

LANDSCAPE AND VISUAL IMPACT ASSESSMENT REPORT

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1.0 INTRODUCTION

1.1 Project Background

This Landscape and Visual Impact Assessment (LVIA) relates to the proposed development of Horsely Logistics Park located at 327-335 Burley Road, Horsley Park. This comprises of five individual warehouses within four separate lots. Each contains loading docks, ancillary buildings, parking areas, entry roads and associated earthworks and landscaping.

A request for a Secretary's Environmental Assessment Requirements (SEARs) was submitted to the NSW Department of Planning, Industry and Environment (DIPE) in March 2020. This report aims to satisfy the following relevant requirements of the SEARs:

Urban Design and Visual Impact:

- a detailed design analysis of the development with reference to the built form, height, setbacks, bulk and scale in the context of the immediate locality, the wider area and the desired future character of the area, including views, vistas, open space and the public domain;
- a detailed visual impact assessment (including photomontages and perspectives) of the development including height, bulk and scale, materials and finishes, colours, signage and lighting, particularly from existing and future residences to the south and significant or important vantage points of the broader public domain;
- the visual impact assessment must include detailed mitigation measures including those approved under development consent DA 893.1/2013 and subsequent modifications; and
- detailed landscaping design and plans for minimising the overall visual impacts of the development.

1.2 This Report and Author

Geoscapes Pty Ltd, has been commissioned by ESR, to produce a Landscape and Visual Impact Assessment (LVIA) for the above mentioned development. This LVIA 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 several LVIA's and VIA's for some of the largest industrial developments in Sydney. These were either submitted as part of an Environmental Impact Statement (EIS) for State Significant Development (SSD) to the Department of Planning and Industries (DIPE), or to local council. Clients have included Snackbrands Australia, Jaycar, Frasers, Altis, DCI and Airtrunk.

Geoscapes have also prepared estate wide landscape design drawings. These documents detail landscape treatments to the site exterior, and should be read in conjunction with this report.

2.0 METHODOLOGY OF ASSESSMENT

2.1 Guidelines

LVIA 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 an industrial logistics park 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

It is possible that any receptor with a view towards the development, could potentially receive visual impacts with a resulting high, moderate or low impact. However, it is not feasible or practical to prepare a photomontage for each and every residential dwelling within the project view-shed.

Viewpoint 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. Viewpoints 10 and 11 were taken using a drone to due access, images represent a 50mm lens.

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 as before and after images 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 or VIA, 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 8.0 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 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 Sensitivity of the Landscape Resource

A number of factors influence professional judgement when assessing the degree to which a particular landscape receptor can accommodate change arising from a particular development. Sensitivity is made up of judgements about the value attached to the receptor determined at baseline stage and the susceptibility of the receptor to the type of change arising from the development proposal.

The table below provides an indication of the criteria by which the sensitivity of any landscape receptor is determined by combining judgements of the value of the receptor and its susceptibility to the type of change or development proposed. A degree of professional judgement applies in arriving at the sensitivity for receptors. Wherever sensitivity is judged, the specific combinations of factors that have influenced that judgement are described. The table has been adapted from the GVLIA with terms used as more appropriate for assessment of Australian landscape.

Table: Landscape Receptor Sensitivity Criteria

Category	Landscape Receptor Criteria
Very High	Nationally designated/valued landscape and landscape features; strong/distinctive landscape characteristics: absence of landscape detractors. Rare receptor in excellent condition. A landscape receptor extremely sensitive to disturbance or change in character due to the development proposals. No potential or very limited potential for substitution or replacement.
High	Locally designated valued landscape and features: many distinctive landscape characteristics: very few landscape detractors. Uncommon receptor in good condition. A landscape receptor sensitive to disturbance or change in character due to the development proposals. Limited potential for substitution or replacement.
Medium	Undesignated landscape and features: some distinctive landscape characteristics: few landscape detractors. A relatively common receptor in fair condition. A landscape receptor with a moderate level of sensitivity to disturbance or change in character due to the development proposals. Some potential for substitution or replacement.
Low	Undesignated landscape and features: few distinctive landscape characteristics: presence of landscape detractors. A common receptor in poor condition. A landscape receptor with limited sensitivity to disturbance or change in character due to the development proposals. Clear potential for substitution or replacement.

Very Low	Undesignated landscape and features: absence of distinctive landscape characteristics: presence of many landscape detractors. A common receptor in very poor condition. A landscape receptor with very limited sensitivity to disturbance or change in character due to the development proposals. Good potential for substitution or replacement.
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The magnitude of change is determined through a range of considerations particular to each receptor and effect. In line with the GLVIA, the three main attributes considered are:

1. Scale of Change
2. Geographical Extent
3. Duration and reversibility

The table on the right provides an indication of the criteria by which the magnitude of change as a result of the development proposed upon a landscape receptor is judged within this assessment. These criteria provide a framework for assessment, and final conclusions are reached through clear and transparent use of reasoned professional judgement, taking into account a range of factors as described above.

Table: Landscape Receptor of Change Criteria

Category	Definition
Very High	Total loss of or major alteration to key elements/features/characteristics of the baseline condition. Addition of elements which strongly conflict with the key characteristics of the existing landscape. Large scale effects influencing several landscape types or character areas.
High	Notable loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that are prominent and may conflict with the key characteristics of the of the existing landscape. Effects at the scale of the landscape type or character areas within which the proposal lies.
Medium	Partial loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may be evident but do not necessarily conflict with the key characteristics of the of the existing landscape. Effects within the immediate landscape setting of the site.
Low	Minor loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may not be uncharacteristic within the existing landscape. Effects at the site level (within the development itself)
Very Low	Very Low Barely discernible loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements not uncharacteristic within the existing landscape. Effects only experienced on parts of the site at a very localised level.

2.4 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, travelers 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, 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 baseline situation. Long range views with a negligible part of the view affected.

In some cases, there may be no magnitude of change and the baseline 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.

2.5 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.

2.6 Site Visit and Analysis of Zone of Visibility

Site visits were conducted on the 10th and 16th March 2020 by Geoscapes. The consultant team carried out a site inspection to verify the results of desktop study and to evaluate the existing visual character of the area. Analysis from inside the site boundary and at vantage points from the surrounding landscape, was undertaken to approximate the Zone of Visibility. Any photographs taken at eye-level within the site, would only allow a

partial judgement on which residential properties, commercial properties, public open spaces and public rights of way (classed as visual receptors) in the immediate vicinity, would see the development from ground level to the top of warehouse buildings. This is also limiting due to the presence of existing development and surrounding vegetation therefore, it is not possible to gain a complete understanding of the visual envelope.

As a result of the above, drone photography has been used to test the visibility of the built forms by flying at the proposed ridge heights of each warehouse and photographing the wider landscape. This effectively represents a 'worst case scenario'. It is important to note that it is simply unfeasible to use drone photography to record every single possible view corridor to and from the site.

A drone was used to take panoramic photographs looking north, south, east and west at five separate locations within the proposed estate. Four locations were flown directly over the proposed positions of the ridgelines to each warehouse building. The height flown by the drone was intended to generally represent the approximate maximum elevation of the ridge line. In this case 15m above the proposed pad levels and thus representing a worst case scenario and the maximum Zone of Visual Influence (refer to figures 3 to 18). The flight was performed on the 6th March 2020 by Pixel Media Productions. Weather conditions at the time were clear with good visibility. These photographs allowed a judgement to be made on which receptors in the wider context, will be able to see the upper parts of the development if not the all of the development. Not all residential/commercial properties or public open spaces that potentially have a view of the development are highlighted on figures 3 to 18. However, the locations that have been shown will provide an indication of receptors within the surrounding context, that the development will be most visible to. In some cases it is reasonable to assume for example, that a number of properties close to a selected receptor would experience a very similar type of view. I.e. adjacent properties with similar aspect or those one or two streets away.

In some cases, it was not possible to visit an identified receptor to take photographs looking back at the site (e.g. within private property from gardens or windows when the owner was not home or where access was denied). In these cases, views have been taken from other properties where access was granted, or from publicly accessible areas that are judged to be similarly representative. A judgement has then been made on the likely visual impacts from a selection of the receptors identified in figures 3 to 18 (refer to section 8.0).

As with any VIA, due to the number of receptors that may have views of the development, it is not possible to provide viewpoints for every single possible visual receiver (refer to section 2.7 and 2.8 for details on viewpoint selection).

2.7 Selected Viewpoints – Receptor Locations

The symbols and numbering in Figure 2 (page 9), indicate the viewpoints that have been selected for a Visual Impact Assessment (VIA). Viewpoints have been taken from publicly accessible areas and also from private individual properties.

A sample of receptors which are closest in proximity to the proposed development, those with vantage points at higher elevations and those with views at further distances have been selected. It would be impractical to provide a VIA for every single possible visual receiver of the development, therefore a sample has been selected. For visual receptors not selected for an individual viewpoint assessment (i.e. from inside a private dwelling), a representative view for that location has been assessed in terms of a likely significance of visual impact. Refer to Section 8.0.

From viewpoint locations, photomontages have been generated to represent as closely as possible views of the proposed 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 8.0 of this report and the corresponding viewpoints 1 to 11.

2.8 Photographic Recording

From desktop study, site visits and photography, several locations were identified that would potentially be subject to visual impacts from the proposal. These viewpoints were selected in consultation with the project team. Some viewpoints have been intentionally chosen to test and provide evidence that from those receptors there are no or negligible visual impacts.

Photographs were taken by Geoscapes Landscape Architects from the selected viewpoints looking towards the development site using a Canon 60D DSLR Camera and a 50mm prime lens (VP 10 & VP11 were taken using a drone due to access to these location). These are intended to represent

what a person of average height (1.75m) would see standing at the same location. Photographs were stitched and blended together using an automated software process, however, no perspective correction was used. GPS recordings were taken and locations marked using digital mapping data. This information was later used to create the photomontages.

Drone photography has been stitched together to increase the field of view (see figures 3 to 22). As the drone uses a wide-angle lens, in some cases there may be some distortion present where two images join, particularly in the foreground. However, as these images are used only for analysis and identifying potential visual receptors, this does not affect the validity of their use within this report.

2.9 Visualisation of the Development

Morphmedia were engaged to place a digital three-dimensional model using Autodesk 3Ds Max. The model was provided by HLA Architects and included all aspects of the proposed built form of the development. Morphmedia integrated into the model the landscape design 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.

2.10 Assessment of Visual Impact

The visual impact from receptors has been assessed based on the criteria described in Section 2.4. The following list of visual receptors are judged to potentially have the highest sensitivity to the development:

- Opposite 396-398 Horsley Road, Horsley Park (VP1)
- Driveway of 49-53 Greenway Place, Horsley Park (VP2)
- Adjacent to 178-182 Delaware Road, Horsley Park (VP4)
- 33 Greenway Place, Horsley Park (VP7)
- Bowood Park, Bowood Road, Mount Vernon (VP9)
- Jacfin Lands, Aldington Road, Kemps Creek (VP10 & VP11)

Receptors which are regarded to have less sensitivity but have also been assessed are:

- Ottelia Road, Kemps Creek (VP3)
- Lenore Drive before Old Wallgrove Road, Eastern Creek (VP5)
- Old Wallgrove Road, Horsley Park (VP6)
- 32 Aldington Road, Kemps Creek (VP8)

In total 11 viewpoint locations have been selected for photomontage.

It is noted that to the north of the proposed development a significant amount of industrial development exists. Immediately adjacent is the PGH Bricks & Pavers site, Oakdale Industrial Estate and the Austral Brick Plant. Further north over a distance of approximately 4.5km between the WaterNSW trunk pipeline and the M4 motorway, is the industrial area of Eastern Creek. This has a high density of industrial and commercial type buildings and therefore, is judged to not be particularly sensitive to the proposed development.

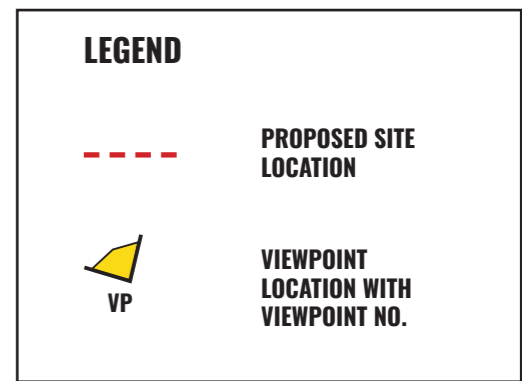
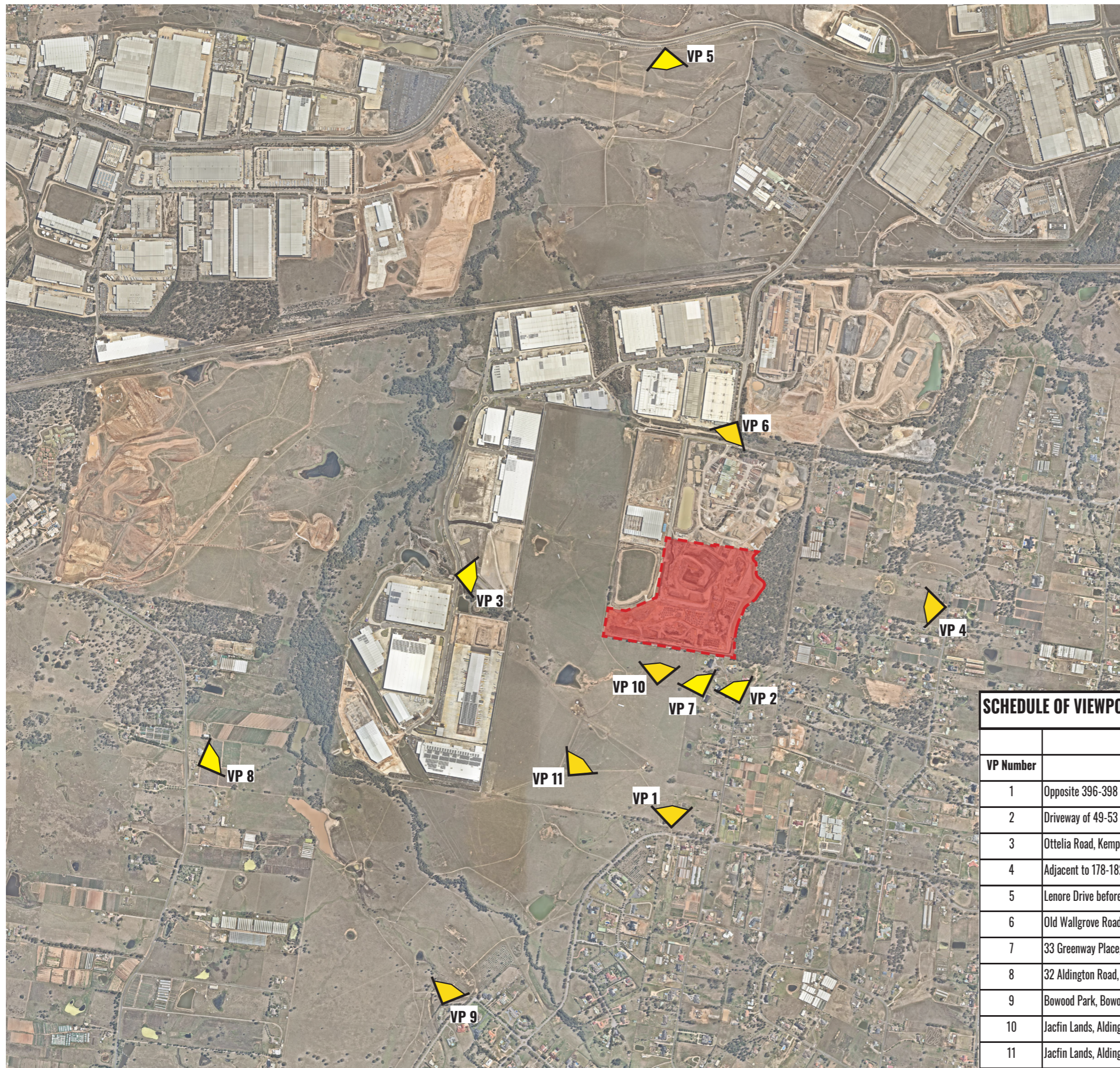
To the northwest is the residential suburb of Erskine Park. This is the closest densely populated residential suburb to the development site. The nearest residential properties are located 2.5km away and there is significant vegetation seen in the drone photography between Erskine Park and the development. It is possible that a few properties maybe able to see the development, however these visual impacts are likely to be negligible.



Legend

- Site Boundary
- ① Drone Position 1 (98.6m RL)
GPS -
33°49'57.9"S
150°49'22.2"E
- ② Drone Position 2 (104.5m RL)
GPS -
33°49'58.3"S
150°49'30.2"E
- ③ Drone Position 3 (101.5m RL)
GPS -
33°50'04.8"S
150°49'17.5"E
- ④ Drone Position 4 (104.1m RL)
GPS -
33°50'05.4"S
150°49'28.1"E
- ⑤ Drone Position 1 (120m AGL)
GPS -
33°50'01.0"S
150°49'25.5"E

Figure 1: Drone Panoramic Photograph Positions



SCHEDULE OF VIEWPOINTS

VP Number	Address	Southings	Eastings	Elevation AHD
1	Opposite 396-398 Horsley Road, Horsley Park	33°50'34"S	150°49'20"E	90.7m
2	Driveway of 49-53 Greenway Place, Horsley Park	33°50'16"S	150°49'32"E	89.7m
3	Ottelia Road, Kemps Creek	33°49'51"S	150°48'41"E	61.7m
4	Adjacent to 178-182 Delaware Road, Horsley Park	33°50'3"S	150°50'8"E	79.7m
5	Lenore Drive before Old Wallgrove Road, Eastern Creek	33°48'43"S	150°49'19"E	76.7m
6	Old Wallgrove Road, Horsley Park	33°49'36"S	150°49'32"E	77m
7	33 Greenway Place, Horsley Park	33°50'16"S	150°49'26"E	96.2m
8	32 Aldington Road, Kemps Creek	33°50'25"S	150°47'59"E	87.1m
9	Bowood Park, Bowood Road, Mount Vernon	33°50'59"S	150°48'41"E	70.45m
10	Jacfin Lands, Aldington Road, Kemps Creek - Position 1	33°50'13.6"S	150°49'18.8"E	81.1m
11	Jacfin Lands, Aldington Road, Kemps Creek - Position 2	33°50'27.6"S	150°49'04.1"E	91.85m

Figure 2: Viewpoint Locations



Figure 3: Drone at 98.6m RL Position 1 - Looking North



Figure 4: Drone at 98.6m RL Position 1 - Looking East



Figure 5: Drone at 98.6m RL Position 1 - Looking South



Figure 6: Drone at 98.6m RL Position 1 - Looking West



Figure 7: Drone at 104.5m RL Position 2 - Looking North



Figure 8: Drone at 104.5m RL Position 2 - Looking East



Figure 9: Drone at 104.5m RL Position 2 - Looking South



Figure 10: Drone at 104.5m RL Position 2 - Looking West



Figure 11: Drone at 101.5m RL Position 3 - Looking North



Figure 12: Drone at 101.5m RL Position 3 - Looking East

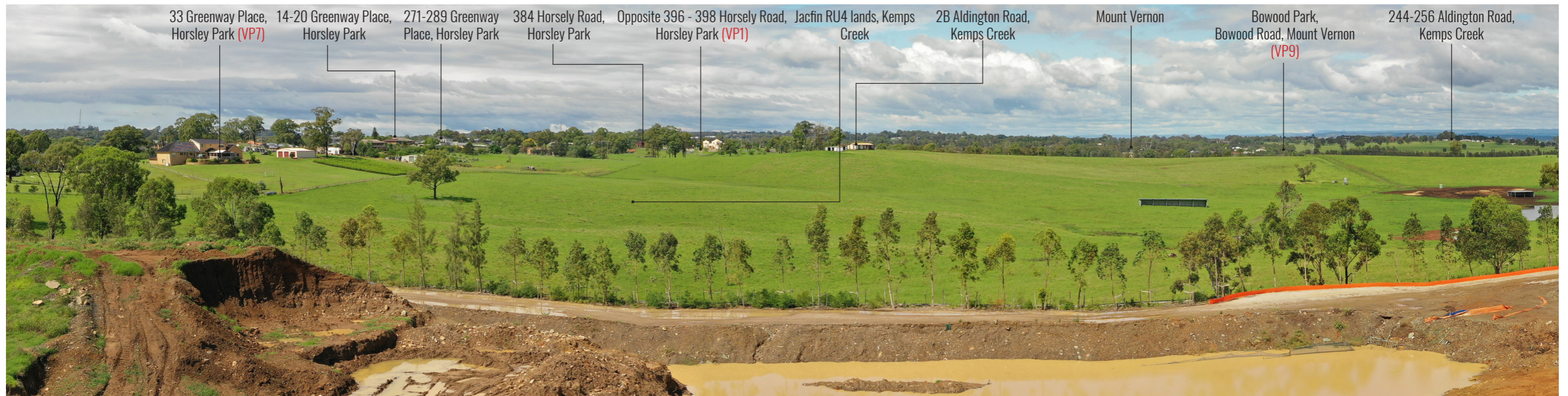


Figure 13: Drone at 101.5m RL Position 3 - Looking South

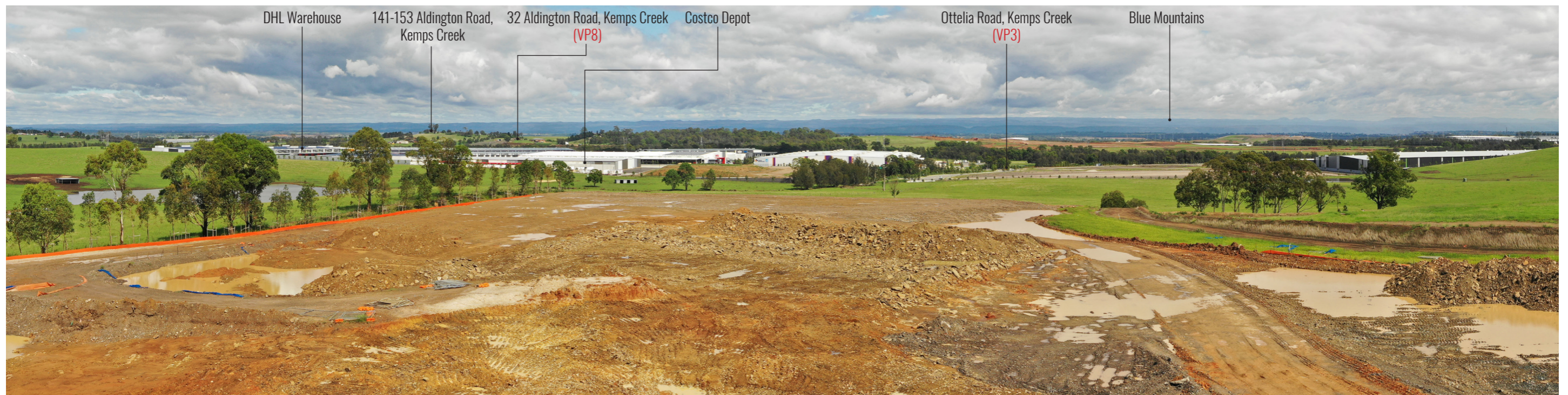


Figure 14: Drone at 101.5m RL Position 3 - Looking West



Figure 15: Drone at 104.1m RL Position 4 - Looking North



Figure 16: Drone at 104.1m RL Position 4 - Looking East

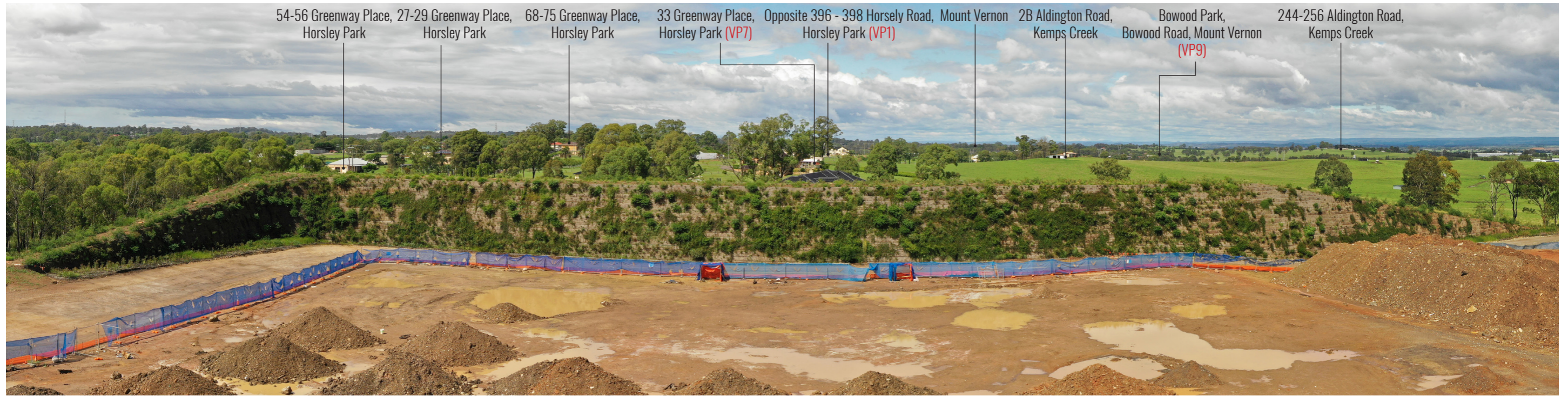


Figure 17: Drone at 104.1m RL Position 4 - Looking South

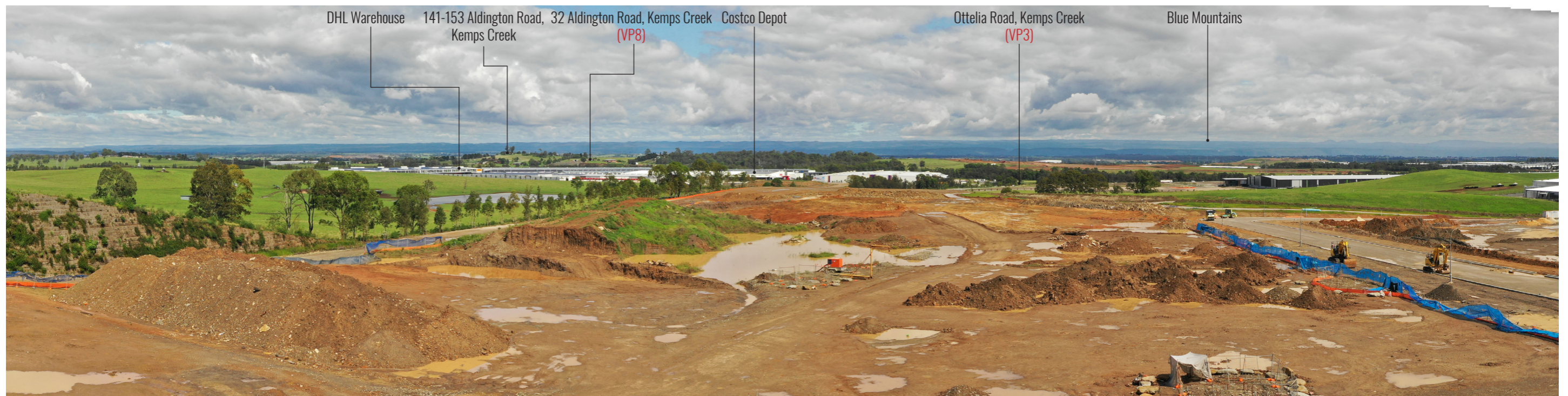


Figure 18: Drone at 104.1m RL Position 4 - Looking West



Figure 19: Drone at 120m AGL - Looking North



Figure 20: Drone at 120m AGL - Looking East



Figure 21: Drone at 120m AGL - Looking South



Figure 22: Drone at 120m AGL - Looking West

The most open views of the site exist to the south and southwest of the development therefore, viewpoint locations are concentrated in these areas.

Refer to section 8.0 for a detailed visual impact assessment from the receptors.

3.0 THE SITE AND ENVIRONS

3.1 Location

The proposed development is located at the former CSR Bricks and Roofing site at 327-335 Burley Rd, Horsley Park, NSW. It has a total area of approximately 21 hectares and is located within Fairfield Council Local Government Area. Figure 24 provides the site's location. Figure 25 provides the site's immediate context.

3.2 Site Description

The site description is summarised in the Figure below.

Figure 23 – Site Description

Component	Description
Address	327-335 Burley Road, Horsley Park, NSW
Legal description	Lot 103 in DP1214912
Site area	207,698sqm (21.77ha)
Current use	Industrial - CSR Brickworks and Roofing. Zoned IN1 in SEPP WSEA 2009

3.3 Context

The development site is situated within the Burley Road / Old Wallgrove Road industrial precinct. It is located approximately 35 kilometers west of Sydney's CBD and is close to the M7 Motorway. The site forms part of the Western Sydney Employment Area and the precinct already contains several industrial type buildings. It is also adjacent to agricultural and pastoral lands (zoned RU4), situated to the east and south. Immediately to the eastern boundary is land zoned E2 Environmental Conservation.

The site is surrounded by the following specific land uses:

- Directly north of the site is PGH Bricks, Oakdale Industrial Estate and Austral Brick Plant 3. Further north is Transgrid Sydney West and Eastern Creek Industrial Estate. The majority of this land is zoned IN1.
- Directly south of the site is presently pastoral lands (in the pastoral lands residential lots zoned RU4 and further industrial development as part of the Jacfin site will be constructed in the future, refer to section 4.3) and a number of rural residential houses along Greenway Place. Some of these houses have direct views of the development site. Further south are the rural residential suburbs of Horsely Park and Mount Vernon. Housing tends to be larger in scale with associated farm lands or large lots.
- Directly to the east is a significant area of existing mature bushland zoned E2 Environmental Conservation. Behind the E2 land and further to the east are rural properties and farm lands within Horsely Park.
- Directly to the west is the Penrith Council LGA boundary. Current uses are either pastoral lands or new industrial development including Toyota and Costco warehousing.

3.4 Aerial Photography

During the drone photography that was carried out within the site boundary on the 6th March 2020 (refer to section 2.6), aerial shots were also taken at an AGL of 120m. These prove useful in the following ways:

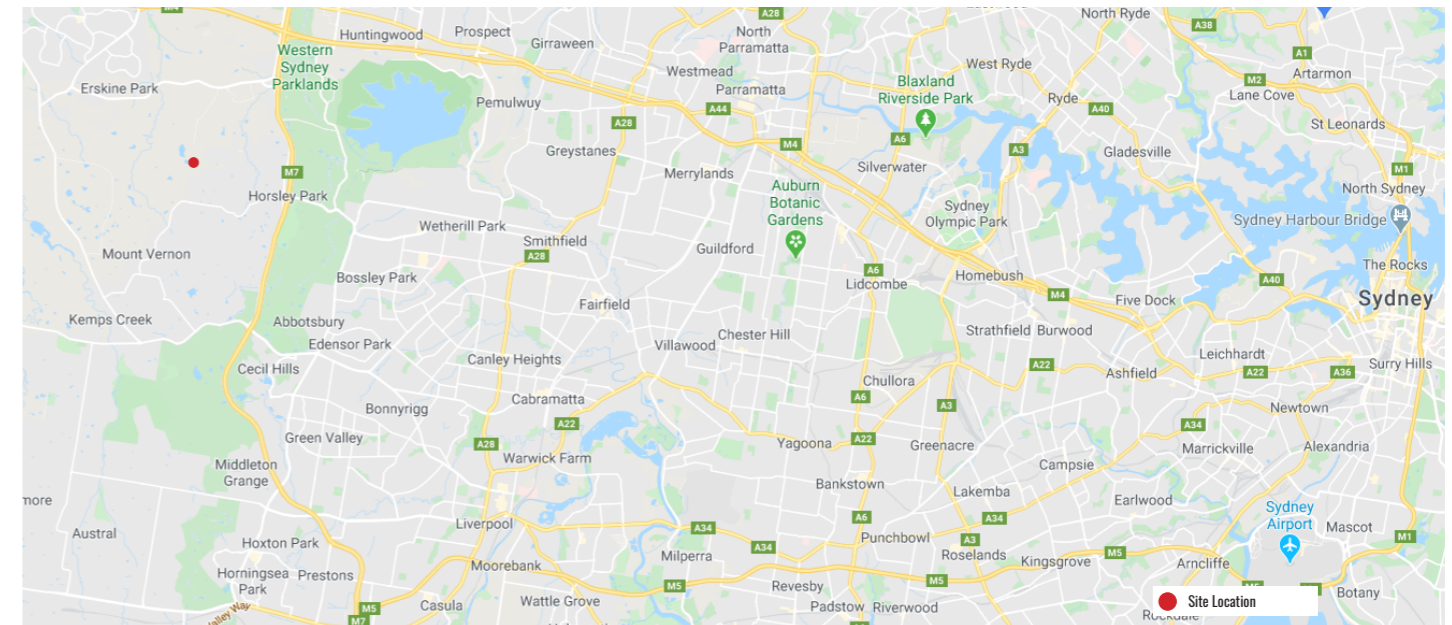


Figure 24 Site Location (Source: Google Maps)



Figure 25: Site Context (Source: Nearmap 2020)

- Demonstrating the site context in which the development sits;
- Highlighting key features of the surrounding landscape;
- Analysing the existing landscape character;
- Help in identifying locations of potential individual receptors that are difficult to identify from ground level or 15m proposed ridgeline drone shots alone. See figures 19-22 for 120m AGL Drone photography.

4.0 BASELINE DESCRIPTION

4.1 Planning Context

The following current and draft state controls have been considered where relevant in this report:

- SEPP (Vegetation in Non-Rural Areas) 2018
- SEPP (Infrastructure) 2007
- SEPP (Western Sydney Employment Area) 2009
- Penrith LEP2010

The proposed site is located within Fairfield Local Government Area and is zoned IN1 as according to SEPP (WSEA) 2009. See figure 26 below.

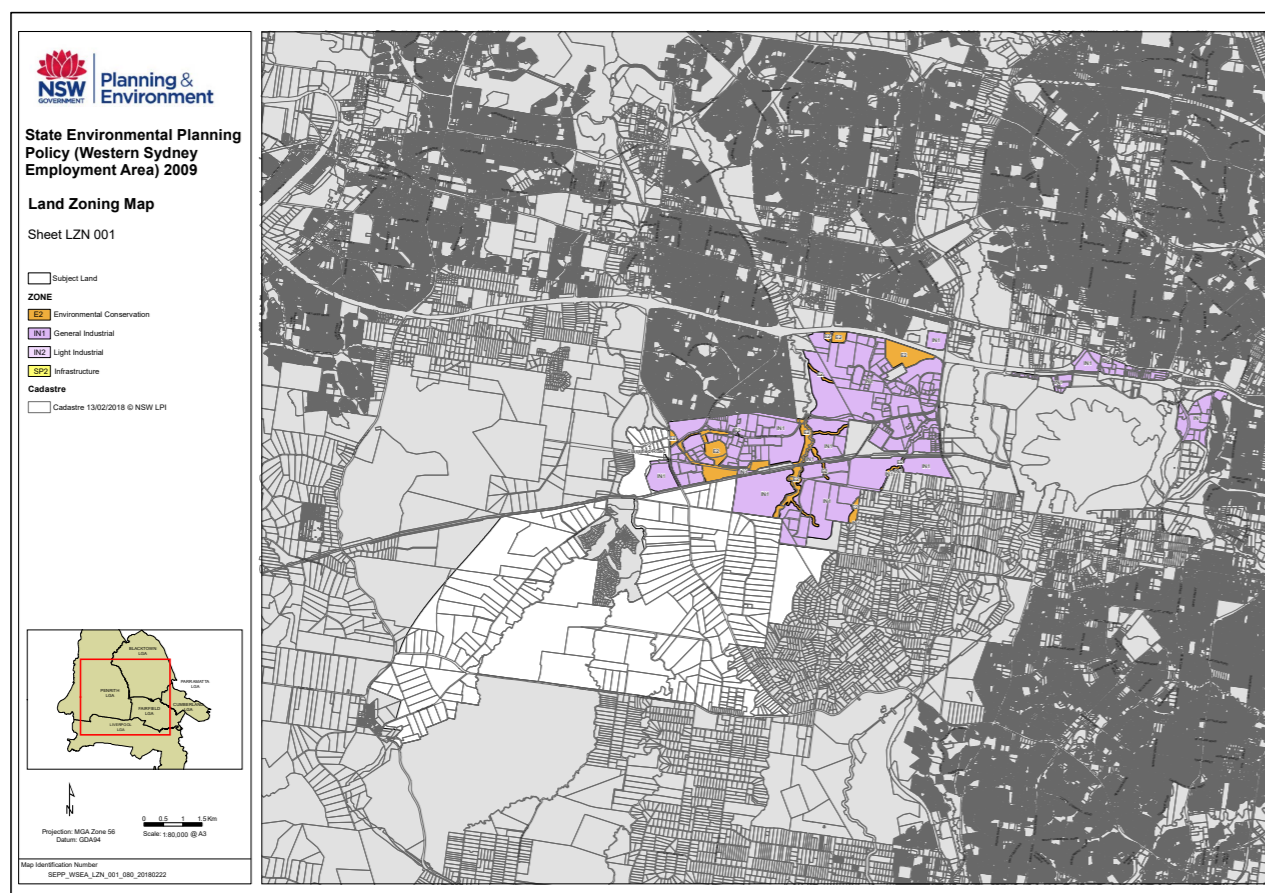


Figure 26: WSEA Land Zoning Map (Source: NSW Planning and Environment)

4.2 Current and Future Landscape Character

The development site is currently operated by CSR Bricks and Roofing and is being prepared for future development. The large excavation centrally located within the site will be filled and other bulk earthworks are currently underway.

Located west of the site is pastoral farm lands and further industrial developments within Penrith LGA. To the north and northwest are large industrial developments within Erskine Park and Eastern Creek. To the south and east are rural lands with scattered residential dwellings and associated farm/pastoral/agricultural lands. These are interspersed with scattered vegetated areas including the E2 Conservation area.

The current landscape character can be described as being a mix of industrial and rural/agricultural lands. The proposed development is not out of character with the immediate surrounding context or present uses of the site.

The future landscape character is dictated by the SEPP (WSEA) 2009 as shown in figure 26 and the Penrith LEP2010. In the WSEA land zoning plan it can be seen that lands in close proximity to the west and north are all zoned to be IN1. To the south and southwest the proposed Jacfin site also shows industrial development adjacent to RU4 zoned land pursuant to the PLEP.2010 Therefore, further industrial development will be constructed in the near vicinity over the coming years. The proposed development therefore, is aligned with the future character dictated by both planning documents.

4.3 Jacfin Horsely Park Project

Figure 27a on page 22 shows the concept plan for the approved LOT A Burley Road, Horsely Park, Employment Precinct Stages 1-4. Figure 27b shows the proposed road layout and drainage design that has recently been lodged for DA with Penrith City Council. The plan shows a layout with lot boundaries to RU4 lands for future primary production small lots. The objectives of the RU4 zone are as follows:

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To ensure land uses are of a scale and nature that is compatible with the environmental capabilities of the land.
- To preserve and improve natural resources through appropriate land management practices.
- To maintain the rural landscape character of the land.
- To ensure that development does not unreasonably increase the demand for public services or facilities.

It is reasonable to assume therefore, that the future character of this land will likely be a mix of agricultural uses with dwelling houses. Therefore, residential dwellings could be subject to visual impacts from the proposed ESR development.

As described in Section 5.0, 6.0 and 9.0 an earth mound and landscape planting has already been installed as part of a previous application to help mitigate visual impacts from any residential locations within the south. This would also be applicable to and be effective for the Jacfin site.

Any landscape proposals for the RU4 within the Jacfin lands, could and should be responsive to the surrounding context and zoning of adjacent lands. As shown in Figure 27a, a buffer zone is shown between the RU4 and Lot A in response to providing visual mitigation between the types of land usage. Therefore, a similar principle could be applied to the northern boundary immediately adjacent to the proposed Horsely Logistics Park which would further strengthen the visual buffer which is already present.

The potential sensitivity of future residential development within the Jacfin site has been considered by this report and two viewpoints have been selected. One is located close to proposed lots 11 & 12 and the other close to Lots 4 & 5 (figure 27b). It can be assumed that houses constructed in Lots 11 & 12 will face north to south and therefore southern aspects will be subject to views from the development. However, judgments of the degree of receptor sensitivity and the magnitude of change within the Jacfin site, is slightly limited by the simple reason that the residential properties do not presently exist nor does the industrial development within Lot A. Landscaping proposals for the site are also unknown at this



Figure 27a: Jacfin Horsley Park Project - Concept Plan Stage 1 to 4 (Source: Ethis Urban)

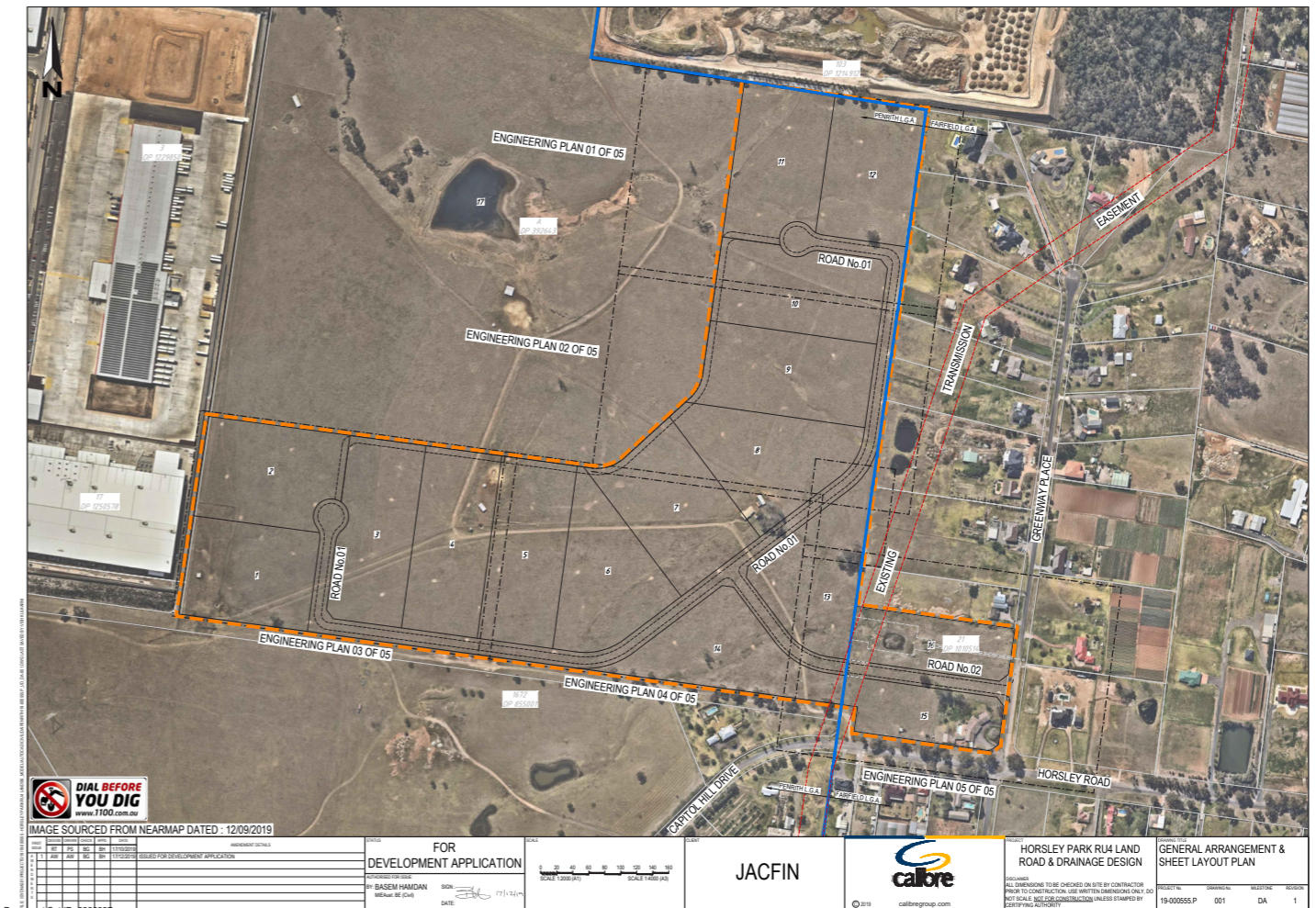


Figure 27b: Jacfin Horsley Park Project - Horsley Park RU4 Land Road & Drainage Design (Source: Calibre)

time. Nevertheless, two viewpoints have been presented in Section 8.0 of this report with judgements given on potential sensitivity, the potential magnitude of change and significance of visual impacts.

4.4 Sensitivity of the Development Site

The site is currently in use as a brickworks with associated major excavation currently present. The landscape has been heavily modified by man-made intervention from a previous agricultural use. An E2 Conservation Zone is present on the eastern site boundary, this has ecological value and will be retained and protected by introducing a previously approved Managed Ecological Zone. It will not be affected by the development.

The conclusion drawn from the assessment of landscape character (see section 4.2) and the analysis above, would suggest that the sensitivity of the developable area of landscape to be **very low**.

5.0 DEVELOPMENT PROPOSALS

The following information is based on an assessment of drawings provided by HLA Architects.

5.1 Overall Design Proposals

Situated in the figure below is the current ESR Masterplan for the proposed Logistics Park. This plan is used for the purpose of assessment within this VIA report. The design proposes five warehouses spread over four lots. Each warehouse will contain a main office, parking, hardstand areas and road access. The total site area is 207,968m² of which 112,659m² is used by the built form.

To the east is an area of E2 land which will remain undisturbed by the proposals. To the south are walls in the form of Gabion and Terramesh structures.

5.2 Height / Scale / Levels

All warehouses propose a max roof ridge height of 13.5-15m and eaves height of approximately 10-12m above proposed pad levels. Larger buildings are positioned to the west, while smaller units are situated to the east.

Each warehouse has a different pad RL, the lowest of these is the warehouse located on Lot 202 at 86.1m, the highest is the warehouse located on Lot 203 at 89.5m. Pad levels with greater elevation have been positioned behind the existing Terramesh bund and E2 Conservation vegetation. This should help to make them less visible to visual receptors in the south and east.

The height and scale of warehousing is similar to that of buildings within the surrounding industrially zoned land.

5.3 Colour / Materials & Finishes

The colours, materials and finishes are fairly typical of this type of development. Building facades consist of mainly grey tones including painted precast concrete, colorbond and zinc cladding. Colours include 'Surfmist', 'Shale Grey' and 'Ironstone'. These colour tones visually break up the long facades, with highlight colours only use for signage elements, awnings or around the main office.

5.4 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.

5.5 Setbacks

There are significant setbacks along the eastern and southern boundary. A 25m wide Managed Environmental Zone is provided as a buffer to the E2 conservation area. This will contain planting with native endemic species (these works are proposed by others within a separate approval and to be in accordance with the VMP). The E2 land itself will be protected and therefore, is unaffected by the development proposals.

On the southern boundary there is a setback of 21m which reduces down to 10m at the south eastern corner. This allows planting to the entire length of the boundary, including on the existing Terramesh bund (separate approval and works by others). Refer to section 6.0 for more details.

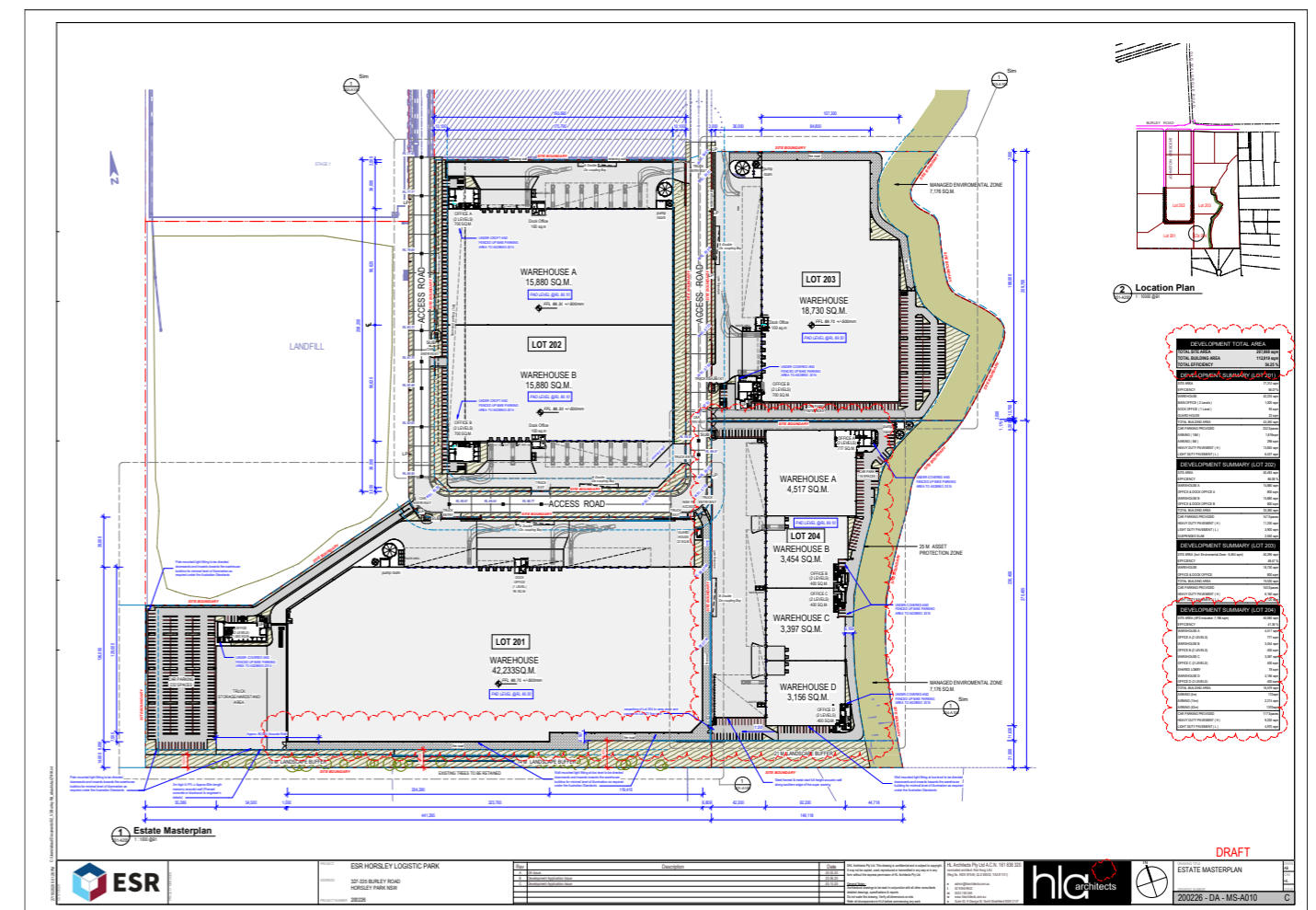


Figure 28: Proposed ESR Masterplan (Source: HLA Architects)

5.6 Noise Wall

A 3m high by 80m long masonry acoustic wall is to be added to the south west corner of the site that start from the edge of the LOT 201 car park. This is expected to be screened by existing landscaping to the southern boundary. Refer to Acoustic engineers report and details.

5.7 Summary

Overall it is judged that the architectural design of the buildings for the proposed logistics park, considers the surrounding context and landscape in which it is located. By placing buildings at higher elevations behind the existing Terramesh bund and E2 conservation area, this will help to reduce visual impacts for nearby visual receivers.

6.0 LANDSCAPE STRATEGY, DESIGN AND MITIGATION

6.1 Strategy and Mitigation

Previously, as part of any future development anticipated for the site, native endemic planting was designed, approved and implemented on the southern boundary as part of DA 893.1/2013. Once mature, this will increase the vegetated area on the site and will help to mitigate views in particular from the south, in which the most sensitive visual receptors are located. These landscape works were documented by Stuart Noble & Associates. Planting includes shrubs up to 5m in height on a Terramesh bund, with trees and shrubs to the remainder of the southern boundary. The trees have the potential to reach approximately 12- 25m and in combination with the bund, will provide landscape screening mitigation for

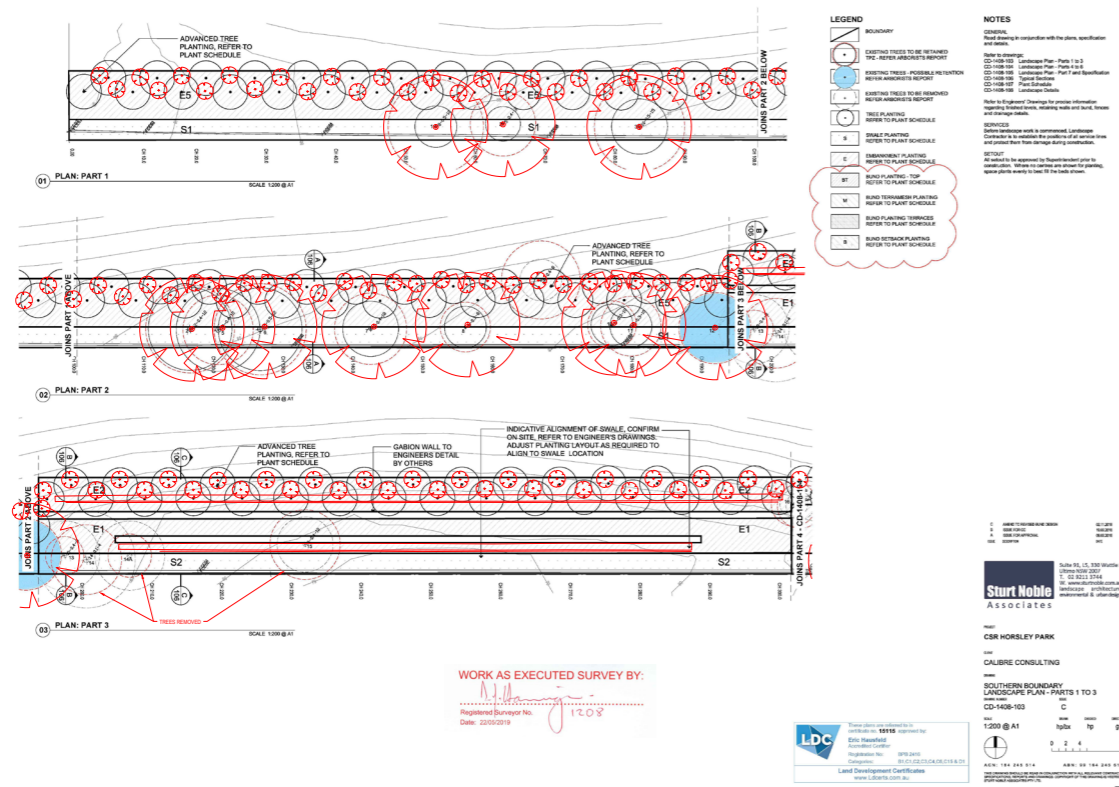


Figure 29: WAE Southern Boundary Landscape Plan - Parts 1 to 3 (Source: LDC & Sturt Noble Associates)

visual receivers located in Greenway Place.

Figures 29, 30 and 31 show work-as-executed (WAE) drawings of the southern boundary including the Terramesh bund and Gabion walls. The sections shows details of planting species to be used and demonstrate a layered approach to provide dense screening to the bund and southern facade.

This planting has been represented at year 0 and 15 in the photomontages within section 8.0 and these demonstrate that the terramesh bund will be effective at screening views of the southern buildings. At year 15 following maturity, the trees and shrubs installed along the boundary to the west of the bund will provide visual mitigation of the proposed warehouse on Lot 201.

Due to the predicted effectiveness of the installed planting, no further planting is proposed to the southern boundary.

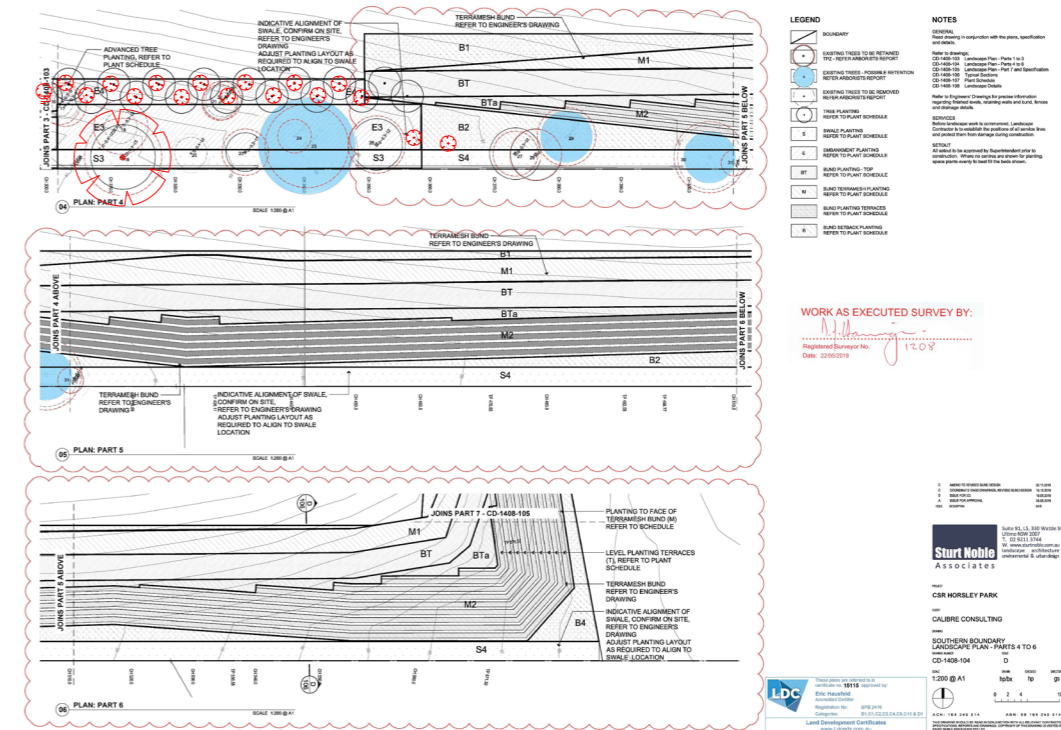


Figure 30: WAE Southern Boundary Landscape Plan - Parts 4 to 6 (Source: LDC & Sturt Noble Associates)

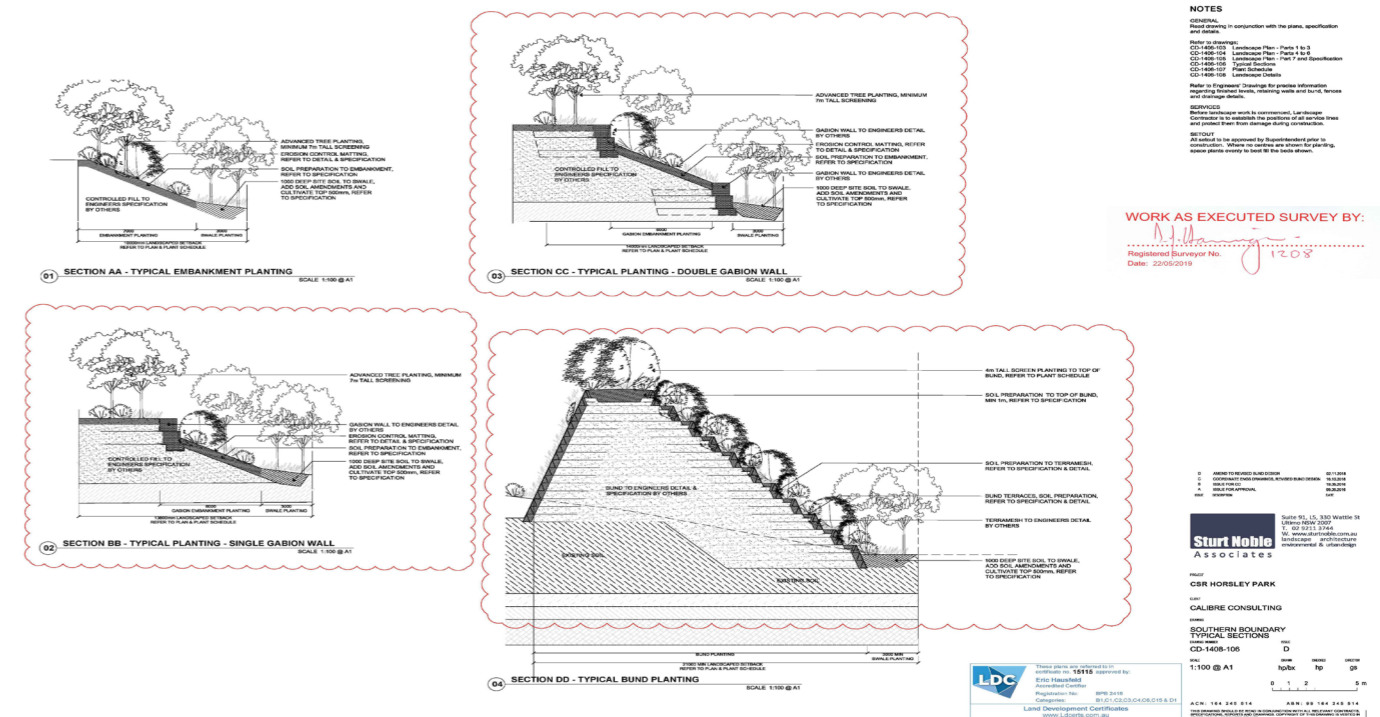


Figure 31: WAE Southern Boundary Typical Sections (Source: LDC & Sturt Noble Associates)

7.0 LANDSCAPE IMPACT ASSESSMENT

7.1 Significance of the Impact

The sensitivity of the landscape resource has been assessed within the baseline to be **very low** (see section 4.0). From understanding the current site condition, development proposals, landscape mitigation and the existing industrial character of adjacent developments to the north and west, the magnitude of change is judged to be **very low**.

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, materials and native endemic landscaping, the development should fit comfortably into the surrounding context. The significance of landscape impact therefore, is judged to be **negligible/none**.

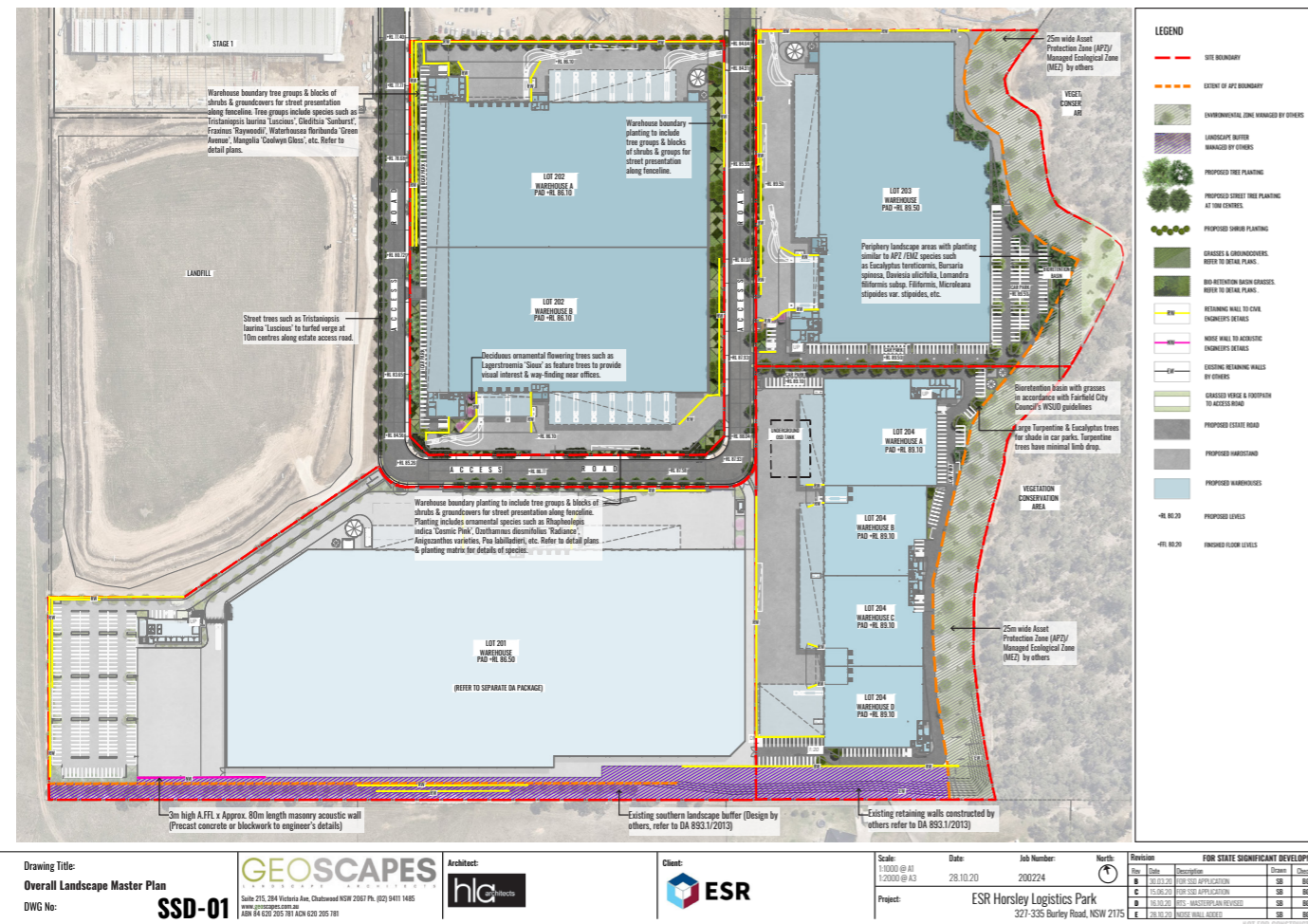


Figure 32: Proposed Landscape Masterplan (Source: Geoscapes Landscape Architects)

Further planting to other areas of the estate will also be introduced (refer to figure 31 above), this will help to filter views of the development from potential visual receivers in the north and west and this is demonstrated within the year 15 photomontages in section 8.0 of this report.

6.2 Detailed Landscape Proposals

Figure 32 above shows the proposed Landscape Masterplan for Horsely Logistics Park. Please refer to landscape design documentation SSD-00 to SSD-14 prepared by Geoscapes for detailed landscape proposals.

8.0 VISUAL IMPACT ASSESSMENT

8.1 Viewpoint 1

Viewing Location	Opposite 396-398 Horsley Road, Horsley Park - Looking North
GPS	33°50'34"S, 150°49'20"E
Elevation (Eye-level)	90.7m AHD
Date and Time	10th March 2020 - 12.23pm
Baseline Photo and Photomontage Figure	Figure 33

Visual Description

Approx. Viewing Distance from Site Boundary 800m

View description & prominence of the development This viewpoint photograph was taken on a track just off Horsely Drive to the south of the site, the track leads up to a small house within pastoral lands at an elevated level. This viewpoint is intended to represent the type of view which may be experienced by residential properties along Horsley Drive close to No's 384 and 386. These properties can be seen in many of the drone photographs looking south (figures 3 to 22). Due to the presence of scattered existing vegetation, properties will either see more or less of the development depending on their angle of view. The baseline image contains pastoral farmlands with scattered trees and residential dwellings. These dwellings can be seen to the right of the image along Greenway Place. The Terramesh bund on the southern boundary of the site can be seen in the background of the photo and the development warehousing will be located beyond this.

Visual Receptor Sensitivity

Receptors with a similar viewpoint to the baseline image, are likely to place high importance and be more critical, regarding their view from a private residential dwelling. Views may be experienced from primary or secondary living spaces. However, as can be seen in the drone photograph, existing vegetation may only allow partial views of the proposed buildings. The baseline does also already contain the Terramesh bund which has changed the view by artificially raising the natural landform. On this basis, it is judged that the sensitivity for this receptor to the development would be **medium**.

Magnitude of Change

As can be seen in the photomontage image opposite, the proposed warehouses on the southern boundary will be partially seen. The existing bund does effectively screen most of warehouse D in Lot 204 and partially the warehouse in Lot 201. Following maturity at year 15, landscaping along the southern boundary is expected to provide further screening of Lot 201. Therefore, the magnitude of change for this visual receptor is judged to be **low**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **minor**.

Extent of Proposed Development



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 32: Viewpoint 1 - Opposite 396-398 Horsley Road, Horsley Park - Looking North (Photomontage)

Approx Panoramic Angle of View - 67°

8.2 Viewpoint 2

Viewing Location	Driveway of 49-53 Greenway Place, Horsley Park - Looking Northwest
GPS	33°50'16"S, 150°49'32"E
Elevation (Eye-level)	89.7m AHD
Date and Time	10th March 2020 - 12.49pm
Baseline Photo & Photomontage Figure	Figure 34

Visual Description

Approx. Viewing Distance from Site Boundary	200m
View description & prominence of the development	<p>Greenway place is in close proximity to the proposed development, with some dwellings only 15m from the southern site boundary. This baseline view was taken on the entrance of the driveway to 49-53 Greenway Place. It is intended to represent the types of views that would be experienced by some residential dwellings, predominantly on the eastern side of the road. As seen in the drone photography in figures 3 to 18, views of the development vary for individual dwellings and most dwellings will experience partial views of warehousing, rather than the entire development.</p> <p>To the right of the image is the E2 conservation area along the eastern boundary of the site. In the center of the image is the Terramesh bund, this extends up to a height of 99m RL and is approximately 11m above adjacent ground level. The development site is situated beyond the bund and mostly in the left portion of the image.</p>

Visual Receptor Sensitivity	As views are likely to be experienced directly from residential properties, either from gardens or windows of primary or secondary living spaces, it is judged that the sensitivity for this receptor to the proposed development would be high . Residential receptors at close range to developments are generally more critical regarding their view.
Magnitude of Change	As can be seen from the photomontage images in figure 30, warehousing in Lots 201 and 204 are expected to mostly screened by either the earth bund or existing vegetation. Only the very top of the southern warehouse D within Lot 204 is expected to be seen above the earth bund and proposed planting. The visibility of Lot 201 may increase from individual residential properties further to the east, who are likely to receive a more open view of the warehouse. This is confirmed in the drone images taken during site analysis. However, any views should be partially screened by planting along the southern boundary following maturity. Therefore, the magnitude of change for this visual receptor is judged to be low .

Significance of Visual Impact	The significance of the visual impact at this location is judged to be moderate/minor .
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Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 33: Viewpoint 2 - Driveway of 49-53 Greenway Place, Horsley Park - Looking Northwest (Photomontage)

Approx Panoramic Angle of View - 67°

8.3 Viewpoint 3

Viewing Location	Ottelia Road, Kemps Creek - Looking East
GPS	33°49'51"S, 150°48'41"E
Elevation (Eye-level)	61.7m AHD
Date and Time	10th Mar 2020 - 2.25pm
Baseline Photo & Photomontage Figure	Figure 35

Visual Description

Approx. Viewing Distance from Site Boundary	700m
View description & prominence of the development	This view is taken from Ottelia Road, which has recently been constructed as part of the industrial estate within this area, tenants include Toyota and Costco. The baseline photograph was taken opposite a road and cul-de-sac which leads to other lots zoned for industrial use. As this road was closed, the photograph could not be taken from the cu-de-sac itself. The site can be seen in the distance centrally located within the view.

Visual Receptor Sensitivity

Receptors at this location are likely to be mostly motorists traveling through a predominately industrial area therefore, are unlikely to place a significant value on the baseline view. It is judged that the sensitivity for this receptor to the development would be **very low**.

Magnitude of Change

The proposed development will form a barely noticeable component of the view and the view whilst slightly altered would be similar to the baseline situation. Therefore, the magnitude of change is judged to be **very low**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **negligible**.

Extent of Proposed Development



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 34: Viewpoint 3 - Ottelia Road, Kemp's Creek - Looking East (Photomontage)

Approx Panoramic Angle of View - 67°

8.4 Viewpoint 4

Viewing Location	Adjacent to 178-182 Delaware Road, Horsley Park - Looking West
GPS	33°50'3"S, 150°50'8"E
Elevation (Eye-level)	79.7m AHD
Date and Time	10th March 2020 - 1.46pm
Baseline Photo & Photomontage Figure	Figure 36

Visual Description

Approx. Viewing Distance from Site Boundary 850m

View description & prominence of the development

This viewpoint was selected to demonstrate the predicted visual impacts for the majority of receptors located due east of the proposed development. There are a few properties further east of this location that are situated at higher elevations. These properties can be seen on some of the drone photographs and most clearly within Figures 8 and 16. As these properties are limited in number and further back from the site boundary, they are unlikely to receive significant visual impacts from the development.

This view is taken along Delaware Road, here the view is open so that the E2 conservation bushland on the eastern boundary of the site is clearly seen. It is adjacent to a residential dwelling with agricultural land and these are seen in the foreground of the view. It is likely that any potential views of the development would be experienced from individual residential dwellings or garden areas.

In the background of the view is the E2 conservation area, the development would be situated directly beyond this vegetation at a distance from the viewpoint of around 850m.

Visual Receptor Sensitivity

Views from this location are generally rural in appearance and do not contain a significant industrial influence therefore, it can be argued that they do present some scenic quality. Residential receptors with a similar viewpoint to the baseline image are likely to place a high importance on, and be more critical of their view. It is likely that views could be experienced from primary or secondary living spaces.

It is judged that the sensitivity for this receptor to the development would be **high**.

Magnitude of Change

As demonstrated in the photomontage and wireframe indication (yellow dashed line) of the position of the proposed development, the existing E2 conservation vegetation is likely to completely screen any views of the proposed buildings. Therefore, the magnitude of change is expected to be **no change**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **none**.



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 35: Viewpoint 4 - Adjacent to 178-182 Delaware Road, Horsley Park - Looking West (Photomontage)

Approx Panoramic Angle of View - 67°

8.5 Viewpoint 5

Viewing Location	Lenore Drive before Old Wallgrove Road, Eastern Creek - Looking South
GPS	33°48'43"S, 150°49'19"E
Elevation (Eye-level)	76.7m AHD
Date and Time	10th March 2020 - 2.59pm
Baseline Photo & Photomontage Figure	Figure 37

Visual Description

Approx. Viewing Distance from Site Boundary	2km
View description & prominence of the development	Lenore Drive is located directly north of the proposed development and is used by motorists traveling in an east or west direction connecting Erskine Park to Eastern Creek. Views are open and Oakdale Industrial Estate can be seen clearly in the background. The baseline image contains several industrial buildings including DHL and Yusen. The foreground of the image shows pastoral land with several electricity pylons which connect up to Transgrid Sydney West. The site is located centrally within the view behind the DHL warehousing.

Visual Receptor Sensitivity	As the receptors are mostly motorists at this location and therefore, are unlikely to place significant value on the baseline view, it is judged that the sensitivity for this receptor to the development would be low .
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Magnitude of Change	The proposed development is likely to be seen above existing warehousing at Oakdale Industrial Estate. However, it will form a minor constituent of the view being partially visible and at sufficient distance to be a small component. Therefore, the magnitude of change is expected to be low .
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Significance of Visual Impact	The significance of the visual impact at this location is judged to be minor negligible .
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Extent of Proposed Development



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 36: Viewpoint 5 - Lenore Drive before Old Wallgrove Road, Eastern Creek - Looking South (Photomontage)

Approx Panoramic Angle of View - 67°

8.6 Viewpoint 6

Viewing Location	Old Wallgrove Road, Horsley Park - Looking South
GPS	33°49'36"S, 150°49'32"E
Elevation (Eye-level)	77m AHD
Date and Time	16th March 2020 - 11.42am
Baseline Photo & Photomontage Figure	Figure 38

Visual Description

Approx. Viewing Distance from Site Boundary	500m
View description & prominence of the development	<p>The viewpoint is taken on the approach to the site via Old Wallgrove Road adjacent to Oakdale Industrial Estate. It is intended to show what views of the development will be possible for motorists approaching the site.</p> <p>To the right of the image is the corner of a DHL warehouse, in the background is the access road approach to northern part of the development site and to the left of the image is the PGH Brick Plant. There are a number of scattered trees along the road and the development site is located behind the PGH site.</p>

Visual Receptor Sensitivity

As the receptors are mostly motorists at this location and traveling through a dense industrial area, they are unlikely to place any significant value on the baseline view. It is judged therefore, that the sensitivity for this receptor to the development would be **very low**.

Magnitude of Change

From the photomontage opposite, the proposed development can be partially seen through the existing trees in the centre of the image. The proposed development will form a barely noticeable component of the view, the view will ultimately be extremely similar to the baseline and the development would be a minor constituent. Therefore, the magnitude of change is judged to be **very low**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **negligible/none**.

Extent of Proposed Development



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 37: Viewpoint 6 - Old Wallgrove Road, Horsley Park - Looking South (Photomontage)

Approx Panoramic Angle of View - 67°

8.7 Viewpoint 7

Viewing Location	33 Greenway Place, Horsley Park - Looking North
GPS	33°50'16"S, 150°49'26"E
Elevation (Eye-level)	96.2m AHD
Date and Time	12th Dec 2019 - 12.47pm
Baseline Photo & Photomontage Figure	Figure 39

Visual Description

Approx. Viewing Distance from Site Boundary 200m

View description & prominence of the development

This visual receptor is located on Greenway Place at close proximity to the southern site boundary. This view is representational of a number of properties who may have similar views of the existing Terramesh bund and the proposed development site. It is noted that land to the east of this location has recently been rezoned to rural residential use. Views from the newly rezoned area would be somewhat similar to this location. The baseline photograph was taken from the rear Varandah of the No.33 and looks directly north towards the site.

In the foreground, pastoral lands associated with rural properties are seen together with existing mature scattered trees. The existing Terramesh bund constructed by CSR is prominent in the view, along with recently planted vegetation. No 41-43 Greenway Place is seen immediately in front of the bund. In the background to the left of the image, new industrial development adjacent to the western development boundary is clearly seen along with earthworks from the development site.

Visual Receptor Sensitivity

As shown in the baseline view, the character of residential properties in this location is rural. However, existing industrial development has already impacted the view with the introduction of warehousing to the north and the Terramesh bund. Due to the close proximity of the development, the likelihood that views will be seen from primary or secondary living spaces and the critical opinion that any development is likely to generate for this receptor, it is judged that the sensitivity to the development would be **high**.

Magnitude of Change

As seen in the photomontages opposite, the existing earth mound does effectively screen most of warehouse D in Lot 204 and the impact of the noise wall is expected to be reduced by the existing planting that exists to the southern boundary. However, the warehouse from Lot 201 will be seen in the view. It could be argued that the view from this location would be fundamentally altered by its presence and the magnitude of change would be high. However, in the baseline photograph there is the presence of existing industrial development seen in this view corridor and the proposed landscape planting at maturity should provide some visual relief and mitigation. Therefore, the magnitude of change is judged to be **medium**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **moderate**. The significance of visual impact is likely to decrease for properties further south from this location.



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 38: Viewpoint 7 - 33 Greenway Place, Horsley Park - Looking North (Photomontage)

Approx Panoramic Angle of View - 67°

8.8 Viewpoint 8

Viewing Location	32 Aldington Road, Kemps Creek - Looking South
GPS	33°50'25"S, 150°47'59"E
Elevation (Eye-level)	87.1m AHD
Date and Time	16th March 2020 - 1.29pm
Baseline Photo & Photomontage Figure	Figure 40

Visual Description

Approx. Viewing Distance from Site Boundary	1.8km
View description & prominence of the development	<p>This location is intended to be representational of the types of view that may be experienced by some residential properties situated to the west of the development. Similar views experienced from this location, would also be experienced by other nearby properties along Aldington Road, these can be seen in Figures 6,10,14, and 18.</p> <p>The baseline view was taken from the rear of the property, where pastoral and agricultural lands are seen in the foreground. Beyond this lies Ropes Creek, which has a significant amount of mature existing vegetation. This acts to screen some of the new industrial development in the area including Toyota and Costco. The proposed development site is clearly seen in the background against the E2 conservation area.</p>

Visual Sensitivity	Views are likely from primary or secondary living spaces, and this type of receptor is also likely to be more critically when assessing any visual impacts received from the development. However, there is a strong presence of existing industrial development within the view corridor and the site itself has been modified by its current use. It is therefore, judged that the sensitivity of this visual receptor is medium .
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Magnitude of Change	The proposed development will be seen on the horizon above existing warehouse development. It is expected to form a minor constituent of the view, being partially visible and at a sufficient distance to be a small component. Therefore, the magnitude of change is judged to be low .
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Significance of Visual Impact	The significance of the visual impact at this location is judged to be minor .
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Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 39: Viewpoint 8 - 32 Aldington Road, Kemps Creek - Looking Northeast (Photomontage)

Approx Panoramic Angle of View - 67°

8.9 Viewpoint 9

Viewing Location	Bowood Park, Bowood Road, Mount Vernon - Looking North
GPS	33°50'59"S, 150°48'41"E
Elevation (Eye-level)	70.45m AHD
Date and Time	16th Dec 2020 - 1.53pm
Baseline Photo & Photomontage Figure	Figure 41

Visual Description

Approx. Viewing Distance from Site Boundary	1.8km
View description & prominence of the development	<p>This visual receptor is located within Bowood Park, Mount Vernon which is situated 1.8km south of the site. A small number of nearby second-storey residential dwellings, may also experience a similar type of view to the baseline image in Figure 37. The park did not appear to be heavily used and there did not seem to be a clear access way other than a closed vehicular gate.</p> <p>The view was taken from the north eastern corner of the park and looks north towards elevated pastoral lands with scattered trees and bushland. The site is located centrally within the view beyond the hill on the horizon. The view is free of development except for electricity pylons.</p>

Visual Sensitivity	Not all areas of the park experience this view, as there is the presence of mature trees along the northern and eastern boundary. However, the view does have some clear scenic value and is likely to be held in high regard by the local community. It is therefore, judged that the sensitivity of this visual receptor is high .
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Magnitude of Change	The proposed development will form a barely noticeable component of the view, with only the very tops of southern warehousing seen. The view would be very similar to the baseline situation and therefore, it is judged that the magnitude of change would be very low .
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Significance of Visual Impact	The significance of the visual impact at this location is judged to be minor .
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Extent of Proposed Development



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 40: Viewpoint 9 - Bowood Park, Bowood Road, Mount Vernon - Looking North (Photomontage)

Approx Panoramic Angle of View - 67°

8.10 Viewpoint 10

Viewing Location	Jacfin Lands, Aldington Road, Kemps Creek - Position 1 - Looking North
GPS	33°50'13.6"S, 150°49'18.8"E
Elevation (Eye-level)	81.1m AHD
Date and Time	16th July 2020 - 3.49pm
Baseline Photo & Photomontage Figure	Figure 42

Visual Description

Approx. Viewing Distance from Site Boundary	160m
View description & prominence of the development	Viewpoints 10 and 11 were taken within the Jacfin lands to represent future residential receptors with the RU4 zoning (refer to section 4.3). This location was chosen to establish potential views of the ESR proposal from residential lots 11 & 12 close to the northern boundary of the Jacfin site. As can be seen in the baseline photograph, the development site is located in close proximity to the north of the Jacfin site. In the foreground, pastoral lands are seen together with the existing Terramesh bund, Gabion walling and recently planted vegetation. In the background of the image, the site is seen with partial views of new industrial development to the north.

Visual Sensitivity	As described within section 4.3 of this report, a judgement of sensitivity is more difficult when the receptor (residential dwellings) does not presently exist. However, it would be likely that dwellings at this location would experience a view similar to that seen within the baseline image. This already contains finished earthworks to the southern boundary of the ESR site and landscaping planting. To the west, proposed industrial development within LOT A is also likely to affect views. Residential receptors who will eventually live in this location, will already be aware of the zoning of adjacent lands and an expectation should exist that their views may contain industrial type buildings. The zoning of the land itself means that working properties are likely to be built here and it could be argued that the land/property would be purchased with regards to its use and possibly less importance would be placed on the views that would be experienced. It is therefore, judged that the sensitivity of this visual receptor is medium .
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Magnitude of Change	The magnitude of change could be determined on a number of factors. For example any landscaping introduced to the rear of the Jacfin RU4 lots may potentially further reduce residual impacts over time. As is demonstrated by the photomontage opposite, the impact of the noise wall is expected to be reduced by the existing planting that exists to the southern boundary. The ESR warehousing will be clearly noticeable in the view. However, following maturity, landscape mitigation planted along the southern site boundary should be effective at screening the development. Therefore, it is judged that the magnitude of change would be medium .
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Significance of Visual Impact	The significance of the visual impact at this location is judged to be moderate/minor .
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Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 41: Viewpoint 10 - Jacfin Lands, Aldington Road, Kemps Creek - Position 1 - Looking North (Photomontage)

Approx Panoramic Angle of View - 67°

8.11 Viewpoint 11

Viewing Location	Jacfin Lands, Aldington Road, Kemps Creek - Position 2 - Looking North
GPS	33°50'27.6"S, 150°49'04.1"E
Elevation (Eye-level)	91.85m AHD
Date and Time	16th July 2020 - 3.54pm
Baseline Photo & Photomontage Figure	Figure 43

Visual Description

Approx. Viewing Distance from Site Boundary	650m
View description & prominence of the development	Viewpoints 10 and 11 were taken within the Jacfin lands to represent future residential receptors with the RU4 zoning (refer to section 4.3). This location was chosen to establish potential views of the ESR proposal further south within the RU4 land close to lots 4 & 5. As can be seen in the baseline photograph, the development site is located to the north of the Jacfin site. In the foreground, pastoral lands are seen together with the existing Terramesh bund, Gabion walling and recently planted vegetation. In the background of the image, the site is seen with partial views of new industrial development to the north and west.

Visual Sensitivity

As described within section 4.3 of this report, a judgement of sensitivity is more difficult when the receptor (residential dwellings) does not presently exist. However, dwellings at this location may experience a view similar to that seen within the baseline image. There are a number of factors that would affect the actual resultant view corridor including other dwellings, development within Lot A and landscaping.

Earthworks to the southern boundary of the ESR site and landscaping planting are visible.

Residential receptors who will eventually live in this location, will already be aware of the zoning of adjacent lands and an expectation should exist that their views may contain industrial type buildings. The zoning of the land itself means that working properties are likely to be built here and it could be argued that the land/property would be purchased with regards to its use and possibly less importance would be placed on the views that would be experienced. It is therefore, judged that the sensitivity of this visual receptor is **medium**.

Magnitude of Change

The magnitude of change could be determined on a number of factors. For example any landscaping introduced to the rear of the Jacfin RU4 lots may potentially further reduce residual impacts over time. As is demonstrated by the photomontage opposite, the ESR development will be noticeable in the view. However, following maturity, landscape mitigation planted along the southern site boundary should be effective at screening the development. The impact of the noise wall is expected to be reduced by the existing planting that exists to the southern boundary. The distance from the development at this location is also 500m further away than Viewpoint 10. Therefore, it is judged that the magnitude of change would be **low**.

Significance of Visual Impact

The significance of the visual impact at this location is judged to be **minor**.



Baseline Photo



Photomontage - Year 0



Photomontage - Year 15

Figure 42: Viewpoint 11 - Jacfin Lands, Aldington Road, Kemps Creek - Position 2 - Looking North (Photomontage)

Approx Panoramic Angle of View - 67°

9.0 CONCLUSIONS AND NON-TECHNICAL SUMMARY

The main purpose of this Landscape and Visual Impact Assessment (LVIA), is to address the Secretary's Environmental Assessment Requirements (SEARs) to prepare a qualitative Visual Impact Assessment (VIA) for a 21.7ha industrial development at the proposed Horsely Logistics Park. This is supported by site analysis and photomontages.

Potential visual impacts have been assessed for a number of locations that are either in close vicinity to the proposed development, at higher elevations or those judged to have particularity high sensitivity.

The site is currently used as a brickworks with major excavation present, the land has been highly modified by its current and previous use. There is ecological value attributed to the site along the eastern boundary, with land zoned as E2 Environmental Conservation. This will be protected and retained as part of the development. Therefore, the sensitivity of the landscape to change within the developable area of the site, has been assessed to be **very low**.

It has been concluded that the significance of the impact upon the landscape at the development site is **negligible/none**. It could even be argued that the proposed development will actually enhance the ecological value of the site by the introduction of additional planting. This planting is in the form of a Managed Ecological Zone along the eastern boundary, planting already installed to the southern boundary and proposed planting within the estate itself.

The proposed development, will create visual impacts for some user groups who will experience views of the development. The highest visual impacts are predominately for people or user groups that are located in close proximity to the development. The existing Terramesh retaining bund structure on the southern boundary, will help to screen the development for some very close range receptors in the south along Greenway Place. This screening will improve following the maturity of recently planting vegetation.

The conclusions of potential visual impacts have been determined by site visits, desktop study, photographic and photomontage study.

Through analysis conducted within this report, the following residential locations are judged to receive **moderate** visual impacts from the proposed development.

- 33 Greenway Place, Horsley Park (VP7)

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

- Driveway of 49-53 Greenway Place, Horsley Park (VP2)
- Jacafin Lands, Aldington Road, Kemps Creek - Position 1 (VP10)

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

- Opposite 396-398 Horsley Road, Horsley Park (VP1)
- 32 Aldington Road, Kemps Creek (VP8)
- Bowood Park, Bowood Road, Mount Vernon (VP9)
- Jacafin Lands, Aldington Road, Kemps Creek - Position 2 (VP11)

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

- Lenore Drive before Old Wallgrove Road, Eastern Creek (VP5)

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

- Old Wallgrove Road, Horsley Park (VP3)
- The following locations and are judged to have **no** visual impacts:

- Adjacent to 178-182 Delaware Road, Horsley Park (VP4)
- Old Wallgrove Road, Horsley Park (VP6)

Only one location (VP7) has been assessed as having **moderate** visual impacts. This is largely based on the close proximity of the residential property to the site, the sensitivity of this location and the expected magnitude of change. Mitigation of visual impacts has been considered in previous design approvals for the site (DA 893.1/2013). These include an earth mound and planting to the southern boundary which has already been installed and is establishing well on the site. These measures have been represented in year 15 photomontages to predict their effectiveness at maturity. It is clear from these photomontages (see section 8.0), that previous earthworks and landscaping approved and installed under DA 893.1/2013, is effective in screening large areas of the development from nearby southern visual receivers. Therefore, no additional planting on the southern boundary is proposed.

Previously installed vegetation is predominately intended to screen Lot 201 and provide visual relief for residents located in Greenway Place (see VP7) and other properties who will experience a similar type of view. This intended screening is also applicable for land recently rezoned as rural residential to the southern boundary of the site.

Two locations are assessment as having **moderate/minor** visual impacts from the development, as described in the methodology of this report, these are not considered to be significant.

The report has considered the Jacfin RU4 future residential dwellings to the west and has determined that although predicted visual impacts at this stage are difficult to fully establish, based on the plans and information currently available, it is believed that any visual impacts received at this location from the proposed ESR development are not likely to be highly significant. A number of factors will determine long term residual visual impacts from the Jacfin lands, including potential landscape buffer planting between residential and industrial lands which is yet to be determined.

This report demonstrates that careful selection of building finishes and colours combined with proposed landscape planting at the development site, can be helpful in filtering and blending the development into its surrounding context. This in turn will help to reduce visual impacts for those people and locations in close proximity to the development. Landscaping will be most effective after a period of 15 years, this is the point that trees and shrubs are expected to begin to reach maturity.

10.0 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
DIPE	Department of Planning Industry & Environment
LEP	Local Environment Plan
DCP	Development Control Plan
GFA	Ground Floor Area
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