 3.54pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 8

Visual Description

Approx. Viewing Distance from Site Boundary	970m
View description & prominence of the development	<p>This visual receptor, was selected to be representational of views that might be experienced from the south side of commercial buildings located within North Ryde. These buildings can clearly be seen in the drone photography and include commercial properties such as Honeywell, BOC and 3M (see figures 10 and 14).</p> <p>The photograph opposite was taken from the 3rd floor communal balcony of the Honeywell Office, and the approved development site can be seen in the center of the photo. Lane Cove River and Magdala Park are seen to the right of the image. To the left is the residential tower of Arise Meriton and commercial buildings associated with Lane Cove Business Park. Residential properties are also seen to the east. In the foreground is another commercial building within North Ryde Business Park.</p>

Significance of Visual Impact of Approved Scheme	Minor negligible (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	Office windows and communal spaces facing south at higher levels, would experience a view as shown in Figure 32. As this receptor is representative of people at their place of work, the view may hold some importance to them. However, the view does contain many built forms, including the residential Meriton tower and parts of Lane Cove Business Park. It can be judged that the sensitivity for this receptor to the development would be low .
Section 4.55 Magnitude of Change	As shown in the Section 4.55 photomontages opposite, the proposed section 4.55 development is not dissimilar to the Approved Scheme photomontage. Therefore, the magnitude of change is judged to be very low .
Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 8, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be negligible .



Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

7.6 Viewpoint 6

Viewing Location	Ryde Gardens, North Ryde - Looking Southeast
GPS	33°47'44"S, 151°08'14"E
Elevation (Eye-level)	125m
Date and Time of Photograph	27th Nov 2018 - 1.57pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 9

Visual Description

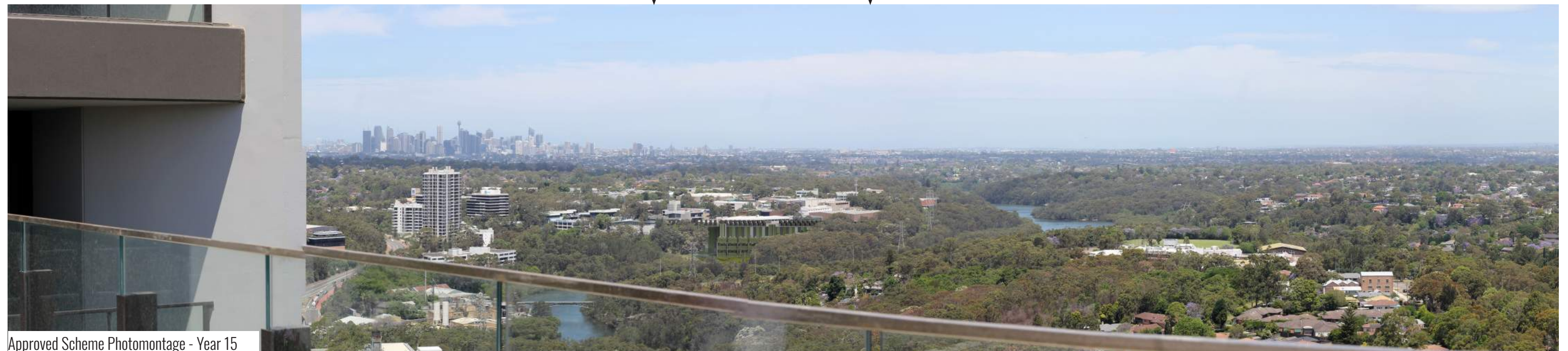
Approx. Viewing Distance from Site Boundary	1.35km
View description & prominence of the development	Ryde Gardens is a new residential development containing several towers located immediately behind North Ryde Train Station. Residential apartments and public communal spaces facing south will experience views of the development, however these are at a distance of 1.3km away. The photo was taken from the rooftop communal space of Tower A on floor 24. Extensive views over the surrounding landscape are possible from this location with Sydney CBD seen in the distant background. Commercial development within Lane Cove Business Park is seen behind the Approved Scheme, which is centrally located within the photo.

Significance of Visual Impact of Approved Scheme	Minor negligible (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	At higher elevations within the tower and at the rooftop communal spaces, extensive long range view exist over greater Sydney. The view therefore, is a mix of cityscape, residential, and industrial. Views of the development are likely from private primary or secondary spaces. The view is at a distance of 1.35km from the site and therefore, it is judged that the sensitivity for this receptor to the development would be medium .
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Section 4.55 Magnitude of Change	The section 4.55 development will form a barely noticeable component view, and the view whilst slightly altered would be similar to the Approved Scheme. Therefore, the magnitude of change is judged to be very low .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 9, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor negligible .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 9: Viewpoint 6 - Ryde Gardens, North Ryde - Looking Southeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.7 Viewpoint 7

Viewing Location	44 Cox Road, East Ryde - Looking East
GPS	33°48'18.8" S, 151°08'08.1" E
Elevation (Eye-level)	56.7m
Date and Time of Photograph	27th Nov 2018 - 10.00am
Approved Scheme & Section 4.55 Photomontage Figure	Figure 10
Visual Description	
Approx. Viewing Distance from Site Boundary	800m
View description & prominence of the development	44 Cox Road, is a new residential dwelling that is still currently under construction. It was identified through Drone photography analysis within the original LVIA01 report. The photograph shown opposite was taken from a proposed balcony on the eastern corner of the property. In the foreground, significant vegetation is present and bushland associated with Lane Cove River can be seen. Sydney CBD is visible to the right of the image in the far distance and the Merition tower is seen in the far left. Lane Cove Business Park and the development site are centrally located within the view, with the top portion of No. 2 Apollo Place visible. The presence of existing vegetation does currently screen lower parts of the site.
Significance of Visual Impact of Approved Scheme	Negligible (refer to assessment of visual impacts in previous LVIA01 report)
Section 4.55 Visual Receptor Sensitivity	There is a significant amount of vegetation in the foreground of the view, this is the bushland to the west of Lane Cove River. At a medium distance in the baseline photo, Lane Cove Business park can clearly be seen, therefore, the view is already influenced by industrial development. The view is likely to be from secondary living spaces and therefore, it is judged that the sensitivity for this receptor to the development would be low .
Section 4.55 Magnitude of Change	From the evidence shown within the Section 4.55 photomontages opposite, the proposed development would form a barely noticeable component of the view, and the view would be very similar to the existing Approved Scheme. Therefore, the magnitude of change is judged to be very low .
Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 10, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be negligible .

Extent of AirTrunk Development



Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 10: Viewpoint 7 - 44 Cox Road, East Ryde - Looking East (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.8 Viewpoint 8

Viewing Location	282 Pittwater Road, East Ryde - Looking Northeast
GPS	33°48'45.7" S, 151°08'25.2" E
Elevation (Eye-level)	18.4m
Date and Time of Photograph	27th Nov 2018 - 9.01am
Approved Scheme & Section 4.55 Photomontage Figure	Figure 11

Visual Description

Approx. Viewing Distance from Site Boundary	500m
View description & prominence of the development	<p>This viewpoint is taken from a second floor balcony of a residential property along Pittwater Road within East Ryde. The view is representational of several properties along this section of Pittwater Road, who would experience similar views. These are shown within the Drone photography image figures 12-13 and 16-17 within report LVIA01.</p> <p>The property is situated in an elevated position on the south eastern side of Lane Cove River and behind Bushland, which makes up a large proportion of what is seen within the view corridor. The Meriton residential tower is clearly seen to the left of the image. The Approved Scheme is located to the left of the baseline photo and partially screened by existing vegetation. There are several electric pylons which cross the view.</p>

Significance of Visual Impact of Approved Scheme	Moderate/minor (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	Within the view corridor, there is a significant amount of bushland which is associated with the Lane Cove River corridor. This combined with views of the river itself, provide a pleasant outlook and one that holds a value to residents close to this location with elevated views. However, there are several landscape detractors in the view, including the AusGrid power grid at 29 Sirius Road to the right of the view and a number of electric pylons which traverse the eastern side of the river corridor. The Approved Scheme could also be considered a landscape detractor. It is therefore, judged that the sensitivity of this visual receptor is medium .
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Section 4.55 Magnitude of Change	The section 4.55 proposed development is similar in scale to the Approved Scheme. However, the more open facade coupled with the increase in generators, will form a new and recognisable element within the view as opposed to the flat facade presented at the approval stage. The magnitude of change is likely to be more critically viewed by the residential receptors along this location. Therefore, the magnitude of change is judged to be high .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 11, the Section 4.55 Modification design is similar in scale to the Approved Scheme. However, the additional generators do create a more visually obtrusive facade that residential receptors will potentially experience views of from living / secondary living spaces. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be moderate .
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Extent of AirTrunk Development



Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 11: Viewpoint 8 - 282 Pittwater Road, East Ryde - Looking Northeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.9 Viewpoint 9

Viewing Location	102 Melba Drive, East Ryde - Looking Northeast
GPS	33°50'23.43" S, 150°46'40.91" E
Elevation (Eye-level)	48m
Date and Time of Photograph	27th Nov 2018 - 9.46am
Approved Scheme & Section 4.55 Photomontage Figure	Figure 12

Visual Description

Approx. Viewing Distance from Site Boundary	600m
View description & prominence of the development	This view is taken from a second floor balcony of an elevated property immediately east of the development site, within the residential suburb of East Ryde. The approved development can clearly be seen centrally within the approved photomontage view, with commercial buildings from Lane Cover Business Park to the right of the image. Significant vegetation is present in the foreground, which does partially obscure views of nearby commercial development.

Significance of Visual Impact of Approved Scheme	Moderate/minor (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	As a residential visual receptor at a distance of 600m from the site, this viewpoint will receive views of the development from private primary/secondary living spaces. Similar type views would be experienced by other two-story properties along sections of Melba Drive, from balconies or windows that face east. A significant amount of the bushland and mature vegetation can be seen in the foreground and background. However, the view has been modified by development over time, including the construction of the Meriton tower which is prominent in the view and also by parts of the Lane Cove Business Park Estate. The Approved Scheme does have a n impact on the view. It is therefore, judged that the sensitivity of this visual receptor is medium .
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Section 4.55 Magnitude of Change	From the Section 4.55 photomontages opposite, it is clear that the proposed scheme is slightly more visually prominent. The facade has more shadow as a result of the stacking of generators on the south west facade. However, in the context of the wider view this forms a small component and is not too dissimilar to the Approved Scheme. It is judged that the magnitude of change would be low .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 12, the Section 4.55 Modification design is similar in scale and visual appearance to the Approved Scheme. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be minor .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 12: Viewpoint 9 - 102 Melba Drive, East Ryde - Looking Northeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

7.10 Viewpoint 10

Viewing Location	Great North Walk Position 1 - Looking East
GPS	33°48'31"S , 151°8'28"E
Elevation (Eye-level)	6.3m
Date and Time of Photograph	30th May 2019 - 1.46pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 13

Visual Description	
Approx. Viewing Distance from Site Boundary	200m
View description & prominence of the development	This view is taken from the western side of Lane Cove River within Lane Cove National Park. It is possible to reach this location from the publicly accessible Great North Walk which runs from Magdala Park south. The track down to the river is informal and reaches a rock outcrop where it is possible to view Lane Cove River and the development site. Significant bushland vegetation is visible in the foreground on the eastern side of the river immediately in front of the development. The top of approved development would be seen as demonstrated in the photomontage image opposite.

Significance of Visual Impact of Approved Scheme	Moderate (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	<p>As described above the this location is accessible a short distance from Great North Walk for those wishing to reach the embankment of the river corridor. It presents an open view of Lane Cove river in a 180 degree panorama. This landscape is not unaffected by commercial/industrial/infrastructure development and some landscape detractors do exist within the view corridor, including 3 Apollo Place, an electricity tower, over-head power lines on the eastern side and the approved development.</p> <p>Great North Walk is a state public right of way and is referenced in on-line media, state and council DCP's and literature, tourist maps and walking maps. It passes through dense bushland and at times close to the waters edge of Lane Cover River Foreshore. It is regarded as environmentally and visually highly sensitive within state and local planning controls and policies. The majority of the walk would either experience filtered views of the development or views would be screened by existing vegetation. There are a couple of locations where getting to the waters edge of Lane Cove river is possible through informal tracks which present open views to the development. With the introduction of the Approved Scheme, it is judged that the sensitivity for this receptor to the S4.55 development would be medium.</p>
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Section 4.55 Magnitude of Change	From the S4.55 photomontages opposite, it is clear that the south western facade becomes visually more prominent in the view. The additional generators add more complexity to the facade and more areas of light and shade. It is judged that the magnitude of change would be medium .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 13, the Section 4.55 Modification design is similar in scale to the Approved Scheme. However, there are changes to the visible facade which make the revised scheme more visually obtrusive. The visual impact of the Section 4.55 Modification against the Approved Scheme at this location is judged to be moderate/minor .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

7.11 Viewpoint 11

Viewing Location	Great North Walk Position 2 - Looking Northeast
GPS	33°48'33"S, 151°8'30"E
Elevation (Eye-level)	5.7m
Date and Time of Photograph	30th May 2019 - 2.00pm
Approved Scheme & Section 4.55 Photomontage Figure	Figure 14

Visual Description

Approx. Viewing Distance from Site Boundary	220m
View description & prominence of the development	This view is similar to VP10 but is taken 70m further south along the western side of Lane Cove River within Lane Cove National Park. It is possible to reach this location from the publicly accessible Great North Walk which runs from Magdala Park south. The track down to the river is informal and reaches a rock outcrop where it is possible to view Lane Cove River and the development site. Significant bushland vegetation is visible in the foreground on the eastern side of the river immediately in front of the development. The top of No 3 Apollo place can be seen above the tree line and electricity lines.

Significance of Visual Impact of Approved Scheme	Moderate (refer to assessment of visual impacts in previous LVIA01 report)
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Section 4.55 Visual Receptor Sensitivity	Great North Walk is a state public right of way and is referenced in on-line media, state and council DCP's and literature, tourist maps and walking maps. It passes through dense bushland and at times close to the waters edge of Lane Cover River Foreshore. It is regarded as environmentally and visually highly sensitive within state and local planning controls and policies. The majority of the walk would either experience filtered views of the development or views would be screened by existing vegetation. There are a couple of locations where getting to the waters edge of Lane Cove river is possible through informal tracks which present open views to the development. Although this is a similar view to VP10, even with the addition of the Approved Scheme, it is judged to have less visually distracting elements and more scenic quality. Therefore, the sensitivity for this receptor to the development would be high .
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Section 4.55 Magnitude of Change	The additional generators of the Section 4.55 scheme, do present a more complex facade on the south west of the development as opposed to the Approved Scheme. It is judged that the magnitude of change would be medium .
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Visual Impact of Section 4.55 Modification against the Approved Scheme	As can be seen in Figure 14, the Section 4.55 Modification design is similar in scale to the Approved Scheme. However, there are changes to the visible facade which make it visually more obtrusive. The visual impact generated by the Section 4.55 Modification against the Approved Scheme at this location is judged to be moderate .
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Approved Scheme Photomontage - Year 15



Section 4.55 Mod Photomontage - Year 0



Section 4.55 Mod Photomontage - Year 15

Figure 14: Viewpoint 11 - Great North Walk Position 2, East Ryde - Looking Northeast (Approved Scheme & Section 4.55 Photomontage)

Approx Panoramic Angle of View - 67°

8.0 CONCLUSIONS AND NON-TECHNICAL SUMMARY

The main purpose of this Visual Impact Addendum Report, is to address the requirement to provide a quantitative analysis and opinion of visual impacts created by the proposed Section 4.55 Modification scheme when compared against the approved SSD scheme. The same viewpoints that were selected for visual assessment of the Approved Scheme, (within the original report LVIA01) have also been selected for this addendum to provide a direct comparison.

It is concluded that in the majority of viewpoint locations assessed, the proposed S4.55 scheme will not create significant visual impacts when compared against the Approved Scheme. However, there are two locations where it has been judged that **moderate** visual impacts are generated by the S4.55 scheme against the approved.

Through analysis conducted within this report, the following locations are judged to receive **moderate** visual impacts from the proposed section 4.55 data centre development when compared against the original Approved Scheme:

- 282 Pittwater Road, East Ryde (VP8)
- Great North Walk - Position 2 (VP11)

The following locations and are judged to have **moderate/minor** visual impacts:

- Great North Walk - Position 1 (VP10)

The following locations and are judged to have **minor** visual impacts:

- Lane Cove Bush Walk, Lane Cove West (VP1)
- Arise Meriton, Lane Cove West (VP2)
- Lane Cove Valley Walk Bridge (VP3)
- Magdala Park, North Ryde (VP4)
- 102 Melba Drive, East Ryde (VP9)

The following locations and are judged to have **minor negligible** visual impacts:

- Ryde Gardens, North Ryde (VP6)

The following locations and are judged to have **negligible** visual impacts:

- Honeywell Office (VP5)
- 44 Cox Road, East Ryde (VP7)

Two locations have been assessed as having **moderate** visual impacts when comparing the proposed S4.55 scheme to Approved Scheme. This is mainly due to close range and direct views of additional generators, which have been added to the south eastern facade. These create more complexity to the facade which was previously a simpler single flat facade treatment.

As the proposed section 4.55 scheme is of similar scale in terms of height and width to the Approved Scheme, the same statements that were concluded (in the approved LVIA01 report) regarding its general visibility still apply. Therefore, there are a few publicly accessible locations on the western side of Lane Cover River within the national park, that do experience close range open views towards the development. These views are however, not totally unaffected by existing development. The presence of IN1 zoning to the east of Lane Cove River means that existing development is seen and that any new proposed development on the Sirius Road site will affect the view to some degree.

Significant areas of existing bushland associated with the Lane Cover River corridor immediately surround the site to the north, west and south of the site. This provides effective screening of the development to a number of potential visual receivers. This often results in residential properties only at higher elevations or those with second floor balconies being able to see the development.

Though this report provides an opinion of the visual impacts of the section 4.55 modification against the Approved Scheme, it is highly likely that local residents or any interested stakeholders would compare the S4.55 design against the original baseline views (i.e pre-development conditions refer to report LVIA01). This is due to the fact that in reality, the Approved Scheme will not be built and then knocked down to rebuild the S4.55 scheme. Essentially those people visually affected by the development would have their views transitioned from the pre-development site to ultimately the Section 4.55 scheme.

9.0 GLOSSARY OF TERMS

Term	Definition
SEARs	Secretary's Environmental Assessment Requirements
GLVIA	Guidelines for Landscape and Visual Impact Assessment (UK Landscape Institute)
LVIA	Landscape and Visual Impact Assessment
VIA	Visual Impact Assessment
DoPE	Department of Planning and Environment
LEP	Local Environment Plan
DCP	Development Control Plan
Baseline	The existing current condition / character of the landscape or view
Landscape Receptor	The landscape of the development site
Landscape Sensitivity	How sensitive a particular landscape is to change and its ability to accept the development proposals.
Visual Receptor	A group or user experiencing views of the development from a particular location
Visual Sensitivity	The degree to which a particular view can accommodate change arising from a particular development, without detrimental effects.
Panoramic Angle of View or Field of View	Single DSLR 50mm lens photographs are stitched together to form a combined panoramic image. The angle of view is the extent of the image shown on the viewpoint sheet. A full frame single image is 39.6°
Viewing Distance	The distance from the point of projection to the image plane to reproduce correct linear perspective.
Magnitude of Change	The magnitude of the change to a landscape receptor or visual receptor
Significance of Impact	How significant an impact is for a landscape or visual receptor