CLOUSTON associates

MIRVAC
ASPECT INDUSTRIAL ESTATE
LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT

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Cover page: Nursery on Aldington Road.
This page: Rural Lands Adjacent to Mamre Road.

ASPECT INDUSTRIAL ESTATE LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT

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Note: This document is Preliminary unless Validated.

Rural Lands Adjacent to Mamre Road.

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Rural Lands Adjacent to Mamre Road.

This document has been prepared in consideration of the Planning Secretary's Environmental Assessment Requirements (SEARs) issued for the proposal (SSD-10448) issued on 30 April 2020. Table 1 below summaries all key issues relevant to this report and how they have been responded to.

KEY ISSUE	REQUIREMENTS	RESPONSE /REFERENCE
Visual Impact Assessment	A visual impact assessment (including photomontages and perspectives) of the development layout and design, including staging, site coverage, setbacks, open space, landscaping, height, bulk, scale, colour, building materials and finishes, façade design, signage and lighting, particularly in terms of potential impacts on: • nearby public and private receivers • significant vantage points in the broader public domain • Mamre Road • the riparian corridor on site.	Artistic renders are located in Section 7.0 - The Proposal Visual Impact Assessment of the development and layout have been provided in Section 8.0 - Visual Impact Analysis. Photmontages for selected viewpoints have been included in this section. Discussion of the proposed materiality is included in Section 9.0 - Mitigation Strategies. The Materiality Concept has been included in Section 11.0 - Appendix.

EXECUTIVE SUMMARY

CLOUSTON Associates has been engaged to prepare an assessment of the surrounding visual catchment and key views in relation to the proposed Aspect Industrial Estate site (Stage 1) that informs a Landscape Character and Visual Impact Assessment (LCVIA) report.

The proposed development comprises a Concept Masterplan comprising 11 industrial buildings and Stage 1 works for site preparation, construction and use of two warehouse and distribution buildings, stormwater and associated works, internal road network, signage and subdivision for complete description of the proposal, refer to the Environmental Impact Assessment for detailed description of works AIE

The LCVIA addresses the possible effects of change in the landscape in relation to views and visual amenity through examining the principal legislative and planning context and applying the relevant methodologies to assessment.

The area immediately surrounding the site can typically be defined as a highly modified landscape as a result of cleared pastureland and large lot residential. As a result of this, much of the vegetation on and surrounding the site has been cleared, however patches of remnant vegetation still remain in the wider surrounds. This creates a general landscape character that is rural and open in nature.

After undertaking a visual catchment assessment of the wider context of the site a number of suitable viewpoints were selected to analyse for visual impact. A range of viewpoints were selected at varying distances.

Of the 17 viewpoints selected and analysed the findings are as follows:

- Three viewpoints received a Negligible impact rating;
- Two viewpoints received a Moderate/Low impact rating;
- Five viewpoints received a Moderate impact rating;
- Six viewpoints received a High/Moderate impact rating;
- One viewpoint received a High impact rating.

A range of potential mitigation measures have been considered in order to reduce any visual impacts. After an analysis of the visual impacts the most appropriate form of mitigation would be Alleviation, based around new planting, particularly to the boundaries. Appropriate use of building materials to be determined during the detailed design phase would also be appropriate to help minimise any visual impacts.

The overall visual impacts of the Proposal have been viewed in terms of The Mamre Road Precinct Plan (November 2019) which identifies the area as future industrial land. Similarly, as a result of Ministerial Local Planning Direction 3.5, future residential development of the site is not possible as it is contained within the Western Sydney Airport ANEF 20 noise contour, resulting in any future land use being limited to employment generating purposes.

1.0 Introduction

Rural Lands Adjacent to Bakers Lane.

1.0 INTRODUCTION

1.1 PROPOSAL INTRODUCTION

Legally described as Lots 54 - 58 of DP259135, with an area of approximately 56.3ha, the Site is located east of Mamre Road, Kemps Creek within the Penrith City Council Local Government Area (LGA).

The Site has approximately 950m of direct frontage to Mamre Road with a proposed signalised intersection providing vehicular access via Mamre Road to the M4 Motorway and the Great Western Highway to the north and Elizabeth Drive to the south.

The Site is located approximately 4km north-west from the future Western Sydney Nancy-Bird Walton Airport, 13km south-east of the Penrith CBD and 40km west of the Sydney CBD.

This land is identified for future employment land, as Mamre Road Precinct is proposed to be rezoned IN1 General Industrial under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).The strategic intent is for this land to be zoned for employment purposes. The Site is zoned RU2 Rural residential land under Penrith City Council's Local Environmental Plan (LEP).

The Ministerial Local Planning Direction 3.5 precludes future residential development, as the site is affected by the Western Sydney International Airport's ANEF 20 noise contour. The NSW Government has identified an opportunity for land uses to locate in this precinct which are not sensitive land uses, such as a warehouse and logistics facilities.

Consistent with the above, this report has been prepared to support a Development Application under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) for the purposes of:

- The demolition and removal of existing rural structures;
- Heritage salvage works (if applicable);
- Clearing of existing vegetation on the subject site and associated dam dewatering and decommissioning;
- Realignment of existing creek;
- Onsite bulk earthworks including any required ground dewatering;
- The importation, placement and compaction of spoil material, consisting of;

1. Virgin Excavated Natural Material (VENM) within the meaning of the POEO Act; and/or
2. Excavated Natural Material (ENM) within the meaning of the NSW Environmental Protection Agency's (EPA) Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the POEO (Waste) Regulation 2014 – The Excavated Natural Material Order 2014; and/or
3. Materials covered by a specific NSW EPA Resource Recovery Order and Exemption which are suitable for their proposed use.

- Boundary retaining walls;
- Catchment level stormwater infrastructure, trunk services connections, utility infrastructure, roads and access infrastructure (signalised intersection with Mamre Road) associated with Stage 1;

Southern Boundary of the Site.

1.0 INTRODUCTION

- Construction, fit out and 24 hours a day / 7 day per week use of industrial warehouse and distribution buildings within Stage 1;
- Detailed on lot earthworks, stormwater, services and utility infrastructure associated with the construction of industrial logistics and warehouse buildings within Stage 1;
- Boundary stormwater management, fencing and landscaping; and
- Staged subdivision of Stage 1.

1.2 PURPOSE OF THIS REPORT

CLOUSTON Associates has been commissioned by Mirvac to prepare this Landscape Character and Visual Impact Assessment (LCVIA) for the Proposal in line with the requirements of the Department of Planning and Environment (DP&E) Secretary's Environmental Assessment Requirements (SEARs).

1.3 VISUAL ASSESSMENT RATIONALE

An LCVIA takes into account all effects of change and development in a visual scene that may impact visual amenity. It is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the visual scene, both quantitatively and qualitatively.

Judgement as to the significance of the effects is arrived at by a process of reasoning, based upon analysis of the baseline conditions, identification of visual receptors (viewers of the scene) and assessment of their sensitivity, as well as the magnitude and nature of the changes that may result from any development.

This assessment is an independent report and is based on a professional analysis of the visual environment and the Proposal at the time of writing. The current and potential future viewers (visual receptors) have not been consulted about their perceptions. The analysis and conclusions are therefore based solely on a professional assessment of the anticipated impacts, based on a best practice methodology.

2.0 Methodology

Mamre Road Looking North.

2.0 METHODOLOGY

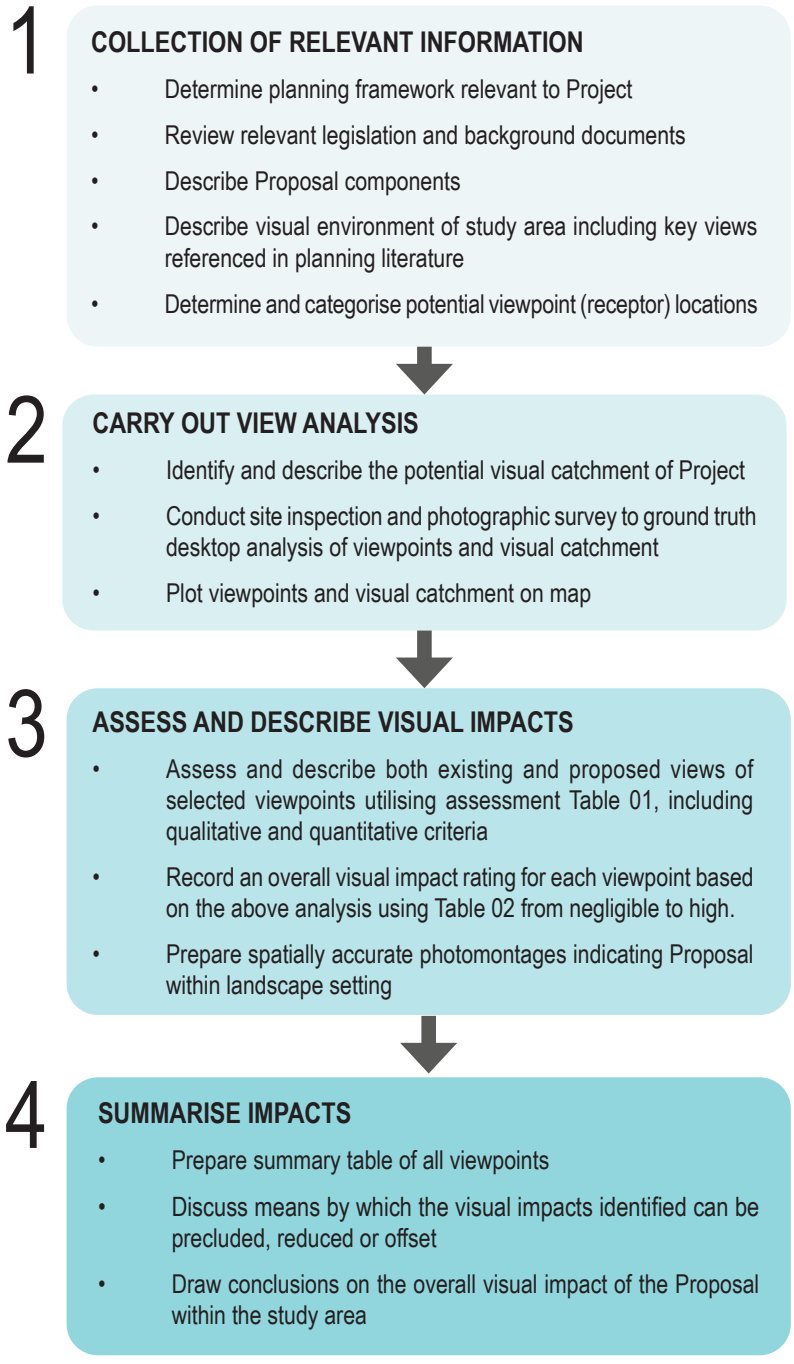

Figure 2.0 - Summary of CLOUSTON methodology

2.0 METHODOLOGY

2.1 METHODOLOGY

Landscape Character and Visual Impact Assessment (LCVIA) aims to ensure that all possible effects of change and development in the landscape, views and visual amenity are taken into account. It is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the landscape, both quantitatively and qualitatively.

The Commission of the NSW Land and Environment Court has developed Planning Principles that relate to visual impact assessment and has developed assessment steps to be followed:

Step 1: Identify the nature and scope of the existing views from the public domain. This identification should encompass (but is not limited to):

- the nature and extent of any existing obstruction of the view
- relevant compositional elements of the view (such as is it static or dynamic and, if dynamic, the nature and frequency of changes to the view)
- what might not be in the view – such as the absence of human structures in the outlook across a natural area
- is the change permanent or temporary
- what might be the curtilages of important elements within the view

Step 2: Identify the locations in the public domain from which the potentially interrupted view is enjoyed. (Note that the Planning Principles give primacy of views from the public domain over views from private land).

Step 3: Identify the extent of the obstruction at each relevant location.

Step 4: Identify the intensity of public use of those locations where that enjoyment will be obscured, in whole or in part, by the proposed development.

Step 5: Identify whether or not there is any document that identifies the importance of the view to be assessed. The absence of such provisions does not exclude a broad public interest consideration of impacts on public domain views. Heritage items (such as Aboriginal and environmental) should also be considered, as should direct impacts on the local community.

2.2 QUANTITATIVE AND QUALITATIVE VALUES

The visual experience of the area and its landscape setting varies depending on the viewer's standpoint within and outside the site and indeed from the viewer's personal perceptions of what they may appreciate in any given setting.

This requires an assessment to address both the quantitative characteristics of the landscape views (what elements form the scene? What features dominate? What breadth of view is offered – narrow vista or wide panorama?) and the qualitative assessment of the values ascribed to those scenes.

2.0 METHODOLOGY

The quantitative-based strategies are less debatable (can that view still be seen when the new built form is introduced? How much of that view will we lose?) than is establishing the qualitative strategies (which view is more important to retain?); the latter could be perceived differently by every viewer that sees that scene. Such variation of perception is particularly acute around the built form.

2.3 FIELD OF VIEW

The choice of lens, camera format and final presentation has a significant bearing on the understanding of site photos. There is a balance to be struck in matching the human experience if the view with its wider context, so that a project's appearance and its place within its environment can be recognised and understood.

In recognising that no photographic image can exactly replicate the view of the human eye, extensive literature has been published on the nearest equivalent combination of focal length and field of view of a camera that best emulates human vision.

It is important to note that the process of assigning visual impact ratings to viewpoints is undertaken during a site visit and is calculated from a human vision perspective on site. Photographic images should be considered to be representative only.

Viewpoint photos will be taken with a Sony Alpha ILCE-A7 II with the following specification:

- Body type: Compact
- Sensor size: 855.62mm2 (35.80mm x 23.90mm)
- Sensor type: CMOS Full Frame
- ISO: Auto
- Focal length: 50mm

While some of this literature is contradictory (with a further complication to this process being the differing sensor formats of digital cameras which affect the apparent focal length and field of view) the use of a 50mm focal length and a full frame sensor is generally considered the closest achievable replication of the human eye view and is in line with the current guidelines of the Landscape Institute (UK).

2.4 ASSESSMENT METHODOLOGY

CLOUSTON Associates has developed a best practice methodology based on internationally accredited approaches and 20 years of experience in the field of visual assessment. There are several critical dimensions demonstrated through this assessment and evaluation:

- Ensuring all receptors (viewers) have been adequately identified, even at distance, with emphasis on public domain views
- Comprehensive evaluation of context to determine visual catchment of the site from these areas
- Being clear on and separately defining quantitative impacts (distance, magnitude, duration etc) as against qualitative impacts (viewer type and context of view)

2.0 METHODOLOGY

- Providing a clear rationale for how impacts are compared and contrasted
- Ensuring photomontages include views from the highest potential impact locations, identified from analysis above
- Being clear on the differing forms of mitigation options, namely avoidance, amelioration (eg design), mitigation (eg screening) and compensation (on or offsite)

2.5 ASSESSMENT PROCESS

This LCVIA adopts an assessment process as follows:

- The initial step involves the collection of relevant information regarding the proposal site, the Proposal and its compatibility with the surrounding landscape. Desktop analysis in undertaken to determine the visual catchment of the Proposal and potential visual receivers through the use of mapping and topography analysis. Site visits are then undertaken to confirm the visual catchment and visual receivers.

- The next step is to carry out a view analysis that identifies the potential visual catchment and areas from which the Proposal Site may be viewed. Viewpoints are analysed and defined into different categories and sensitivities in terms of their land use context and spatial relationship to the Proposal Site and the landscape in which they are located. A photographic inventory from identified key viewpoints is suggested, plotting the viewpoints on a map.

- An evaluation matrix is then completed that summarises the full range of viewer situations identified, assessing the indicative contribution to potential visual impact of key factors for each selected viewpoint. The scores for these key factors are then averaged to determine a High, Moderate or Low impact rating.

2.6 VIEW SELECTION CRITERIA

The selection of views for detailed evaluation for the Proposal is based on the following sources:

- visual assessment policy guidance in particular the NSW Land and Environment Court Planning Principles;
- desktop mapping;
- in-field evaluation;
- SEARS requirements.

Informed by the above considerations, the selection criteria for views to be assessed in detail includes potentially impacted views from:

- the public domain (principally streets, parks and waterways)
- pedestrians and cyclists
- views and vistas identified within local planning documents
- close and direct views
- transport (private and public)
- distant and filtered views
- any impacted heritage areas or items.

2.0 METHODOLOGY

2.7 CHRONOLOGY OF ASSESSMENT

For this LCVIA the sequential assessment steps employed in determining the potential visual impact of the Proposal Site are as follows:

Stage 1:

Establishing the baseline – drawing on background documents and site investigation to document the existing landscape character and visual environment of the study area and its visual catchment. This leads to establishing the most significant views and vistas within and surrounding the Proposal Site.

Stage 2:

Visual Impact Assessment - assessment of the visual impacts of the Proposal Site for the construction and operation stages, set against the planning and design principles. This leads to determining any mitigation measures that may be required to reduce visual impacts from the preferred development option.

2.8 RATING SYSTEM

The overall visual impact rating of a Proposal on any given viewpoint/visual receptor is based on themes of magnitude and sensitivity, recorded using a four band scoring system from negligible to high.

- ***Sensitivity:*** each visual receptor type has an inherent and varied sensitivity to change in the visual scene based on the personal context in which their view is being experienced (ie. At home, on the street, in a park etc). This sensitivity has a direct bearing on the perception of visual impact experienced by the receptor and qualifies the quantitative impacts
- ***Magnitude:*** a measure of the magnitude of the visual effects of the development within the landscape. A series of quantitative assessments are studied, including distance from development, quantum of view, period of view and scale of change
- ***Overall Impact Rating:*** The severity of these impacts is calculated using matrix Table 1 – based on a combination of magnitude and sensitivity.

	HIGH MAGNITUDE	MODERATE MAGNITUDE	LOW MAGNITUDE	NEGLIGIBLE MAGNITUDE
HIGH SENSITIVITY	HIGH	HIGH-MODERATE	MODERATE	NEGLIGIBLE
MODERATE SENSITIVITY	HIGH-MODERATE	MODERATE	MODERATE/LOW	NEGLIGIBLE
LOW SENSITIVITY	MODERATE	MODERATE/LOW	LOW	NEGLIGIBLE
NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE

Table 1: Visual Impact Rating as a combination of Sensitivity and Magnitude. Source: Environmental Impact Assessment Practice Note: Guideline for Landscape Character and Visual Impact Assessment (EIA-N04). Roads and Maritime Services.

2.0 METHODOLOGY

	FACTOR		NEGLIGIBLE	LOW IMPACT	MODERATE IMPACT	HIGH IMPACT
QUALITATIVE	Viewer Sensitivity	Each visual receptor type has an inherent and varied sensitivity to change in the visual scene based on the personal context in which their view is being experienced. This sensitivity has a direct bearing on the perception of visual impact experienced by the receptor and qualifies the quantitative impacts. Number of viewers also has a bearing on sensitivity. Viewpoints have a varied number of potential receivers depending on whether the viewpoint is public or private, the popularity of the viewing location and its ease of accessibility. Views from public reserves and open space are often given the highest weighting due to the increased number of viewers affected.	Vacant lot, uninhabited building, car park.	Minor roads, service providers.	Residential properties with limited views, commercial properties, scenic public roads (eg official tourist routes).	Public open space, public reserves, living areas or gardens/balconies of residential properties with direct views of Project.
QUANTITATIVE	Quantum of View	The quantum of view relates to the openness of the view and the receptor's angle of view to the scene. A development located in the direct line of sight has a higher impact than if it were located obliquely at the edge of the view. Whether the view of the Proposal is filtered by vegetation or built form also affects the impact, as does the nature of the view (panoramic, restricted etc.). A small element within a panoramic view has less impact than the same element within a restricted or narrow view.	Only an insignificant part of the Proposal is discernible.	An oblique, highly filtered or largely obscured view of the Proposal or a view where the Proposal occupies a very small section of the view frame.	A direct view of the Proposal or its presence in a broader view where the Proposal occupies a moderate proportion of the view frame.	A direct view of the Proposal or its presence (sometimes in a very narrow or highly framed view), where the Proposal occupies the greater proportion of the view frame.
	Distance of View	The effect the Proposal has on the view relating to the distance between the Proposal and the visual receptor. The distances are from the approximate boundary of the Proposal site.	Over 3000m	Viewing distance of between 1000-3000m.	Viewing distance between 100m and 1000m.	Viewing distance between 0 and 100m.
	Period of View	The length of time the visual receptor is exposed to the view. The duration of view affects the impact of the Proposal on the viewer - the longer the exposure the more detailed the impression of the proposed change in terms of visual impact.	Less than 1 second	1 to 10 seconds: often from a road or walking past.	1 to 5 minutes: usually from a road/driveway entrance, walking past.	Significant part of the day: usually residential property.
	Scale of Change	Scale of change is a quantitative assessment of the change in compositional elements of the view. If the proposed development is largely similar in nature and scale to that of existing elements in the vicinity, the scale of change is low. If the development radically changes the nature or composition of the elements in the view, the scale of change is high. Distance from the development would accentuate or moderate the scale and variety of visible elements in the overall view and hence influence this rating.	Proposal barely discernible	Elements and composition of the view would remain largely unaltered.	Elements within the view would be at odds with existing features in the landscape	Elements within the view would greatly dominate existing features in the landscape

Table 2: Sensitivity and Magnitude Rating Criteria.

Mamre Road.

2.0 METHODOLOGY

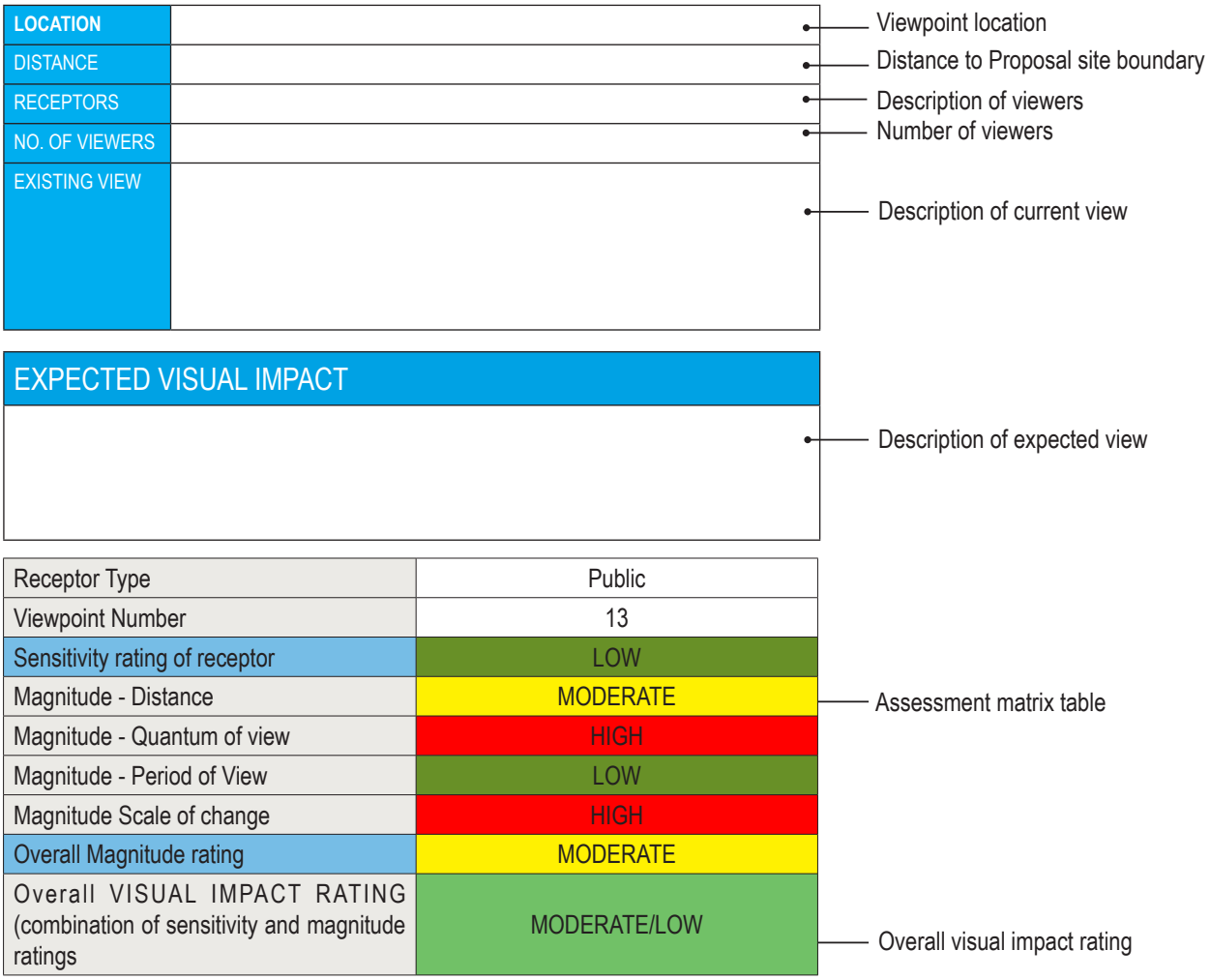

Table 3: Example of Assessment Format Before Mitigation Measures.

2.9 PHOTOMONTAGE PRODUCTION

Virtual Ideas has produced photomontages for this report for Viewpoints 1, 3, 5, 7, 8, 10, 15, 16 & 17 in order to give a representative view of how the Project upon completion will appear in terms of bulk and scale and its relationship to its surroundings when viewed from these viewpoints.

Viewpoints have not been produced for every viewpoint as they are either of a similar vantage point to ones that are being produced (particularly along Mamre Road) or would not be visible (such as Aldington Road). Vegetation within the photomontages have been shown at a mature stage of growth. Photomontaged viewpoint locations can be seen in Figure 2.1.

2.0 METHODOLOGY

Figure 2.1 - Viewpoint Locations

Photomontaged Viewpoint

Non-photomontaged Viewpoint

3.0 Planning Context

Rural Land Surrounding the Proposal.

3.0 PLANNING CONTEXT

3.1 LEGISLATIVE POLICY AND CONTEXT

The key legislative and planning instruments that have a bearing on the visual and amenity assessment and implications for the proposed development include;

i. Environmental Planning and Assessment Act, 1979 (NSW)
ii. The Land and Environment Court's Planning Principles (for assessing views)
iii. Western Sydney Priority Growth Area and Western Sydney Employment Area, 2015
iv. Western City District Plan, 2018
v. Draft Penrith City Council Local Strategic Planning Statement
vi. Draft Penrith Rural Lands & Villages Study
vii. Draft Penrith Scenic & Cultural Landscape Study
viii. Draft Western Sydney Aerotropolis Plan
ix. Draft Aspect Industrial Estate DCP
x. State Environmental Planning Policy (Western Sydney Employment Area) 2009

3.2 Environmental Planning and Assessment Act, 1979 (NSW)

The EP&A Act provides the statutory basis for planning and environmental assessment in NSW. Assessment and approvals may be carried out under various parts of the Act, depending on the requirements of environmental planning instruments, and the scale and nature of impacts of the upgrade work.

3.3 The Land and Environment Court Planning Principles

The Land and Environment Court of New South Wales was established in 1980 by the Land and Environment Court Act 1979. Relevant principles have been developed in visual assessment case judgments to guide future decision-making in development appeals. These include separate but related principles for private and public domain views.

The principles set out a process for assessing the acceptability of impact. The two relevant cases are:

- Private views - Tenacity Consulting v Warringah Council (2004)
- Public domain views - Rose Bay Marina Pty Limited v Woollahra Municipal Council (2013)

Planning Principle for Private Views - Tenacity Consulting v Warringah Council (2004)

The key points from this principle include:
Assessment of views to be affected

- Water views are valued more highly than land views.
- Iconic views (eg of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons.

3.0 PLANNING CONTEXT

- Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.

What part of the property the views are obtained

- The protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries.
- Sitting views are more difficult to protect than standing views.

Extent of the impact

- The impact on views from living areas is more significant than from bedrooms or service areas.
- It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating.

Reasonableness of the proposal

- With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable.

Planning Principle for Public Domain Views - Rose Bay Marina Pty Limited v Woollahra Municipal Council (2013)
The assessment process from this principle includes:

Identification Stage
Identify the nature and scope of the existing views from the public domain:

- the nature and extent of any existing obstruction of the view
- relevant compositional elements of the view
- what might not be in the view - such as the absence of human structures in the outlook across a natural area
- is the change permanent or temporary.

This is followed by identifying the locations in the public domain from which the potentially interrupted view is enjoyed and the extent of obstruction at each relevant location. The intensity of use of this locations is also to be recorded. Finally, the existence of any documents that identifies the importance of the view - ie. international, national, state or local heritage recognition is ascertained.

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Analysis of impacts

- The analysis required of a particular development proposal's public domain view impact is both quantitative as well as qualitative.
- A quantitative evaluation of a view requires an assessment of the extent of the present view, the compositional elements within it and the extent to which the view will be obstructed by or have new elements inserted into it by the proposed development.
- In the absence of any planning document objective/aim, the fundamental quantitative question is whether the view that will remain after the development (if permitted) is still sufficient to understand and appreciate the nature of and attractive or significant elements within the presently unobstructed or partially obstructed view. If the view remaining (if the development were to be approved) will be sufficient to understand and appreciate the nature of the existing view, the fundamental quantitative question is likely to be satisfied.
- The outcome of a qualitative assessment will necessarily be subjective. However, although beauty is inevitably in the

3.0 PLANNING CONTEXT

eye of the beholder, the framework for how an assessment is undertaken must be clearly articulated. Any qualitative assessment must set out the factors taken into account and the weight attached to them. Whilst minds may differ on outcomes of such an assessment, there should not be issues arising concerning the rigour of the process.

- As with Tenacity, a high value is to be placed on what may be regarded as iconic views (major landmarks or physical features such as land/water interfaces).

Other factors to be considered in undertaking a qualitative assessment of a public domain view impact include:

- Is any significance attached to the view likely to be altered?
- If so, who or what organisation has attributed that significance and why have they done so?
- Is the present view regarded as desirable and would the change make it less so (and why)?
- Should any change to whether the view is a static or dynamic one be regarded as positive or negative and why?
- If the present view attracts the public to specific locations, why and how will that attraction be impacted?
- Is any present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?
- However, on the other hand, if the present obstruction of the view is extensive, does that which remains nonetheless warrant preservation (it may retain all or part of an iconic feature, for example)?
- If the change to the view is its alteration by the insertion of some new element(s), how does that alter the nature of the present view?

The principles established by the Court from both cases have been integrated into the approach adopted for this evaluation.

3.4 Western Sydney Priority Growth Area and Western Sydney Employment Area 2015

Figure 3.0 illustrates the Western Sydney Priority Growth Area including the Proposal Site. This area will guide new infrastructure investment, identify new homes and jobs close to transport and coordinate services in the area.

Furthermore, the New South Wales Government established the Western Sydney Employment Area (WSEA) to provide business in the region with land for industry and employment, including transport and logistics, warehousing and office spaces- refer to Figure 3.0.

3.5 Western City District Plan (WCDP)

The *WCDP* is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. The *WCDP* informs local environmental plans, the assessment of planning proposal as well as community strategic plans and policies. The *WCDP* identifies a number of planning priorities through key initiatives, with 'a strong emphasis on jobs, leveraging off the Western Sydney Airport' being identified.

The Proposal Site is located in a Land Release Area (refer Figure 3.1) identified within the plan, and the Proposal aligns with the broader aims of creating a productive region by driving opportunities for investment, business and jobs growth to support a metropolis of three cities ensuring people have access to a large number and range of jobs and services delivering a well connected city.

3.6 Draft Penrith Local Strategic Planning Statement (LSPS).

The purpose of the *LSPS* is to outline Penrith's economic, social and environmental land use needs over the next 20 years. The *LSPS* identifies the strategic planning work needed to be undertaken in order to inform a review of current planning controls. The *LSPS* groups the priorities identified at state, regional, district and local levels to provide context to the planning actions and priorities of Penrith. Importantly, the *LSPS* recognises that areas of existing rural land in Penrith will undergo rezoning in order to support a range economic and social goals, allowing for urban development and associated business activities (such as the Proposal) while maintaining a balanced relationship to the current character

Rural Land Adjacent to Bakers Lane.

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of Penrith and its rural lands.

3.7 Draft Penrith Rural Lands and Villages Study

The draft Penrith Rural Lands and Villages Study outlines a range of guiding principles and strategic directions for the future growth and management of Penrith's rural areas. Rural Penrith is expected to undergo significant change which is being led by a number of major infrastructure and land use initiatives associated with the future Western Sydney Airport and the Aerotropolis as well as associated urban growth, employment and agribusiness opportunities and transport improvements.

Importantly, the Study outlines the goal of managing the conversion of rural lands required for urban or infrastructure development in order to support wider goals of Council's longstanding vision for the whole of Penrith which is providing a 'sustainable and prosperous region with harmony of urban and rural qualities...(which) would offer both the cosmopolitan and cultural lifestyles of a mature city and the casual character of a rural community.

3.8 Penrith Scenic and Cultural Landscapes Study (PSCLS)

The PSCLS is a strategic level document that broadly describes landscapes across the Penrith Local Government Area (LGA) with an emphasis on priority landscapes. Certain areas are referred to as 'Significant Scenic and Cultural Landscapes' which should be given a higher level of protection. The Proposal Site is not located within either a 'significant scenic and cultural landscape' or a 'highly visually-sensitive area' identified within the study.

3.9 Draft Western Sydney Aerotropolis Plan

The draft *Western Sydney Aerotropolis Plan*, released for exhibition in December 2019, has been developed by the Western Sydney Planning Partnership and sets the planning framework for the Aerotropolis. Mamre Road Precinct is identified as one of ten precincts within the growth area. Mamre Road Precinct is an initial precinct to be brought forward to create early employment opportunities and better coordinate infrastructure planning.

The Western Sydney Aerotropolis Plan identifies the planning pathway for Mamre Road Precinct to be rezoned under the WSEA SEPP as the purpose of this precinct aligns with the existing WSEA. The Structure Plan identifies land within Mamre Road Precinct to be zoned for flexible employment, with intended land uses being industrial warehousing and logistics. The statutory planning pathway will be separate from the remaining Aerotropolis precincts and it will have its own Development Control Plan.

3.10 Draft Aspect Industrial Estate DCP

The principal aims of the AIE DCP are listed as follows:

- To integrate State and local planning inputs to enable the delivery of environmentally, economic and socially sustainable development.
- To provide suitably located industrial land to support the economic growth of the city.
- To provide connections to required services to meet the future needs of the Precinct.
- To facilitate development that is integrated with local road and freight networks.

The primary aim of the AIE DCP is to facilitate the redevelopment of the land zoned IN1 General Industrial under the provisions of the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (SEPP WSEA). The DCP includes specific objectives that address the principal development standards listed within the SEPP WSEA and the planning principles developed during the precinct planning process. The associated investigations undertaken to inform the SEPP amendment.

3.11 State Environmental Planning Policy (Western Sydney Employment Area) 2009

The objectives of this clause are as follows—

(a) to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,

and specifically in relation to visual imapct: 3(j) the visual impact of earthworks as viewed from the waterways.

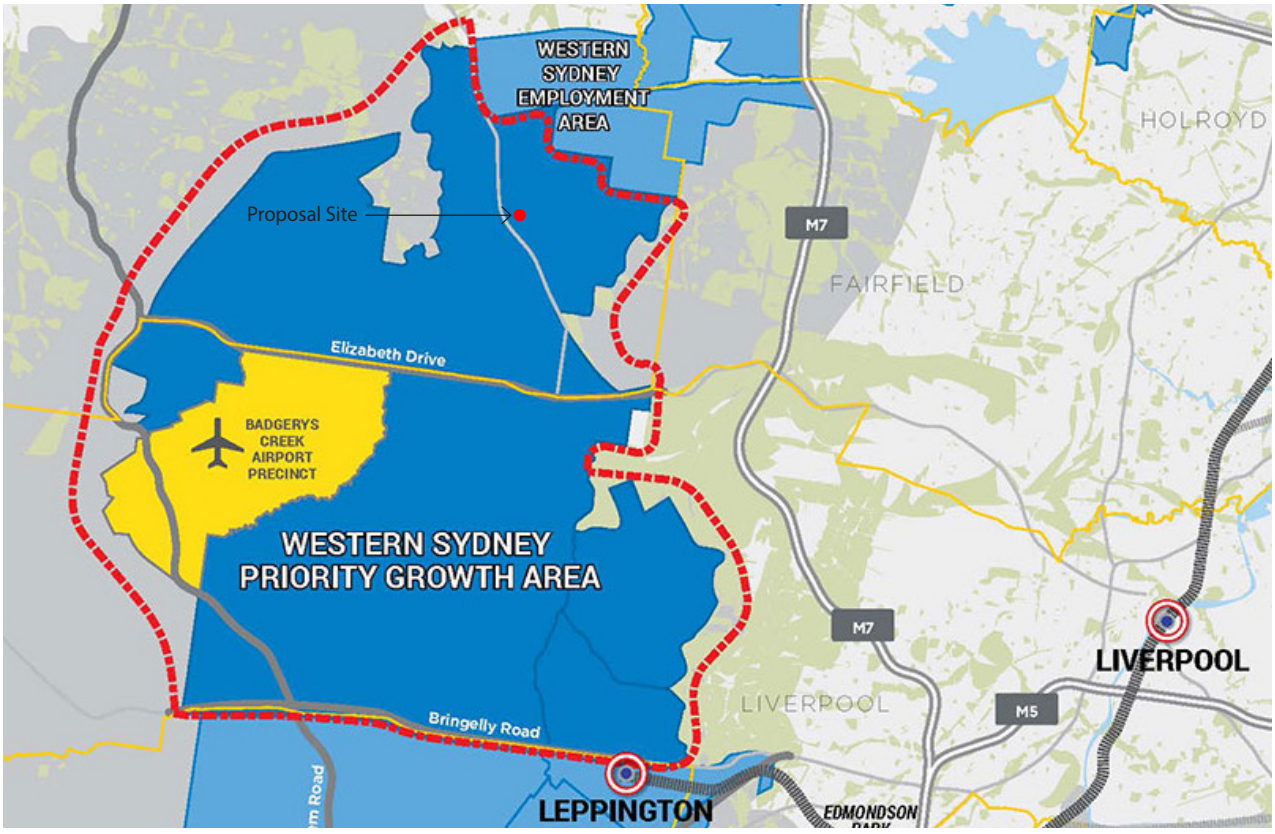
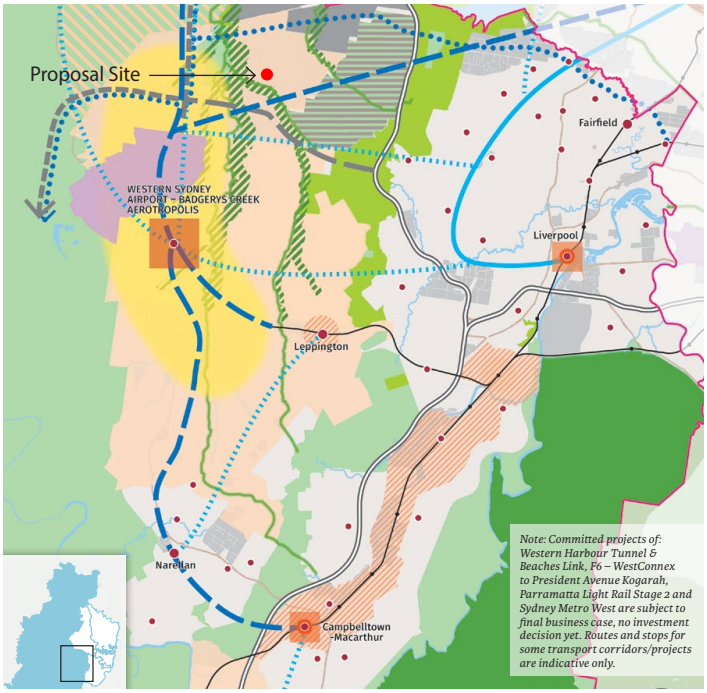


Figure 3.0 - Western Sydney Priority Growth Area.



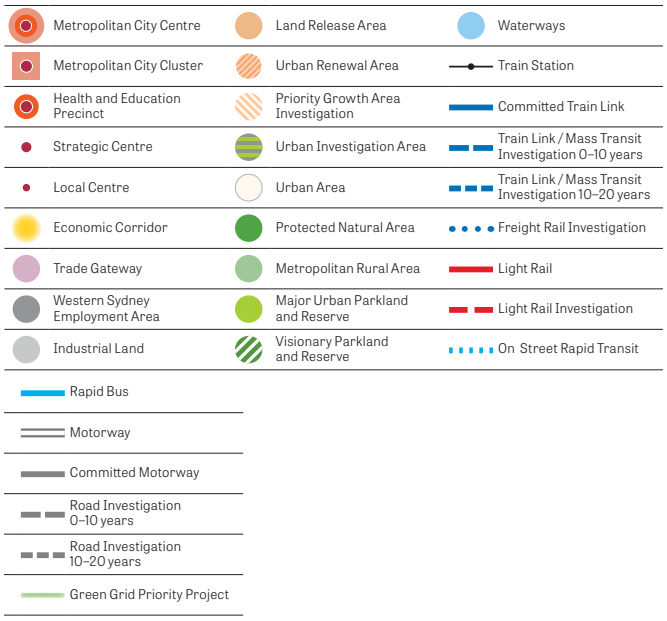
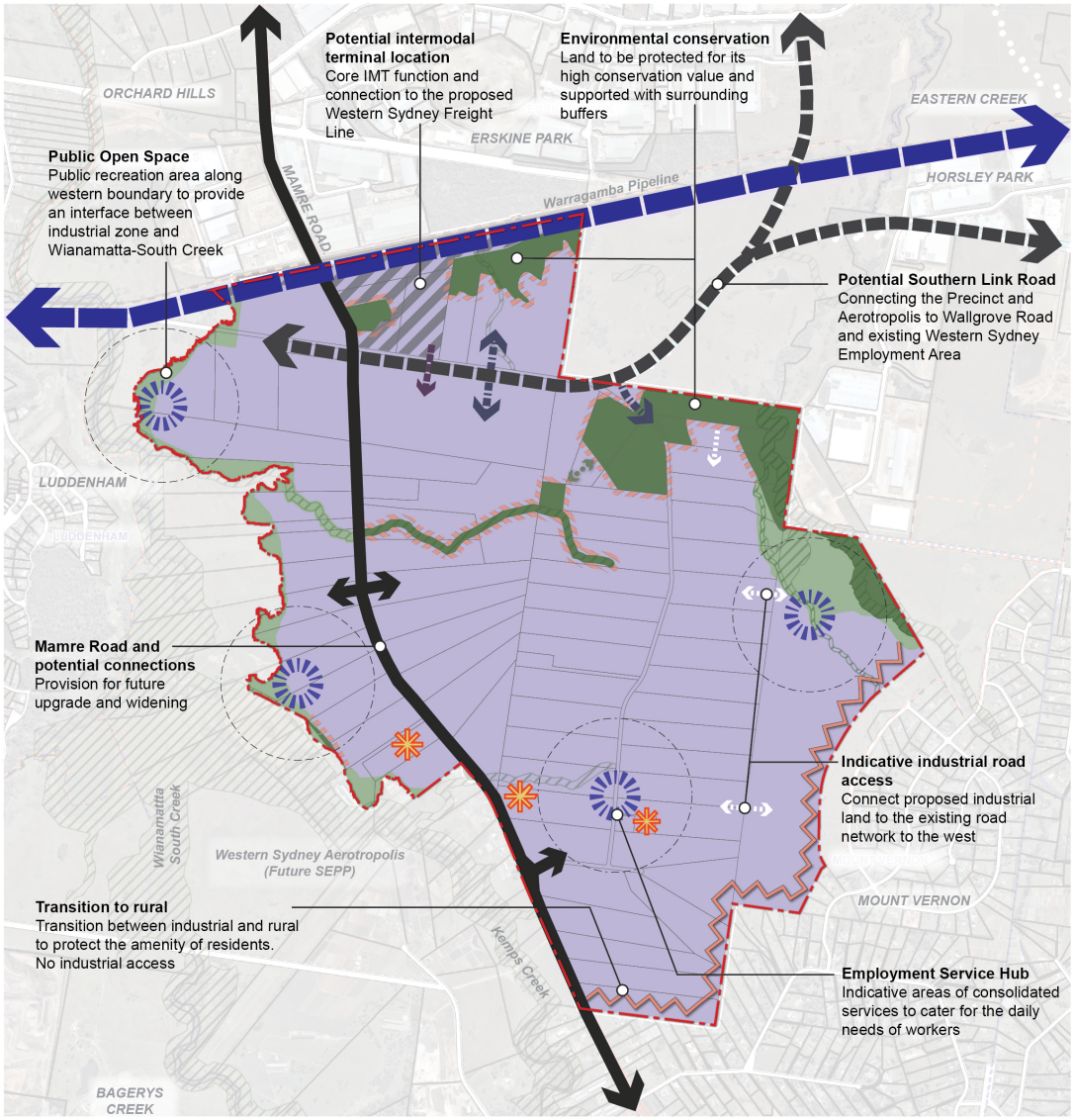


Figure 3.1 - Western City District Structure Plan – Urban Area South.



Structure Plan

- Precinct boundary
- Cadastral boundaries
- Industrial
- Environmental conservation
- Open space
- Potential intermodal terminal
- Proposed Western Sydney Freight Line
- Mamre Road and potential connections
- Potential Southern Link Road
- Potential road access
- Potential freight connection to precinct
- Indicative road access
- Indicative riparian buffers
- Transition to rural
- Transition to Environmental Conservation
- Local heritage items
- Indicative employment service hub (with 400m catchment)
- Opportunity for ecological corridor

Mamre Road Precinct

Structure Plan - June 2020

Scale 0 250 500 1000m

Figure 3.2 - Mamre Road Precinct Structure Plan.

4.0 Landscape Character and Visual Environment

View 1 - Erskine Business Park. Stitched Using 50mm Focal Length

View 2 - Rural Landscapes. Stitched Using 50mm Focal Length

View 3 - Residential Suburbs. Stitched Using 50mm Focal Length

View 4 - Large Lot Rural Living. Stitched Using 50mm Focal Length

4.0 LANDSCAPE CHARACTER AND VISUAL ENVIRONMENT

INTRODUCTION

Landscape character is a combination of distinctive qualities of a certain area including readily identifiable elements such as landform, vegetation cover, built-form & architecture, as well as history, seasonal changes, human culture, urban grain, wildlife and land use. Together these elements produce a distinctive character that influences how the landscape is perceived and valued by the community.

SURROUNDING LANDSCAPE CHARACTER

The area immediately surrounding the site can typically be defined as a highly modified landscape as a result of cleared pastureland and large lot residential. As a result of this, much of the vegetation on and surrounding the site has been cleared, however patches of remnant vegetation still remain in the wider surrounds. This creates a general landscape character that is rural and open in nature.

The surrounding topography is predominately undulating, with certain more elevated positions allowing views towards the distant Blue Mountains.

To the north of the site is the Erskine Business Park which is an established industrial area consisting of a large number of warehouses and office spaces.

The business park separates the more rural landscape character surrounding the immediate site and that of the more suburban residential areas of St Clair and Colyton to the north which typically consist of a mixture of single and double storey detached housing of varying architectural styles.

A clear distinction between landscape character types is evident surrounding the Proposal Site ranging from a rural character through to suburban and commercial types, highlighting how extensively the surrounding area has been influenced by development. The area as a whole has been highly modified from its original characteristics, first as a result of agricultural uses and progressively (in the wider area) through residential and industrial undertakings.

Figure 5.0 - Potential Visual Catchment Based on Landform Only.

5.0 VISUAL CATCHMENT AND VIEW SELECTION CRITERIA

5.1 VISUAL CATCHMENT ANALYSIS

Visual catchment of a site is the extent the Proposal can be seen from the surrounding landscape, and conversely how much of the landscape can be seen from the Proposal.

Topography, vegetation and land use all contribute to the visual catchment of a Proposal. For example, a location within a heavily urbanised area may have a small visual catchment because of the density of buildings surrounding it. Similarly, a Proposal may have a low visual catchment due to surrounding vegetation providing only highly filtered views.

This desktop topography study (sourced from Google Earth Pro) is limited to an estimated viewshed based on topography only, without taking into account vegetation or building heights. This analysis has been used as a guide only, while significant ground studies have been conducted in and around the site to ascertain the key locations from which the Proposal Site (as it currently is) could potentially be visible from.

5.2 BASIS OF VIEWPOINT SELECTION

The selection of views for detailed evaluation later in this report has been based on the following sources:

- Visual assessment policy guidance in particular the NSW Land and Environment Court Planning Principles;
- Background documents;
- Desktop mapping;
- In field evaluation undertaken for this report.

Based on the above, the selection criteria for the views assessed in detail in section 8.0 include, in order of priority:

- Views from the public domain (principally streets, parks and waterways);
- Views of pedestrians and cyclists;
- Close and direct views;
- Views from transport (private and public);
- Distant and filtered views.

Figure 6.0 - Project location Source: Google Earth

6.0 THE SITE

Aspect Industrial Estate is legally described as Lots 54 – 58 in DP 259135, with an area of approximately 56.3 hectares (ha). The site is located east of Mamre Road, Kemps Creek within the Penrith Local Government Area (LGA).

The site has approximately 950m of direct frontage to Mamre Road with a proposed intersection providing vehicular access via Mamre Road to the M4 Motorway and Great Western Highway to the north and Elizabeth Drive to the south.

The site is located approximately 4km north-west of the future Western Sydney Nancy-Bird Walton Airport, 13km south-east of the Penrith CBD and 40km west of the Sydney CBD.

The site is located within the Mamre Road Precinct. It sits south-west of the existing zoned WSEA, one of Sydney's major employment areas. It is proposed to be rezoned under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP). The applicant seeks to commence a State Significant Development (SSD) planning approval pathway in tandem with the rezoning of the Precinct. The strategic intent is for this land to be zoned for employment purposes. The site is currently zoned RU2 Rural Landscape under the Penrith Local Environmental Plan 2010.

Furthermore, Ministerial 9.1 Local Planning Direction 3.5 precludes future residential development, as the site is affected by the Western Sydney Airport's ANEF 20 noise contour. Therefore, further cementing the site's future land use to employment purposes consistent with the Broader WSEA 2014 Amendment to the SEPP WSEA and the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1: Initial Precincts (Stage 1 LUIIP).

The land parcel will need to be rezoned for industrial purposes prior to development consent being granted for the subject application. The rezoning process is current being contemplated for the Mamre Road Precinct, and this DA is prepared in anticipation of the rezoning advancing prior to its eventual gazettal.

7.0 THE PROPOSAL

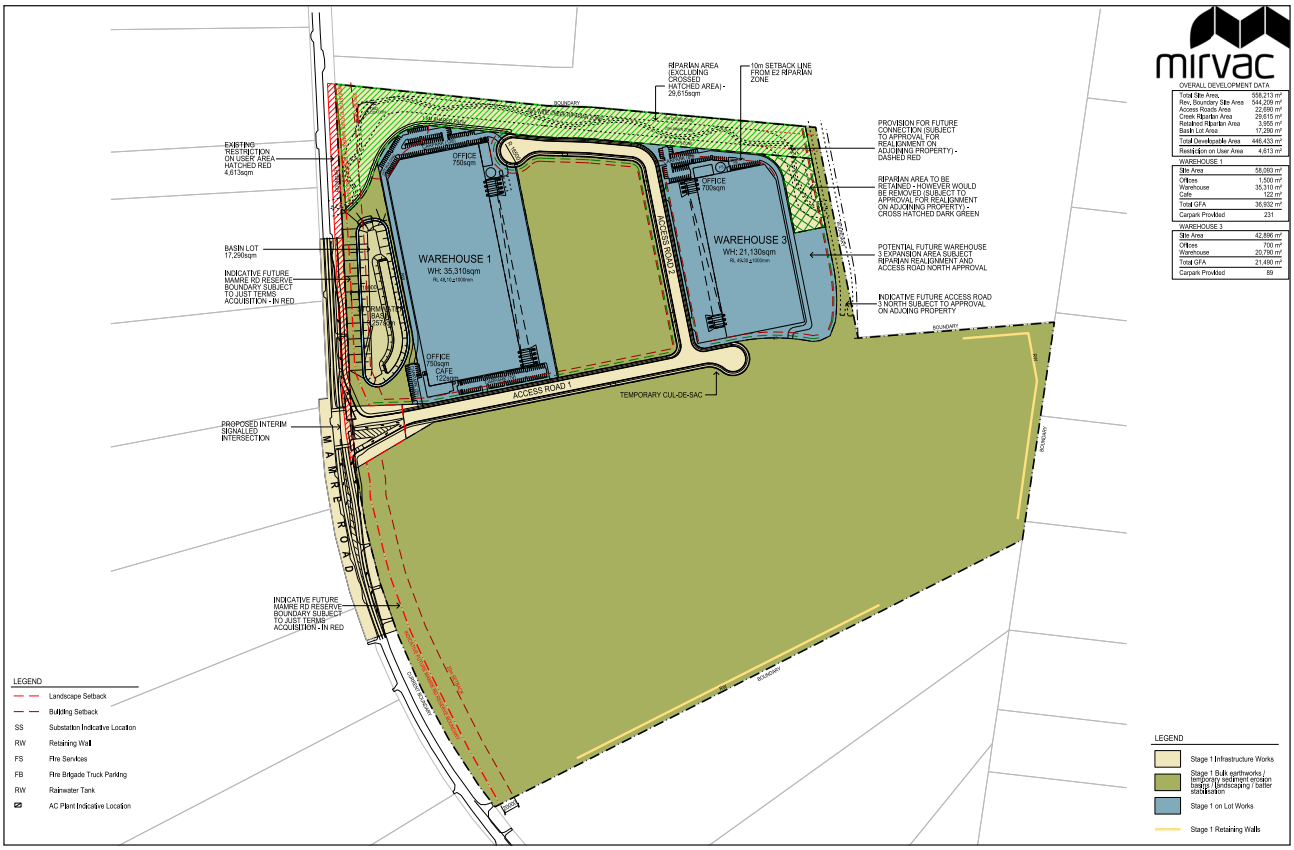


Figure 7.1: Stage 1 Proposal.

7.0 THE PROPOSAL

The proposed development comprises a Concept Masterplan comprising 11 industrial buildings and Stage 1 works for site preparation, construction and use of two warehouse and distribution buildings, stormwater and associated works, internal road network, signage and subdivision for complete description of the proposal, refer to the Environmental Impact Assessment for detailed description of works AIE

Figure 7.2: SSDA Estate Masterplan.

7.0 THE PROPOSAL

Figure 7.3: Artistic Render

7.0 THE PROPOSAL

Figure 7.4: Artistic Render

Existing Site along Mamre Road.

7.0 THE PROPOSAL

Figure 7.6: Stage 1 Site Planting Concept (full concept in Appendix).

Figure 8.1: Viewpoint Locations

8.0 VISUAL IMPACT ANALYSIS

Based on the foregoing selection criteria this section maps and describes 17 views of the site from a variety of close and more distant viewpoints. A photograph of each viewpoint is accompanied by a description of the view and the major visual elements within that view. Ratings have been provided for the Stage 1 impacts, however a brief description of the completed overall concept has also been included.

VIEWPOINT 1

Viewpoint 1

Viewpoint 1 Photomontage

8.0 VISUAL IMPACT ANALYSIS

Viewpoint Location.

LOCATION	Mamre Road (approx. 915)
DISTANCE	180m.
RECEPTORS	Vehicles using Mamre Road.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	An undulating landform with a single residential dwelling on the crest occupies the view scene in the mid and distant view. In the foreground can be seen Mamre Road with the accompanying road side verge. Apart from the residential dwelling, only a small number of constructed elements are visible such as the overhead power lines and fencing.

EXPECTED VISUAL IMPACT

STAGE 1: As a result of the bulk earthworks, the existing topography in the mid-ground will be noticeably altered with the removal of the undulating landform. The private residence on top of this hill will also be removed. The resulting topography will be level pads which will not have any warehouses on them. Beyond these flattened pads will be visible the warehouse on Lot 1 and Lot 3. Elements of the proposed boundary planting will also be visible from this location, although these elements will take time to establish and reach maturity. The immediate foreground of the view will remain the same, consisting of grassland that is privately owned as will as the roadside reserve running parallel to Mamre Road.

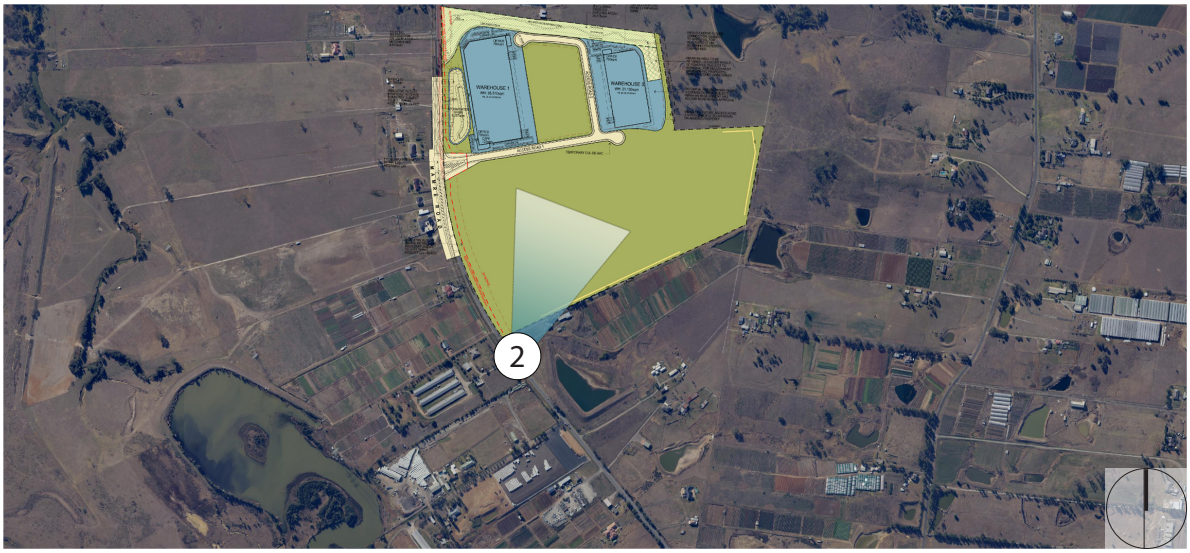
COMPLETED ESTATE MASTERPLAN: Views of the Lot 11 warehouse will be clearly visible from this location. The warehouse will be 14 metres in height which will result in a significant reduction in views of open sky, resulting in a significant increase in the level of built form in the view.

Boundary planting consisting of a variety of trees, shrubs and grasses and ground covers will be running along the southern edge of the site which will help break up views of the built form, particularly over time as the trees mature.

Receptor Type	Public
Viewpoint Number	1
Sensitivity rating of receptor	LOW
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	MODERATE
Magnitude - Period of View	LOW
Magnitude Scale of change	HIGH
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 2



Viewpoint Location.

Viewpoint 2

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of 885 Mamre Road.
DISTANCE	50m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	Undulating land form with a private dwelling on the crest occupies the majority of the visual scene. IN the foreground can be seen Mamre Road. Apart from the dwelling, the only other constructed elements visible are Mamre Road, overhead power lines and fencing.

EXPECTED VISUAL IMPACT

STAGE 1: As a result of the Proposal a noticeable change in the existing topography will occur which will see a lowering of the currently undulating landform to accommodate the flat pads. The proposed earthworks will mean that flat expanses will replace the hill, with the private residence as well as all vegetation currently visible being removed.

A proposed embankment and smaller section of retaining wall will run along the southern boundary of the site which will separate the site and the existing driveway, creating a distinct buffer between the site and the driveway. A range of trees, shrubs, grasses and groundcovers have been proposed for the planting on the embankment, and once established will help mitigate the impact of the vegetation removal as well as create a more textured and filtered view of the proposed landform.

COMPLETED ESTATE MASTERPLAN: A clear view of Lot 11 will be possible from this location with the proposed 14 metre high warehouse located on the lot. This will decrease views of open sky from this position and increase the level of built form in the view.

Views of the proposed boundary planting consisting of a variety of trees, shrubs and groundcovers and grasses will be seen running parallel to the proposed warehouse. This will help to break up views of the built form, especially over time as the planting matures.

Receptor Type	Public
Viewpoint Number	2
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	MODERATE
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH/MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 3

Viewpoint 3

Viewpoint 3 Photomontage

8.0 VISUAL IMPACT ANALYSIS

Viewpoint Location.

LOCATION	Driveway of 859 Mamre Road.
DISTANCE	15m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	A significant change in topography is noticeable between Mamre Road and the crest of a hill to the east of the road. On the peak of the hill can just be seen the roof of a private dwelling. A relatively limited amount of further built elements are visible from this location and are comprised of overhead power lines, a single power pole and a simple wire fence running alongside Mamre Road.

EXPECTED VISUAL IMPACT

STAGE 1: A noticeable change in the existing topography will occur as a result of the Proposal. The mid-ground view of the rising hill with a private dwelling on it will be replaced by an embankment running parallel to Mamre Road. A flat pad will replace the hill topography and gently undulating landform in this location. As a result of the earthworks creating a flat pad, the overall topography height will be lowered by approximately 10-11 metres. The proposed embankment will be planted with a range of trees, shrubs, grasses and groundcovers which will increase the volume of vegetation currently visible from this location.

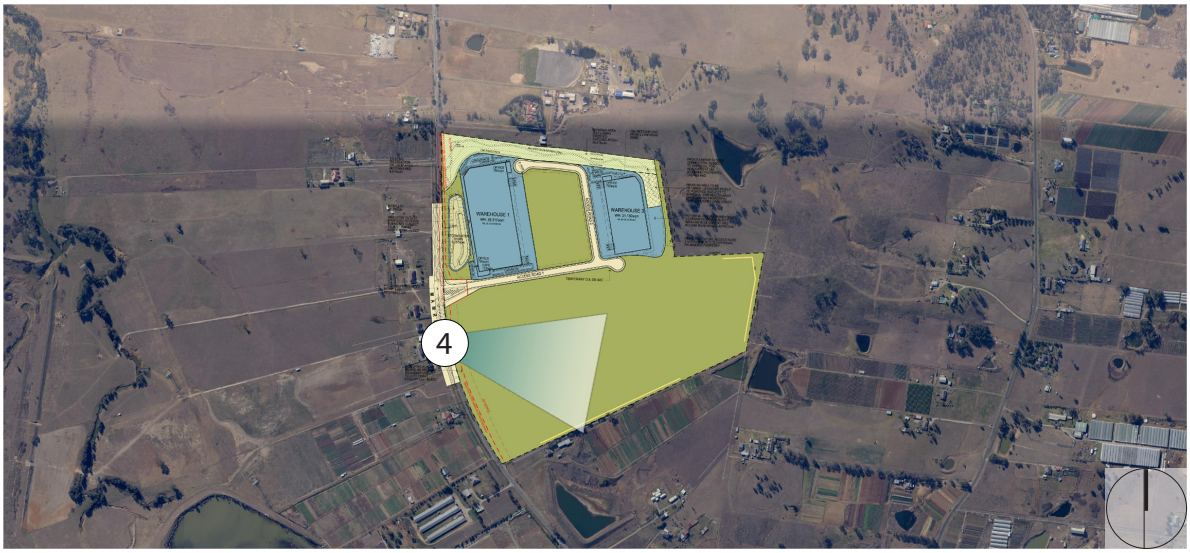
The undulating landform of the site currently visible from this location will be replaced with a more constructed landform consisting of large, flat expanses separated by embankments unlike the current surrounding landform.

COMPLETED ESTATE MASTERPLAN: A clear view of the Lot 11 site will be visible from this location with views of the western side of a 14 metre high warehouse. Beyond Mamre Road the proposed 20 metre setback will be perceptible, as well the proposed frontage planting consisting of a mixture of trees, shrubs and accents and grasses and groundcovers. This will help to lessen the impact of built form running parallel to the road due to the setback, and as the vegetation matures and helps to filter views of the built form.

Receptor Type	Public
Viewpoint Number	3
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	MODERATE
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH/MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 4



Viewpoint Location.

Viewpoint 4

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of 845A Mamre Road.
DISTANCE	13m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	The topography levels between the viewpoint and the Proposal Site are largely similar as opposed to the southern end of the site which is characterised by more distinctive level changes. The most noticeable elements of the visual scene are the single storey dwellings that occupy the mid-ground of the view. A small amount of mature vegetation can be seen surrounding the dwelling to the left, with a more open view of the dwelling to the right possible. Beyond the dwellings can be seen a more significant band of mature vegetation rising above the dwelling to the left, as well as the elevated dwelling to the south of the site to the right of the view. A simple wire fence runs parallel to Mamre Road and allows for unobstructed views into the Proposal Site.

EXPECTED VISUAL IMPACT

STAGE1: A relatively minor difference in levels between Mamre Road and the Proposal Site currently exists. This will be replaced by a proposed embankment running parallel to Mamre Road along the majority of the eastern boundary of the site.

As a result, a noticeable change to the visual scene will occur with a distinct change in level between the road and the site. To the left of the view at the top of the embankment the flat pad of Lot 9 will be discernible, while to the right of the view another embankment separating Lot 9 and Lot 10 will be visible. Both the road side embankment and the embankment separating Lot 9 and Lot 10 will be planted which will result in a significant amount of new vegetation becoming visible in the view.

COMPLETED ESTATE MASTERPLAN: Partial views of the warehouses proposed for both Lots 9 and 10 will be visible from this location. This will result in a significant increase in the level of built form views and reduction in sky views as a result of the elevated pads and 14 metre high warehouses.

Proposed frontage planting consisting of a mixture of species will help to soften the visual impact of the built form, especially as the species being to mature. The proposed 20 metre setback will help to ensure that built form does not sit in the immediate vicinity of the road, which would encroach on and restrict views looking along Mamre Road when travelling by car.

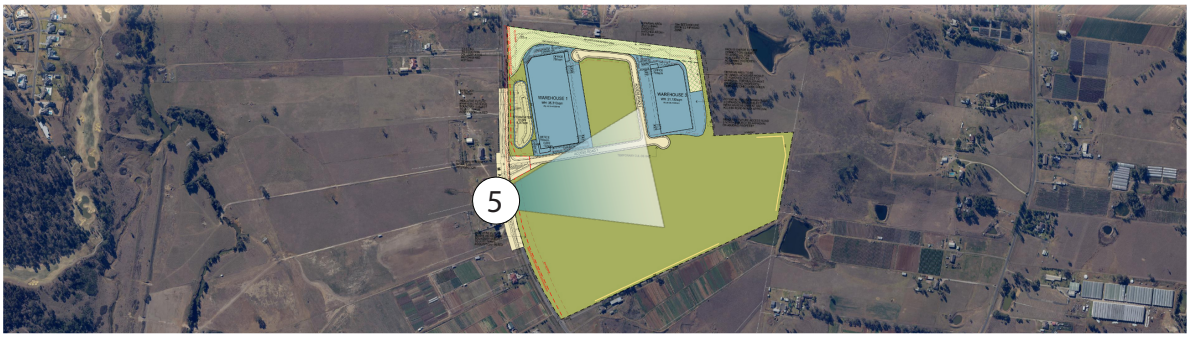
Receptor Type	Public
Viewpoint Number	4
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH/MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 5

Viewpoint 5

Viewpoint 5 Photomontage



Viewpoint Location.

LOCATION	Driveway of 833B Mamre Road
DISTANCE	13m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	Mature vegetation both within the road reserve as well as the private property comprises the most noticeable elements of the view. Highly filtered views of the private dwelling are possible through the mature vegetation. Overhead power lines running parallel to Mamre Road can be seen, as can a simple wire fence.

EXPECTED VISUAL IMPACT

STAGE 1: The existing levels between Mamre Road and the private property are relatively level with one another currently, and this will be replaced by an embankment which will alter the level between Mamre Road and the Proposal Site. The existing vegetation currently visible will be removed in order to create the embankment and the flat pad of Lot 9.

The proposed embankment will be planted with a range of trees, shrubs, grasses and groundcovers which will create a textured and varied embankment as opposed to a solid flat buffer along Mamre Road.

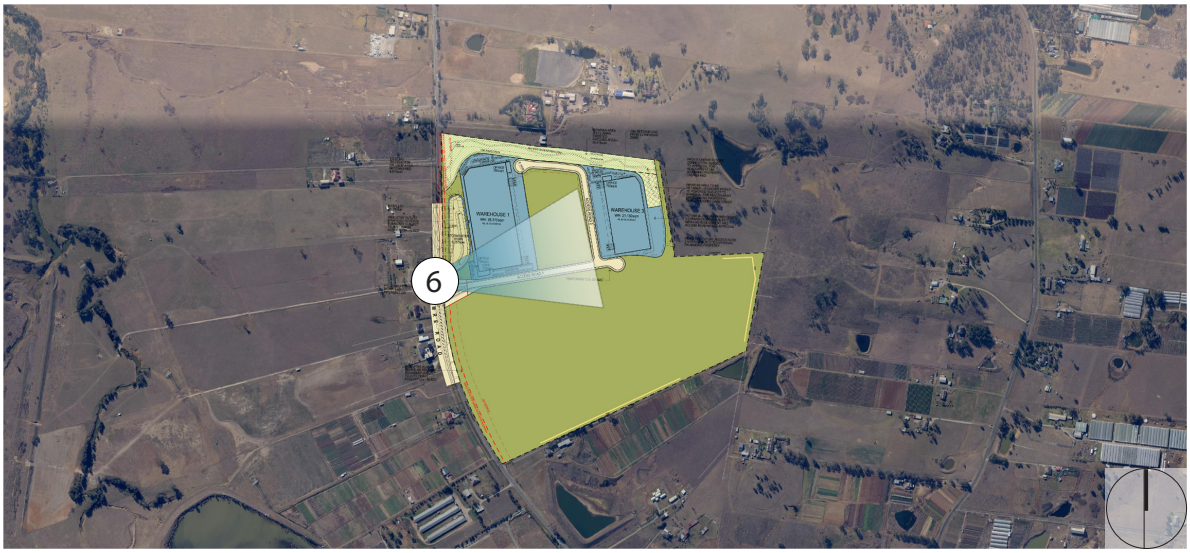
COMPLETED ESTATE MASTERPLAN: The proposed 14 metre high warehouse of Lot 9 will be visible on top of the flat pad. This will significantly increase the level of built form in the view and diminish views of open sky.

In the foreground the 20 metre setback and frontage planting will be visible. As the planting matures this will help filter views of the warehouse, particularly the trees.

Receptor Type	Public
Viewpoint Number	5
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH/MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 6



Viewpoint Location.

Viewpoint 6

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of 819 Mamre Road.
DISTANCE	10m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	A long distance view over a rural landscape to low lying hills in the distance is the most defining element of the visual scene. Scattered groupings of mature vegetation throughout the view can be noticed, however the majority of the land is cleared in support of rural / farming activities. A low level of built elements can seen, including sheds to the right of the view, overhead power lines, and simple wire fencing throughout the view.

EXPECTED VISUAL IMPACT

STAGE 1 & COMPLETED STATE MASTERPLAN: Long distance views to the hills will be replaced by a planted embankment running parallel to Mamre Road. The Lot 1 Warehouse will be clearly visible on the elevated flat pad beyond the embankment and will result in a significant new built-form edition to the visual scene. The the proposed cafe and office will also be visible from this location.

Over time views of the proposed warehouse will become more filtered as a result of the proposed frontage planting maturing, which will break up the western facade of the building, however the presence of the warehouse will still discernible.

Receptor Type	Public
Viewpoint Number	6
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH/MODERATE

Assessment Rating for Stage 1.

Viewpoint Location.

VIEWPOINT 7

Viewpoint 7

Viewpoint 7 Photomontage

8.0 VISUAL IMPACT ANALYSIS

Viewpoint Location.

LOCATION	Driveway of 805 Mamre Road.
DISTANCE	10m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence Exiting Driveway.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	A relatively flat rural landscape extending into the distance before eventually giving way to low lying hills defines the visual scene. A number of small man-made objects can be seen scattered throughout the landscape.

EXPECTED VISUAL IMPACT

STAGE1 & COMPLETED ESTATE MASTERPLAN: A noticeable change to the existing landform will be visible from this location as a result of the proposed basin. This will result in an embankment running parallel to Mamre Road in this location (and for the majority of the eastern boundary of the Proposal Site). This will result in the current long distance views being replaced by the embankment with frontage planting.

Above the embankment and proposed planting will be views of the Lot 1 Warehouse, which will obstruct any views into the distance. The warehouse will be a significant new built-form element to the visual scene, as the existing built-form elements in the immediate vicinity are comprised predominately of private residential housing and agricultural buildings.

It is anticipated that over time as the frontage planting matures, views of the eastern facade of the proposed warehouse will become more filtered which will soften the visual impact, however the presence of the warehouse will still be clearly discernible.

Receptor Type	Public
Viewpoint Number	7
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	LOW
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE

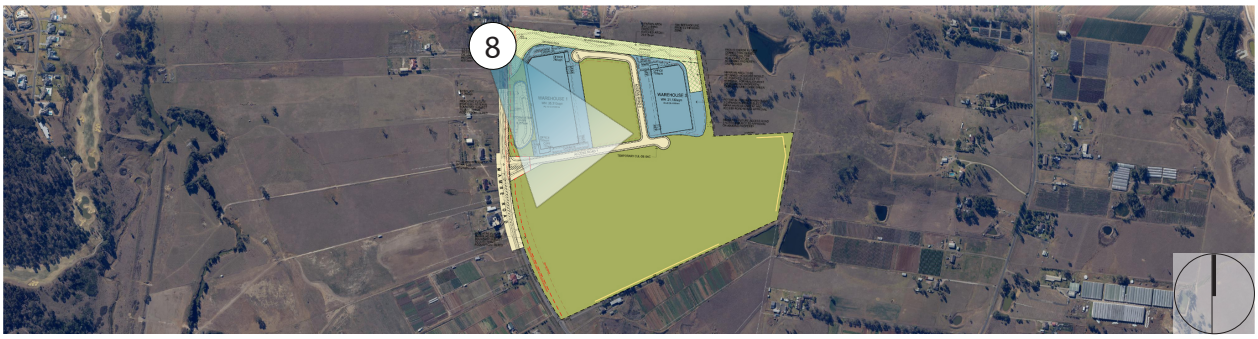
Assessment Rating for Stage 1.

VIEWPOINT 8

Viewpoint 8

Viewpoint 8 Photomontage

8.0 VISUAL IMPACT ANALYSIS



Viewpoint Location.

LOCATION	Driveway of 783 Mamre Road.
DISTANCE	25m.
RECEPTORS	Vehicles using Mamre Road, Occupants of Private Residence Exiting Driveway.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	A number of mature trees dominant the view from this location, both within the road serve and within the Proposal Site. This vegetation obscures a large portion of the Proposal Site, however the change in elevation at the southern end of the site can be seen to the right of the view. A number of man-made elements can be seen from this position including housing to the right of the view, power lines and power poles and also simple wire fencing.

EXPECTED VISUAL IMPACT

STAGE1 & COMPLETED ESTATE MASTERPLAN: Views of the Riparian Zone planting and Lot 1 Warehouse will be visible from this location. Although sporadic mature trees run parallel to Mamre Road, views of the site will be easily accessible between them.

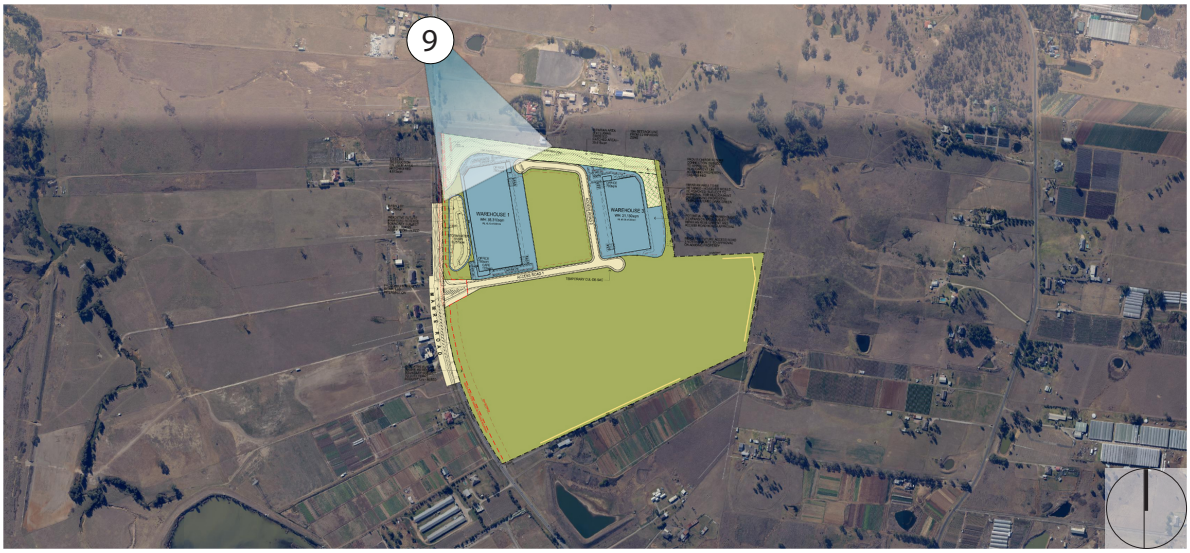
The grouping of trees visible behind the road planting will be removed which will allow for distinct views of the proposed warehouse, however it is anticipated that over time as the Riparian Zone planting matures, the impact of the built-form of the warehouse will be diminished, with more filtered views resulting. The ecological assessment of the riparian zone concludes that the re-aligned riparian zone, rehabilitated in accordance with a VMP, will result in an increased riparian zone in significantly better condition than currently exists.

Although the proposed planting will eventually help mitigate the impact of the Proposal, the scale of the warehouse will result in a new scale of built-form in this location that is currently comprised of residential and agricultural scale buildings.

Receptor Type	Public
Viewpoint Number	8
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH-MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 9



Viewpoint Location.

Viewpoint 9

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of 757-769 Mamre Road
DISTANCE	290m.
RECEPTORS	Vehicles using Mamre Road, Residents of Private Residence Exiting Driveway.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	The majority of the Proposal Site is obscured as a result of mature vegetation to the right of the view in the mid-foreground as well as a shed in front of vegetation in the centre of the view. The change in elevation towards the southern end of the site is just visible above the shed and central vegetation. Scattered mature trees can be seen to the left of the view. Mamre Road can be seen receding into the distance towards the Proposal Site.

EXPECTED VISUAL IMPACT

STAGE 1 & COMPLETED ESTATE MASTERPLAN: Views of the Riparian Zone planting and the Lot 1 Warehouse will be possible between the gap between the dominant tree to the left of the view and the small quantum of trees to the right of the view. The small shed, vegetation and buildings beyond this will be removed in order to accommodate the Proposal.

The grouping of trees running parallel to Mamre Road to the right of the view means that a significant portion of the Proposal Site will be either obstructed or be visible through highly filtered views.

Although the removal of the shed, vegetation and buildings visible between the existing trees outside of the Proposal Site will be noticeable with the replacement of views if the Riparian Zone and the Lot 1 Warehouse, this will be lessened over time as the vegetation within the Riparian Zone matures, creating more filtered views of the proposed warehouse.

Receptor Type	Public
Viewpoint Number	9
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	LOW
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE/LOW

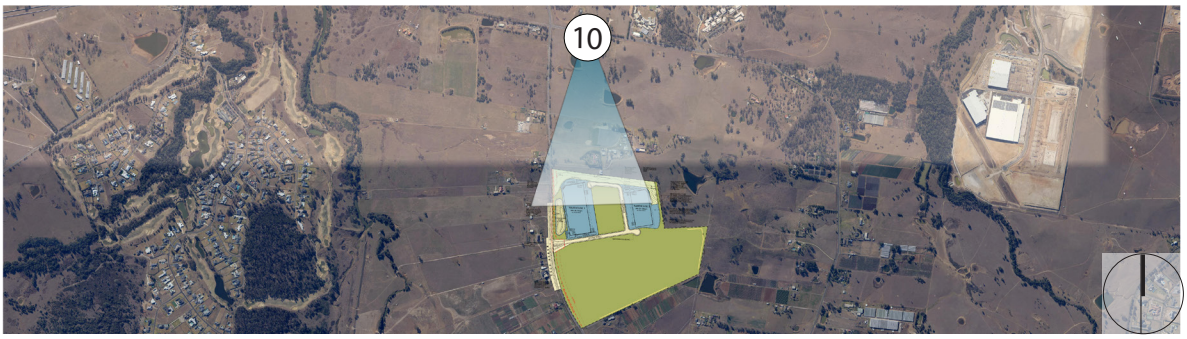
Assessment Rating for Stage 1.

VIEWPOINT 10

Viewpoint 10

Viewpoint 10 Photomontage

8.0 VISUAL IMPACT ANALYSIS



Viewpoint Location.

LOCATION	Driveway of 1 Bakers Lane.
DISTANCE	840m.
RECEPTORS	Occupants of the Private Residence.
NO. OF VIEWERS	Low.
EXISTING VIEW	The elevated position allows for views southwards which overlook a small portion of the north-eastern edge of the Proposal Site. Existing vegetation within the Proposal Site as well as running parallel to Mamre road largely obscure long distance views, however the glimpses of the distant horizon are still possible. As a result of a change in topography in the foreground of the view, the majority of the Proposal site cannot be seen from this location.

EXPECTED VISUAL IMPACT

STAGE 1 & COMPLETED ESTATE MASTERPLAN: As a result of the landform beginning to rise to the right of the view, only a small portion of the north-western edge of the Proposal Site will be visible from this location, predominately the riparian zone and a small portion of the Lot 1 Warehouse.

A small quantum of vegetation will be removed from the scene, however it is anticipated that this will be mitigated as a result of the proposed planting in the riparian zone, although this will take time for the tree species to reach maturity. The distance of the viewpoint location and the limited visual accessibility of the Proposal Site from this location means that although it will form a noticeable change in the visual scene, it will sit within a wider view and not dominate the view.

Receptor Type	Public
Viewpoint Number	10
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	LOW
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE/LOW

Assessment Rating for Stage 1.

VIEWPOINT 11

Viewpoint Location.

Viewpoint 11

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of Little Smarties Early Learning Centre / Mamre Anglican School.
DISTANCE	820m.
RECEPTORS	Vehicles using Bakers Lane, People exiting the Learning Centre.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	A distinctive change in level between the viewpoint and the rural land located on the opposite side of Bakers Lane is the most noticeable element of the view. Grass comprises the majority of the vegetation visible with a small shrub in the foreground. Minimal man-made elements can be seen which include simple wire fencing and a small sign.

EXPECTED VISUAL IMPACT

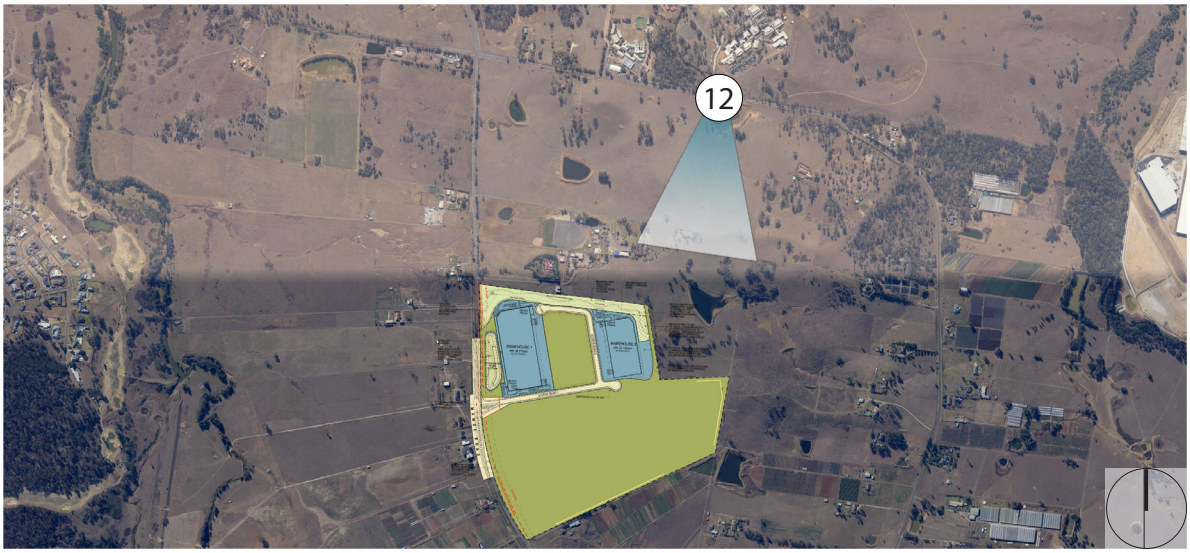
STAGE 1: As a result of a distinct level difference between Bakers Lane the landform to the south of it, views of the Proposal Site from this location will not be possible, resulting in no change to the visual scene.

COMPLETED ESTATE MASTERPLAN: No Change in view will result .

Receptor Type	Public
Viewpoint Number	11
Sensitivity rating of receptor	LOW
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	NEGLIGIBLE
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	NEGLIGIBLE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	NEGLIGIBLE

Assessment Rating for Stage 1.

VIEWPOINT 12



Viewpoint Location.

Viewpoint 12

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Entrance of Emmaus Catholic College and Trinity Primary School.
DISTANCE	800m.
RECEPTORS	Vehicles using Bakers Lane, People exiting the College / School.
NO. OF VIEWERS	Moderate.
EXISTING VIEW	An undulating rural landscape is occupies the visual scene. The dominant vegetation is grasslands, however a number of mature trees can be seen throughout the view in both the mid and foreground. Man-made elements are very minimal from this location and are comprised of simple wire fencing and a small road marker.

EXPECTED VISUAL IMPACT

STAGE 1: As a result of the existing landform, the Proposal Site will not be visible from this location, resulting in no change to the visual scene.

COMPLETED ESTATE MASTERPLAN: No Change in view will result .

Receptor Type	Public
Viewpoint Number	12
Sensitivity rating of receptor	LOW
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	NEGLIGIBLE
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	NEGLIGIBLE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	NEGLIGIBLE

Assessment Rating for Stage 1.

VIEWPOINT 13

Viewpoint Location.

Viewpoint 13

8.0 VISUAL IMPACT ANALYSIS

LOCATION	183-197 Aldington Road.
DISTANCE	1km.
RECEPTORS	Vehicles using Aldington Road.
NO. OF VIEWERS	Low.
EXISTING VIEW	A rural landscape comprised of a single private dwelling surrounded by mature vegetation in the mid-ground are the most noticeable visual elements. In the foreground can be seen a simple wire fence running parallel to Aldington Road, as well as the edge of a basin to the very left of the view.

EXPECTED VISUAL IMPACT

STAGE 1: As a result of the existing landform views of the Proposal Site will not be possible from this location, which is consistent with much of Aldington Road, particularly to the northern portion of the road as a result of a more significant change in topography between the road and the crest of the landform to the east of the road.

COMPLETED ESTATE MASTERPLAN: No Change in view will result .

Receptor Type	Public
Viewpoint Number	13
Sensitivity rating of receptor	LOW
Magnitude - Distance	LOW
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	NEGLIGIBLE
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	NEGLIGIBLE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	NEGLIGIBLE

Assessment Rating for Stage 1.

VIEWPOINT 14

Viewpoint Location.

Viewpoint 14

8.0 VISUAL IMPACT ANALYSIS

LOCATION	Driveway of 864 Mamre Road
DISTANCE	10m
RECEPTORS	Private Residents
NO. OF VIEWERS	Low.
EXISTING VIEW	As a result of a significant change in level between the driveway and the neighbouring property, rural grassland is the most dominant feature of the view. To the right can be seen the western edge of a private residence on site at the peak of the hill. In the immediate foreground can be seen a simple wire fence separating the property and the driveway. The viewing position is adjacent to the neighbouring private dwelling along the site boundary and has been chosen to represent the view from this dwelling.

EXPECTED VISUAL IMPACT

STAGE 1: The naturally rising landform will be replaced by a noticeably different steep embankment which will level off to a flat pad at the top. This will result in an overall reduction in height of landform at this location as a result of the removal of the crest of the hill (and private residence). The current natural looking landform will be replaced with a highly modified topography.

A mixture of boundary planting is proposed for this location and will consist of a range of trees, shrubs, grasses and groundcovers. The grasses and shrubs will establish more quickly than the trees, which will require a number of years to reach maturity. The variation in height between the vegetation along the boundary will help to soften the impact of the flat pad level.

COMPLETED ESTATE MASTERPLAN: Views of the southern elevation of the 14 metre high Lot 11 warehouse will result which will significantly increase built form views. Due to the proximity of the viewpoint to the site boundary and proposed warehouse, views of the open sky will be significantly decreased.

Vegetation from Stage 1 will help to filter views of the warehouse over time (particularly trees as they mature) but will not be able to fully obstruct views of the warehouse.

Receptor Type	Public
Viewpoint Number	14
Sensitivity rating of receptor	HIGH
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	HIGH
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	HIGH

Assessment Rating for Stage 1.

VIEWPOINT 15

Viewpoint 15

Viewpoint 15 Photomontage

8.0 VISUAL IMPACT ANALYSIS

Viewpoint Location.

LOCATION	Entrance to Driveway of 784 Mamre Road
DISTANCE	32m.
RECEPTORS	Residents using driveway, cars using Mamre Road
NO. OF VIEWERS	Moderate.
EXISTING VIEW	The visual scene is dominated by rural elements such as the paddock in the foreground. In the distance can be seen a scattering of trees as well as a farming shed to the centre left. To the centre right in a gap between the trees more farming sheds can be seen in the distance, with a private residential dwelling visible to the right of the view.

EXPECTED VISUAL IMPACT

STAGE 1: A noticeable change to the ground level will occur as a result of the earthworks for the riparian corridor and the pad for Warehouse 1, creating a 'hill' in the area that is predominately flat in the existing view. A significant increase in the level of vegetation in the view will occur as a result of the riparian corridor, increasing both the number of trees and shrub/ grass planting. Significant long distance views in the existing view were largely obstructed as a result of trees in the view, however a small number of gaps in the trees allowed for highly framed views. As a result of the Proposal these limited number of long distance views will be obstructed, limiting views to mid-ground.

COMPLETED ESTATE MASTERPLAN: No significant difference to the visual scene will result between the Stage 1 works and the completed masterplan.

Receptor Type	Public
Viewpoint Number	15
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE

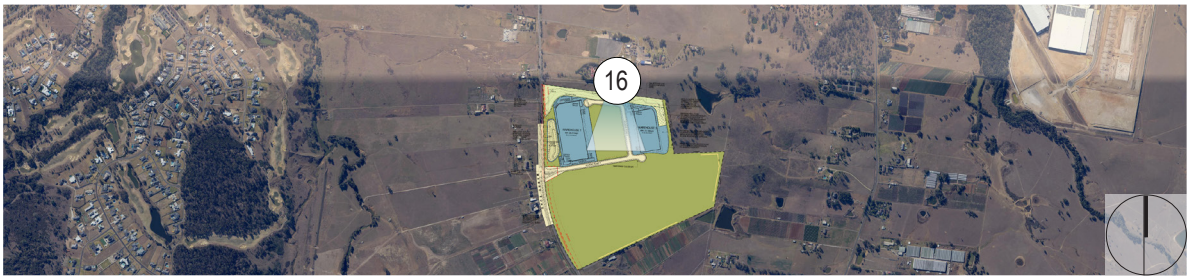
Assessment Rating for Stage 1.

VIEWPOINT 16

Viewpoint 16

Viewpoint 16 Photomontage

8.0 VISUAL IMPACT ANALYSIS



Viewpoint Location.

LOCATION	Driveway of 784 Mamre Road
DISTANCE	43m.
RECEPTORS	Property owners using driveway
NO. OF VIEWERS	Low
EXISTING VIEW	The view is dominated by the rural landscape of paddocks, fence lines and a number of buildings consisting of farming sheds and residential dwellings. A scattering of trees are visible in the mid-ground and distance, with a large dam visible to the centre right of the view. As a result of the limited number of trees, long distance views to the ridgeline are possible with a large shed visible to the centre left.

EXPECTED VISUAL IMPACT

STAGE 1: Elements of the riparian corridor will be the most visible aspect of the Proposal from this location. A significant increase in vegetation, both trees as well as grass and shrub planting, will occur. This will provide highly filtered views of Warehouse 1 and Warehouse 3. Long distance views will be lost as a result of the Proposal, limiting views to the mid-ground distance only. As the driveway is orientated on a east-west axis the users of the driveway will not be directly facing this view as they travel the driveway, however they will still be able to be aware of the view in their peripheral vision.

COMPLETED ESTATE MASTERPLAN: No significant difference to the visual scene will result between the Stage 1 works and the completed masterplan.

Receptor Type	Public
Viewpoint Number	16
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE

Assessment Rating for Stage 1.

VIEWPOINT 17

Viewpoint 17

Viewpoint 17 Photomontage

8.0 VISUAL IMPACT ANALYSIS

Viewpoint Location.

LOCATION	Agricultural Field (784 Mamre Road)
DISTANCE	77m.
RECEPTORS	Property owners
NO. OF VIEWERS	Negligible
EXISTING VIEW	The view is dominated by the agricultural paddock, with a small number of trees scattered throughout the mid-ground. A large dam can be seen to the centre left of the view, and to right of the view can be seen a number of small sheds and buildings. In the distance a number of private dwellings along Mamre Road are visible, and in the extreme distance the Blue Mountains are just visible.

EXPECTED VISUAL IMPACT

STAGE 1: The foreground of the view will remain unaltered and comprised of open paddock land. The riparian corridor and Warehouse 3 will clearly visible from this location, with the level of vegetation in the view significantly increasing as a result of the riparian corridor. The majority of the long distance views will be lost as a result of Warehouse 3, however a small section of long distance views will still be visible to the right of the view which is outside of the Proposal boundary.

COMPLETED ESTATE MASTERPLAN: No significant difference to the visual scene will result between the Stage 1 works and the completed masterplan.

Receptor Type	Public
Viewpoint Number	17
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	MODERATE
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings	MODERATE

Assessment Rating for Stage 1.

Bakers Lane.

8.0 VISUAL IMPACT ANALYSIS

VIEWPOINT LOCATIONS	RECEPTOR SENSITIVITY	MAGNITUDE					IMPACT RATING
		DISTANCE	QUANTUM OF VIEW	PERIOD OF VIEW	SCALE OF CHANGE	OVERALL MAGNITUDE RATING	
1. Mamre Road (approx. 915)	L	M	M	L	H	M	MODERATE
2. Driveway of 885 Mamre Road	M	H	M	M	H	H	HIGH/MODERATE
3. Driveway of 859 Mamre Road	M	H	M	M	H	H	HIGH/MODERATE
4. Driveway of 845 Mamre Road	M	H	H	M	H	H	HIGH/MODERATE
5. Driveway of 833B Mamre Road	M	H	H	M	H	H	HIGH/MODERATE
6. Driveway of 819 Mamre Road	M	H	H	M	H	H	HIGH/MODERATE
7. Driveway of 805 Mamre Road	L	H	H	L	H	H	MODERATE
8. Driveway of 783 Mamre Road	M	H	H	M	H	H	HIGH/MODERATE
9. Driveway of 757-769 Mamre Road	M	M	L	L	L	L	MODERATE/LOW
10. Driveway of 1 Bakers Lane	M	M	L	L	L	L	MODERATE/LOW
11. Driveway of Little Smarties Early Learning Centre / Mamre Anglican School	L	M	N	N	N	N	NEGLIGIBLE
12. Entrance to Emmaus Catholic College and Trinity School	L	M	N	N	N	N	NEGLIGIBLE
13. 183-197 Aldington Road	L	L	N	N	N	N	NEGLIGIBLE
14. Driveway of 864 Mamre Road	H	H	H	H	H	H	HIGH
15. Entrance to Driveway of 784 Mamre Road	L	H	H	M	H	H	MODERATE
16. Driveway of 784 Mamre Road	L	H	H	M	H	H	MODERATE
17. Agricultural Field (784 Mamre Road)	L	H	H	M	H	H	MODERATE

Summary of visual impacts of the Project across the study area.

9.0 Mitigation Recommendations

Looking West Along Bakers Lane.

9.0 MITIGATION RECOMMENDATIONS

9.1 APPROACHES TO MITIGATION

There are typically five broad approaches to mitigating the visual impacts of any change to a scene that entails built form development. These are through:

- Avoidance – where the visual impact of the proposal is deemed of a scale that cannot be mitigated by any of the approaches outlined below, this approach implies relocating the proposal elsewhere on the site with lesser visual impacts or not proceeding with the proposal on the site at all
- Reduction – typically this approach seeks to mitigate impacts through the reduction of some part of the proposed structure or development (ie. reduced height or omission of parts of the built structure/s)
- Alleviation – this approach entails design refinements to the proposal to mitigate visual impacts. These refinements might typically include built form articulation, choice of material and colours and/or planting design
- Off-site Compensation – where none of the above approaches will provide adequate visual impact mitigation for off-site visual receptors, this approach entails off-site works on the land from which the viewpoint is experienced (eg screening close to the viewpoint).
- Management – in this approach the mitigation response typically entails an operational or management action such as construction management.

Set out below are the relevant responses to these approaches with respect to Aspect Industrial Estate.

9.2 RECOMMENDED MITIGATION

Avoidance

The Proposal Site is located within the Western Sydney Priority Growth Area which aims to guide new infrastructure investment, identify new homes and jobs close to transport and coordinate services in the area. Furthermore, the Western City District Plan identifies the Proposal Site as being within a Land Release Area. Outcomes of the plan are aimed towards creating a productive region by driving opportunities for investment, business and jobs growth to support a metropolis of three cities. Given the objectives around planning for the area, and the already highly modified nature of the landscape, avoiding the Proposal altogether or locating it elsewhere does not appear to be a suitable mitigation option.

Reduction

The scale of the Proposal is linked to the operational requirements, and therefore certain elements are required in order for successful operations, such as building scale, earthworks and access (such as roads). The scope for reduction as the primary form of mitigation is limited given operational constraints, and is therefore not considered to be the most effective form of mitigation.

Alleviation

A number of planting strategies have been deployed throughout the Proposal Site which include Frontage and Boundary Planting, Riparian Zone Planting and Streetscape Planting. Proposed Frontage and Boundary Planting will play a significant part in mitigating the visual impacts of the Proposal. Planting will help to filter views of the earthworks and warehouses, which will help limit the impact of new significant built form, as well as mitigate the required removal of any vegetation on site (although it is noted that existing vegetation on site is limited). The effectiveness of the proposed planting will increase over time as the planting matures, particularly proposed trees which will be more effective after 10-15 years of growth.

Surrounding Rural Landscape.

9.0 MITIGATION RECOMMENDATIONS

It is noted that the overall materiality concept is centred around the use of unpainted and natural feeling materials and colours where possible, including cool grey cladding and textured precast concrete, as well as gabion retaining walls as entry features and corten steel fencing. The warehouses overall are proposed to be simple built forms which include colourbond natural colours for the canopy which will help to anchor the Proposal within the surrounding landscape. The concept of the offices include materials that have been selected to reflect the industrial nature of the building, being concrete, steel and metal cladding, while still reflecting the colors of the Australian landscape.

Building upon the materiality concept will include consideration of specific building materials and building facades during the detailed design phase in order to minimise the visual impacts of the built-form. This could include the testing of appropriate colour palettes for building materials and ensuring that building materials have as lower reflectivity as possible.

Off-site compensation

The number of visual receivers to the Proposal is limited and as a result the use of off-site compensation through the use of strategic planting is limited, but could provide filtered views of the Proposal for a limited number of receivers if they felt the visual impacts were too intrusive.

Management

An appropriate Construction Environmental Management Plan (CEMP) should be prepared for the construction phase of the Proposal by the responsible construction contractor which outlines management measures for environmental impacts including impacts on sensitive receivers.

Out of the aforementioned mitigation techniques, **Alleviation** would appear to be the most suitable. This will be primarily achieved through the proposed planting which will help lessen the impacts of built-form on the surrounding area.

CONSTRUCTION IMPACTS

The Proposal will involve a construction phase with associated additional visual impacts. The following activities are likely to occur:

- clearing of vegetation
- setting up of site compounds
- stockpiling
- earthworks
- site fencing
- increased site traffic including heavy vehicles

During the construction period, all viewpoints studied within this report are likely to have increased visual impacts. Views of site compounds, storage areas and increased site traffic (including trucks) will lead to a reduction in visual amenity. Impacts will reduce as viewing distance and screening vegetation increase. These visual impacts will be of a temporary nature and will reduce for all viewpoints once the proposal is complete.

10.0 Conclusion

Rural Land Adjacent to Mamre Road.

10.0 CONCLUSION

10.1 FINDINGS

A comprehensive visual impact assessment of the Proposal on the surrounding area has been conducted.

The study has identified and evaluated the existing visual environment, key views and view types before progressing to an assessment of quantitate and qualitative criteria using best practice methodology. A number of mitigation measures have also been proposed to reduce visual impacts of the Proposal to the surrounding area.

10.2 SUMMARY OF FINDINGS

Overall, the following conclusions can be drawn on the Proposal's impacts to visual amenity within the study area:

- a limited amount of substantial vegetation groupings within the site and immediately surrounding it means that large areas of the site area are visually accessible within close proximity;
- Mamre Road provides the most visual access to the site given that it runs parallel to the western boundary and is publicly accessible;
- the number of private visual receivers is highly limited and primarily restricted to properties off Mamre Road;
- topography plays a significant part in limiting the visual catchment of the site, with landform obscuring views to most visual receivers to the north (on Bakers Lane) and to the east;
- earthworks will modify the current topography, most noticeably at the southern end of the site and around the boundaries (where embankments will be visible);
- the proposed landscaping will add a significant new level of vegetation and variety of species to the site;
- the landscape of both the site and the surrounding area has been highly modified as a result of previous land uses (primarily related to agricultural);
- the re-aligned riparian zone would be rehabilitated in accordance with a VMP and will result in an increased riparian zone in significantly better condition than currently exists. A detailed planting assessment during the design development phase should be undertaken to ensure the effectiveness of the riparian zone in helping to mitigate the impact of the loss of the current riparian zone section as a result of the Proposal;
- the site (and surrounding area) has been identified as a priority growth area, with most of the surrounding land undergoing rezoning.

10.3 CONCLUSIONS

This LCVIA employs a rigorous, best practice methodology to identify levels of visual impacts and potential mitigation measures, based on a professional evaluation.

Whilst it is acknowledged that the perceived visual impact of the Proposal will vary from viewer to viewer, the methodology used to evaluate visual impact in this instance is informed by internationally accredited approaches and the author's 20 years of experience in the field of visual impact.

Although a number of viewpoints rate at the high/moderate to high rating, it is recognised that the number of current visual receivers is highly limited as a result of the small number of existing private residences that are located along Mamre Road, with a greater number of transient viewers seeing the site while travelling along Mamre Road.

It is further noted that although the viewpoints in immediate proximity to the western boundary of the site (Mamre Road) rate highly in terms of impacts (changes to the current visual scene), the proposed landscaping introduces significant new levels of planting in terms of numbers and species diversity at these locations (frontage planting) as well as elsewhere throughout the site.

The overall visual impacts of the Proposal have also been viewed in terms of the fact that as a result of Ministerial Local Planning Direction 3.5, future residential development of the site is not possible as it is contained within the Western Sydney Airport ANEF 20 noise contour, resulting in any future land use being limited to employment generating purposes.

On balance it is the professional opinion of the authors of this assessment that the visual impacts combined with the overall visual catchment of the Proposal as well as its location within the Western Sydney Priority Growth Area (and restrictions of future land uses) are such that they would not constitute reasons to hinder approval on visual impact grounds.

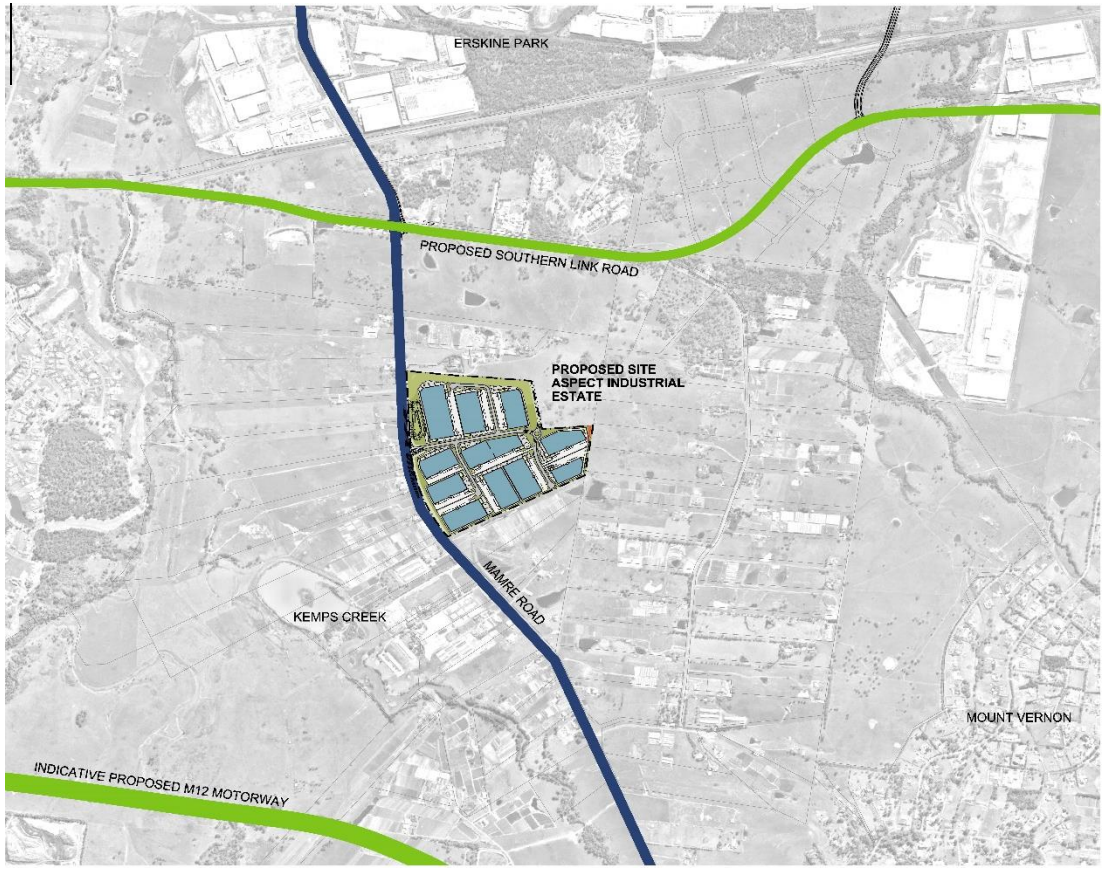
11.0 Appendix

Mamre Road.

Design Statement - Aspect Industrial Estate

Lot 45-58 Mamre Road, Kemps Creek

VIEW OF BUILDING 1 AND CAFE



LOCATION PLAN

Aspect Vision

Mirvac's vision for the Aspect Industrial Estate (AIE) is to deliver an employment estate for future industrial and logistic users based around an emphasis on design quality, flexibility, technology and sustainability.

The Site

The site is located on the eastern side of Mamre Road and south of the proposed Southern Link Road with a total site area of 558,213sqm. & a total development area of 446,536sqm.

OVERALL SITE PLAN

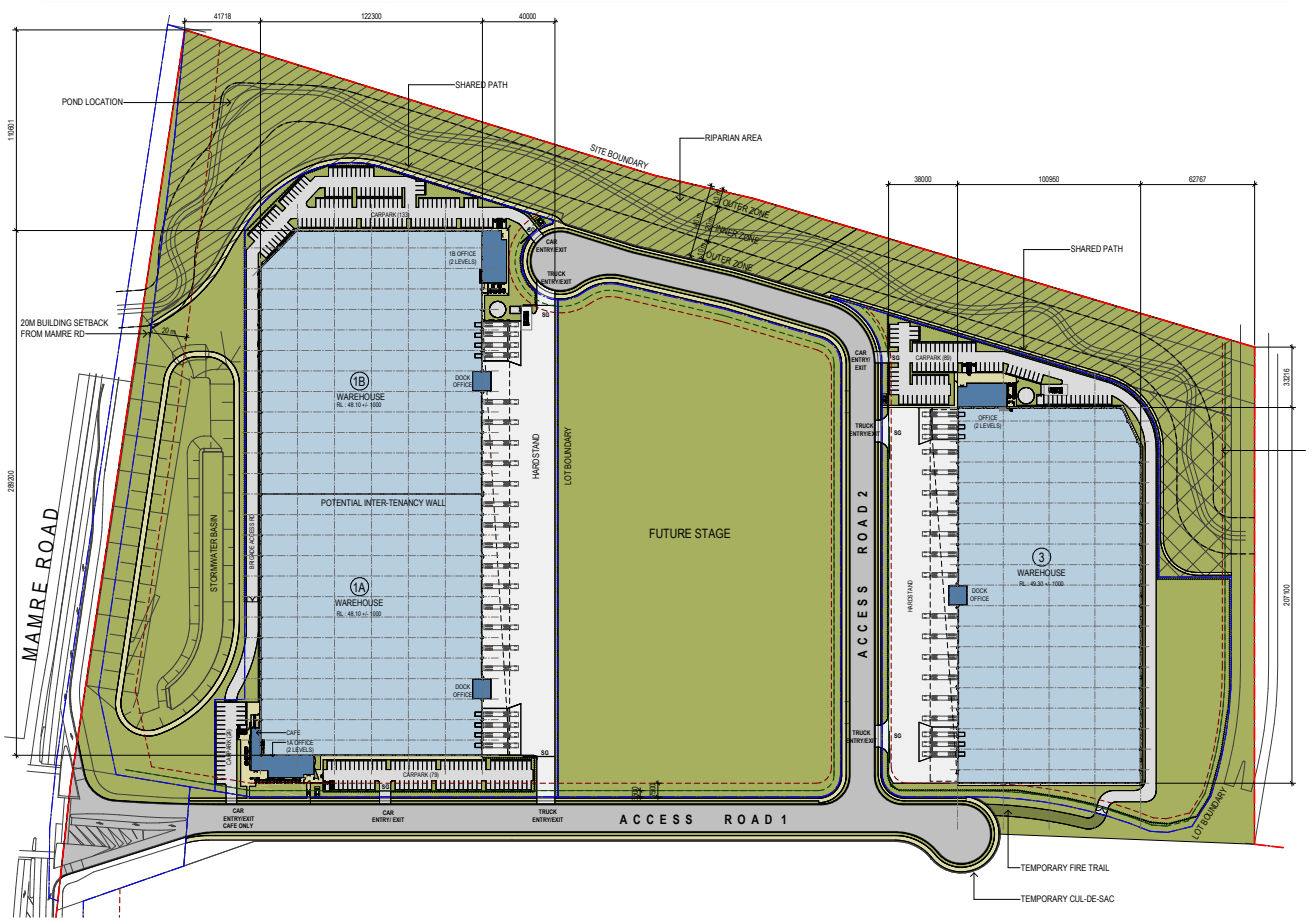
The Proposed Development

The proposed Concept Plan consists of eleven warehouses, ancillary offices with a GFA of 11,510 sqm and a café with a GFA of 122sqm. The main access to the site is via a central spine running east-west off Mamre Road. As you enter the estate the intersection of Mamre Road and Access Road 1 forms the focal point of the development. The proposed internal road layout, Access Roads 2, 3 & 4, have been designed to provide maximum flexibility & convenient access to the estate lots and neighboring sites. The Proposed Concept plan utilises landscaping and urban design features to compliment biodiversity values and outlined in the Urban Design Report and Landscaping Plans.

The lots on the northern side of access Road 1 (lots 1, 2 & 3) run north-south, whilst the lots on the southern side (lots 4 to 11) run east-west. This adds variety to the streetscape and allows for a more varied architectural typology. In accordance with the proposed Aspect Industrial Estate DCP, building setbacks along the Access roads are at 7.5m. other than Access Road 2 where the building setback to the west of Lot 3 is set at 5m. All landscape setbacks are set at 3.5m. There will be parking provisions of 162 cars across the estate in accordance with the AIE DCP.

Stage 1 Development

(Warehouses 1 and 3)



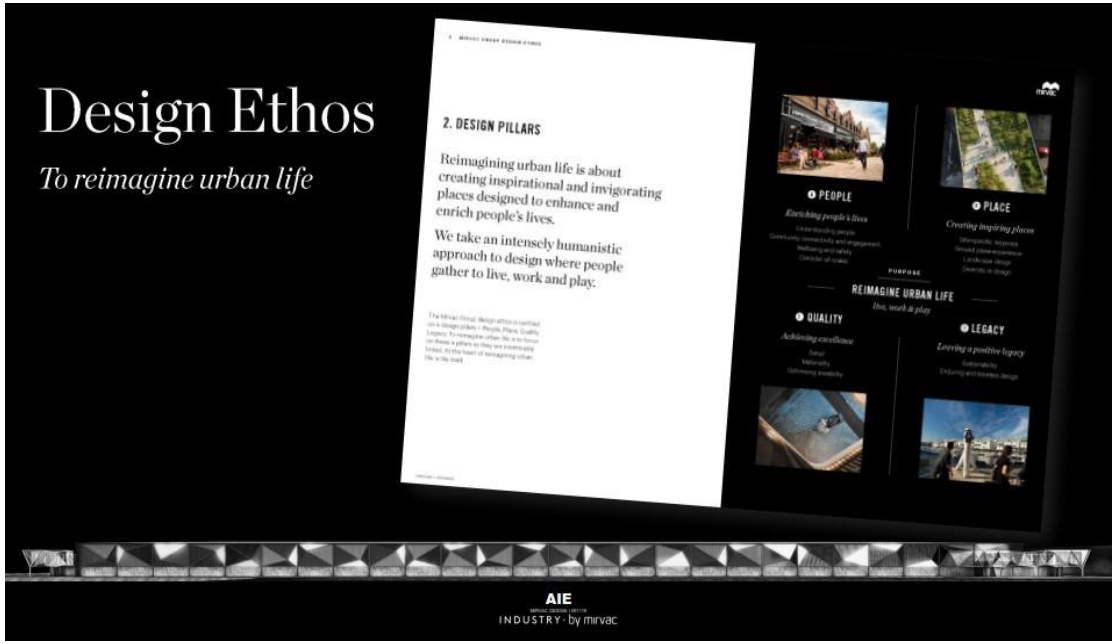
SITE PLAN LOTS 1 & 3.

The Stage 1 Development includes;

- Warehouse 1 which has an area of 35,060 sqm, office area of 1,460sqm and 223 carparks; and
- Warehouse 3 which has an area of 20,735 and 700-sqm of office.
- A Café which has an area of 122sqm and 26 carparks

Car & truck access to each lot is separated for safety & functionality as part of the development proposal. Warehouse 1 building is setback from the Mamre Road frontage. The setback provides space for the feature landscaping at the entry of the site, a landscaped stormwater basin & a riparian area to the north/west, corner of the site.

The height, bulk and scale of the buildings has been developed to meet the tenant requirements and is line with other industrial typologies in the surrounding areas. The design of the offices aims to implement architectural elements to breakup elevations and create visual interest, minimising perceived bulk and provide visually balanced forms. Office components are positioned to further break up the site and define the corner condition of warehouses along Mamre Road. Where possible, offices have been situated to take advantage of any views across to the west.



Architectural Design Ethos

SBA Architects collaborated with Mirvac Design to establish an Architectural Design Ethos and Vision for Aspect Industrial Estate.

Mirvac's Design Ethos is to reimagine urban life to create inspirational and invigorating places designed to enhance people's lives focused around 4 pillars:

- People
- Place
- Quality
- Legacy

See a copy of the Mirvac Design Ethos document for AIE provided at Appendix A which was created in collaboration with SBA Architects.

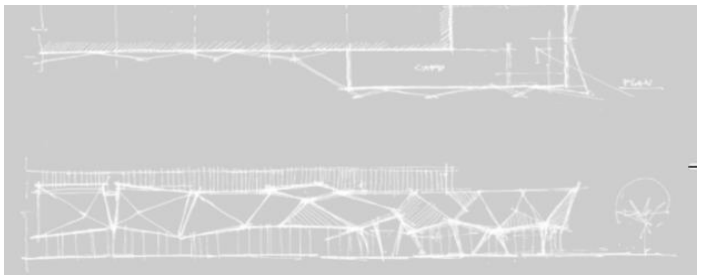
CAFÉ CONCEPT SKETCH

The Concept

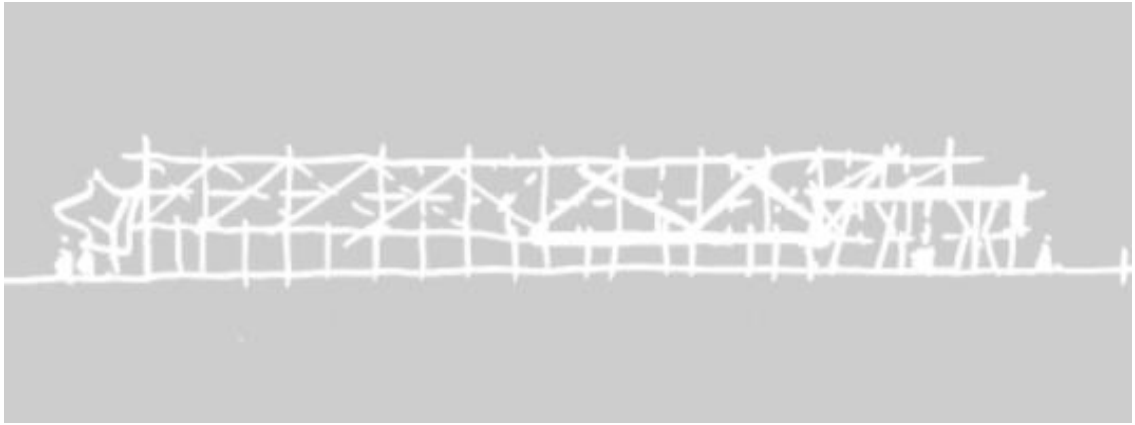
The overall concept for the development is to reflect the heritage of the site, being farming, and forestry. The forms have been developed from the original wool sheds and the forested landscape.

The jointing in the concrete base represents the tree trunks, while the articulated cladding represents the trees with its multi-faceted branches. The offices are wrapped in perforated metal screens providing dappled shaded areas, under a "canopy."

The color pallet used reflects the Australian landscape and is concisely muted, natural and restrained.



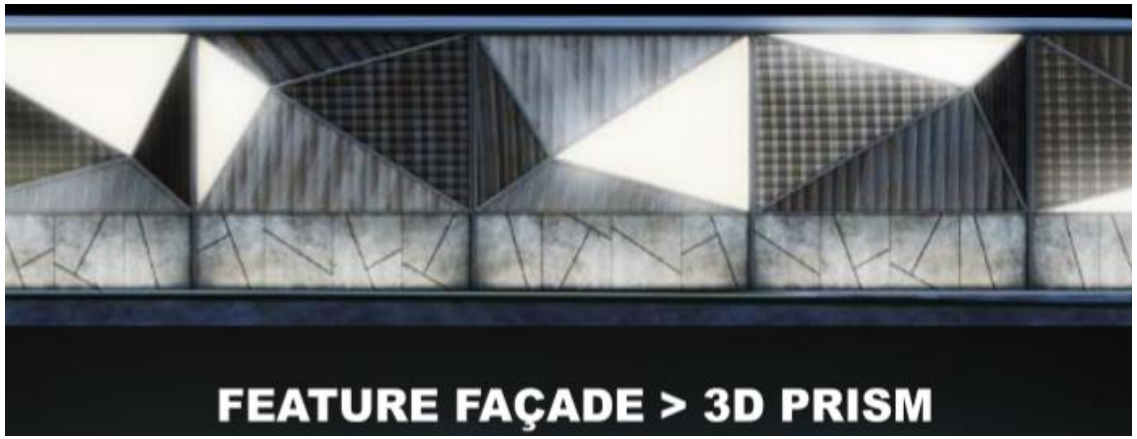
CAFÉ CONCEPT SKETCH



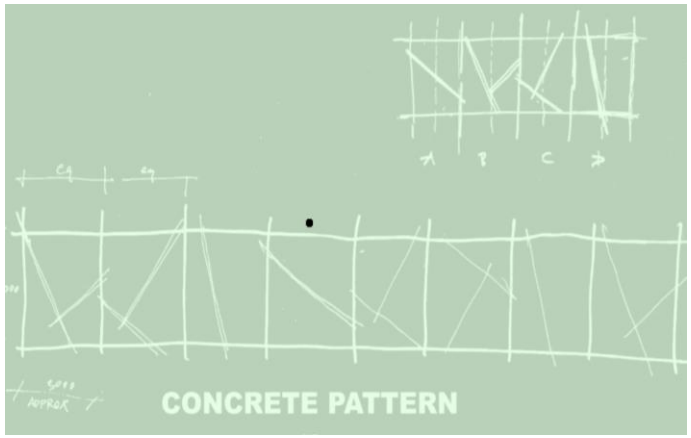
WAREHOUSE FACADE CONCEPT SKETCH

Warehouse Design

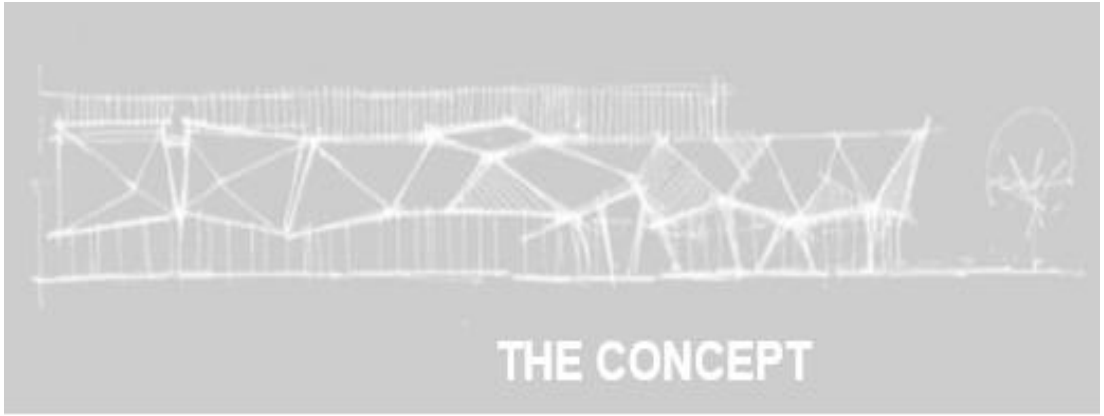
External articulation of the warehouses has been achieved through the balance of large expanses of cool grey metal cladding. Translucent panels and diagonal recesses with LED lighting adds interest at night that reflect the concept & articulate the form. Precast concrete dados are used to "float" the warehouse and define the ground plane. The change in colors and texture will be incorporated into the design of all the buildings across the estate, providing a consistent architectural language.



WAREHOUSE FACADE CONCEPT STUDY



CONCRETE DADO CONCEPT SKETCH



OFFICE SCREEN CONCEPT SKETCH

OFFICE CONCEPT STUDY

Office Design

The office component of the development, is an elaboration of the overall concept. The articulated and faceted façade peels out to form a perforated "canopy" giving dappled shading and forming an iconic architectural language. This dynamic geometric over the glass office facade, which has diagonal random mullions, a representation of tree trunks.

Materials have been selected to reflect the industrial nature of the building, being concrete, steel and metal cladding, while still reflecting the colors of the Australian landscape.

PERFORATED METAL SCREEN IMAGE

NATURAL COLOURS & MATERIALS

AUSTRALIAN COLOUR PALETTE

Integration of architecture & landscape

Aspect Industrial Estate will feature a number of initiatives to create a strong, layered landscape master plan that is well integrated into the urban space and built fabric. This will include the reinforcement of entries, avenues, bounded with appropriately selected trees and native plants. The offices will incorporate a diverse range of textured materials, to celebrate the entry experience and encourage spaces for external meeting, break-out and recreation for the office populations.

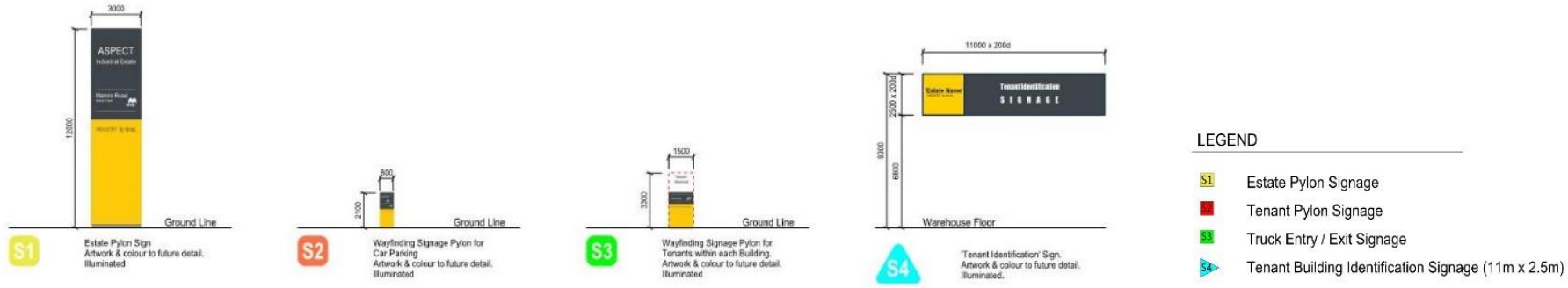
Landscaping for the AIE responds to the key interfaces of the estate with the public domain, adjoining properties and environmentally sensitive lands such as riparian corridors. The landscape strategy for the AIE aims to reflect a consistent image and maintenance regime across the entire estate and respond to its unique site characteristics.

The entry landscape located to the northern side of Mamre Road provides a landscape arrival feature. An open lawn area with a series of banding grasses and concrete inlays frames the entry road and provides a design framework and entry statement to the AIE.

Signage

The AIE signage has been designed in accordance with Mirvac's corporate signage strategy and includes a combination of typologies ranging from estate pylon signage at the entrance to wayfinding and tenant identification signage throughout. Tenancy signage will be integrated in the facade, addressing the immediate street frontage. This approach has been further adapted to the secondary facades facing public roads with a smaller logo & company signage, clearly identifying the premises without excessive repetition.

SIGNAGE PLAN



SIGNAGE TYPES


Reimagine urban life
mirvac
AIE
INDUSTRY · by mirvac

Design Ethos

To reimagine urban life

2. DESIGN PILLARS

Reimagining urban life is about creating inspirational and invigorating places designed to enhance and enrich people's lives.

We take an intensely humanistic approach to design where people gather to live, work and play.

The Mirvac Group design ethos is centred on 4 design pillars – People, Place, Quality, Legacy. To reimagine urban life is to focus on these 4 pillars as they are inextricably linked. At the heart of reimagining urban life is life itself.

VERSION 1. 07032019

mirvac

A PEOPLE

Enriching people's lives

Understanding people
Community connectivity and engagement
Wellbeing and safety
Consider all scales

B PLACE

Creating inspiring places

Site-specific response
Ground plane experience
Landscape design
Diversity in design

PURPOSE

REIMAGINE URBAN LIFE

live, work & play

C QUALITY

Achieving excellence

Detail
Materiality
Optimising useability

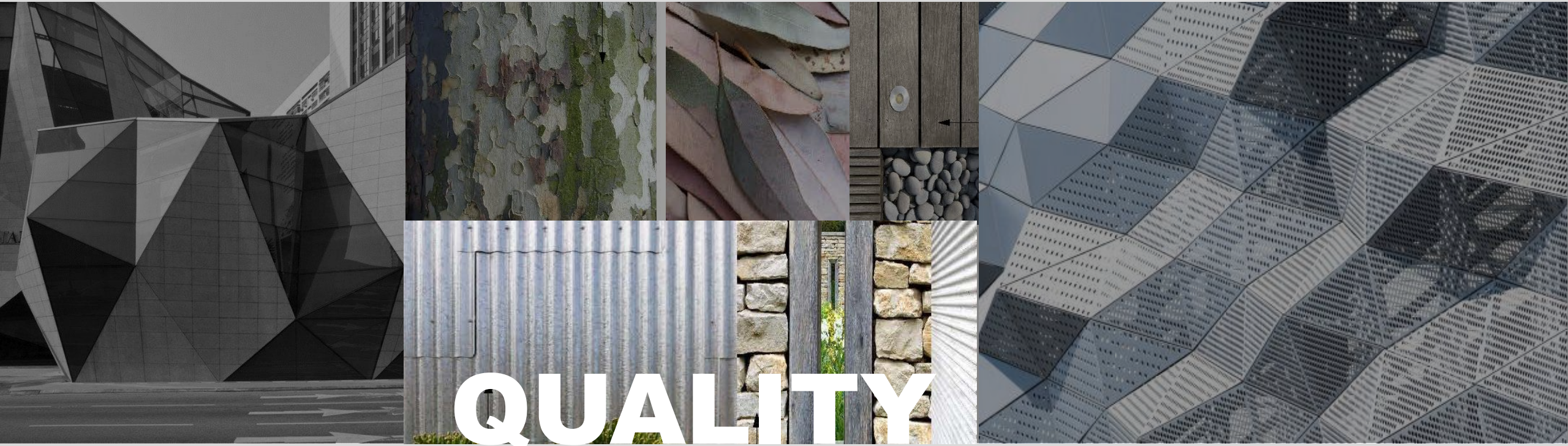
D LEGACY

Leaving a positive legacy

Sustainability
Enduring and timeless design


PEOPLE

PLACE



OUR VISION

AIE

LEGACY

OUR VISION

AIE

MIRVAC DESIGN I 091119

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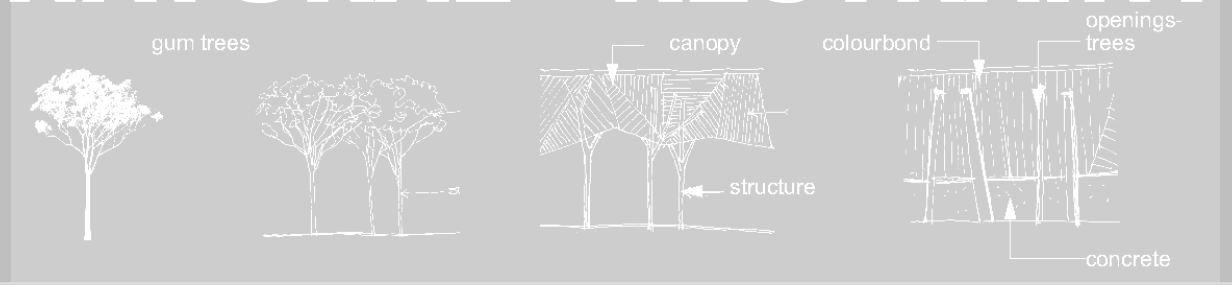
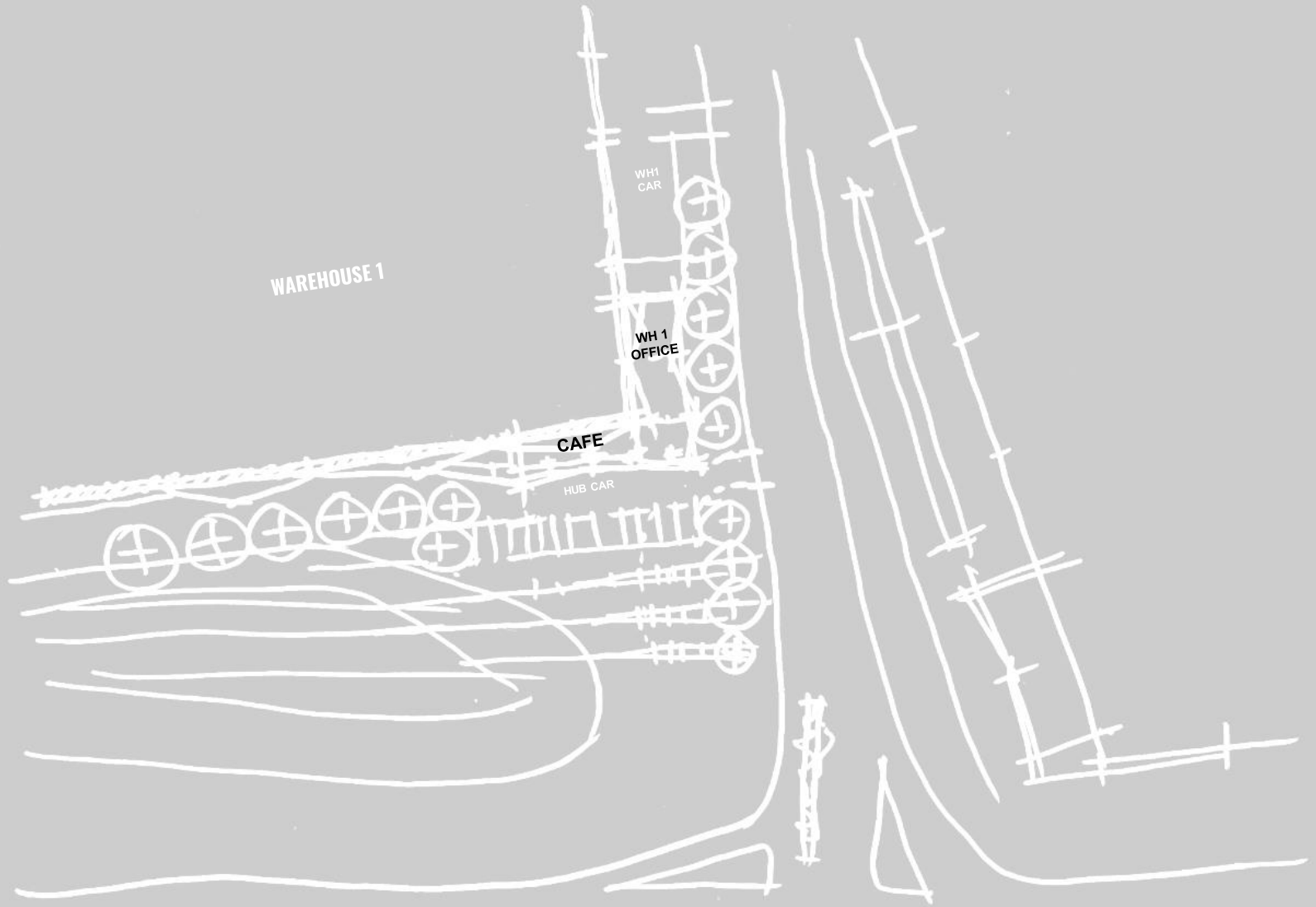
OUR CONCEPT

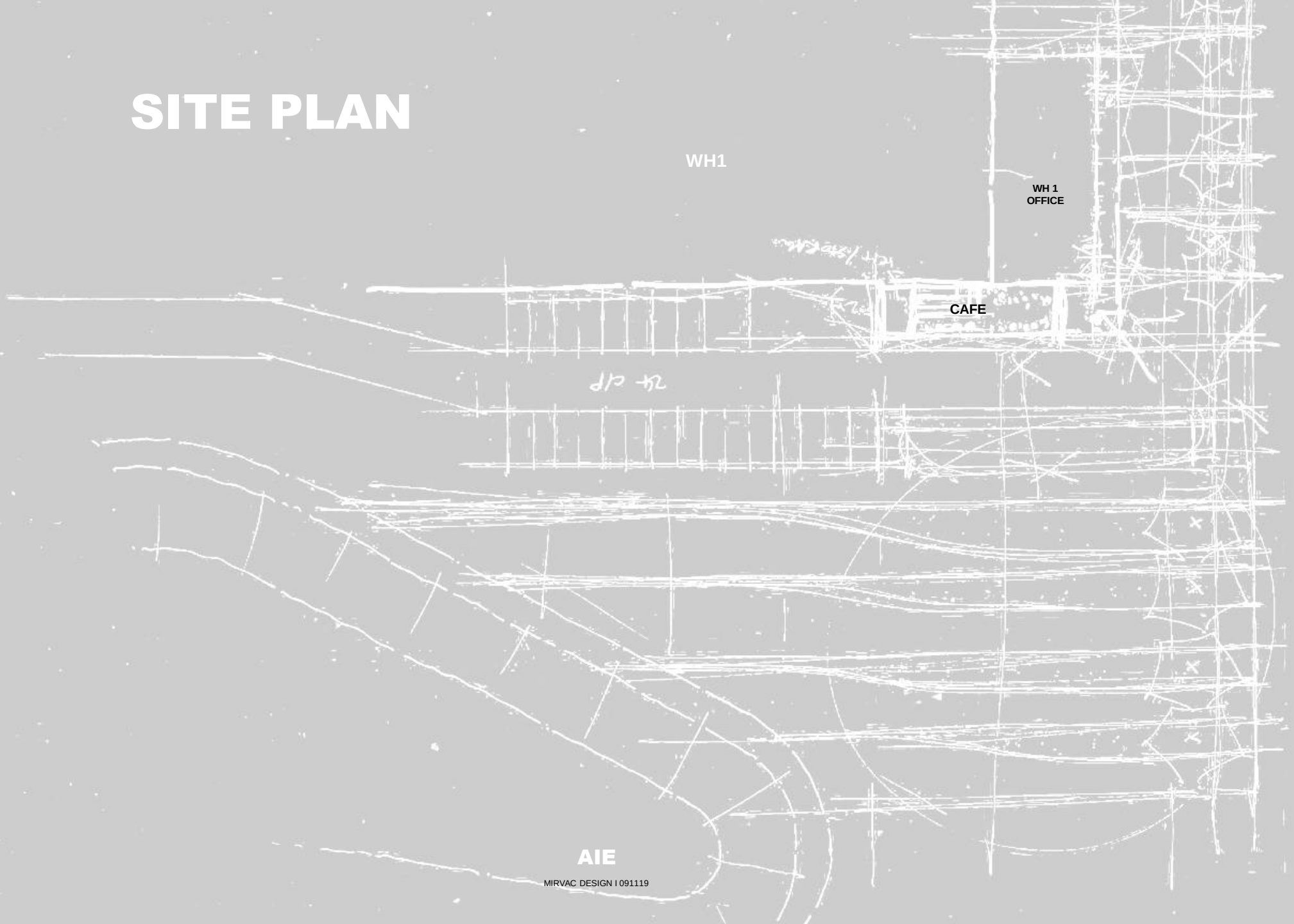
NATURAL+ RESTRAINT



OUR PLAN

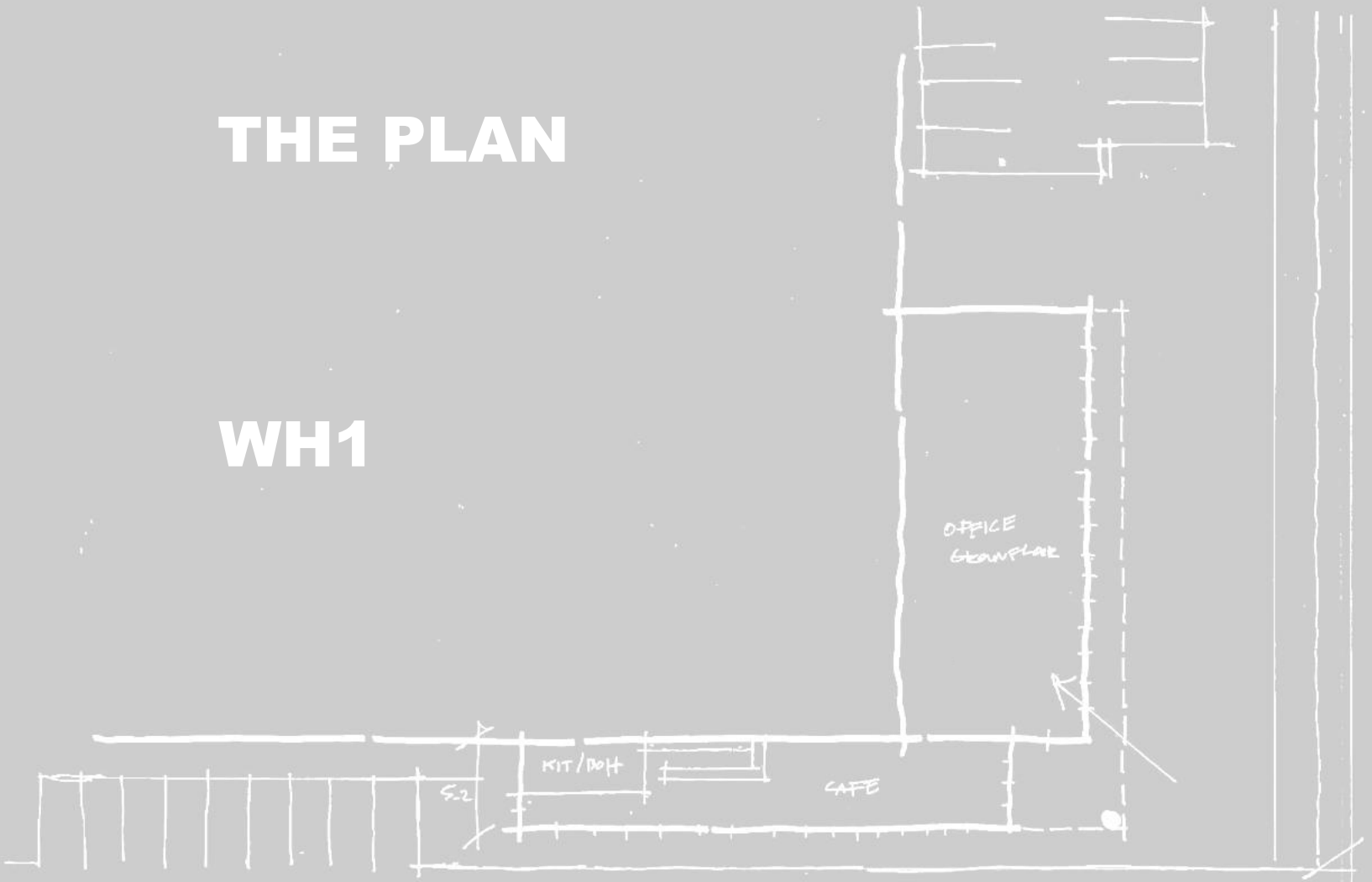


SITE PLAN



THE PLAN

WH1



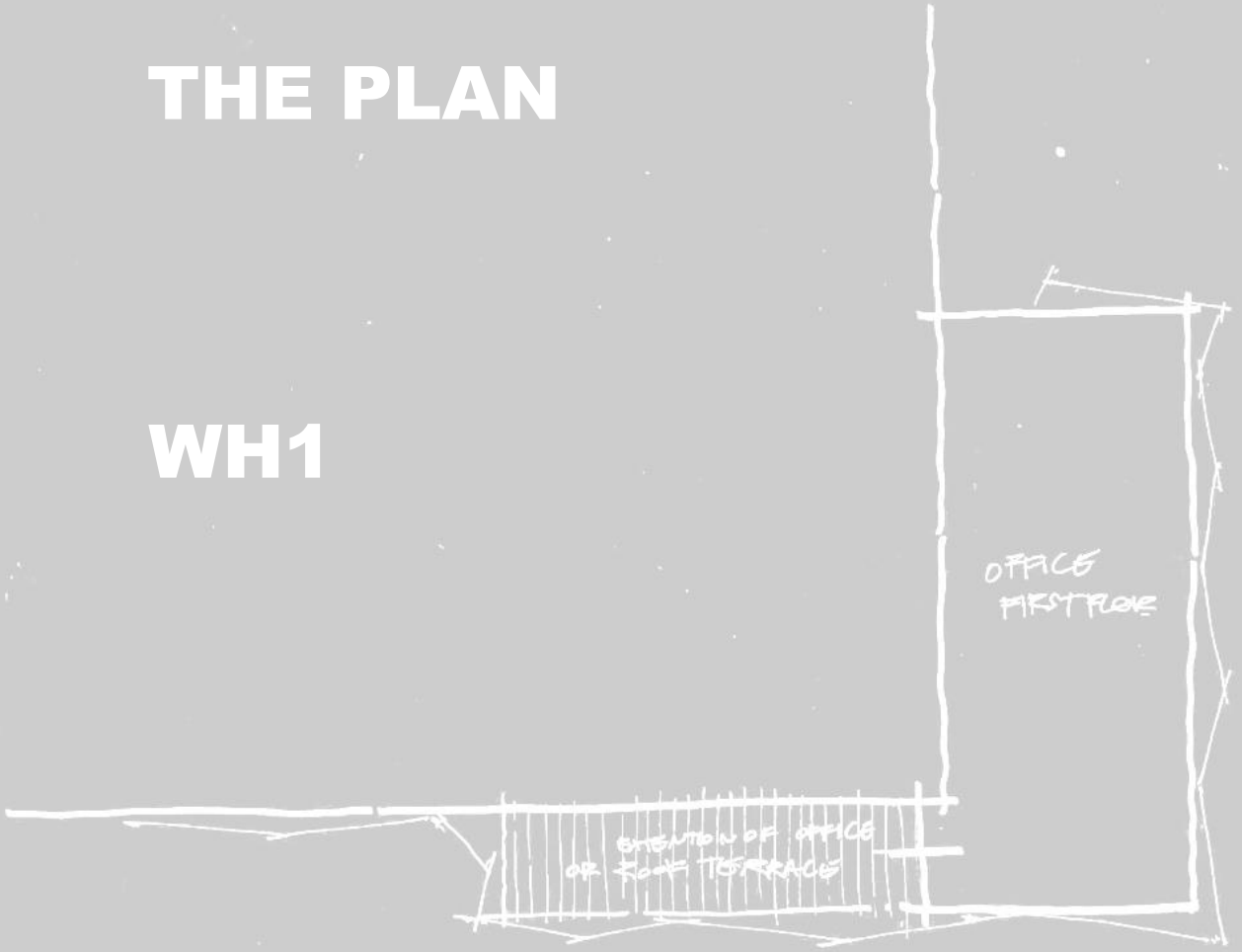
GROUND +0

GROUND FLOOR
1:250@A3

AIE

THE PLAN

WH1



LEVEL 1

FIRST FLOOR
1:250 @ A3

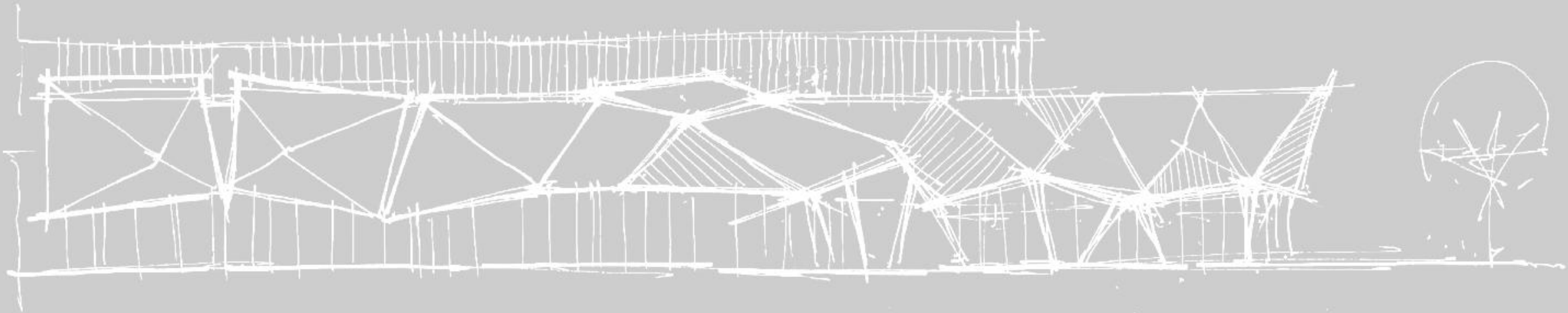
AIE

OUR FACADE

AIE

OUR HUB

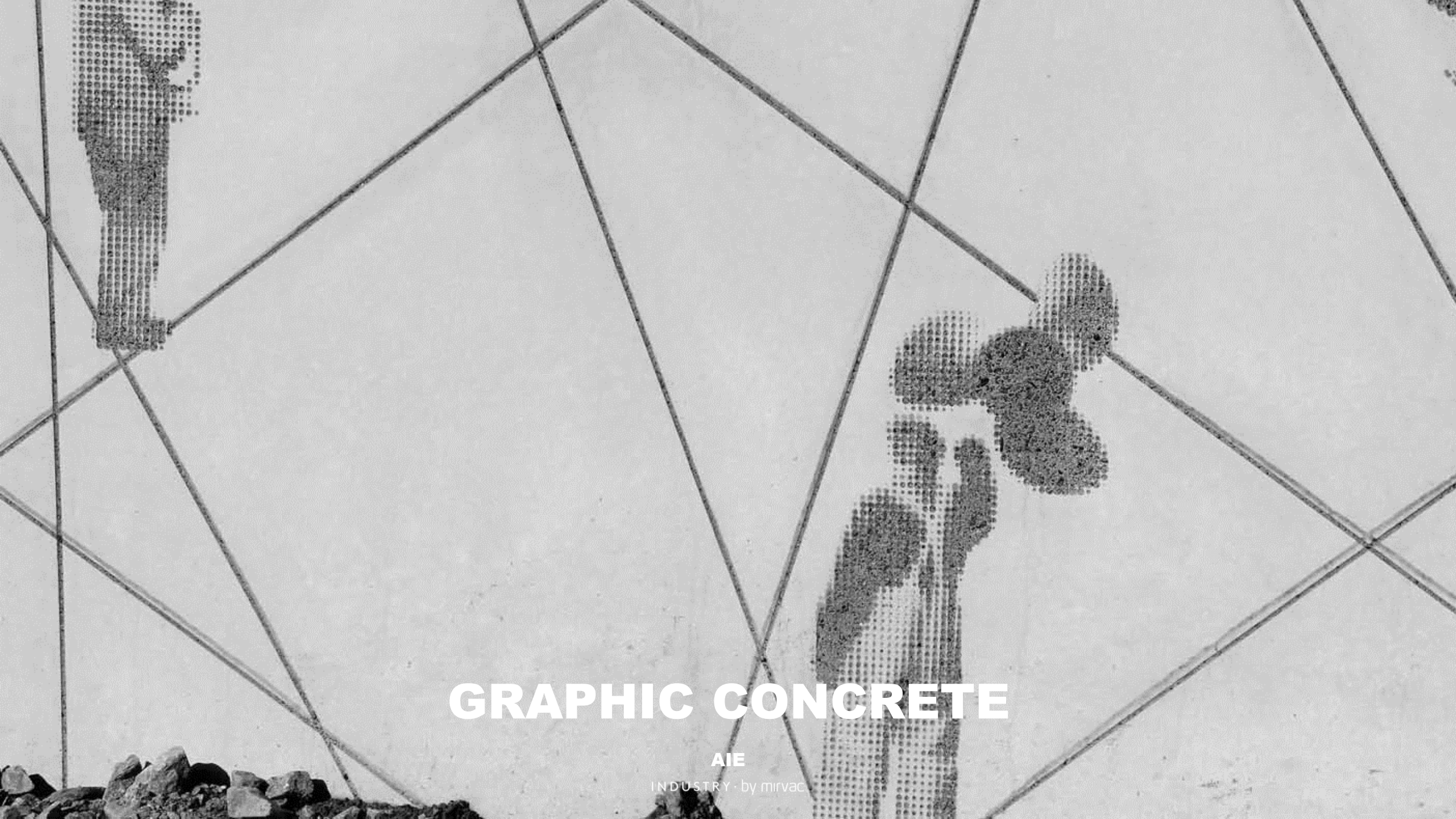
AIE



THE CONCEPT

CONCRETE PATTERN

AIE



GRAPHIC CONCRETE

AIE

INDUSTRY · by mirvac

THE HUB CONCEPT

AIE

WH1 OFFICE SOUTH

AIE

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THE BREAKOUT

AIE

WEST FACADE

WH1 OFFICE NORTH

AIE

MIRVAC DESIGN I 091119

THE VISION

AIE

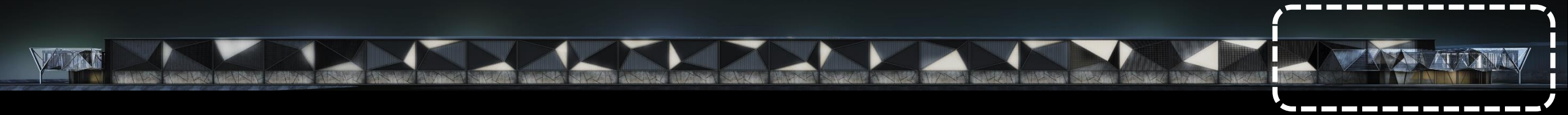
AIE

MIRVAC DESIGN | 091119

THE VISION

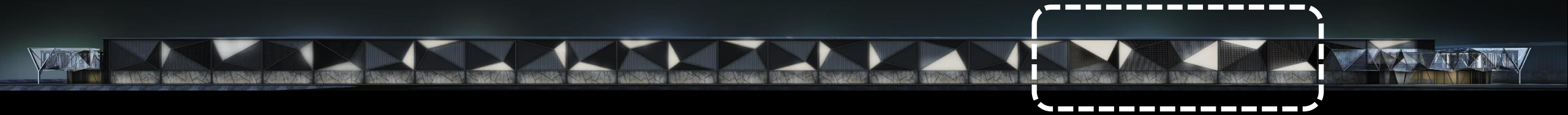
AIE

THE HUB FETAURE FACADE



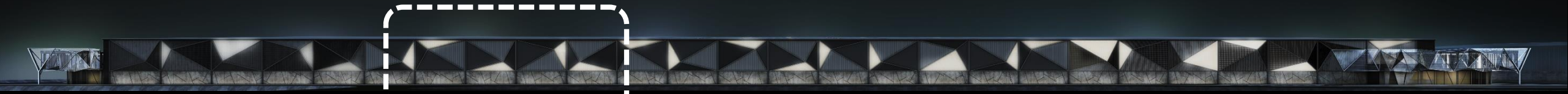
AIE

FEATURE FAÇADE > 3D PRISM



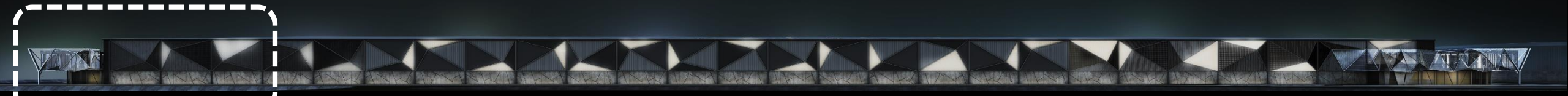
AIE

FEATURE FAÇADE > FLAT

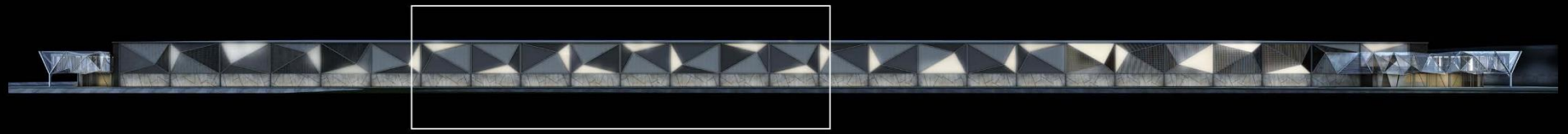


AIE

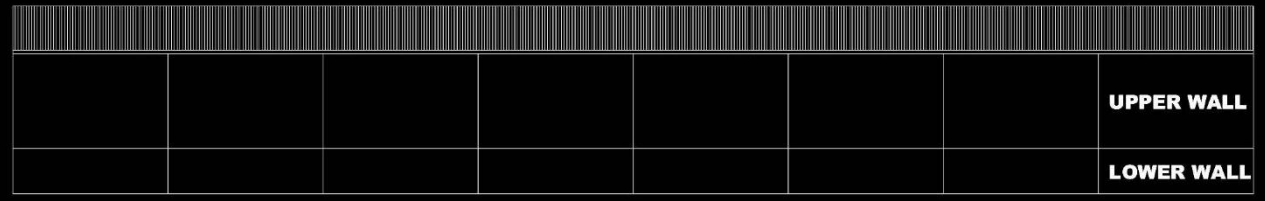
THE NORTHERN FACADE

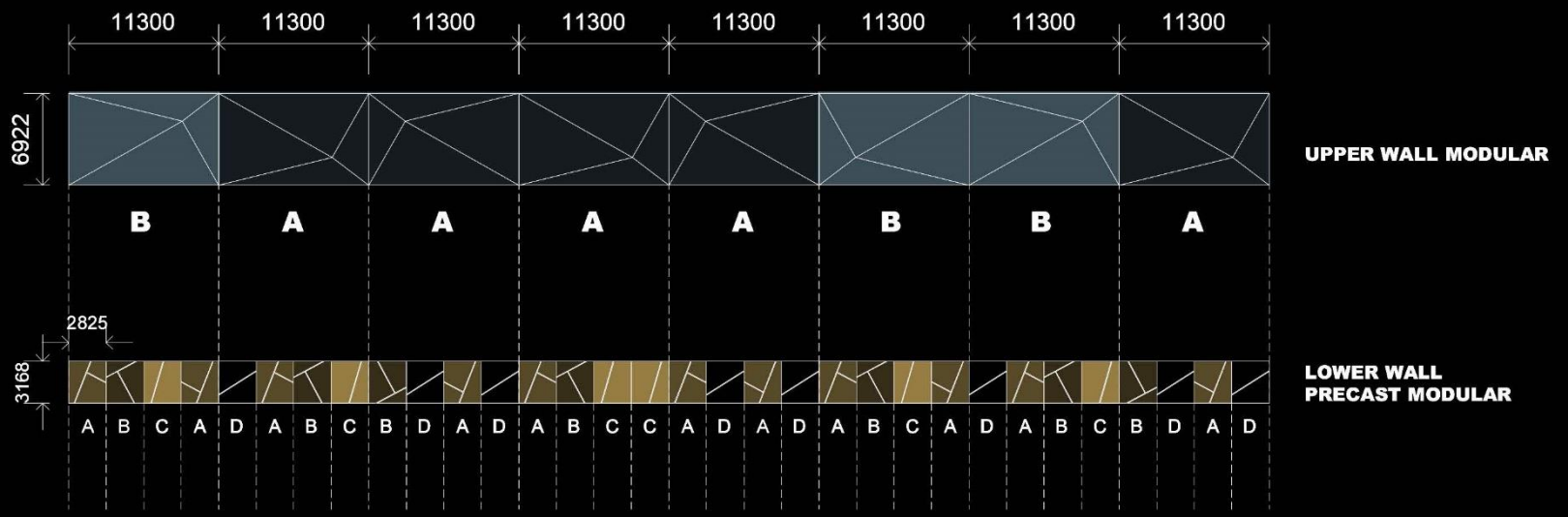


AIE



WH1 WEST FAÇADE MODULE DETAILS





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WAREHOUSE WESTERN FACADE

1:250@A2

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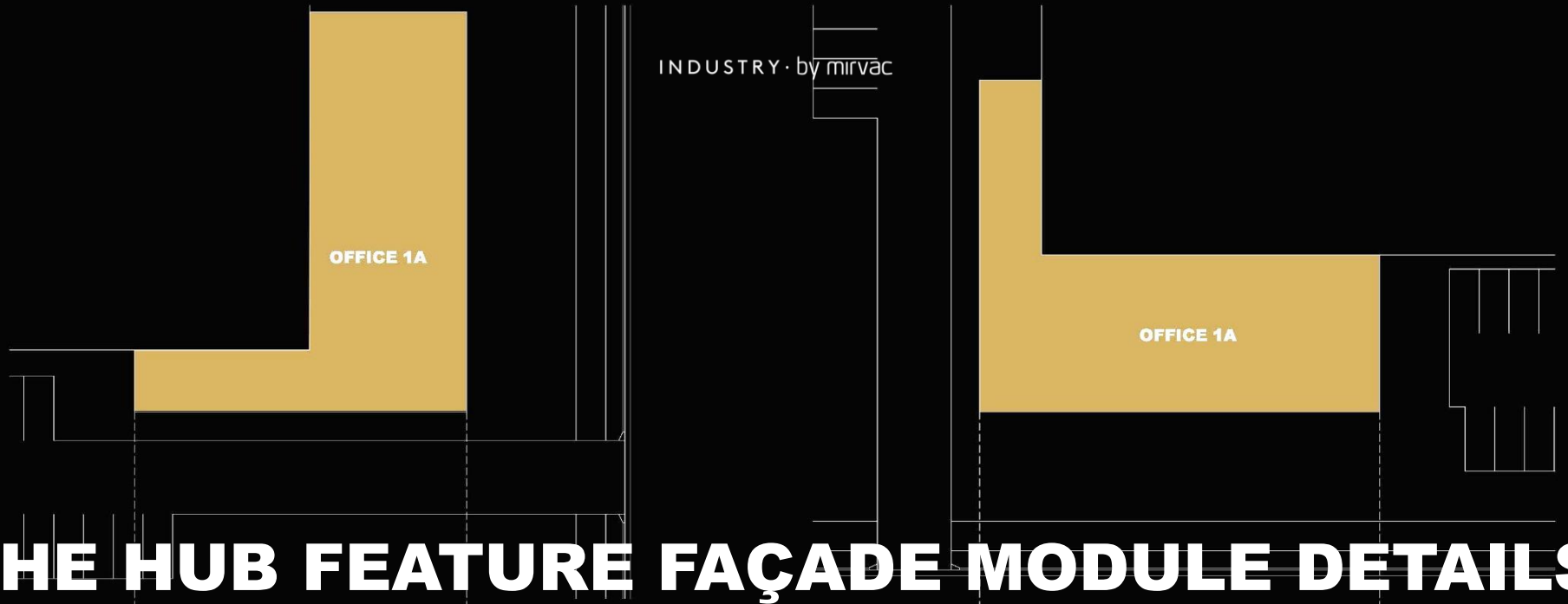
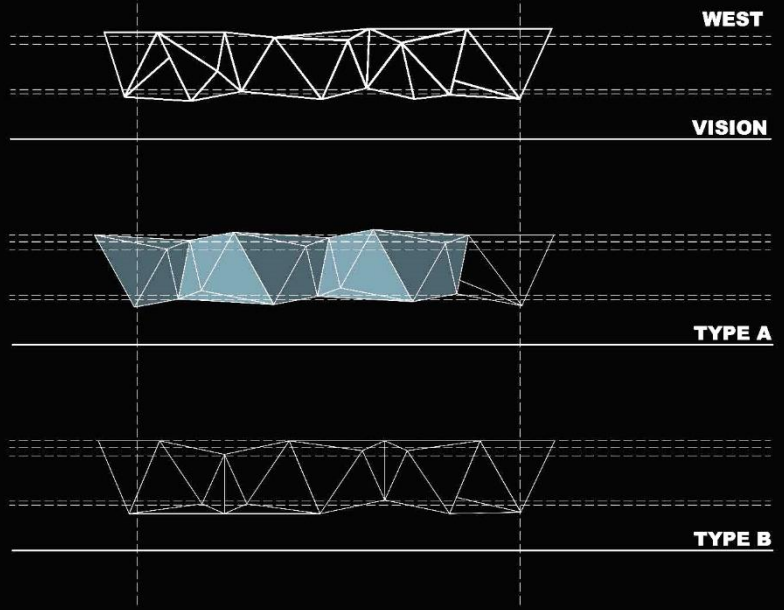
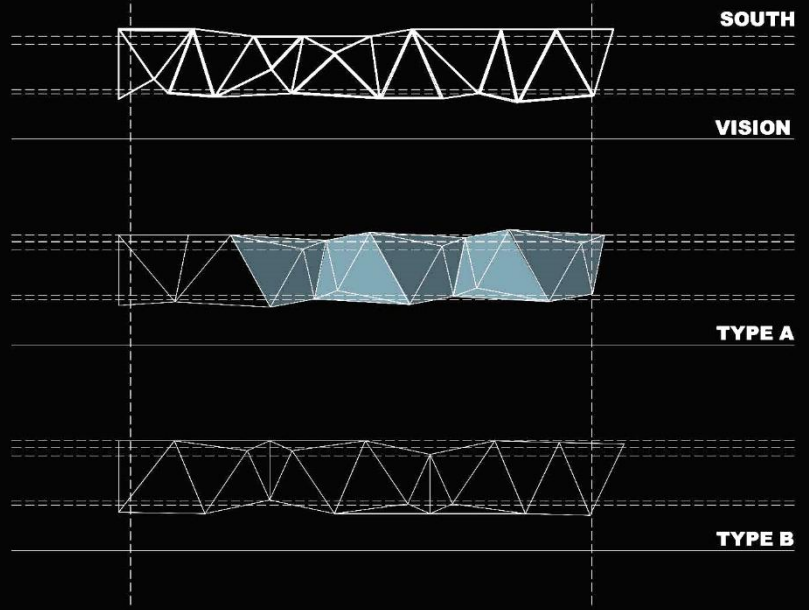


THE HUB FEATURE FAÇADE MODULE DETAILS





AIE

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OFFICE 1A WESTERN FACADE

OFFICE 1A SOUTHERN FACADE

1:250@A2

AIE

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Reimagine urban life
mirvac
AIE
MIRVAC DESIGN I 091119

Aspect Industrial Estate, Mamre Rd, Kemps Creek

Landscape Masterplan

October 2020

SITE IMAGE
Landscape Architects

Contents Page

Introduction

The landscape concept masterplan demonstrates the vision for the **Aspect Industrial Estate**.

This Masterplan report is to be read with the following landscape documentation as well as civil, architectural and ecological reports.

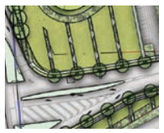
This report and the following doucments have been prepared to respond to SEARS condition for detailed landscape plans.

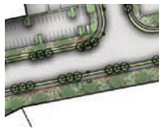
'Detailed landscaping plans'

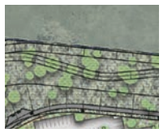
S1-INF-101	Stage 1 Infrastructure Plan
S1-INF-102	Stage 1 Infrastructure Plan
S1-INF-103	Stage 1 Infrastructure Plan
S1-INF-104	Stage 1 Infrastructure Plan
S1-INF-105	Stage 1 Infrastructure Plan
S1-INF-106	Stage 1 Infrastructure Plan
S1-INF-107	Stage 1 Infrastructure Plan
S1-INF-108	Stage 1 Infrastructure Plan
S1-INF-108	Stage 1 Infrastructure Detail Landscape Plan
S1-INF_501	Landscape Details
S1-INF_601	Landscape Sections
S1-INF_602	Landscape Sections
S1-INF_603	Landscape Sections
S1-1_101	Stage 1 Lot 1 Landscape Plan
S1-1_102	Stage 1 Lot 1 Landscape Plan
S1-1_103	Stage 1 Lot 1 Landscape Plan
S1-3_101	Stage 1 Lot 3 Landscape Plan
S1-3_102	Stage 1 Lot 3 Landscape Plan
S1-3_103	Stage 1 Lot 3 Landscape Plan

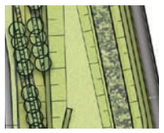
Landscape Concept Masterplan

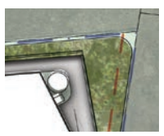
scale: 1:4000 @ A3


Estate Entry Feature


Streetscape


Riparian Zone


Stormwater Basin


Boundary Planting

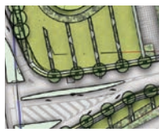

On Lot Landscape

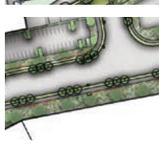
SITE IMAGE
Landscape Architects

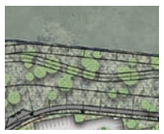
Aspect Industrial Estate Kemps Creek | Landscape Masterplan

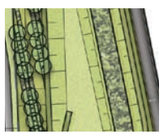
Drawing Number	003
Issue	G
Date	15.10.2020

Landscape Concept Masterplan Stage 1


Estate Entry Feature


Streetscape


Riparian Zone


Stormwater Basin


Boundary Planting


On Lot Landscape

0 40 100m 200m 400m

scale: 1:4000 @ A3

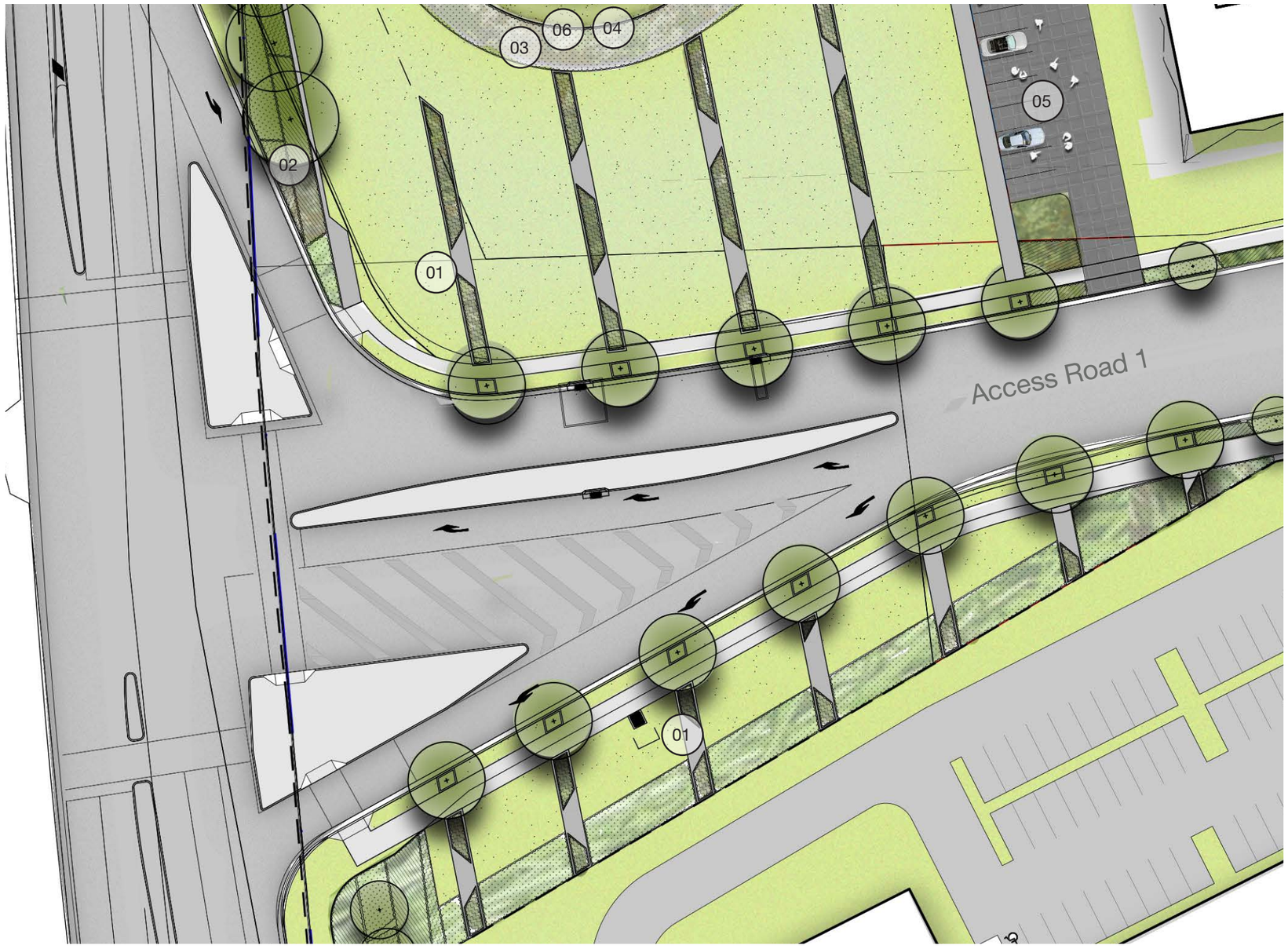
SITE IMAGE
Landscape Architects

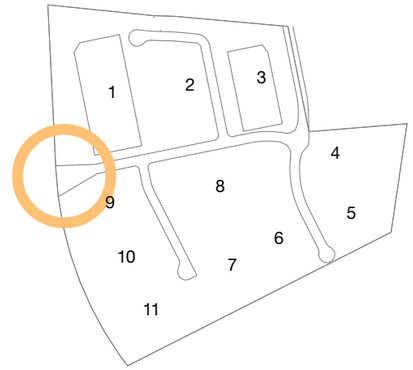
Aspect Industrial Estate Kemps Creek | Landscape Masterplan

Drawing Number	004
Issue	G
Date	15.10.2020

Entry Landscape

The entry landscape located to the northern side of the Mamre Road entry provides a landscape arrival feature. A open lawn area with a series of banding of grasses and concrete inlays frames the entry road and provides a framework for future amenity in this area. The adjacent stormwater basin's planting will be visible for this area. Connecting the Entry feature to Lot 1 is a carpark with feature unit paving to encourage permeability of pedestrians between the building, carpark and broader landscape.





01 Feature blade walls

02 Entry massed grasses and groundcover planting

03 Massed Grasses to stormwater basin perimeter

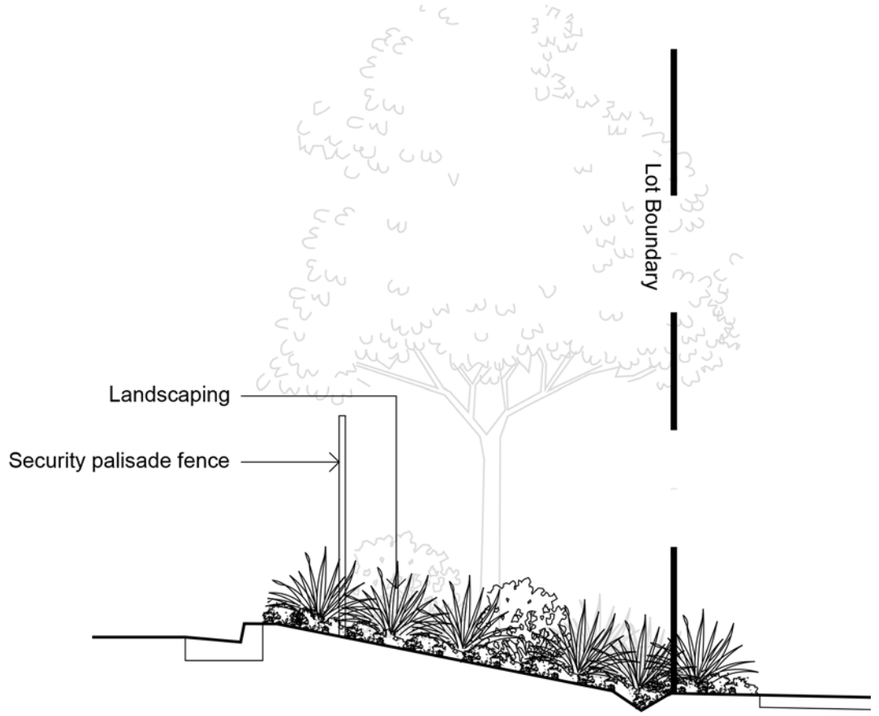
04 Stormwater maintenance pathway

05 Shared parking area

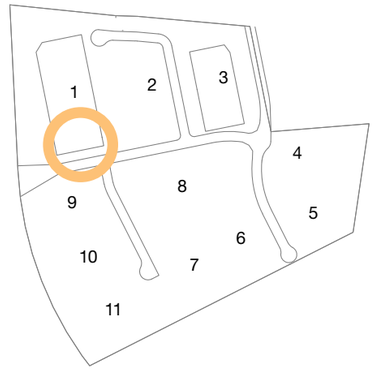
06 Fence to stormwater basin

Typical Lot Frontage

The lot frontages are the main presentational frontage of lots to the estate road. Planting to the frontages will consist of a variety of native and exotic, shrubs, groundcovers and small-medium trees. Security fencing is to be positioned amongst the landscape to recede into planting.



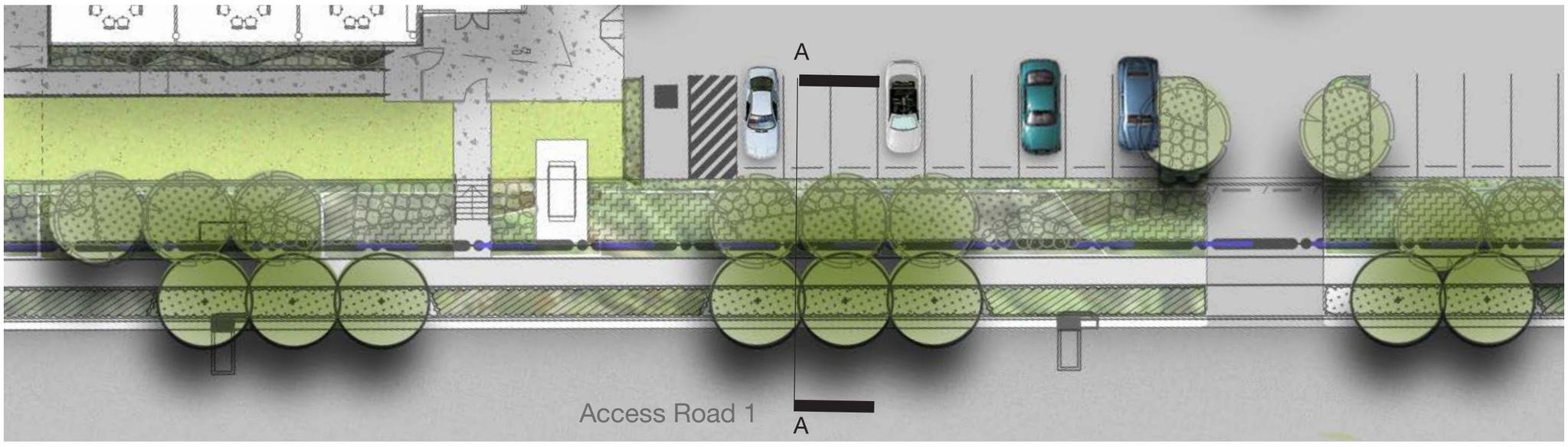
Section A Lot Frontage Cross Section 1:50



01 Planting in blocks

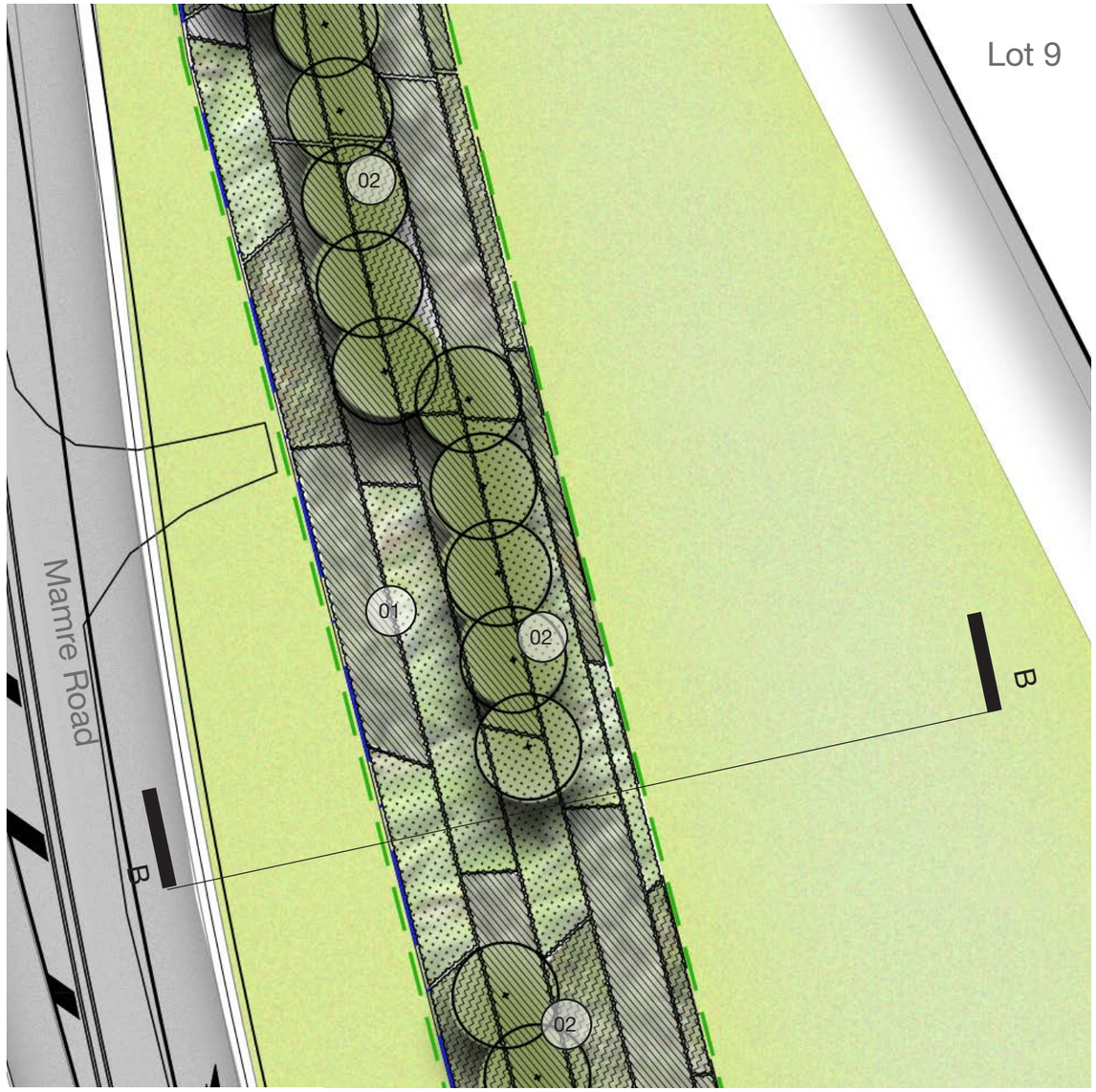
02 Massed low grasses and groundcovers

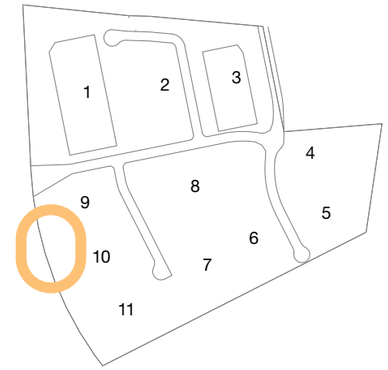
03 Boundary tree planting



Mamre Road Frontage

The Mamre Road frontage consists of embankments sloping from lots down the road, Massed planting of shrubs, grasses and groundcovers is proposed with large canopy trees.



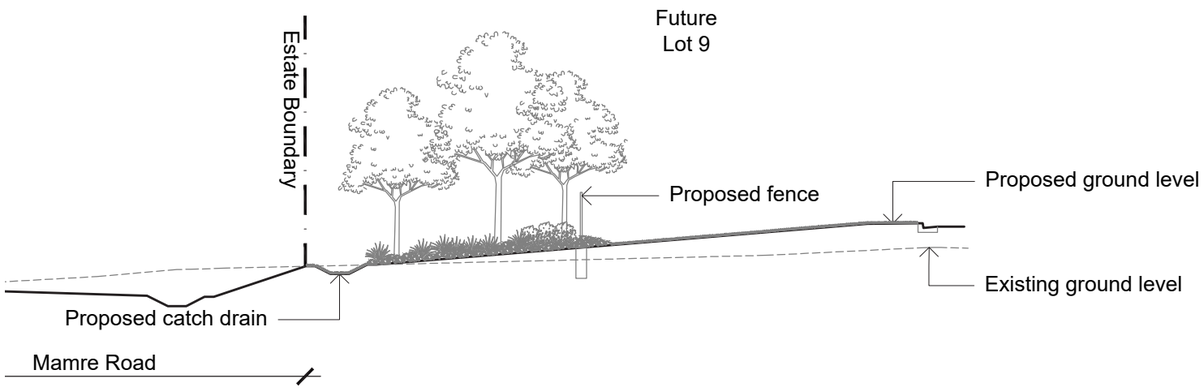


01 Massed planting

02 Canopy Tree Planting

Massed grasses and shrubs

Canopy tree planting



Section B Mamre Rd Frontage Cross Section 1:50

Mamre Road Frontage Planting

Botanic Name	Common Name	Mature Size (h x w) (m)	
TREES			
Corymbia maculata	Spotted Gum	30 x 8	
Eucalyptus eugenioides	Thin leaved stringybark	20 x 8	
Melaleuca styphelioides	Prickly Leaved Paperbark	8 x 6	
SHRUBS & ACCENTS			
Acmena smithii var. minor	Lilly Pilly	2 x 2	
Callistemon 'Endeavour'	Bottlebrush	2x3	
Callistemon 'Little John'	Dwarf Bottle Brush	1 x 1	
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush		
Melaleuca linariifolia 'Claret Tops'	Honey Myrtle	1 x 1	
Phormium tenax 'Purpureum'	Bronze Flax	1.5 x 1	
Westringia fruticosa	Coastal Roasemary	2 x 2	
GRASSES AND GROUNDCOVERS			
Carpobrotus glaucescens	Pigface	.15 x 1	
Gazania tomentosa	Silver Gazania	.15 x 1	
Hardenbergia violacea	Purple Coral Pea		
Lomandra longifolia	Matt Rush	1 x 1	
Myoporum parvifolium	Creeping Boobialla	.3 x 2	
Poa 'Kingsdale'	Tussock Grass	.3 x .6	
Pennisetum 'Nafray'	Swamp Foxtail Grass	.6 x .6	
Trachelospermum jasminoides	Star Jasmine	0.3 x 0.3	

Indicates species from endemic vegetation community

Indicative Species

Estate Roads

Primary Access Roads

Road 1, Road 3

Secondary Roads

Road 2, Road 4

Understorey Planting

Corymbia maculata

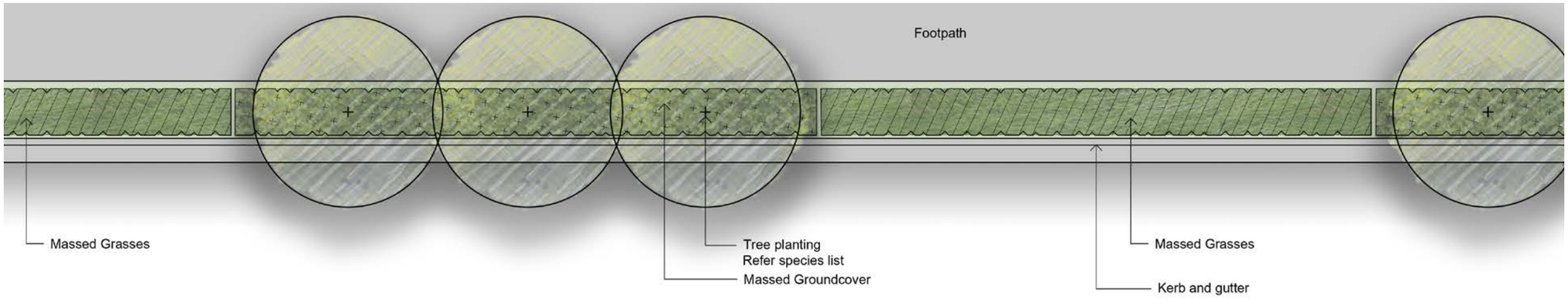
Spotted Gum

E. crebra

Narrow Leaved Ironbark

Myoporum parvifolium to understory of trees

Massed grasses to alternate



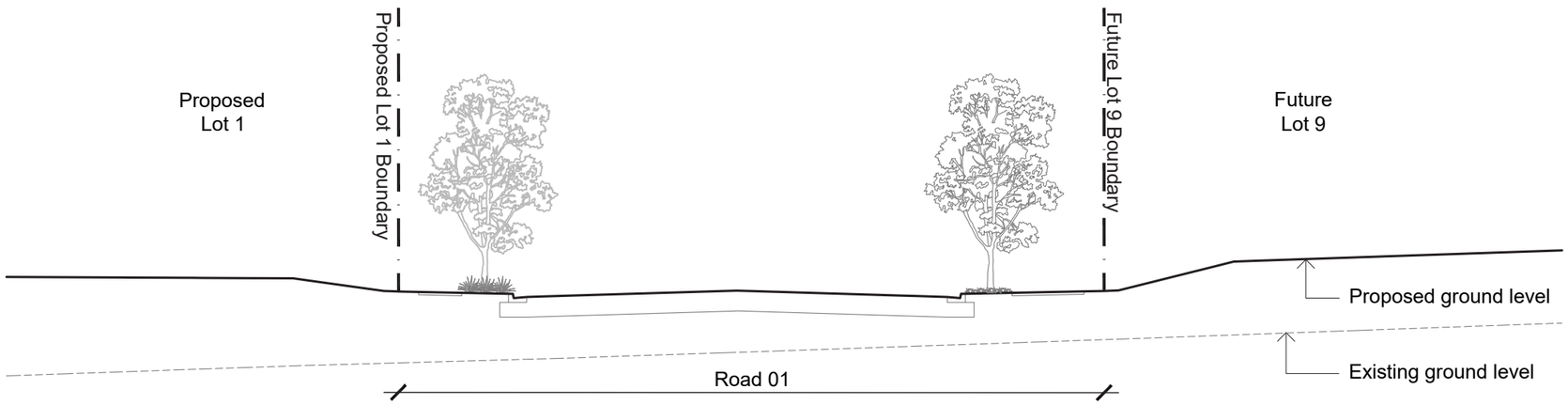
SITE IMAGE
Landscape Architects

Aspect Industrial Estate Kemps Creek | Landscape Masterplan

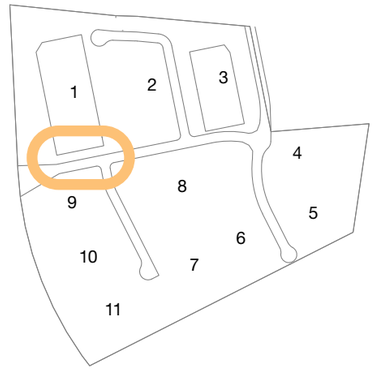
Drawing Number	009
Issue	G
Date	15.10.2020

Primary Access Road

Estate Roads are proposed to have groups of canopy trees with low grass and groundcover underplanting. Tree species will vary based on the street hierarchy.



Section C Road 01 Section 1:50

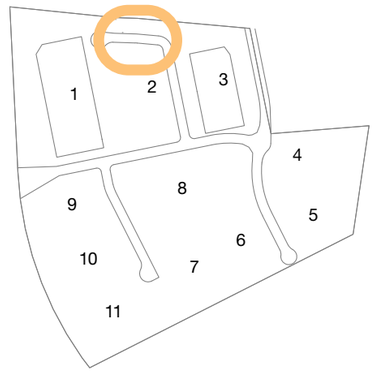


SITE IMAGE
Landscape Architects

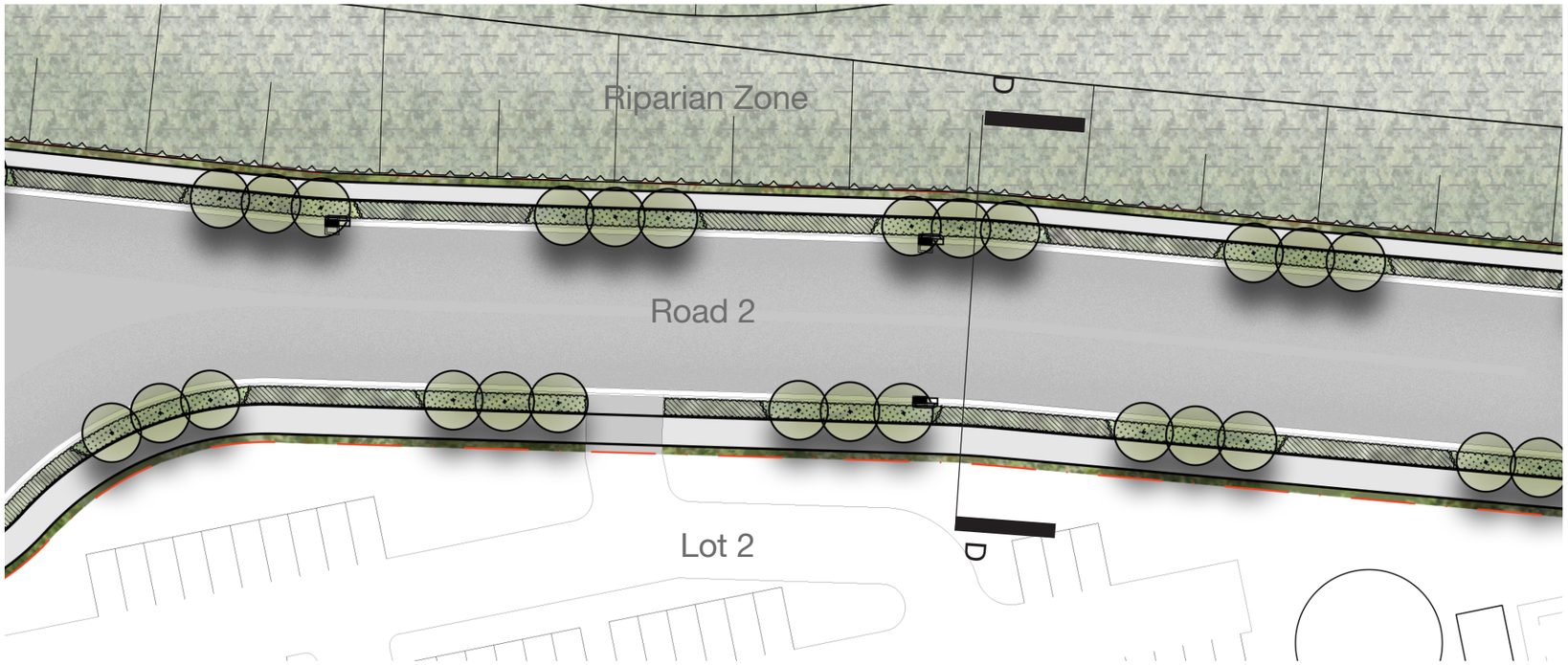
Aspect Industrial Estate Kemps Creek | Landscape Masterplan

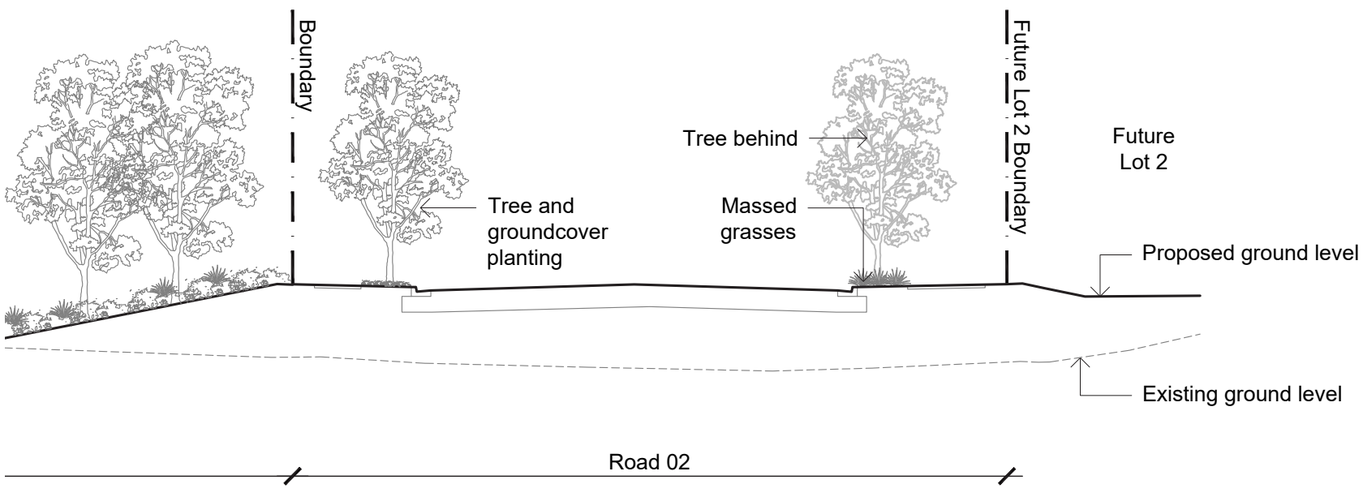
Drawing Number	0010
Issue	G
Date	15.10.2020

Secondary Road



Secondary roads feature the same general arrangement as primary roads. Groups of trees can be positioned to allow for the arrangement of services and utilities such as lightpoles.

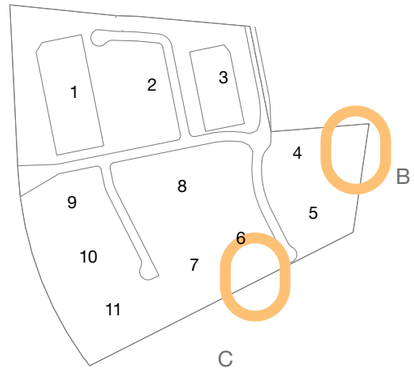




Section D Road 2 Section 1:50

Boundaries

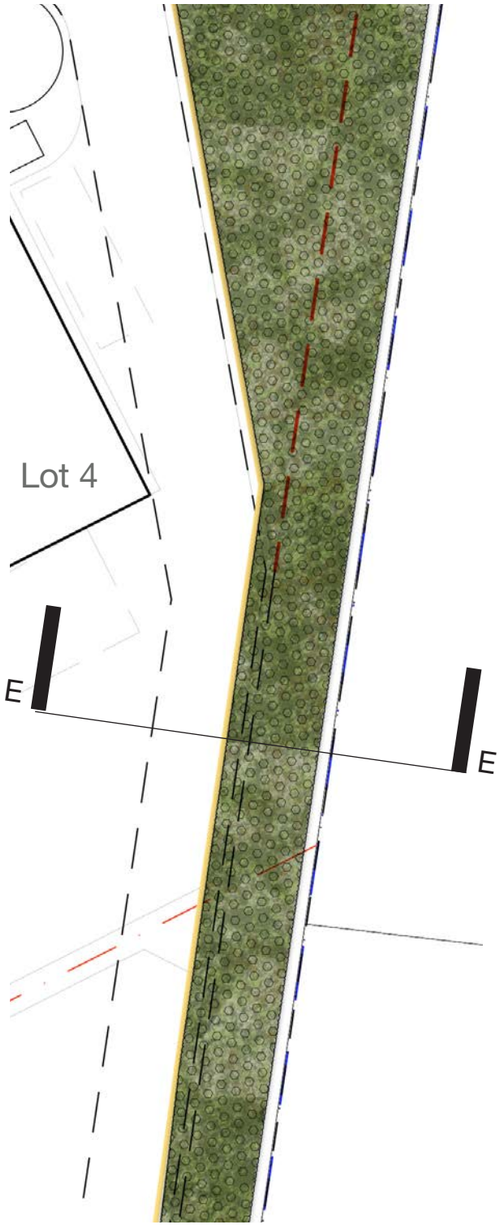
Boundary treatments will feature planting of native shrub grass and groundcovers. In locations where there is a retaining wall below cascading plants will be provided to break up the mass of the wall.

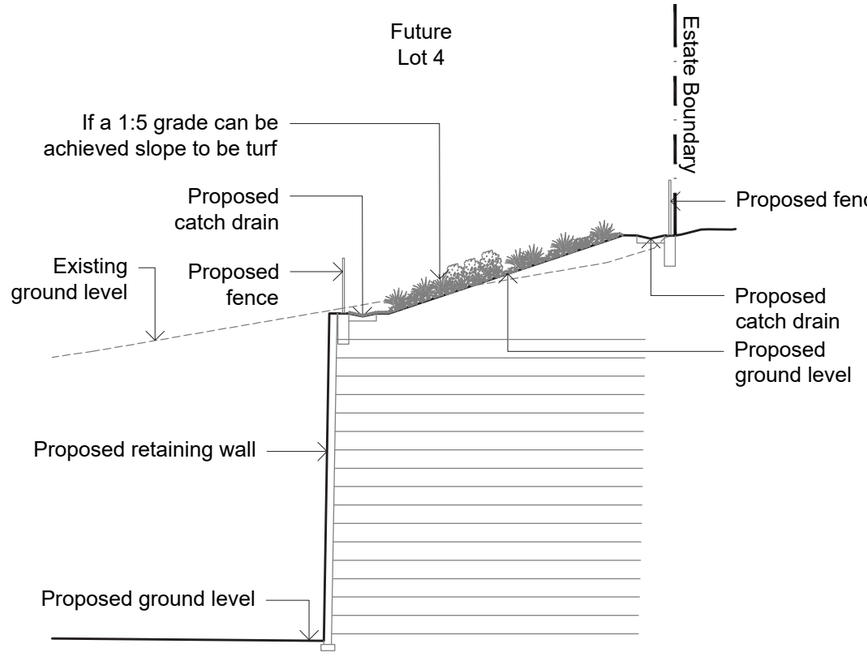


Shrub and grass planting

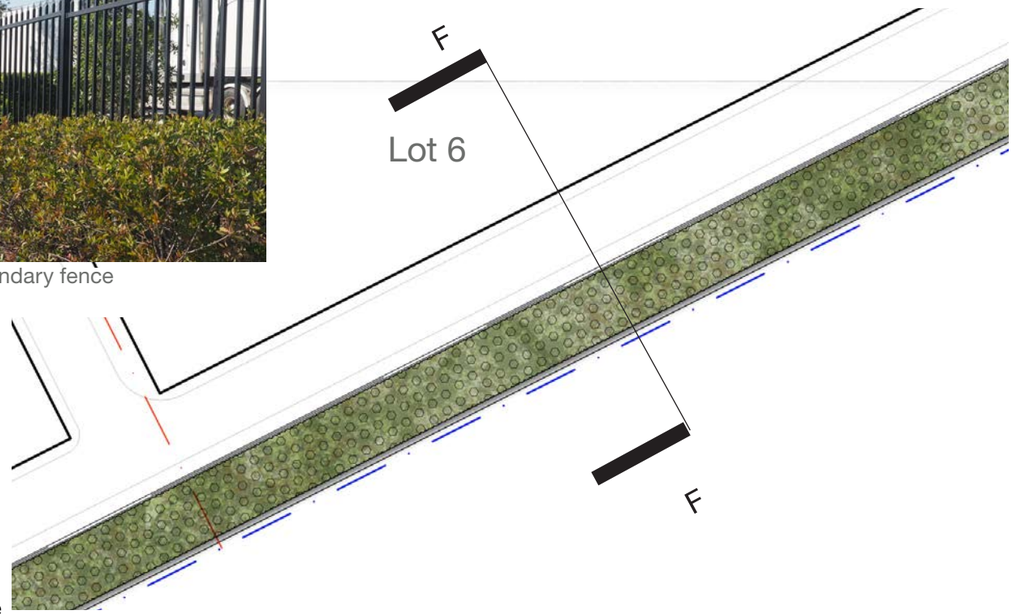
Shrub and grass planting

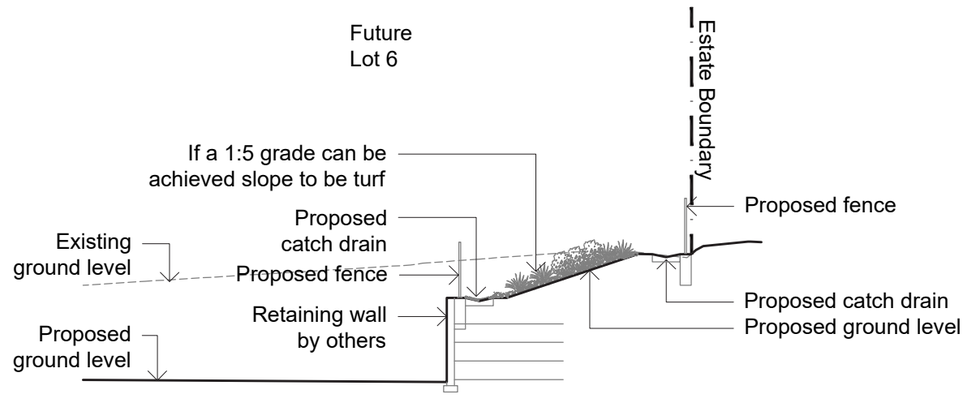
Security boundary fence





Section E 1:200





Section F 1:200

Boundary Planting

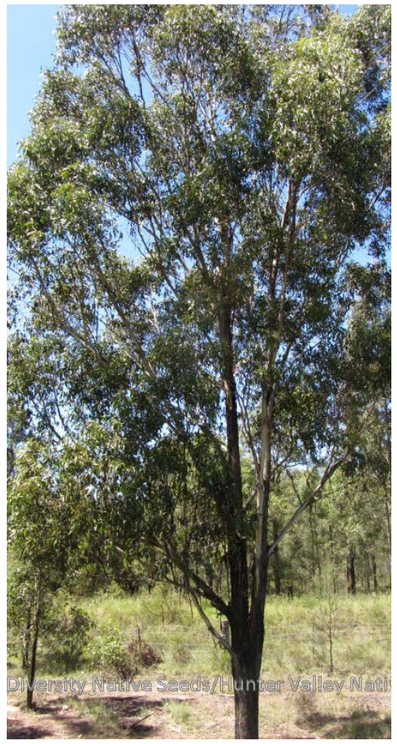
Boundary

Botanic Name	Common Name	Mature Size (h x w) (m)
TREES		
Corymbia maculata *	*Spotted Gum*	30 x 8
Eucalyptus crebra	Narrow-leaved Ironbark	
Eucalyptus eugenioides	Thin-leaved Stringybark	30 x 8
Eucalyptus moluccana	Grey Box	
SHRUBS & ACCENTS		
Acmena smithii var. minor	Lilly Pilly	2 x 2
Callistemon 'Endeavour'	Bottlebrush	2x3
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush	
GRASSES AND GROUNDCOVERS		
Carpobrotus glaucescens	Pigface	.15 x 1
Carex inversa		
Hardenbergia violacea	Purple Coral Pea	
Gazania tomentosa	Silver Gazania	.15 x 1
Myoporum parvifolium	Creeping Boobialla	.3 x 2
Poa 'Kingsdale'	Tussock Grass	.3 x .6
Pennisetum 'Nafray'	Swamp Foxtail Grass	.6 x .6

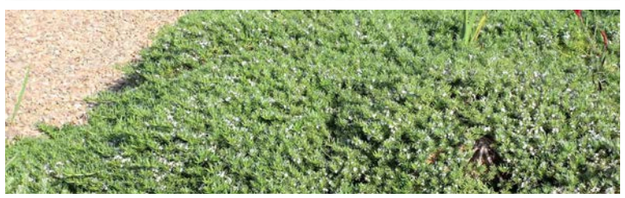
Indicates species from endemic vegetation community

Indicative Species






Stormwater Basin

The Stormwater basin will feature planting to compliment the water retention and treatment processes designed by civil. A Grass-Cel maintenance pathway provides access around the perimeter of the basin at the top of the embankment. Appropriate safety fencing shall be included where necessary.

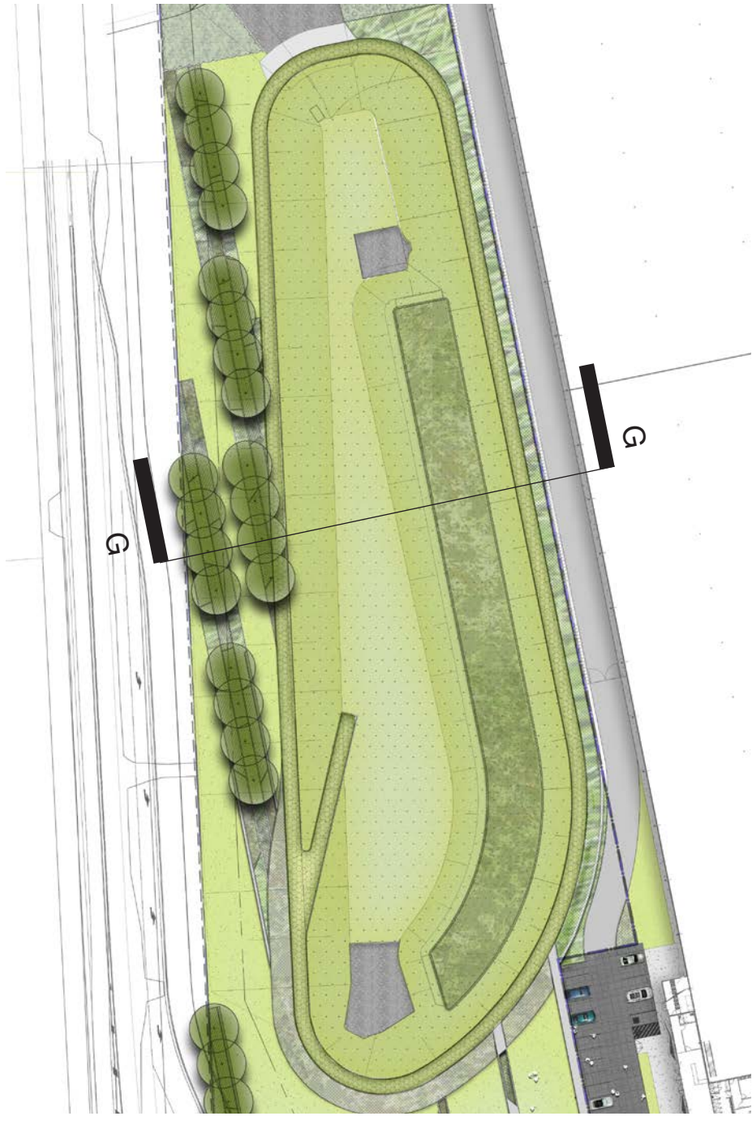
Basin Planting

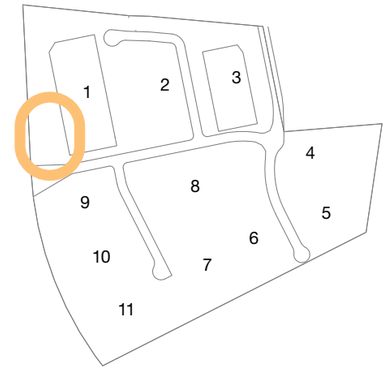
Botanic Name	Common Name	Mature Size (h x w) (m)
GRASSES AND GROUNDCOVERS		
Carex inversa	-	
Lomandra longifolia	Matt Rush	1 x 1
Imperata cylindrica var. major	Blady Grass	
Juncus usitatus	Common Rush	
Imperata cylindrica var. major	Blady Grass	
Poa labillardieri	Tussock Grass	
Themeda australis	Kangaroo Grass	

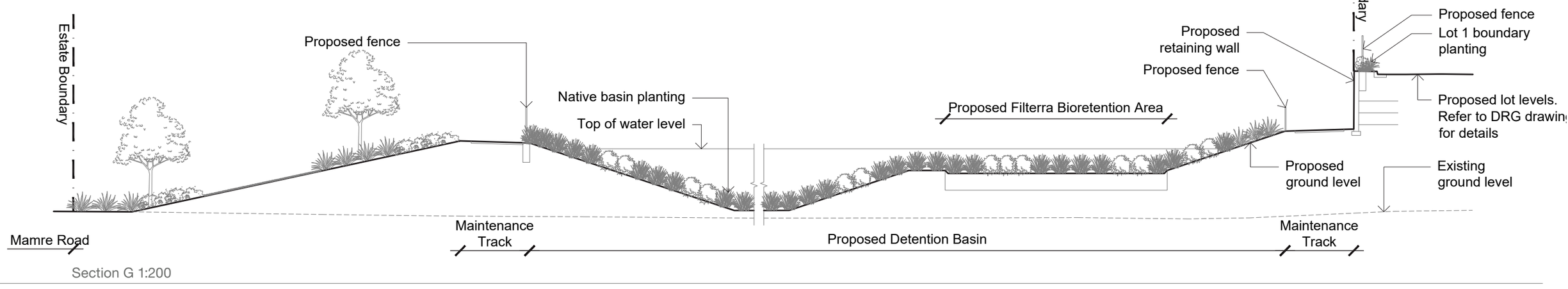
Indicates species from endemic vegetation community

Native basin planting

Fencing to basin



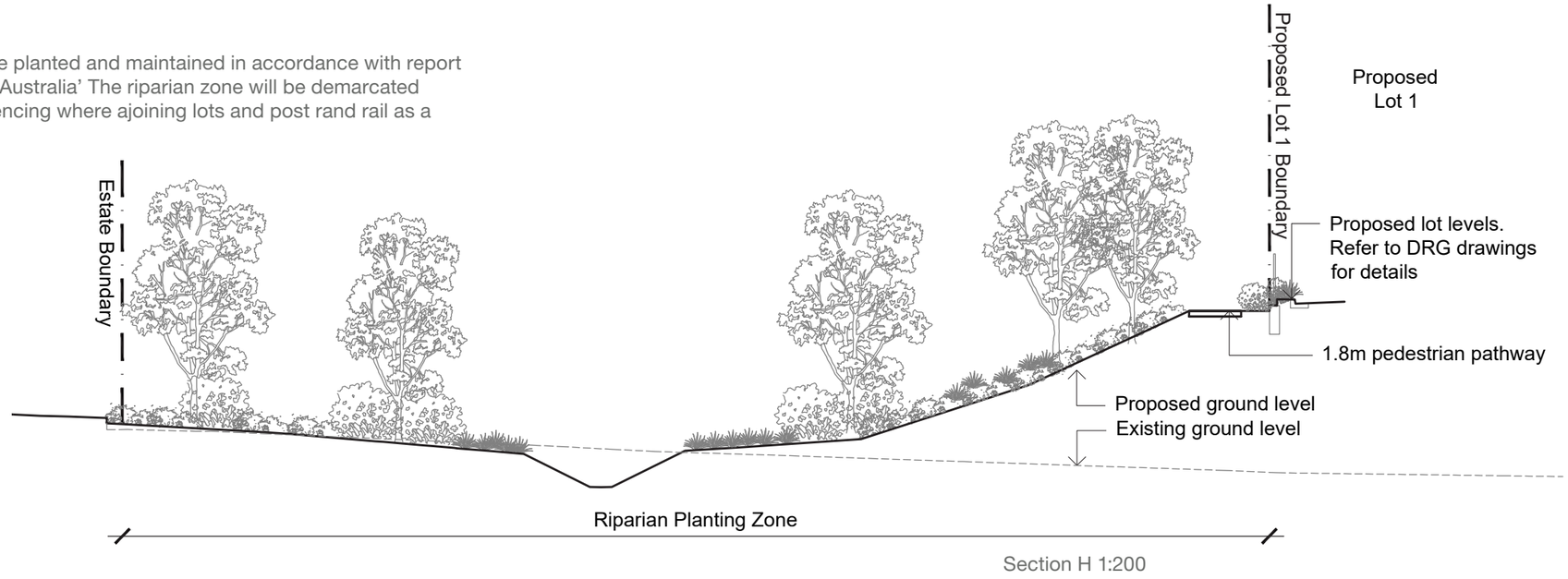




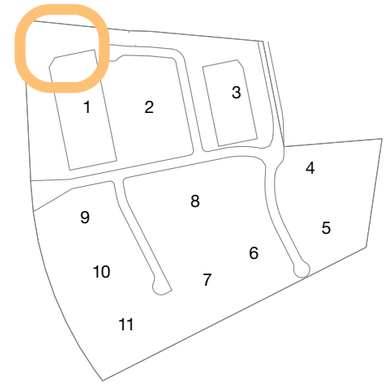
Section G 1:200

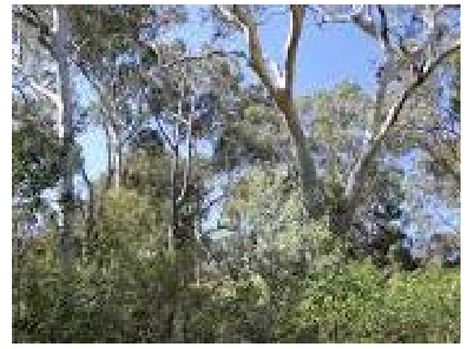
Riparian Zone

The Riparian Zone will be planted and maintained in accordance with report produced by Écological Australia' The riparian zone will be demarcated with fencing - security fencing where ajoining lots and post rand rail as a boundary marker style.



Section H 1:200



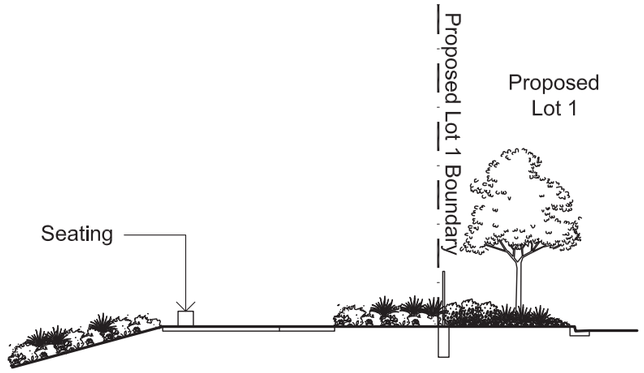


Native riparian zone planting in accordance with ecological report

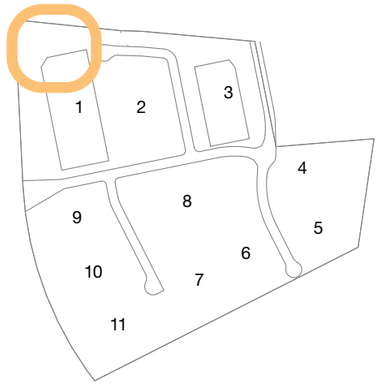
Fencing to riparian zone perimeter

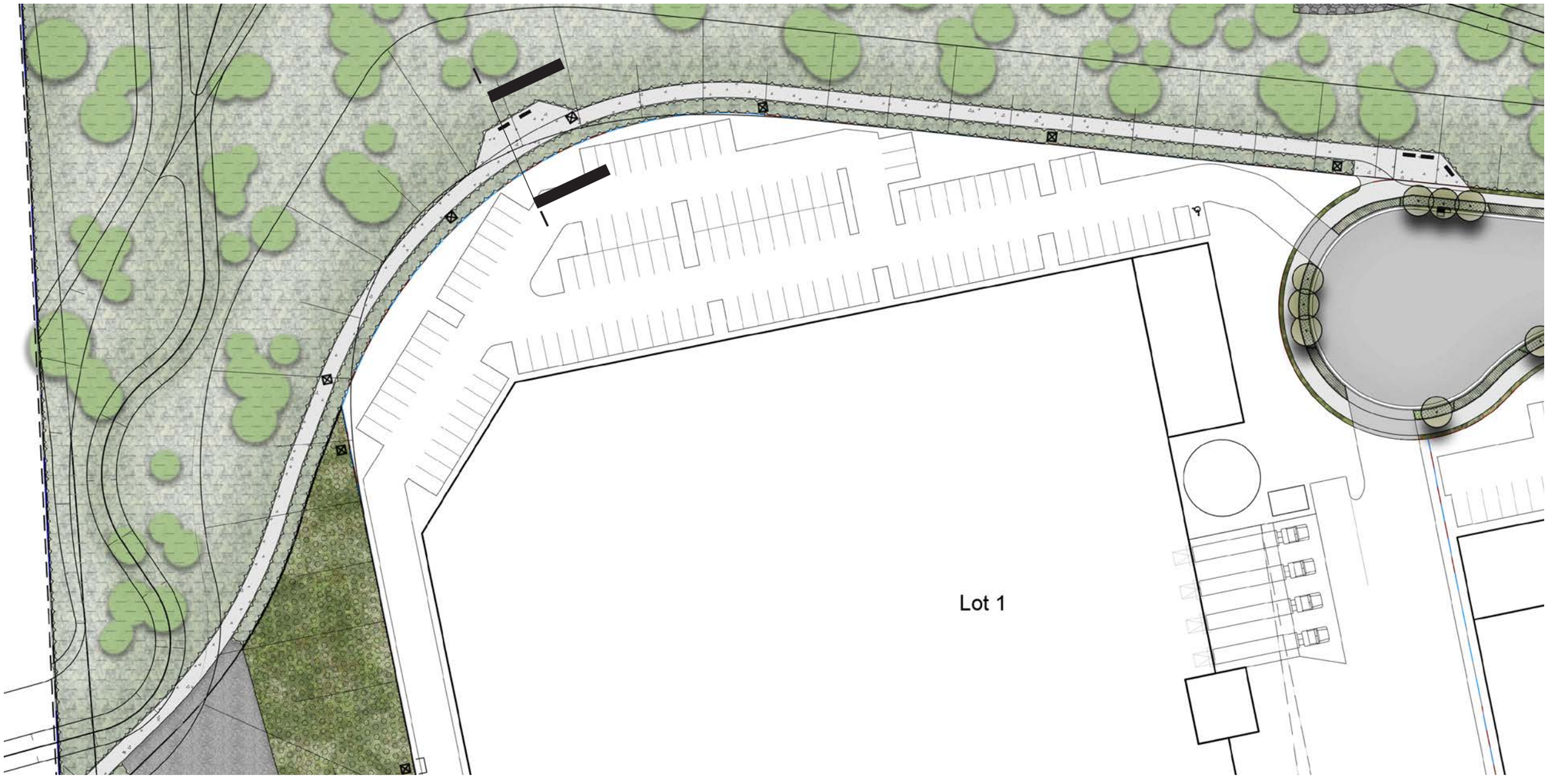
Riparian Zone Pathway and Nodes

A 1.8m wide pedestrian path will provide access along the riparian zone with a number of amenity nodes featuring seating.



Section I 1:200





Seating nodes

1.8m gravel pathway

SITE IMAGE
Landscape Architects

Aspect Industrial Estate Kemps Creek | Landscape Masterplan

Drawing Number	0016
Issue	G
Date	15.10.2020

Riparian Zone Planting

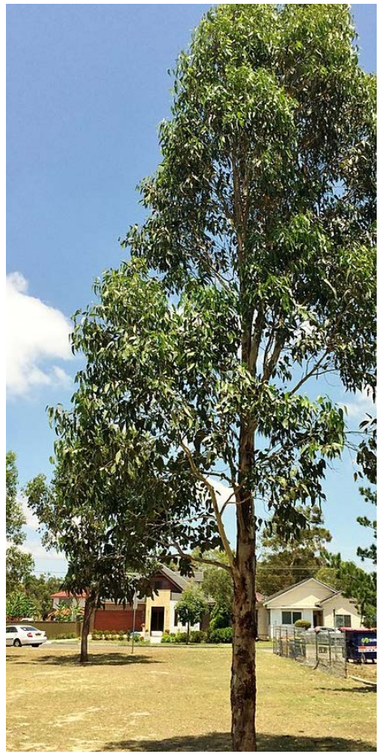
Species list from ‘Ecological Australia” vegetation communities and native species list.

Riparian Zone

Botanic Name	Common Name
Eucalyptus amplifolia	Cabbage Gum
Eucalyptus crebra	Narrow-leaved Ironbark
Eucalyptus eugenioides	Thin-leaved Stringybark
Eucalyptus moluccana	Grey Box
Eucalyptus tereticornis	Forest Red Gum +
Acacia decurrens	Sydney Green Wattle
Acacia falcata	-
Acacia implexa	Hickory Wattle
Acacia parramattensis	Parramatta Wattle
Bursaria spinosa	Blackthorn
Daviesia ulicifolia	Gorse Bitter Pea
Dillwynia sieberi	-
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush
Exocarpos cupressiformis	Native Cherry
Indigofera australis	Australian Indigo
Aristida ramosa	Purple Wiregrass
Aristida vagans	Threeawn Speargrass
Bothriochloa macra	Red Grass
Carex inversa	-
Chloris truncata	Windmill Grass
Dichelachne micrantha	Shorthair Plumegrass
Echinopogon caespitosus var. caespitosus	Tufted Hedgehog Grass
Echinopogon ovatus	Forest Hedgehog Grass
Entolasia marginata	Bordered Panic
Fimbristylis dichotoma	Common Fringe-sedge
Imperata cylindrica var. major	Blady Grass
Juncus usitatus	Common Rush
Lomandra filiformis	-
Lomandra multiflora subsp. multiflora	-
Microlaena stipoides var. stipoides	Weeping Meadow Grass
Poa labillardieri	Tussock Grass
Rytidosperma caespitosum	Whitetop
Rytidosperma racemosa var. racemosum	Wallaby Grass
Rytidosperma tenuior	-
Themeda australis	Kangaroo Grass
Asperula conferta	-
Brunoniella australis	Blue Trumpet
Centella asiatica	Indian Pennywort
Cheilanthes sieberi subsp. sieberi	Poison Rock Fern
Clematis glycinoides	Old Man’s Beard
Commelina cyanea	Creepinng Christian
Desmodium varians	Slender Tick-trefoil
Dianella longifolia	Blueberry Lily
Dichondra repens	Kidney Weed
Geranium solanderi	Native Geranium
Glycine clandestina	Twining Glycine
Glycine microphylla	Small-leaf Glycine
Glycine tabacina	-
Hardenbergia violacea	Purple Coral Pea
Plectranthus parviflorus	Cockspur Flower
Pultenaea microphylla	-
Solanum prinophyllum	Forest Nightshade

Indicative Species







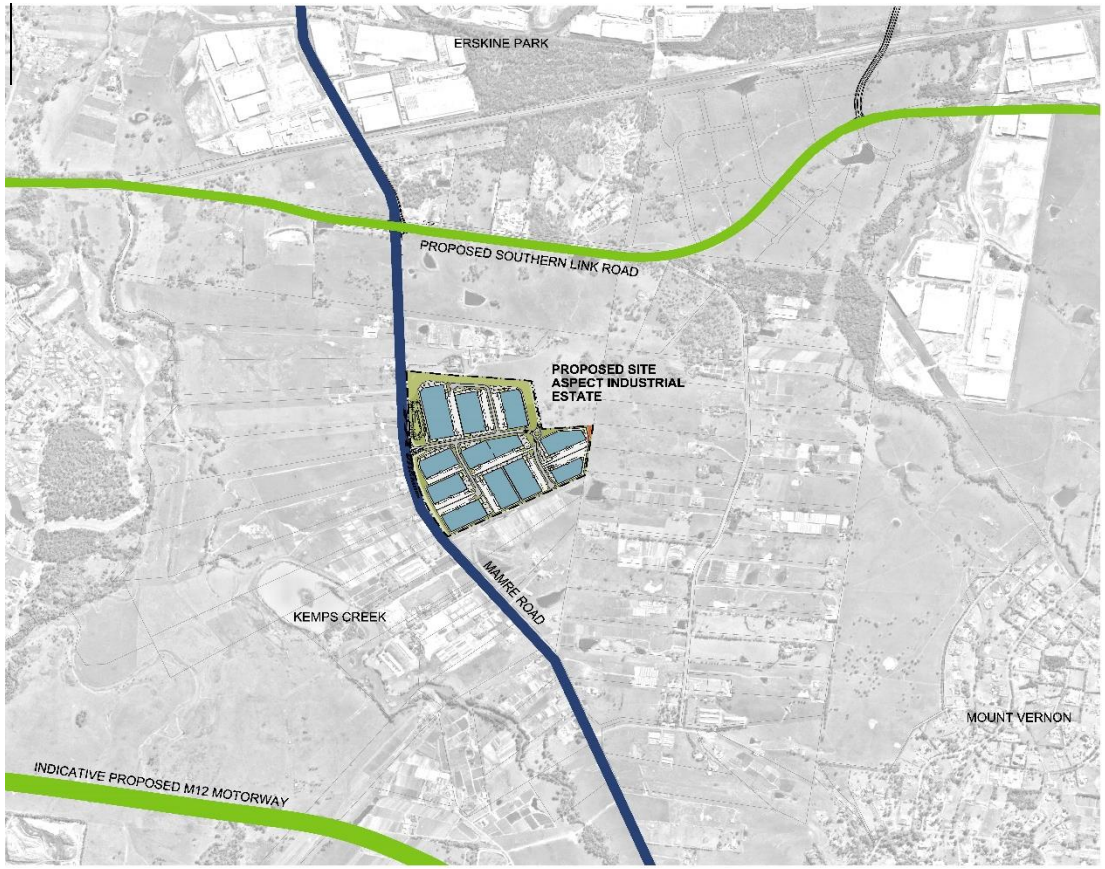





Design Statement - Aspect Industrial Estate

Lot 45-58 Mamre Road, Kemps Creek

VIEW OF BUILDING 1 AND CAFE



LOCATION PLAN

Aspect Vision

Mirvac's vision for the Aspect Industrial Estate (AIE) is to deliver an employment estate for future industrial and logistic users based around an emphasis on design quality, flexibility, technology and sustainability.

The Site

The site is located on the eastern side of Mamre Road and south of the proposed Southern Link Road with a total site area of 558,213sqm. & a total development area of 446,536sqm.

OVERALL SITE PLAN

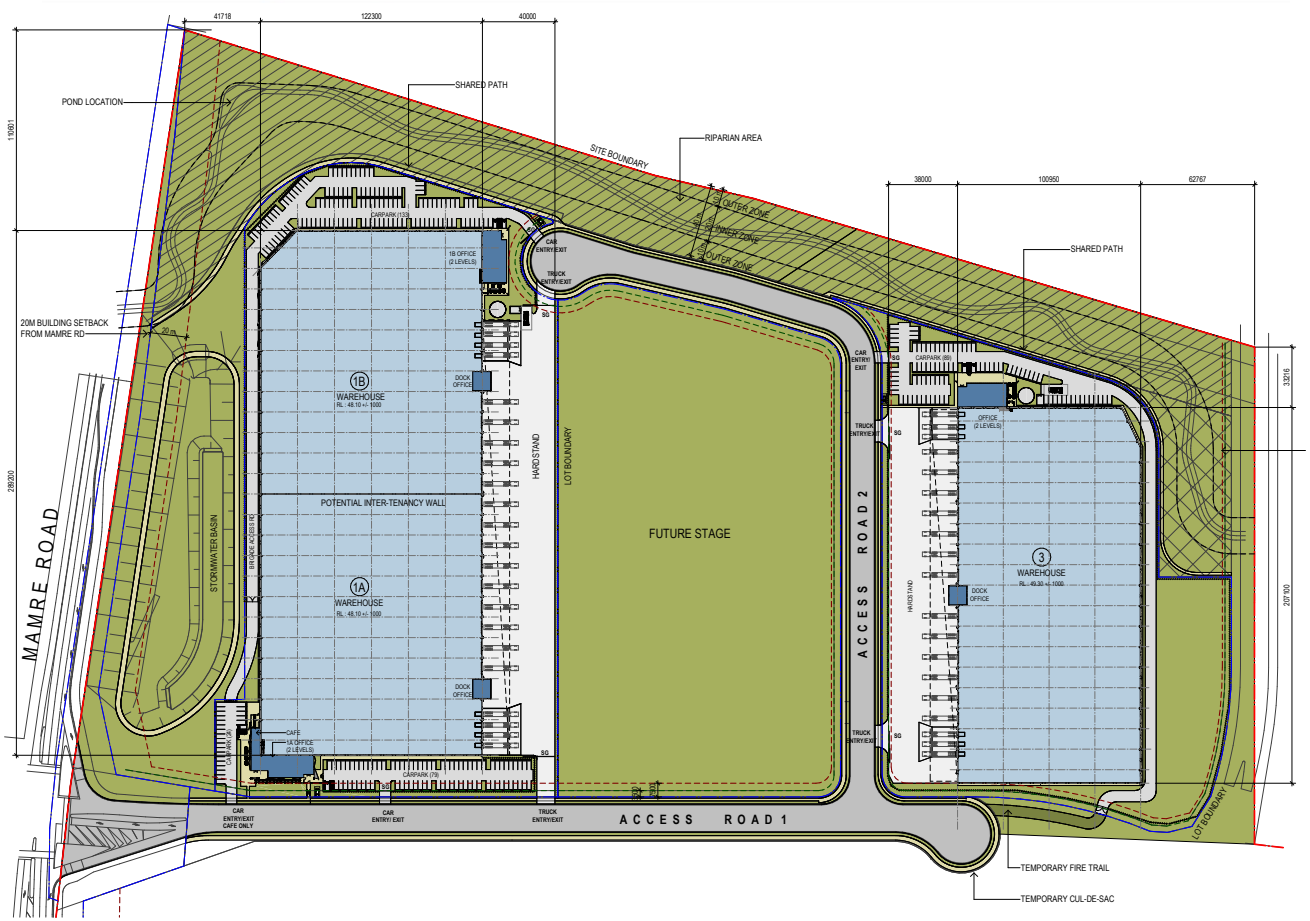
The Proposed Development

The proposed Concept Plan consists of eleven warehouses, ancillary offices with a GFA of 11,510 sqm and a café with a GFA of 122sqm. The main access to the site is via a central spine running east-west off Mamre Road. As you enter the estate the intersection of Mamre Road and Access Road 1 forms the focal point of the development. The proposed internal road layout, Access Roads 2, 3 & 4, have been designed to provide maximum flexibility & convenient access to the estate lots and neighboring sites. The Proposed Concept plan utilises landscaping and urban design features to compliment biodiversity values and outlined in the Urban Design Report and Landscaping Plans.

The lots on the northern side of access Road 1 (lots 1, 2 & 3) run north-south, whilst the lots on the southern side (lots 4 to 11) run east-west. This adds variety to the streetscape and allows for a more varied architectural typology. In accordance with the proposed Aspect Industrial Estate DCP, building setbacks along the Access roads are at 7.5m. other than Access Road 2 where the building setback to the west of Lot 3 is set at 5m. All landscape setbacks are set at 3.5m. There will be parking provisions of 162 cars across the estate in accordance with the AIE DCP.

Stage 1 Development

(Warehouses 1 and 3)



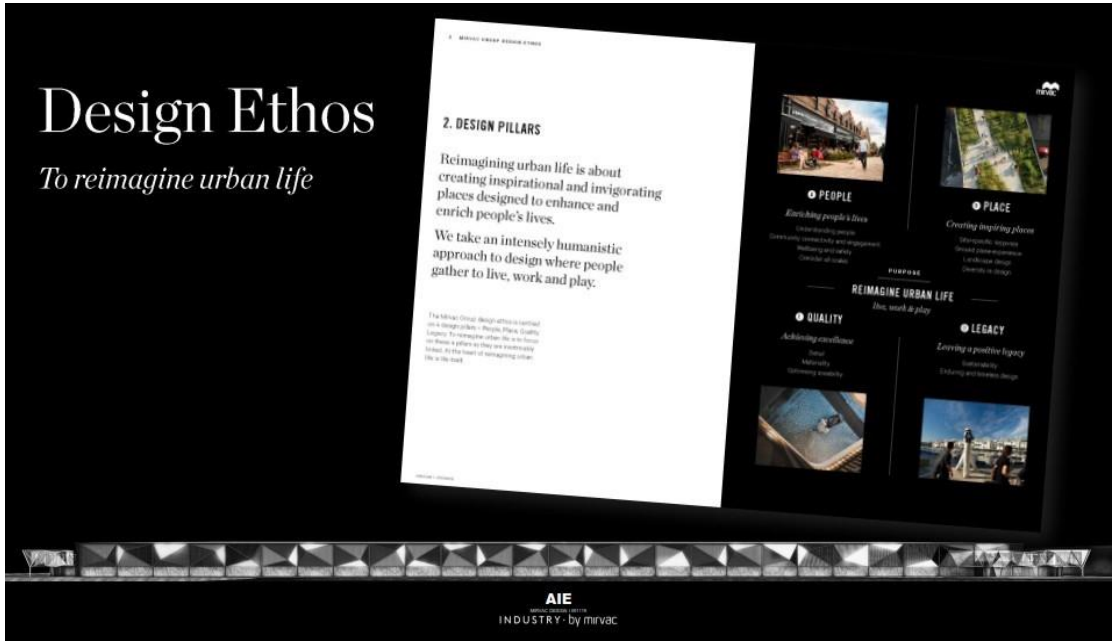
SITE PLAN LOTS 1 & 3.

The Stage 1 Development includes;

- Warehouse 1 which has an area of 35,060 sqm, office area of 1,460sqm and 223 carparks; and
- Warehouse 3 which has an area of 20,735 and 700-sqm of office.
- A Café which has an area of 122sqm and 26 carparks

Car & truck access to each lot is separated for safety & functionality as part of the development proposal. Warehouse 1 building is setback from the Mamre Road frontage. The setback provides space for the feature landscaping at the entry of the site, a landscaped stormwater basin & a riparian area to the north/west, corner of the site.

The height, bulk and scale of the buildings has been developed to meet the tenant requirements and is line with other industrial typologies in the surrounding areas. The design of the offices aims to implement architectural elements to breakup elevations and create visual interest, minimising perceived bulk and provide visually balanced forms. Office components are positioned to further break up the site and define the corner condition of warehouses along Mamre Road. Where possible, offices have been situated to take advantage of any views across to the west.



Architectural Design Ethos

SBA Architects collaborated with Mirvac Design to establish an Architectural Design Ethos and Vision for Aspect Industrial Estate.

Mirvac's Design Ethos is to reimagine urban life to create inspirational and invigorating places designed to enhance people's lives focused around 4 pillars:

- People
- Place
- Quality
- Legacy

See a copy of the Mirvac Design Ethos document for AIE provided at Appendix A which was created in collaboration with SBA Architects.

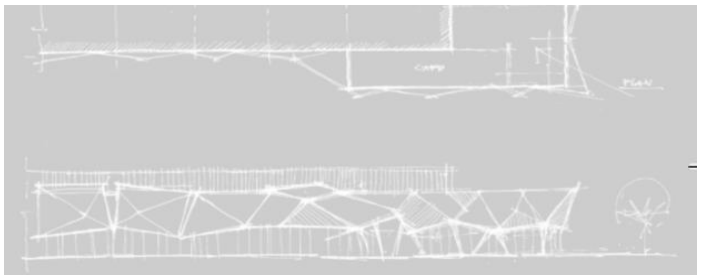
CAFÉ CONCEPT SKETCH

The Concept

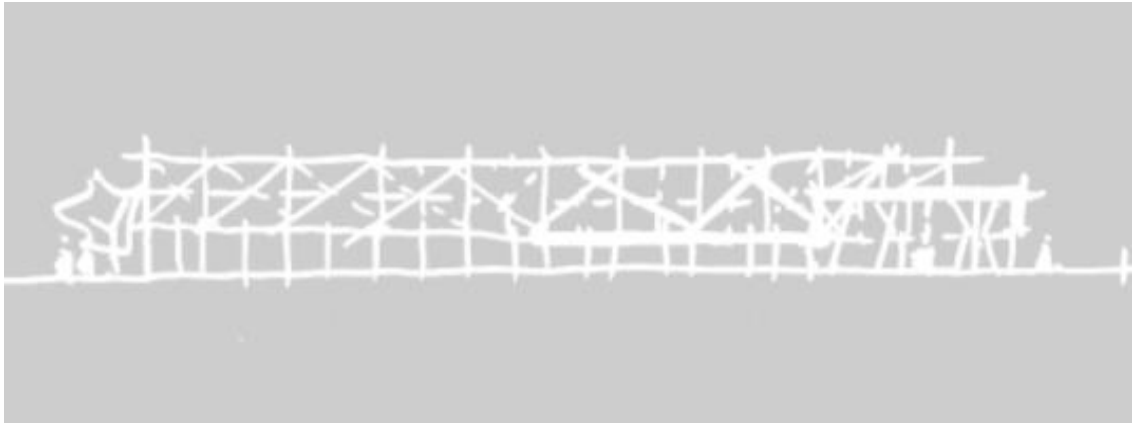
The overall concept for the development is to reflect the heritage of the site, being farming, and forestry. The forms have been developed from the original wool sheds and the forested landscape.

The jointing in the concrete base represents the tree trunks, while the articulated cladding represents the trees with its multi-faceted branches. The offices are wrapped in perforated metal screens providing dappled shaded areas, under a "canopy."

The color pallet used reflects the Australian landscape and is concisely muted, natural and restrained.



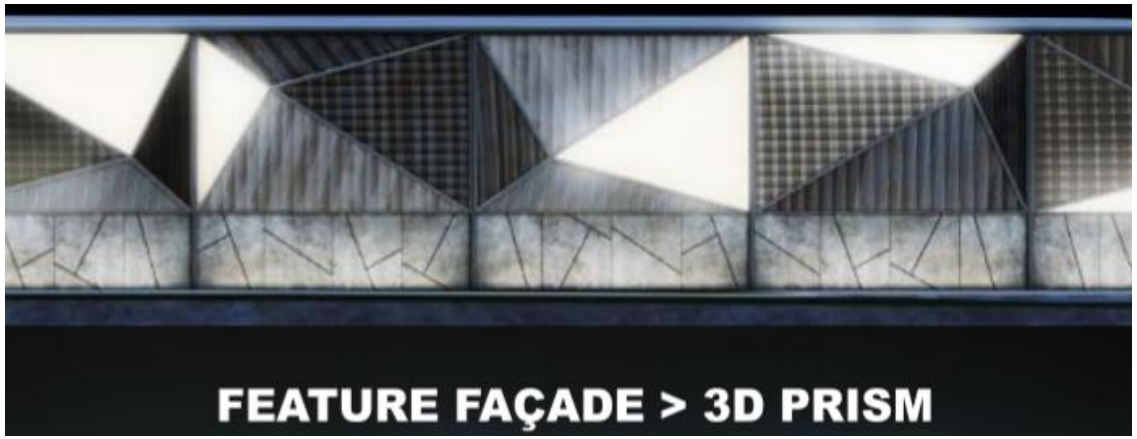
CAFÉ CONCEPT SKETCH



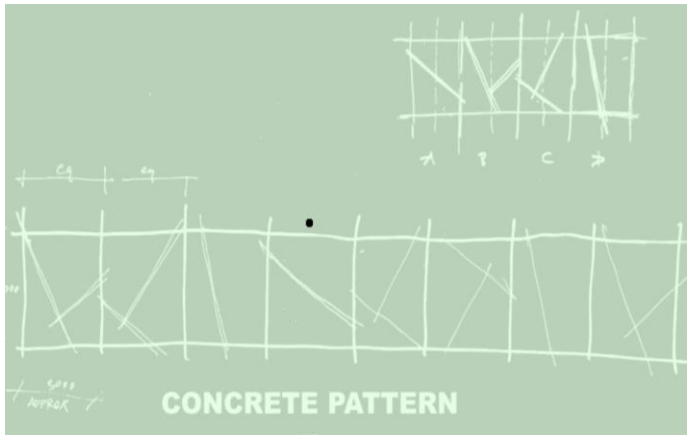
WAREHOUSE FACADE CONCEPT SKETCH

Warehouse Design

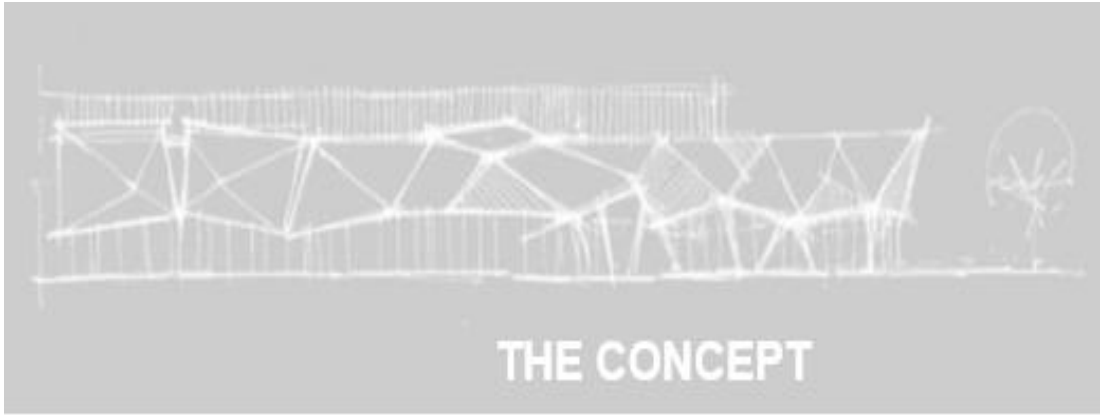
External articulation of the warehouses has been achieved through the balance of large expanses of cool grey metal cladding. Translucent panels and diagonal recesses with LED lighting adds interest at night that reflect the concept & articulate the form. Precast concrete dados are used to "float" the warehouse and define the ground plane. The change in colors and texture will be incorporated into the design of all the buildings across the estate, providing a consistent architectural language.



WAREHOUSE FACADE CONCEPT STUDY



CONCRETE DADO CONCEPT SKETCH



OFFICE SCREEN CONCEPT SKETCH

OFFICE CONCEPT STUDY

Office Design

The office component of the development, is an elaboration of the overall concept. The articulated and faceted façade peels out to form a perforated "canopy" giving dappled shading and forming an iconic architectural language. This dynamic geometric over the glass office facade, which has diagonal random mullions, a representation of tree trunks.

Materials have been selected to reflect the industrial nature of the building, being concrete, steel and metal cladding, while still reflecting the colors of the Australian landscape.

PERFORATED METAL SCREEN IMAGE

NATURAL COLOURS & MATERIALS

AUSTRALIAN COLOUR PALETTE

Integration of architecture & landscape

Aspect Industrial Estate will feature a number of initiatives to create a strong, layered landscape master plan that is well integrated into the urban space and built fabric. This will include the reinforcement of entries, avenues, bounded with appropriately selected trees and native plants. The offices will incorporate a diverse range of textured materials, to celebrate the entry experience and encourage spaces for external meeting, break-out and recreation for the office populations.

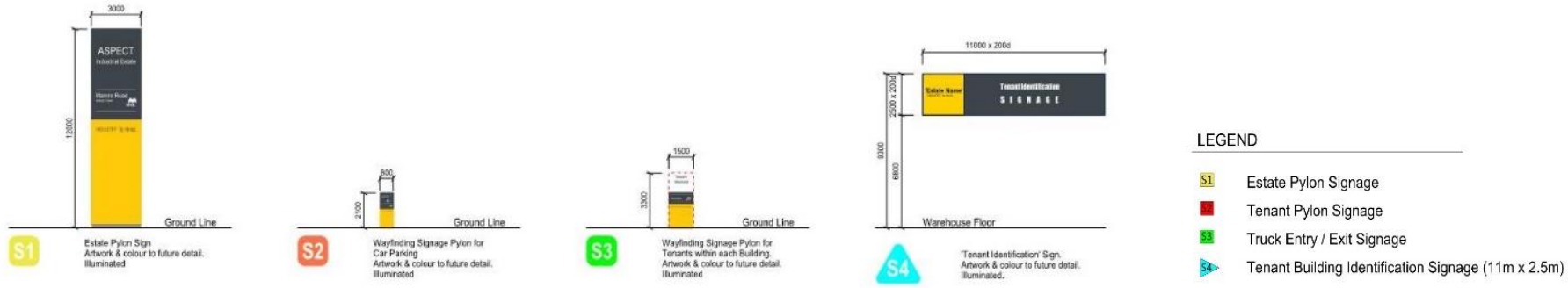
Landscaping for the AIE responds to the key interfaces of the estate with the public domain, adjoining properties and environmentally sensitive lands such as riparian corridors. The landscape strategy for the AIE aims to reflect a consistent image and maintenance regime across the entire estate and respond to its unique site characteristics.

The entry landscape located to the northern side of Mamre Road provides a landscape arrival feature. An open lawn area with a series of banding grasses and concrete inlays frames the entry road and provides a design framework and entry statement to the AIE.

Signage

The AIE signage has been designed in accordance with Mirvac's corporate signage strategy and includes a combination of typologies ranging from estate pylon signage at the entrance to wayfinding and tenant identification signage throughout. Tenancy signage will be integrated in the facade, addressing the immediate street frontage. This approach has been further adapted to the secondary facades facing public roads with a smaller logo & company signage, clearly identifying the premises without excessive repetition.

SIGNAGE PLAN



SIGNAGE TYPES


Reimagine urban life
mirvac
AIE
INDUSTRY · by mirvac

Design Ethos

To reimagine urban life

2. DESIGN PILLARS

Reimagining urban life is about creating inspirational and invigorating places designed to enhance and enrich people's lives.

We take an intensely humanistic approach to design where people gather to live, work and play.

The Mirvac Group design ethos is centred on 4 design pillars – People, Place, Quality, Legacy. To reimagine urban life is to focus on these 4 pillars as they are inextricably linked. At the heart of reimagining urban life is life itself.

VERSION 1. 07032019

mirvac

A PEOPLE

Enriching people's lives

Understanding people
Community connectivity and engagement
Wellbeing and safety
Consider all scales

B PLACE

Creating inspiring places

Site-specific response
Ground plane experience
Landscape design
Diversity in design

PURPOSE

REIMAGINE URBAN LIFE

live, work & play

C QUALITY

Achieving excellence

Detail
Materiality
Optimising useability

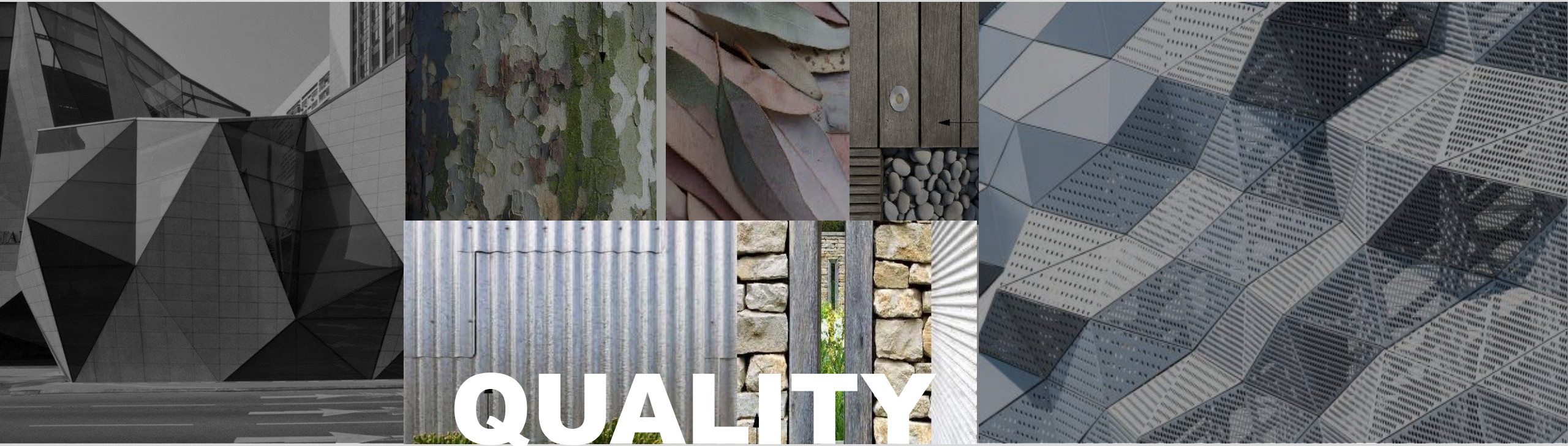
D LEGACY

Leaving a positive legacy

Sustainability
Enduring and timeless design


PEOPLE

PLACE



OUR VISION

AIE

LEGACY

OUR VISION

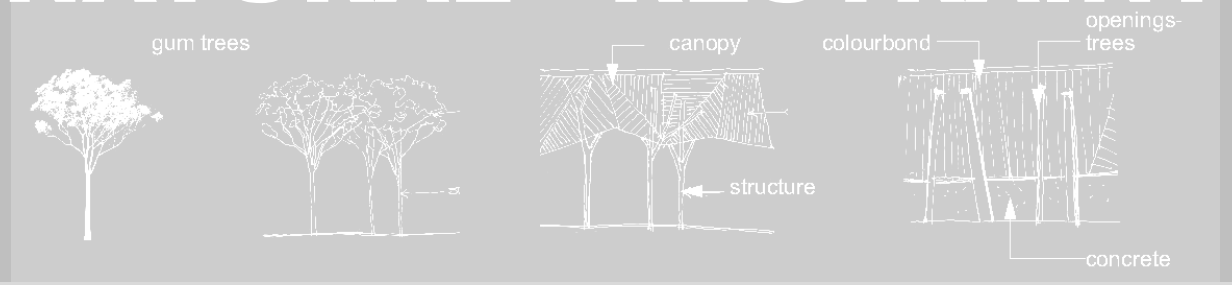
AIE

MIRVAC DESIGN I 091119

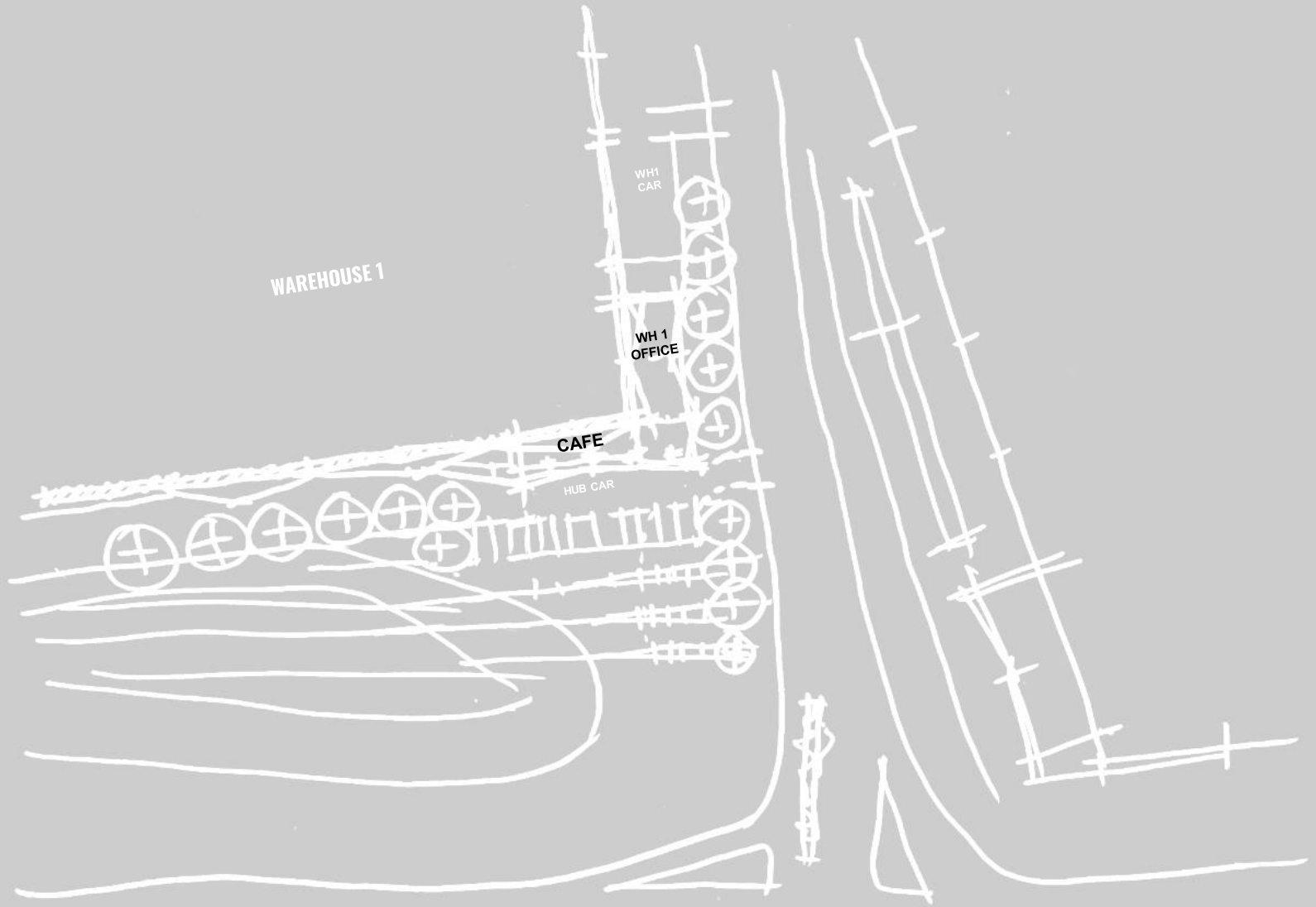
INDUSTRY · by mirvac

OUR CONCEPT

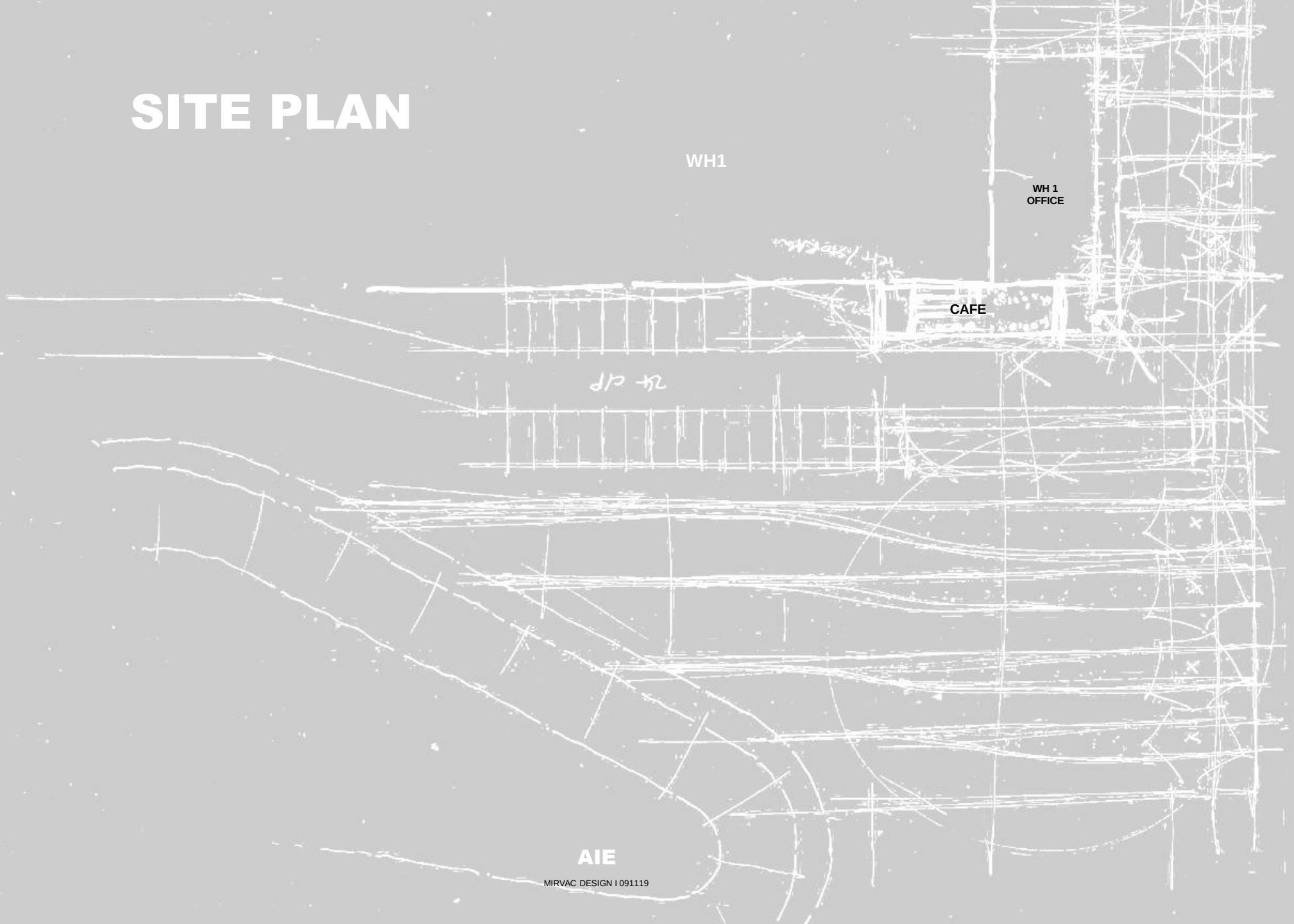
NATURAL+ RESTRAINT



OUR PLAN

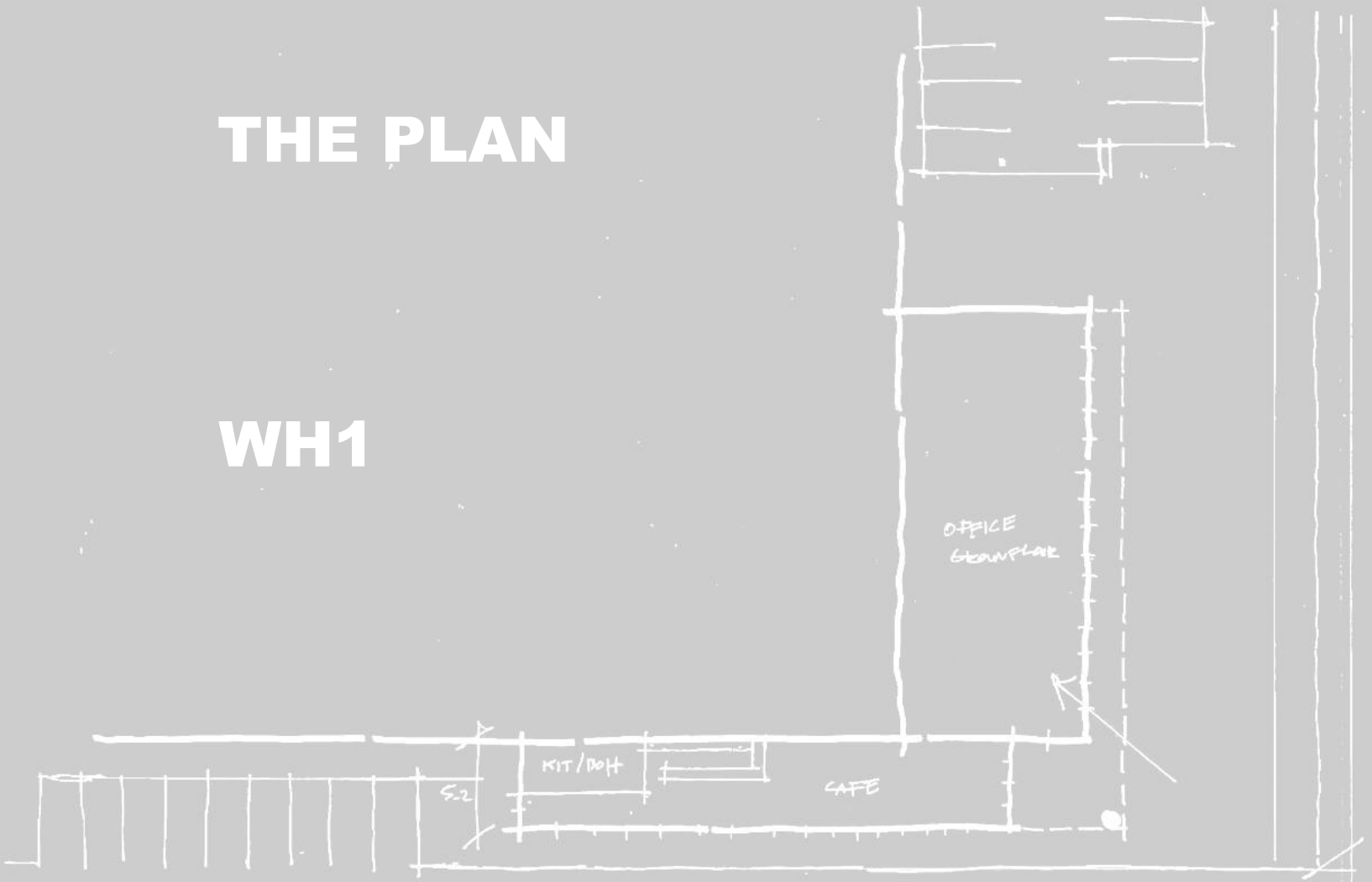


SITE PLAN



THE PLAN

WH1



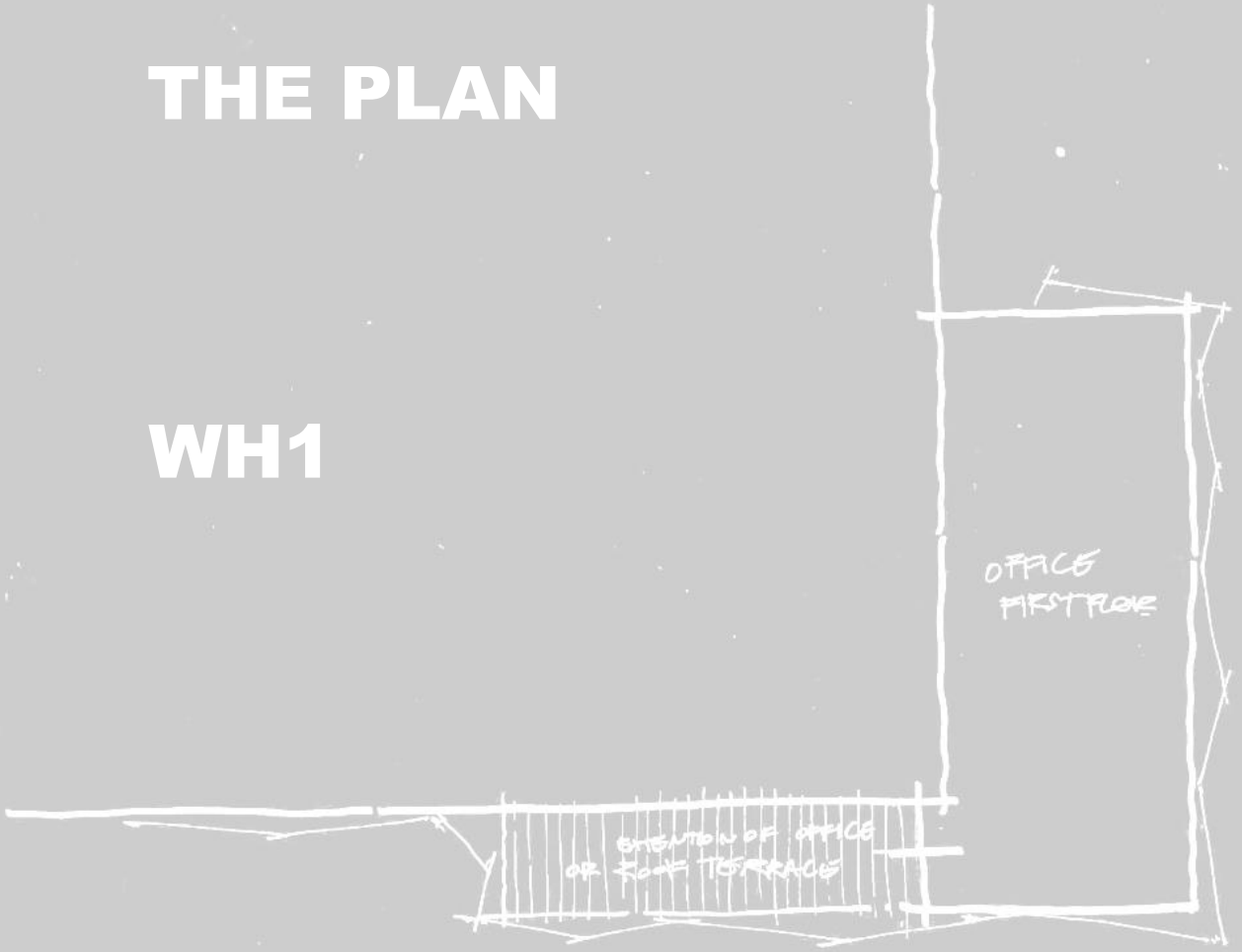
GROUND +0

GROUND FLOOR
1:250@A3

AIE

THE PLAN

WH1



LEVEL 1

FIRST FLOOR
1:250 @ A3

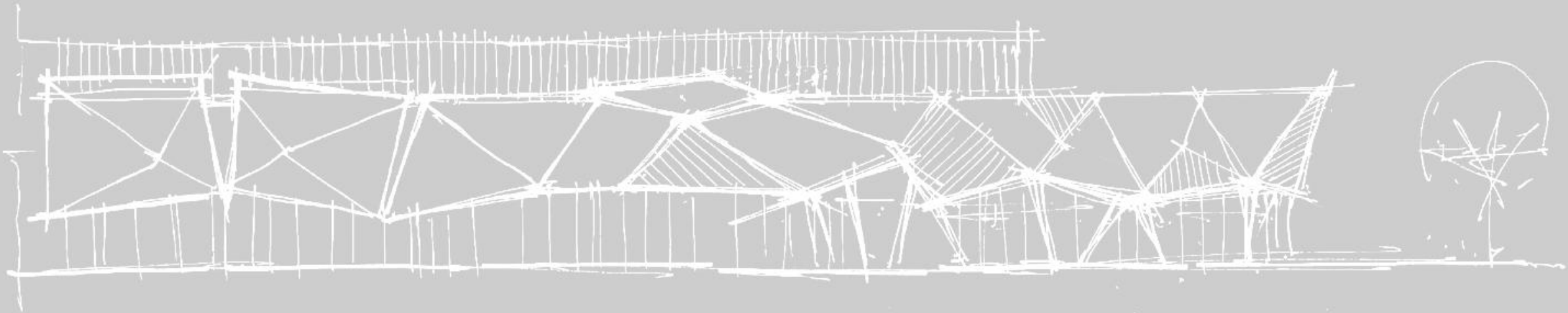
AIE

OUR FACADE

AIE

OUR HUB

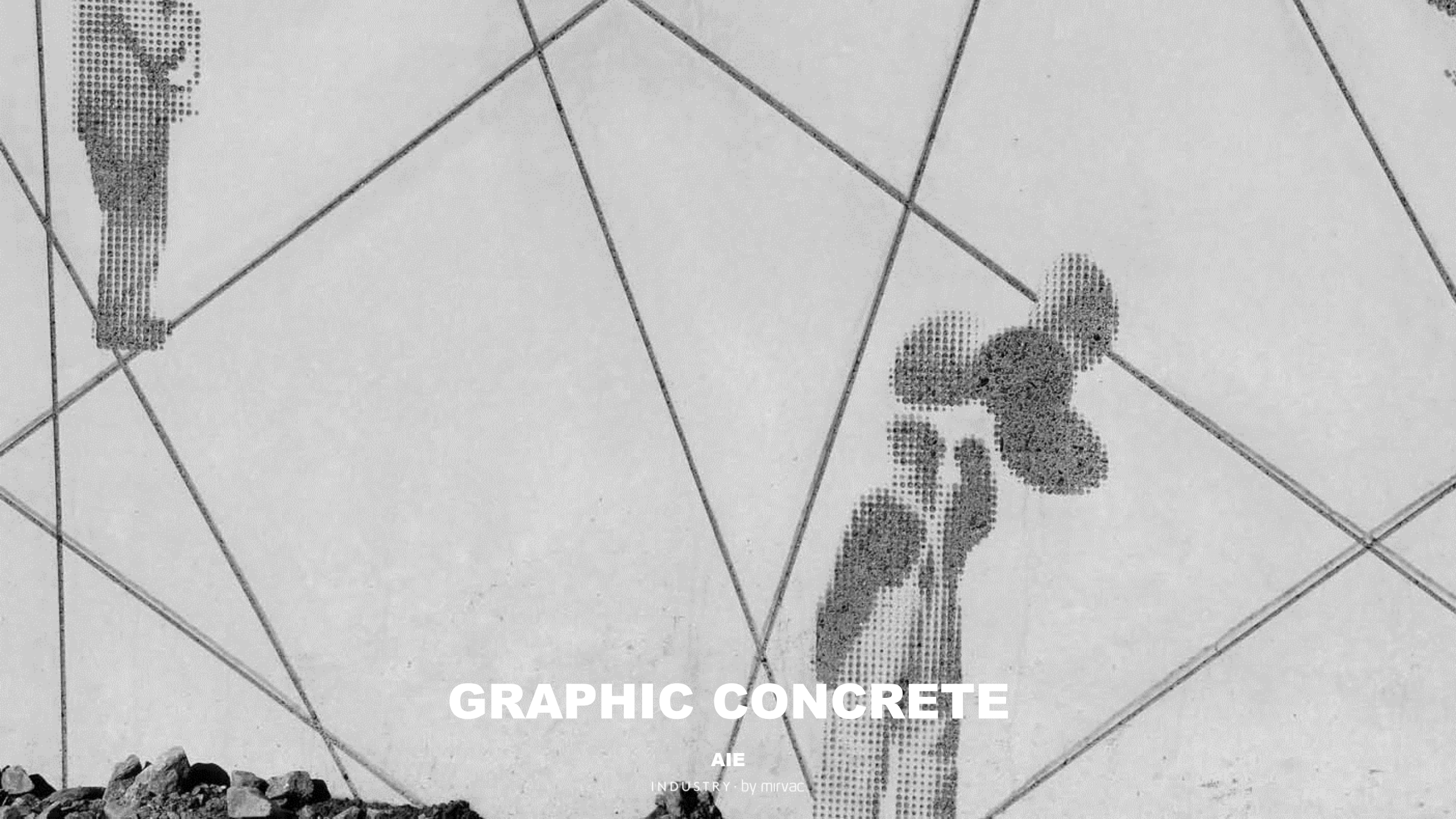
AIE



THE CONCEPT

CONCRETE PATTERN

AIE



GRAPHIC CONCRETE

AIE

INDUSTRY · by mirvac

THE HUB CONCEPT

AIE

WH1 OFFICE SOUTH

AIE

MIRVAC DESIGN I 091119

THE BREAKOUT

AIE

WEST FACADE

WH1 OFFICE NORTH

AIE

MIRVAC DESIGN I 091119

THE VISION

AIE

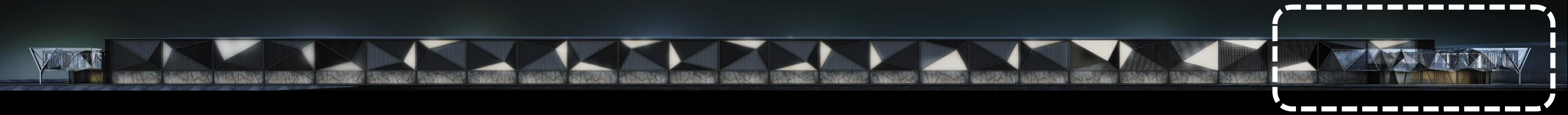
AIE

MIRVAC DESIGN | 091119

THE VISION

AIE

THE HUB FETAURE FACADE



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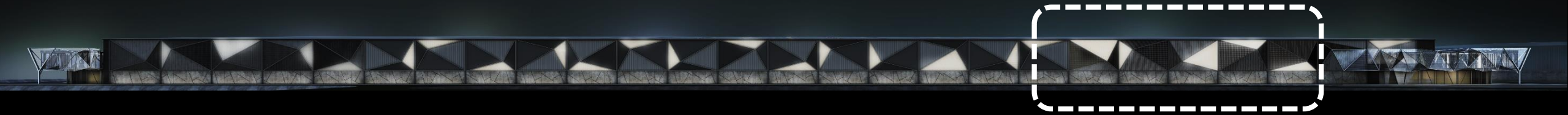

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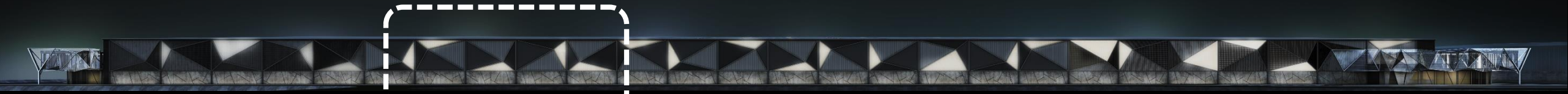
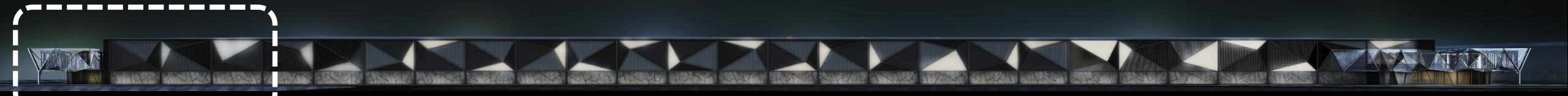


AIE

THE NORTHERN FACADE



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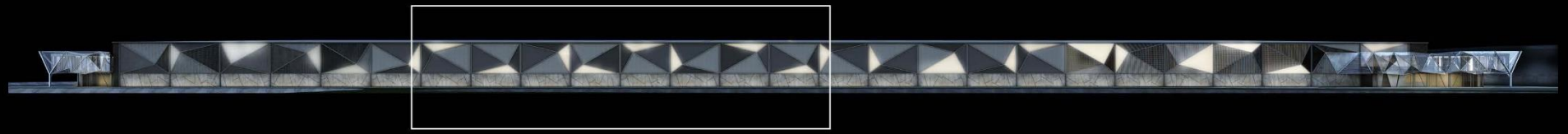

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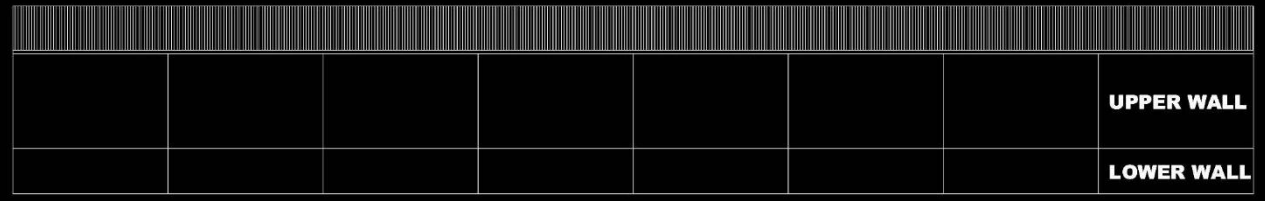

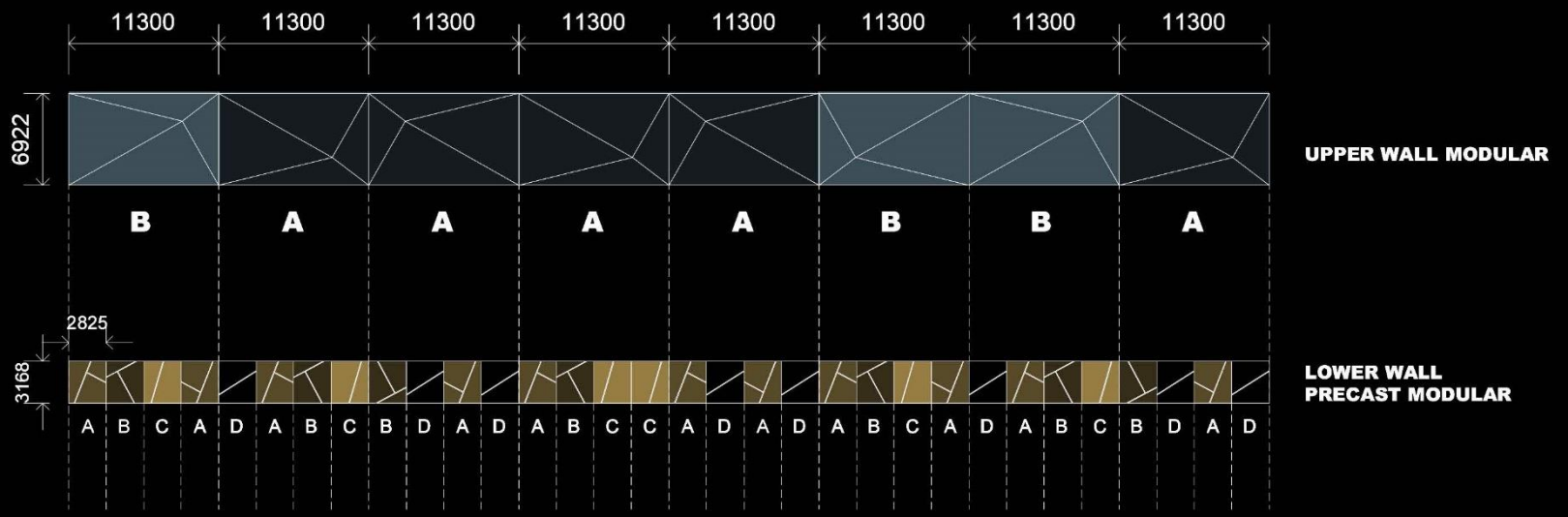

AIE

MIRVAC DESIGN I 091119

WAREHOUSE WESTERN FACADE

1:250@A2

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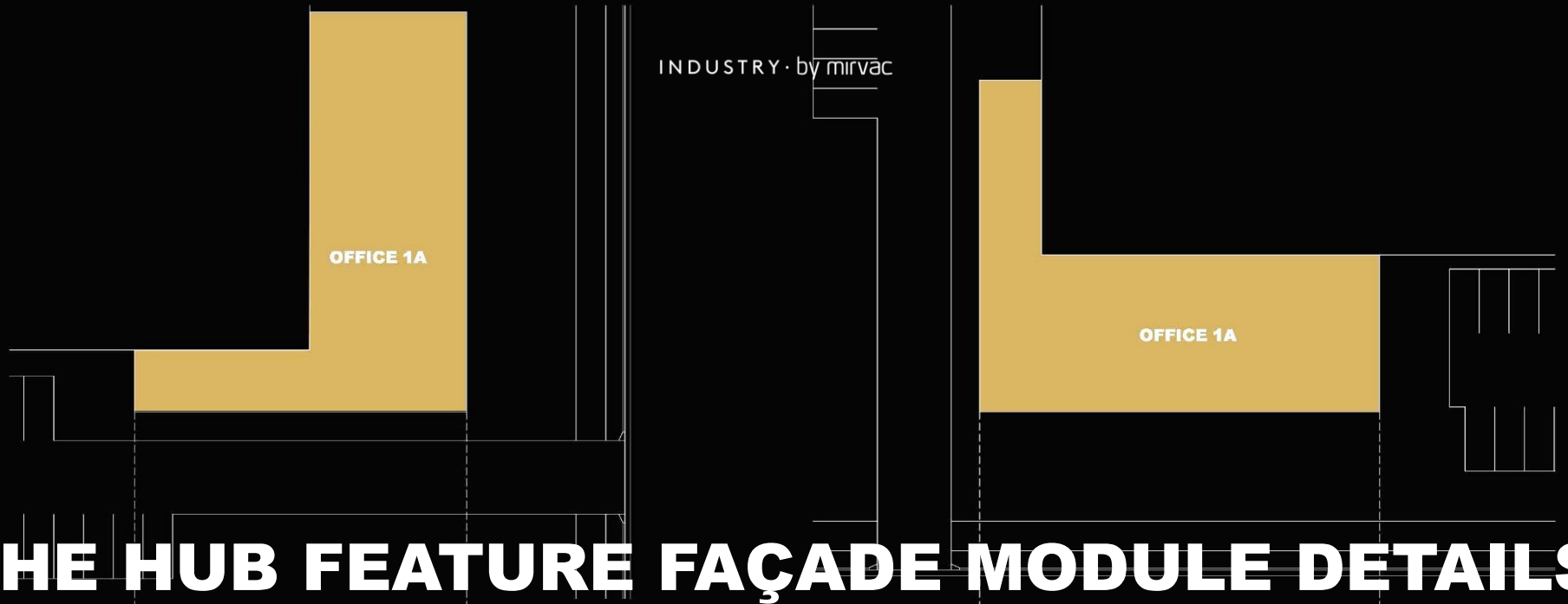
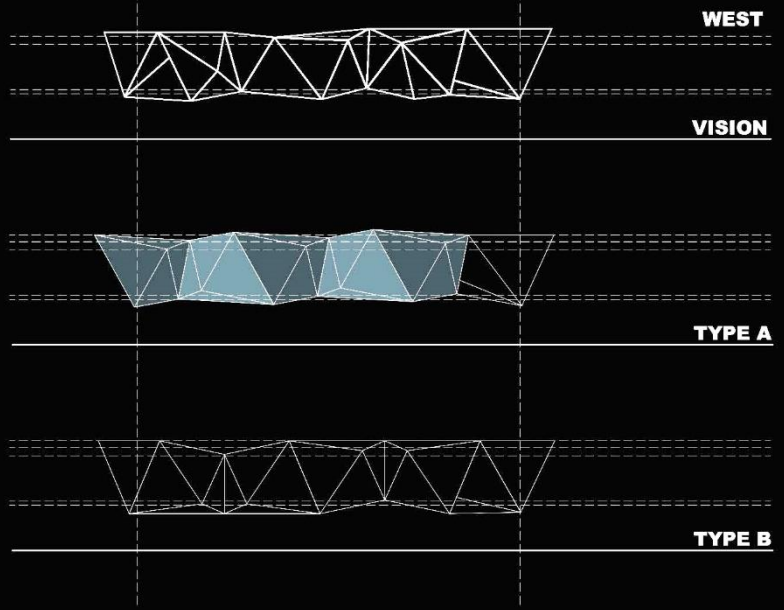
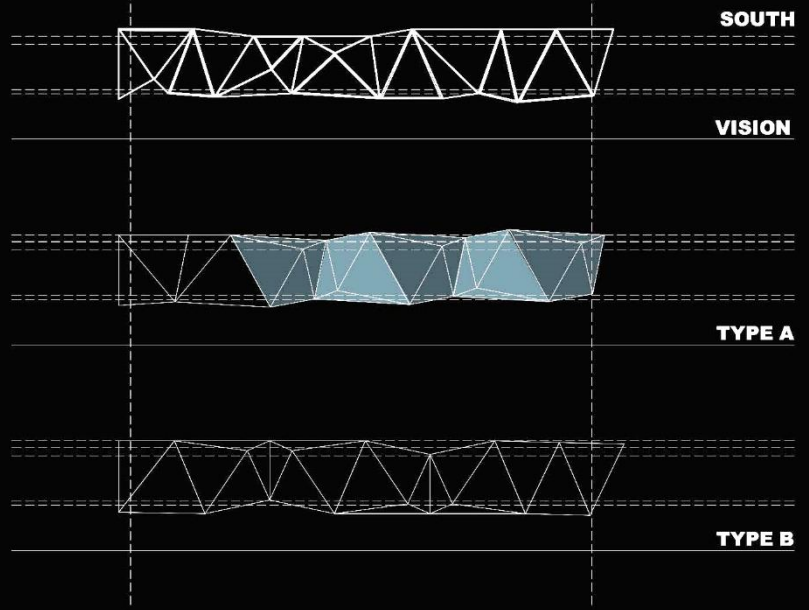


THE HUB FEATURE FAÇADE MODULE DETAILS





AIE

MIRVAC DESIGN I 091119

OFFICE 1A WESTERN FACADE

OFFICE 1A SOUTHERN FACADE

1:250@A2

AIE

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MIRVAC DESIGN I 091119

Aspect Industrial Estate, Mamre Rd, Kemps Creek

Landscape Masterplan

October 2020

SITE IMAGE
Landscape Architects

Contents Page

Introduction

The landscape concept masterplan demonstrates the vision for the **Aspect Industrial Estate**.

This Masterplan report is to be read with the following landscape documentation as well as civil, architectural and ecological reports.

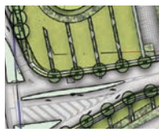
This report and the following doucments have been prepared to respond to SEARS condition for detailed landscape plans.

'Detailed landscaping plans'

S1-INF-101	Stage 1 Infrastructure Plan
S1-INF-102	Stage 1 Infrastructure Plan
S1-INF-103	Stage 1 Infrastructure Plan
S1-INF-104	Stage 1 Infrastructure Plan
S1-INF-105	Stage 1 Infrastructure Plan
S1-INF-106	Stage 1 Infrastructure Plan
S1-INF-107	Stage 1 Infrastructure Plan
S1-INF-108	Stage 1 Infrastructure Plan
S1-INF-108	Stage 1 Infrastructure Detail Landscape Plan
S1-INF_501	Landscape Details
S1-INF_601	Landscape Sections
S1-INF_602	Landscape Sections
S1-INF_603	Landscape Sections
S1-1_101	Stage 1 Lot 1 Landscape Plan
S1-1_102	Stage 1 Lot 1 Landscape Plan
S1-1_103	Stage 1 Lot 1 Landscape Plan
S1-3_101	Stage 1 Lot 3 Landscape Plan
S1-3_102	Stage 1 Lot 3 Landscape Plan
S1-3_103	Stage 1 Lot 3 Landscape Plan

Landscape Concept Masterplan

scale: 1:4000 @ A3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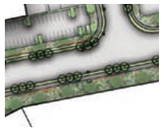
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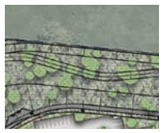
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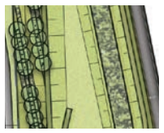
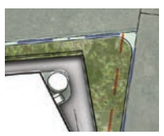

Stormwater Basin


Boundary Planting


On Lot Landscape

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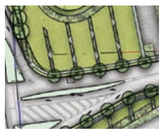
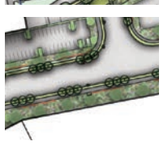
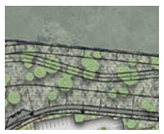
Drawing Number	003
Issue	G
Date	15.10.2020

Landscape Concept Masterplan Stage 1


Estate Entry Feature


Streetscape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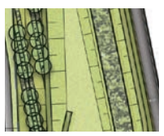

Stormwater Basin


Boundary Planting


On Lot Landscape

0 40 100m 200m 400m

scale: 1:4000 @ A3

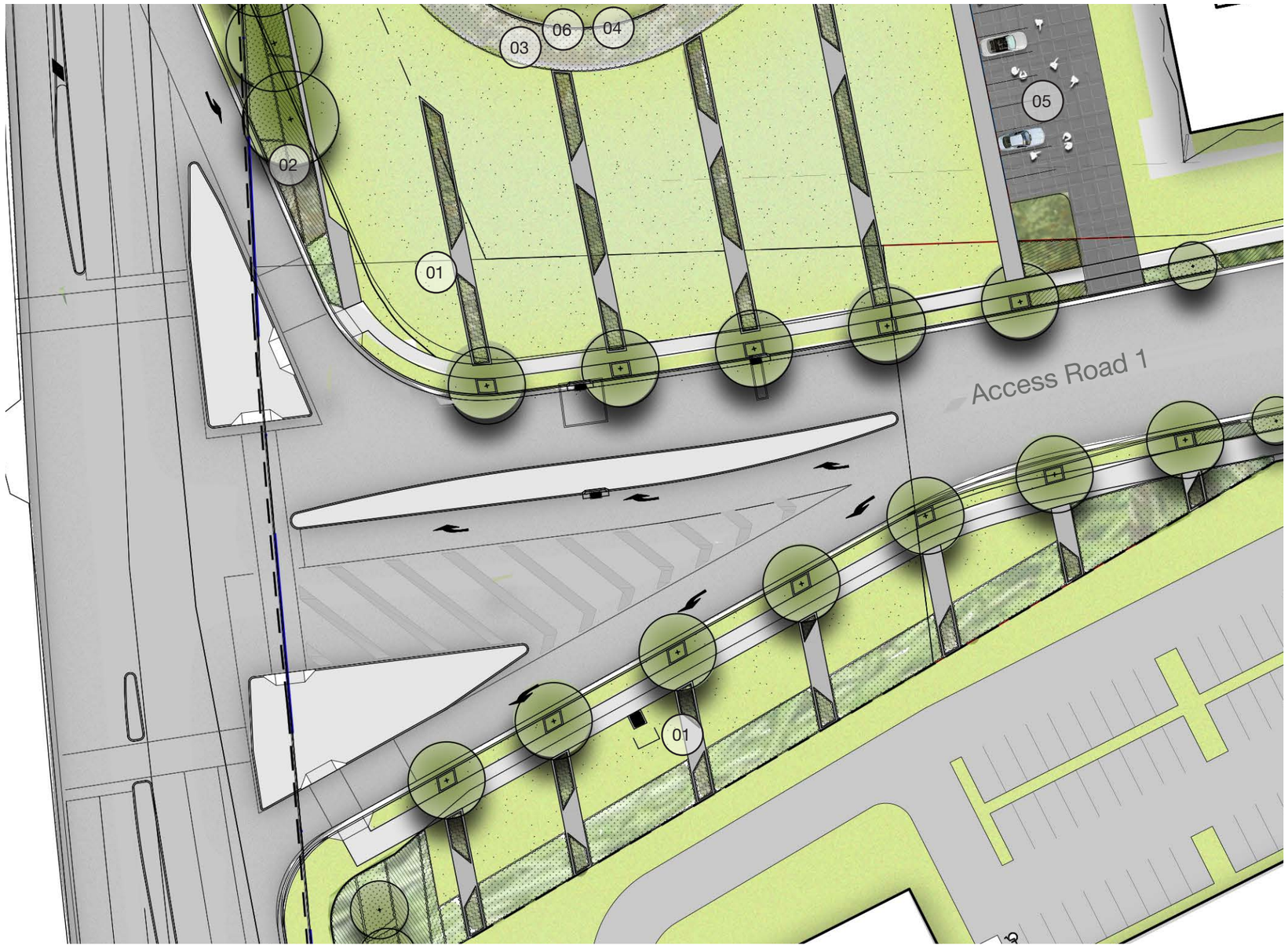
SITE IMAGE
Landscape Architects

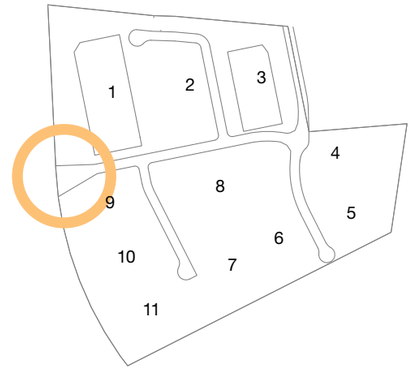
Aspect Industrial Estate Kemps Creek | Landscape Masterplan

Drawing Number	004
Issue	G
Date	15.10.2020

Entry Landscape

The entry landscape located to the northern side of the Mamre Road entry provides a landscape arrival feature. A open lawn area with a series of banding of grasses and concrete inlays frames the entry road and provides a framework for future amenity in this area. The adjacent stormwater basin's planting will be visible for this area. Connecting the Entry feature to Lot 1 is a carpark with feature unit paving to encourage permeability of pedestrians between the building, carpark and broader landscape.





01 Feature blade walls

02 Entry massed grasses and groundcover planting

03 Massed Grasses to stormwater basin perimeter

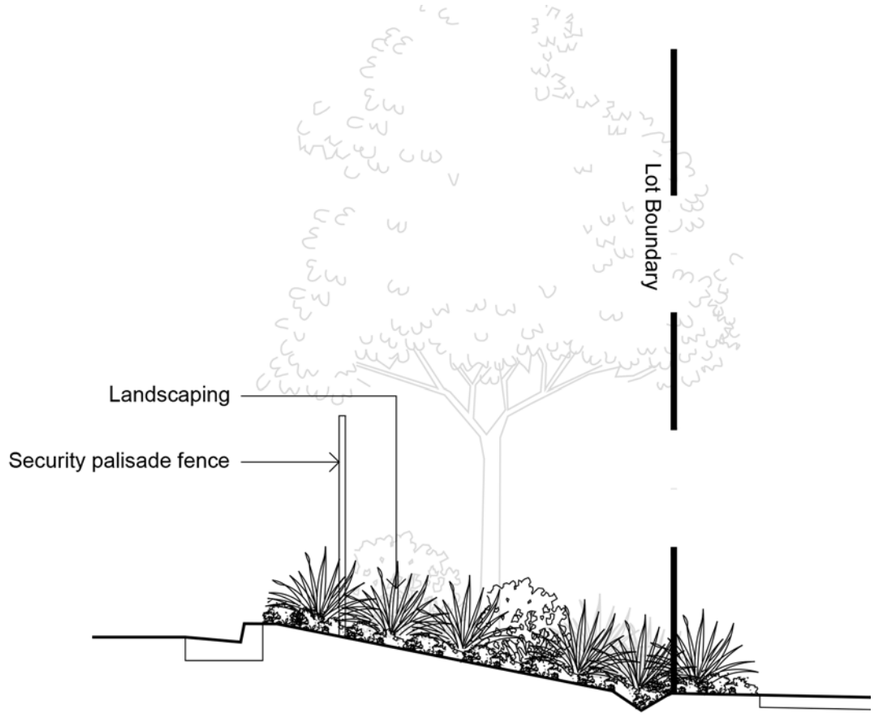
04 Stormwater maintenance pathway

05 Shared parking area

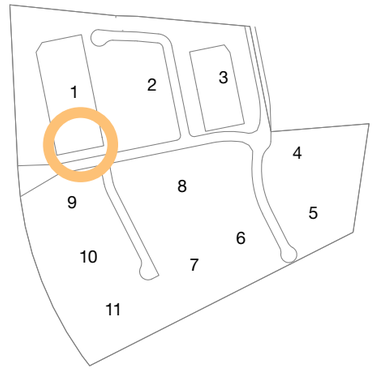
06 Fence to stormwater basin

Typical Lot Frontage

The lot frontages are the main presentational frontage of lots to the estate road. Planting to the frontages will consist of a variety of native and exotic, shrubs, groundcovers and small-medium trees. Security fencing is to be positioned amongst the landscape to recede into planting.



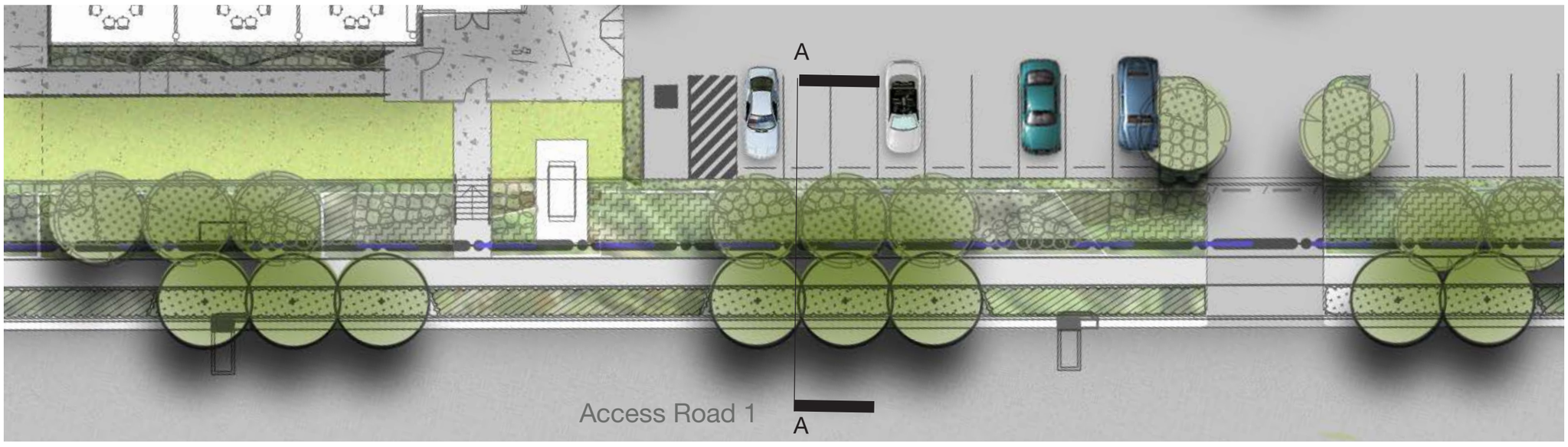
Section A Lot Frontage Cross Section 1:50



01 Planting in blocks

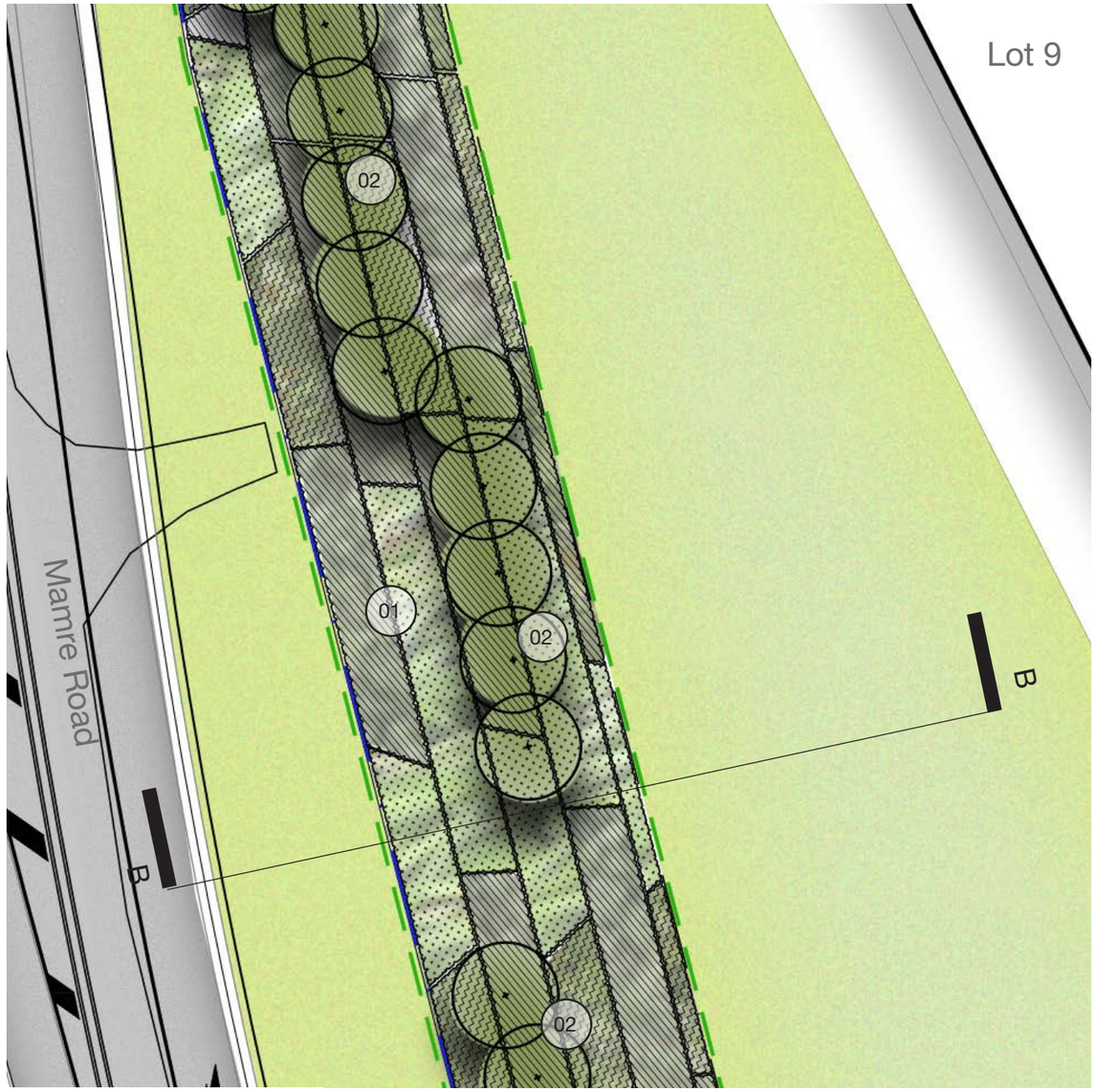
02 Massed low grasses and groundcovers

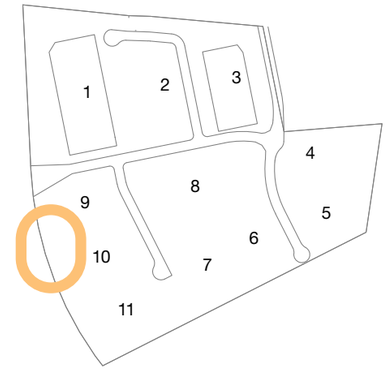
03 Boundary tree planting



Mamre Road Frontage

The Mamre Road frontage consists of embankments sloping from lots down the road, Massed planting of shrubs, grasses and groundcovers is proposed with large canopy trees.



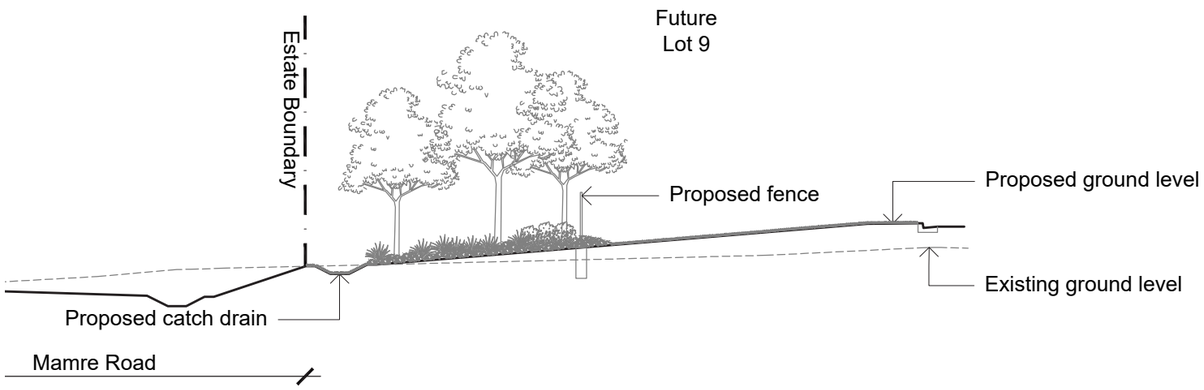


01 Massed planting

02 Canopy Tree Planting

Massed grasses and shrubs

Canopy tree planting



Section B Mamre Rd Frontage Cross Section 1:50

Mamre Road Frontage Planting

Botanic Name	Common Name	Mature Size (h x w) (m)	
TREES			
Corymbia maculata	Spotted Gum	30 x 8	
Eucalyptus eugenioides	Thin leaved stringybark	20 x 8	
Melaleuca styphelioides	Prickly Leaved Paperbark	8 x 6	
SHRUBS & ACCENTS			
Acmena smithii var. minor	Lilly Pilly	2 x 2	
Callistemon 'Endeavour'	Bottlebrush	2x3	
Callistemon 'Little John'	Dwarf Bottle Brush	1 x 1	
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush		
Melaleuca linariifolia 'Claret Tops'	Honey Myrtle	1 x 1	
Phormium tenax 'Purpureum'	Bronze Flax	1.5 x 1	
Westringia fruticosa	Coastal Roasemary	2 x 2	
GRASSES AND GROUNDCOVERS			
Carpobrotus glaucescens	Pigface	.15 x 1	
Gazania tomentosa	Silver Gazania	.15 x 1	
Hardenbergia violacea	Purple Coral Pea		
Lomandra longifolia	Matt Rush	1 x 1	
Myoporum parvifolium	Creeping Boobialla	.3 x 2	
Poa 'Kingsdale'	Tussock Grass	.3 x .6	
Pennisetum 'Nafray'	Swamp Foxtail Grass	.6 x .6	
Trachelospermum jasminoides	Star Jasmine	0.3 x 0.3	

Indicates species from endemic vegetation community

Indicative Species

Estate Roads

Primary Access Roads

Road 1, Road 3

Secondary Roads

Road 2, Road 4

Understorey Planting

Corymbia maculata

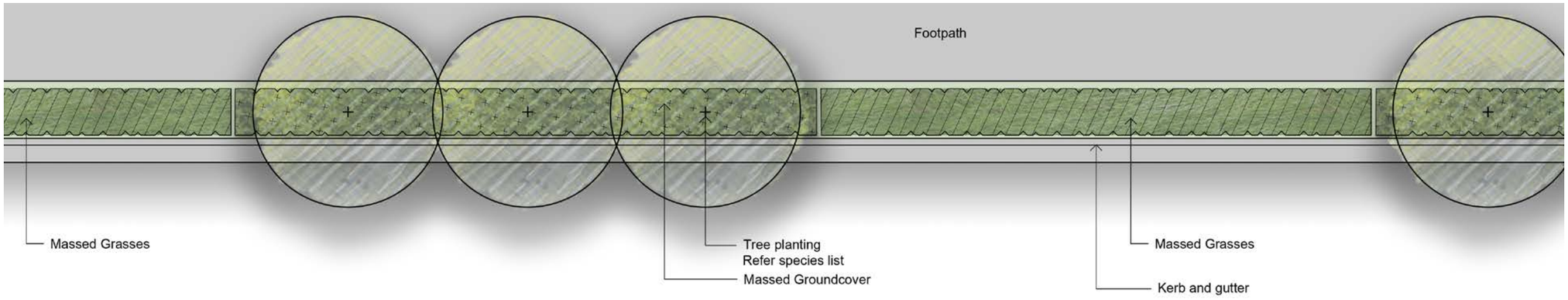
Spotted Gum

E. crebra

Narrow Leaved Ironbark

Myoporum parvifolium to understory of trees

Massed grasses to alternate



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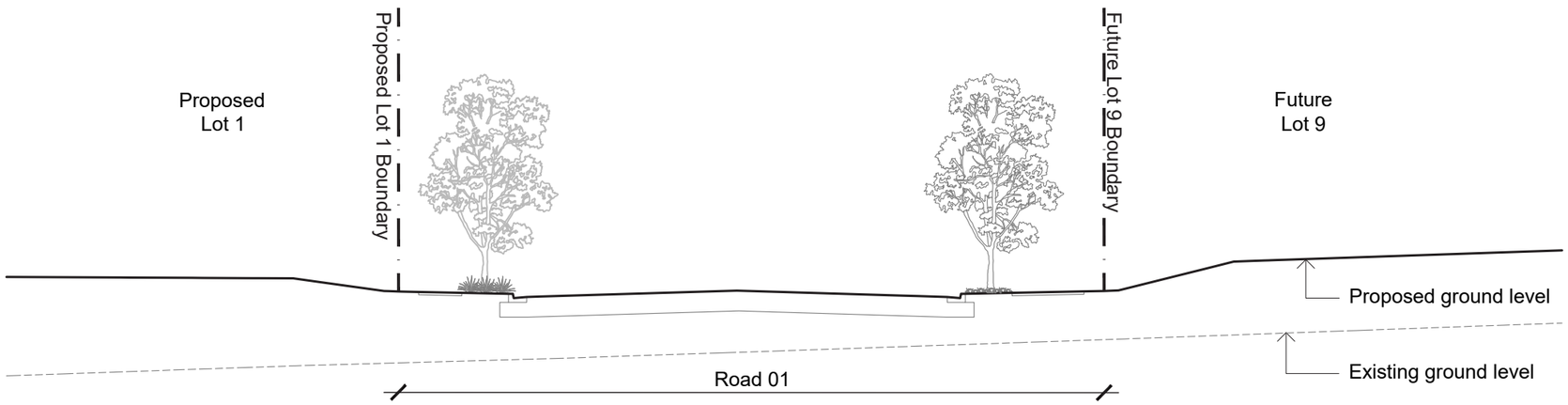
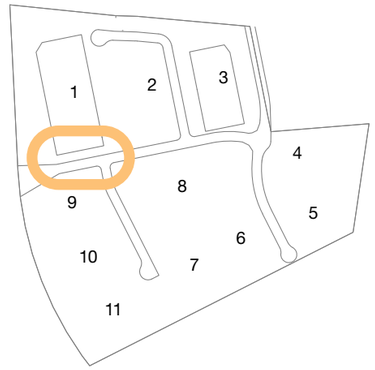
Date	15.10.2020

Primary Access Road

Estate Roads are proposed to have groups of canopy trees with low grass and groundcover underplanting. Tree species will vary based on the street hierarchy.



Section C Road 01 Section 1:50

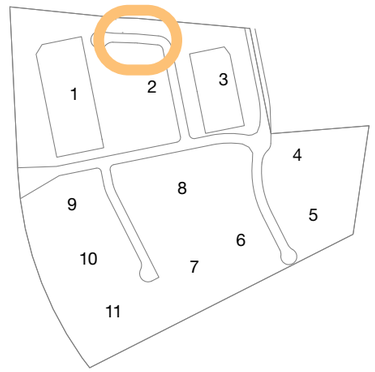


SITE IMAGE
Landscape Architects

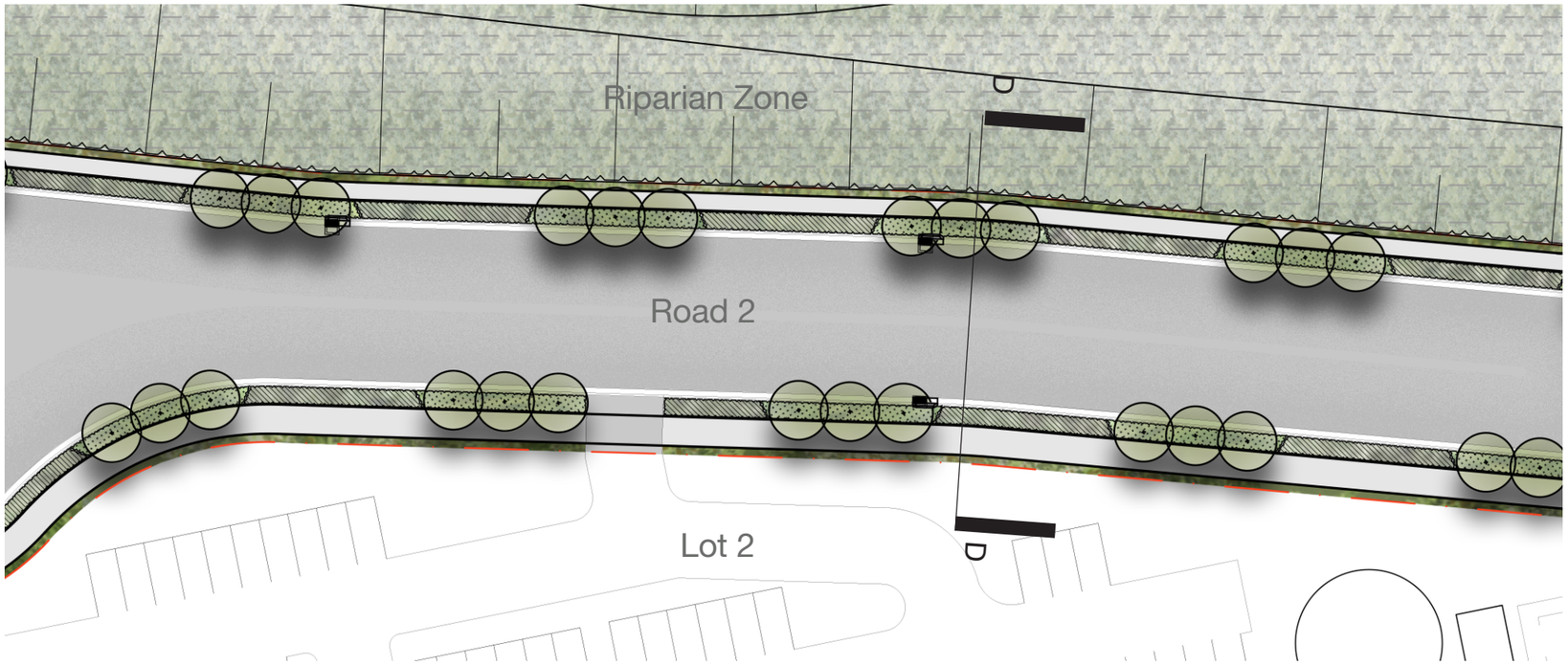
Aspect Industrial Estate Kemps Creek | Landscape Masterplan

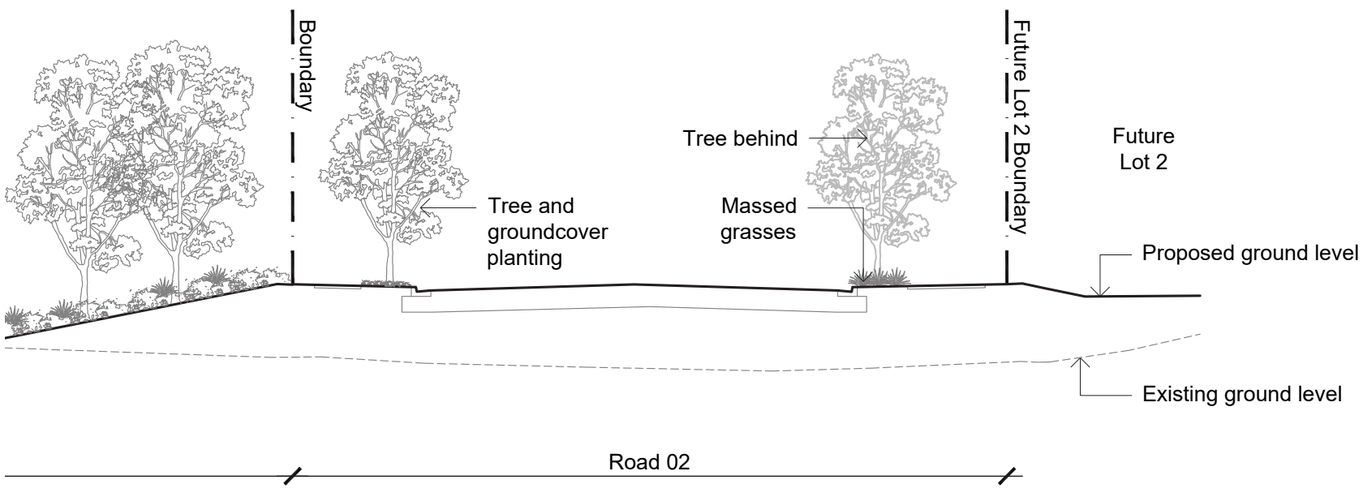
Drawing Number	0010
Issue	G
Date	15.10.2020

Secondary Road



Secondary roads feature the same general arrangement as primary roads. Groups of trees can be positioned to allow for the arrangement of services and utilities such as lightpoles.

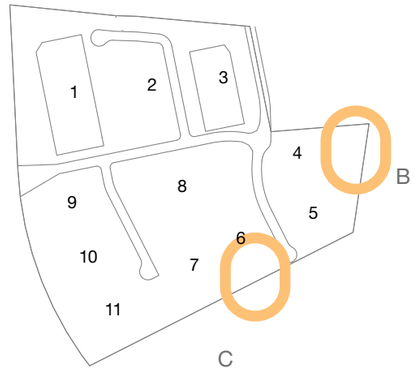




Section D Road 2 Section 1:50

Boundaries

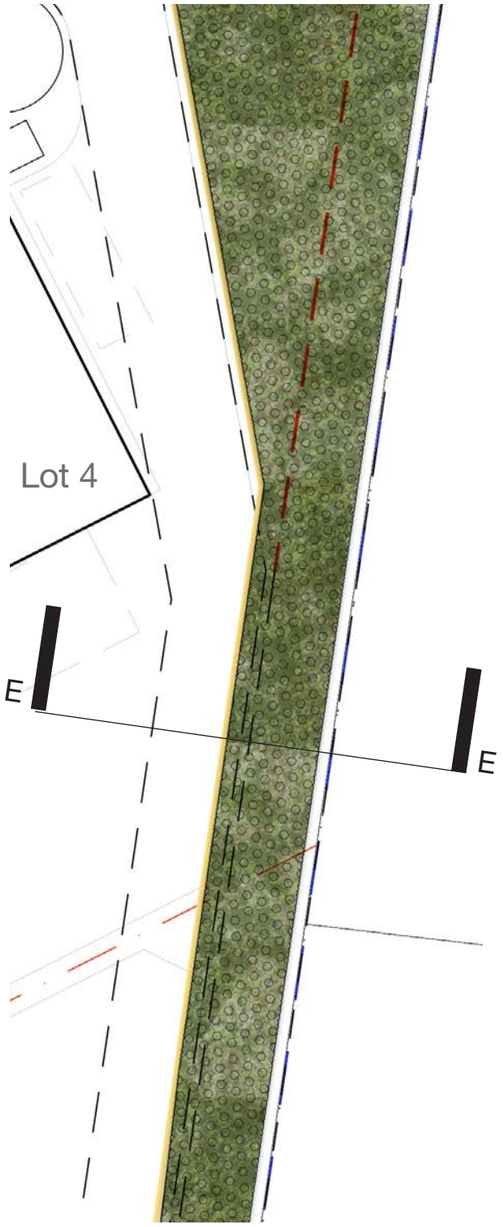
Boundary treatments will feature planting of native shrub grass and groundcovers. In locations where there is a retaining wall below cascading plants will be provided to break up the mass of the wall.

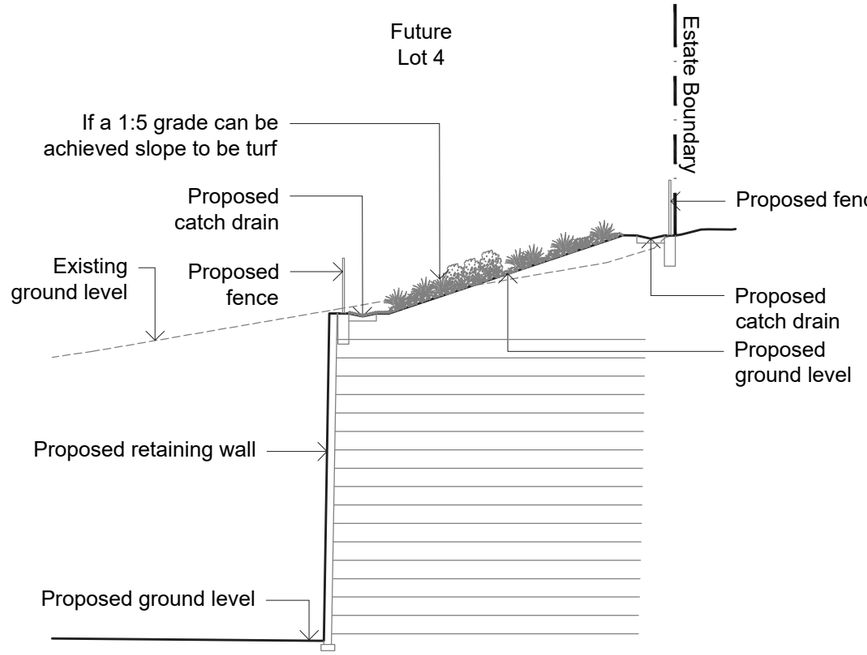


Shrub and grass planting

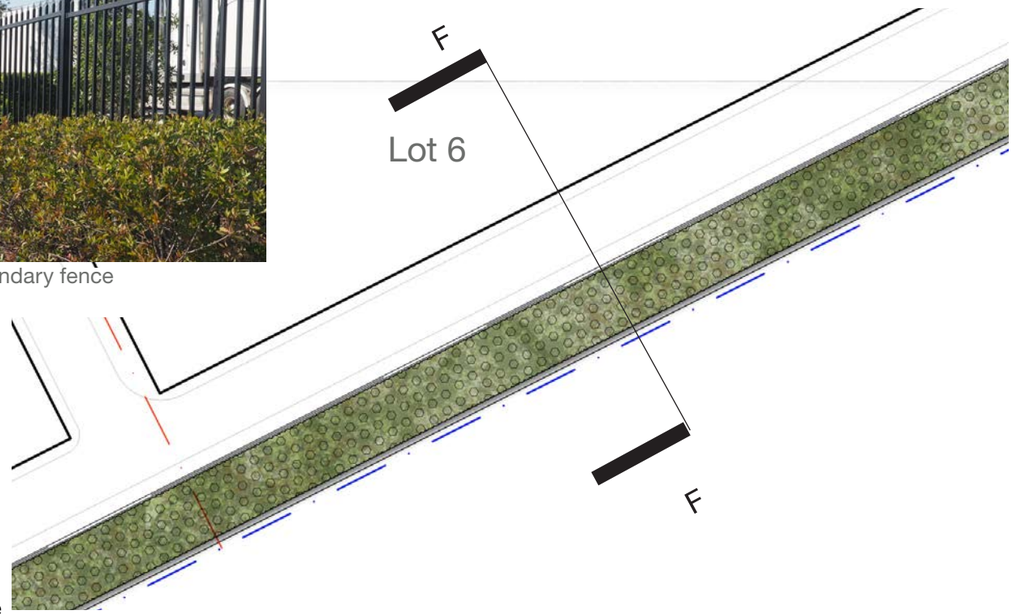
Shrub and grass planting

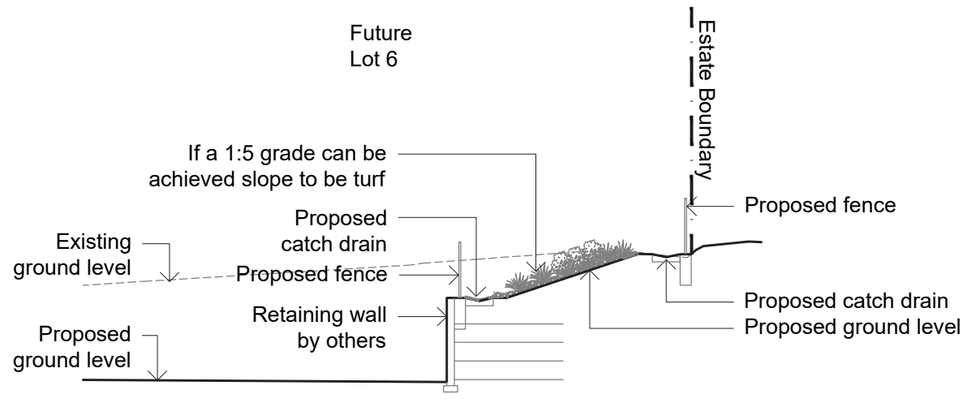
Security boundary fence





Section E 1:200





Section F 1:200

Boundary Planting

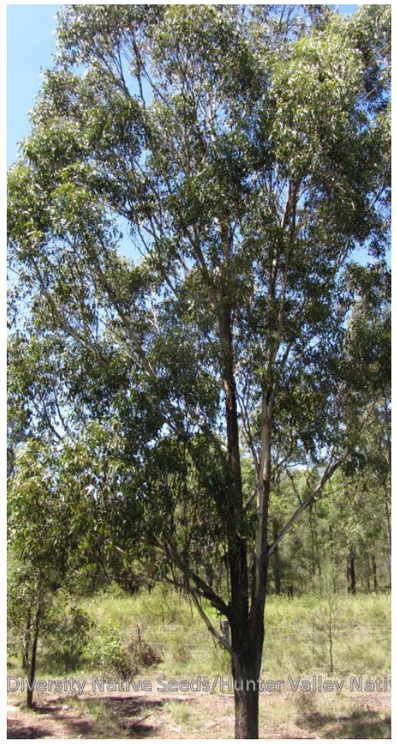
Boundary

Botanic Name	Common Name	Mature Size (h x w) (m)
TREES		
Corymbia maculata *	*Spotted Gum*	30 x 8
Eucalyptus crebra	Narrow-leaved Ironbark	
Eucalyptus eugenioides	Thin-leaved Stringybark	30 x 8
Eucalyptus moluccana	Grey Box	
SHRUBS & ACCENTS		
Acmena smithii var. minor	Lilly Pilly	2 x 2
Callistemon 'Endeavour'	Bottlebrush	2x3
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush	
GRASSES AND GROUNDCOVERS		
Carpobrotus glaucescens	Pigface	.15 x 1
Carex inversa		
Hardenbergia violacea	Purple Coral Pea	
Gazania tomentosa	Silver Gazania	.15 x 1
Myoporum parvifolium	Creeping Boobialla	.3 x 2
Poa 'Kingsdale'	Tussock Grass	.3 x .6
Pennisetum 'Nafray'	Swamp Foxtail Grass	.6 x .6

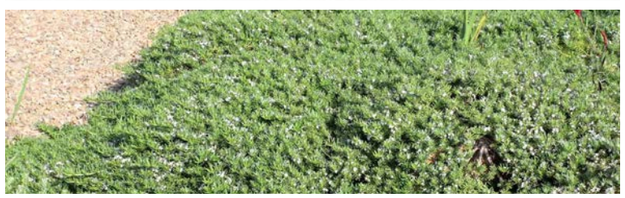
Indicates species from endemic vegetation community

Indicative Species






Stormwater Basin

The Stormwater basin will feature planting to compliment the water retention and treatment processes designed by civil. A Grass-Cel maintenance pathway provides access around the perimeter of the basin at the top of the embankment. Appropriate safety fencing shall be included where necessary.

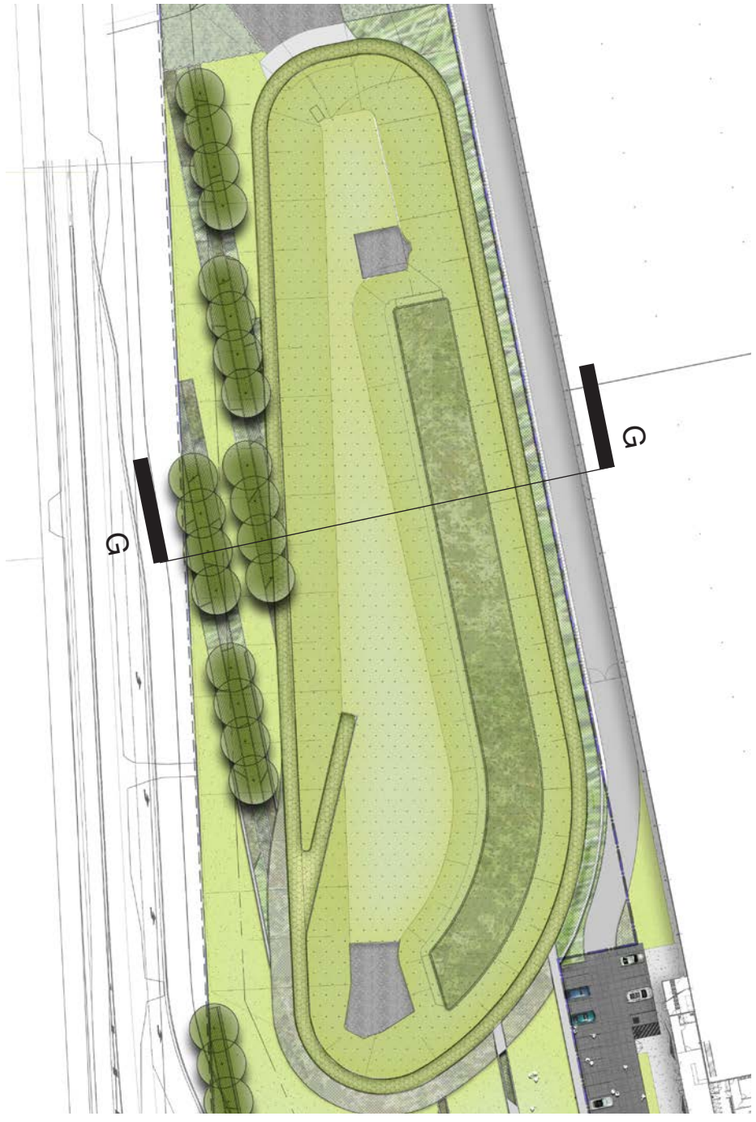
Basin Planting

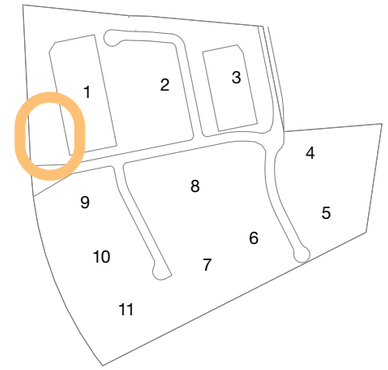
Botanic Name	Common Name	Mature Size (h x w) (m)
GRASSES AND GROUNDCOVERS		
Carex inversa	-	
Lomandra longifolia	Matt Rush	1 x 1
Imperata cylindrica var. major	Blady Grass	
Juncus usitatus	Common Rush	
Imperata cylindrica var. major	Blady Grass	
Poa labillardieri	Tussock Grass	
Themeda australis	Kangaroo Grass	

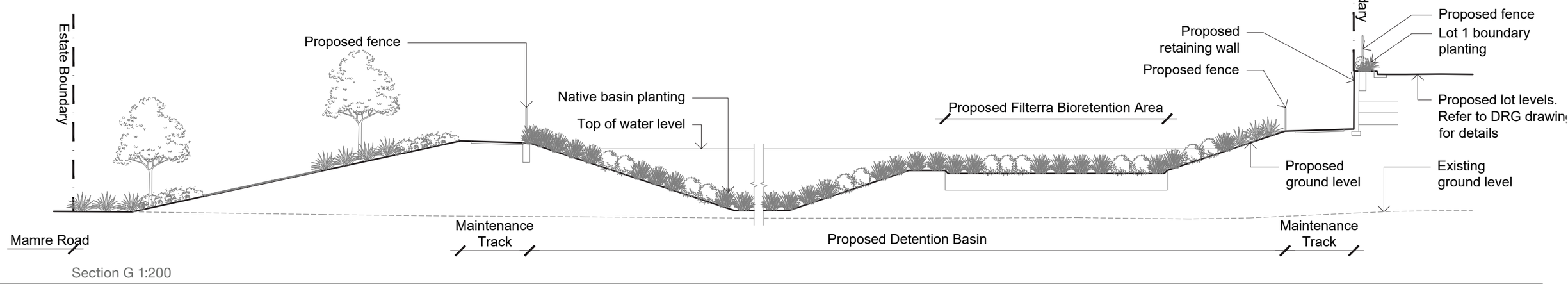
Indicates species from endemic vegetation community

Native basin planting

Fencing to basin



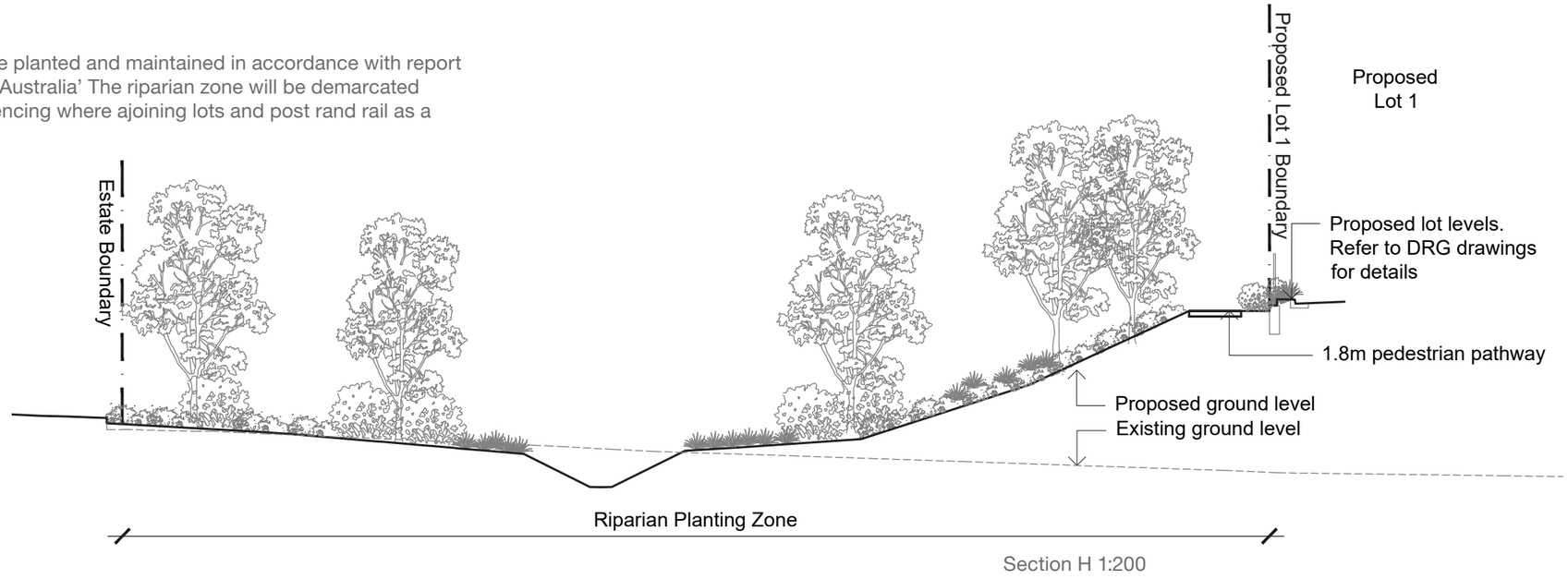




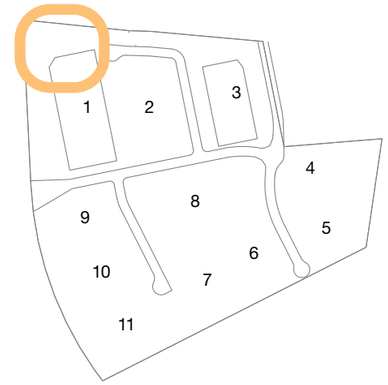
Section G 1:200

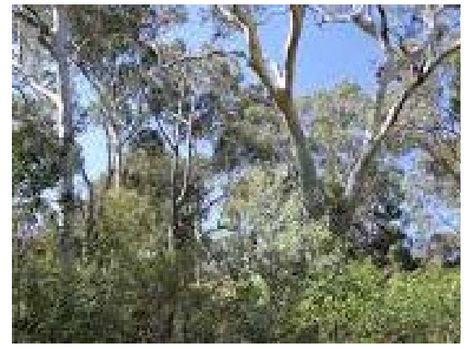
Riparian Zone

The Riparian Zone will be planted and maintained in accordance with report produced by Écological Australia' The riparian zone will be demarcated with fencing - security fencing where ajoining lots and post rand rail as a boundary marker style.



Section H 1:200



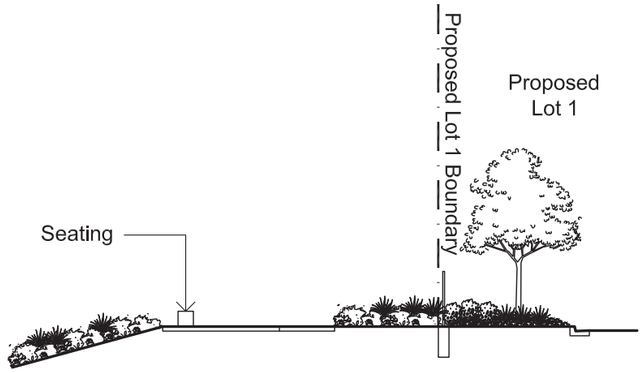


Native riparian zone planting in accordance with ecological report

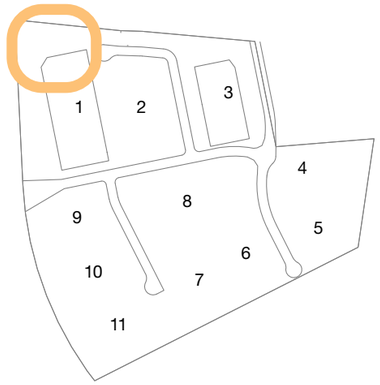
Fencing to riparian zone perimeter

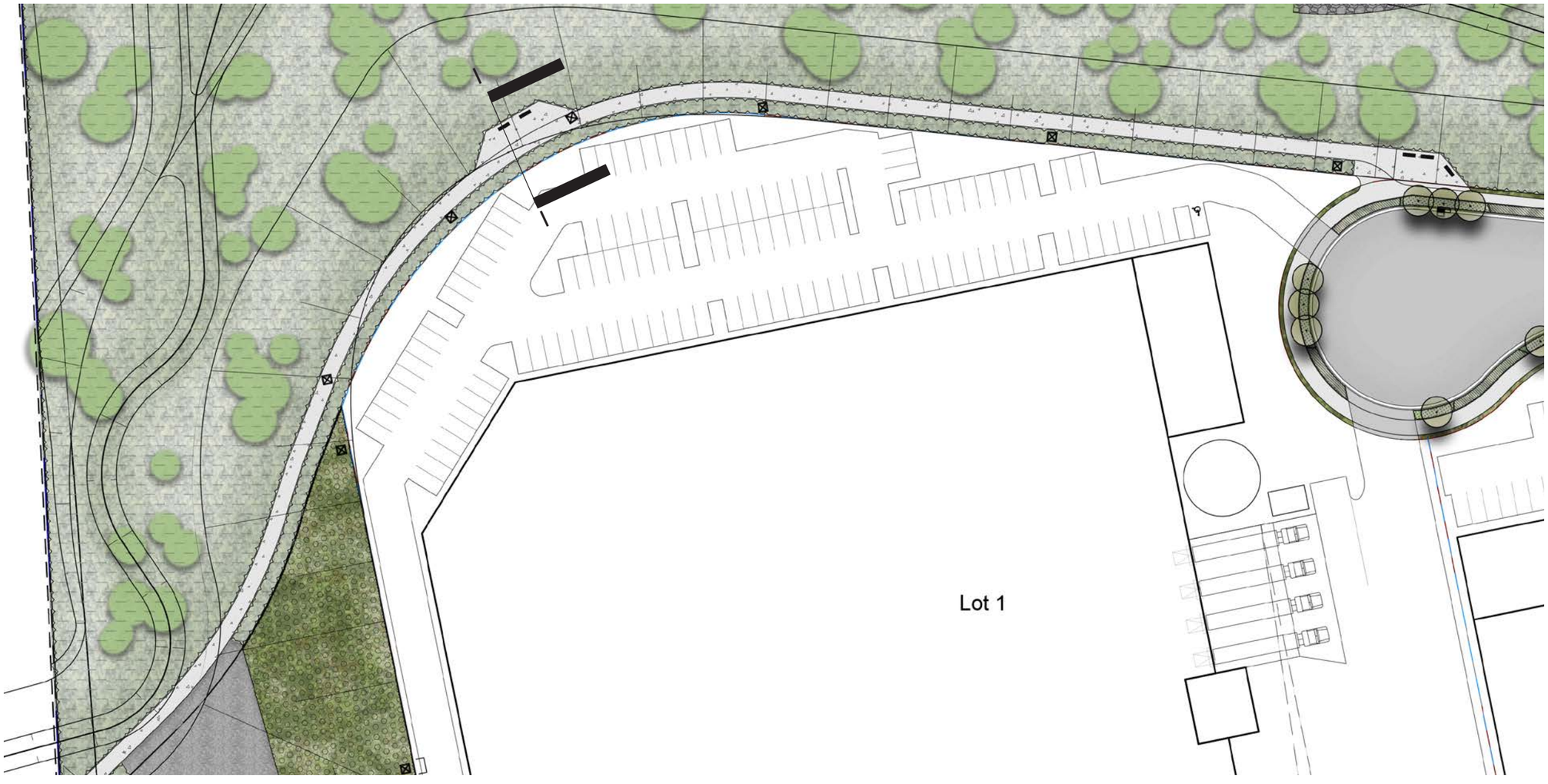
Riparian Zone Pathway and Nodes

A 1.8m wide pedestrian path will provide access along the riparian zone with a number of amenity nodes featuring seating.



Section I 1:200





Seating nodes

1.8m gravel pathway

SITE IMAGE
Landscape Architects

Aspect Industrial Estate Kemps Creek | Landscape Masterplan

Drawing Number	0016
Issue	G
Date	15.10.2020

Riparian Zone Planting

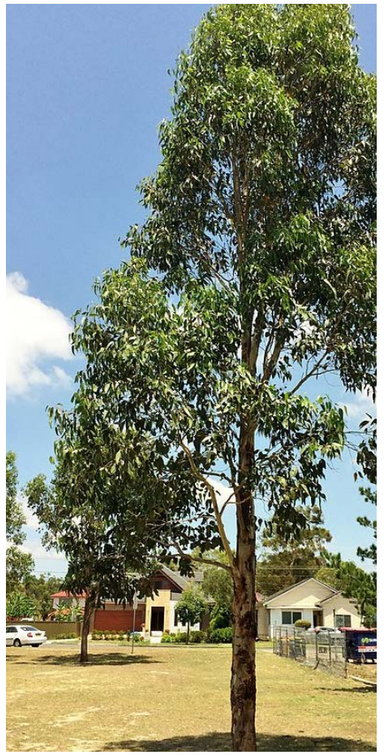
Species list from ‘Ecological Australia” vegetation communities and native species list.

Riparian Zone

Botanic Name	Common Name
Eucalyptus amplifolia	Cabbage Gum
Eucalyptus crebra	Narrow-leaved Ironbark
Eucalyptus eugenioides	Thin-leaved Stringybark
Eucalyptus moluccana	Grey Box
Eucalyptus tereticornis	Forest Red Gum +
Acacia decurrens	Sydney Green Wattle
Acacia falcata	-
Acacia implexa	Hickory Wattle
Acacia parramattensis	Parramatta Wattle
Bursaria spinosa	Blackthorn
Daviesia ulicifolia	Gorse Bitter Pea
Dillwynia sieberi	-
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop-bush
Exocarpos cupressiformis	Native Cherry
Indigofera australis	Australian Indigo
Aristida ramosa	Purple Wiregrass
Aristida vagans	Threeawn Speargrass
Bothriochloa macra	Red Grass
Carex inversa	-
Chloris truncata	Windmill Grass
Dichelachne micrantha	Shorthair Plumegrass
Echinopogon caespitosus var. caespitosus	Tufted Hedgehog Grass
Echinopogon ovatus	Forest Hedgehog Grass
Entolasia marginata	Bordered Panic
Fimbristylis dichotoma	Common Fringe-sedge
Imperata cylindrica var. major	Blady Grass
Juncus usitatus	Common Rush
Lomandra filiformis	-
Lomandra multiflora subsp. multiflora	-
Microlaena stipoides var. stipoides	Weeping Meadow Grass
Poa labillardieri	Tussock Grass
Rytidosperma caespitosum	Whitetop
Rytidosperma racemosa var. racemosum	Wallaby Grass
Rytidosperma tenuior	-
Themeda australis	Kangaroo Grass
Asperula conferta	-
Brunoniella australis	Blue Trumpet
Centella asiatica	Indian Pennywort
Cheilanthes sieberi subsp. sieberi	Poison Rock Fern
Clematis glycinoides	Old Man’s Beard
Commelina cyanea	Creepinng Christian
Desmodium varians	Slender Tick-trefoil
Dianella longifolia	Blueberry Lily
Dichondra repens	Kidney Weed
Geranium solanderi	Native Geranium
Glycine clandestina	Twining Glycine
Glycine microphylla	Small-leaf Glycine
Glycine tabacina	-
Hardenbergia violacea	Purple Coral Pea
Plectranthus parviflorus	Cockspur Flower
Pultenaea microphylla	-
Solanum prinophyllum	Forest Nightshade

Indicative Species












VIRTUAL IDEAS

Aspect Industrial Estate, Kemps Creek

Visual Impact Report

Visual Impact Report - Aspect Industrial Estate, Kemps Creek

BACKGROUND

This document was prepared by Virtual Ideas and includes a methodology of the processes used to create the visual impact photomontages and illustrate the accuracy of the results.

Virtual Ideas is an architectural visualisation company that is highly experienced at preparing visual impact assessment media to a level of expertise that is suitable for both council submission and use in court.

Virtual Ideas is familiar with the court requirements to provide 3D visualisation media that will accurately communicate a proposed development's design and visual impact.

Virtual Ideas' methodology and results have been inspected by various experts in relation to previous visual impact assessment submissions and have always been found to be accurate and acceptable.

OVERVIEW

The general process of creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model.

We capture site photographs from specified positions on location. The camera positions are surveyed to identify the MGA coordinates at each position. Additional reference points are also surveyed at each camera location to assist in aligning our 3D camera to the real world camera position.

Cameras are then created in the 3D scene to match the locations and height of where the photographs were taken from. The lens data stored in the metadata of the photograph is also referenced for accuracy.

The cameras are then aligned in rotation so that the surveyed points of the 3D model align with the corresponding objects that are visible in the photograph.

A realistic sun and sky lighting system is then created in the 3D scene and matched to the precise time and date of when each photograph was taken.

3D renderings of the proposed buildings are then created from the selected cameras at the exact pixel dimensions and aspect ratio of the original digital photograph.

The 3D renderings are then placed into the digital photography to show the proposed buildings in context.

DESCRIPTION OF COLLECTED DATA

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected.

This includes the following:

1) 3D models of proposed buildings Lots 1 & 3
   - Supplied by: Mirvac
   - Format: Revit file

2) 3D models of proposed buildings lots 2, 4-11
   - DWG supplied by: Mirvac
   - 3D model: created by Virtual Ideas (base on the plans and elevations supplied)

3) 3D models of proposed terrain
   - Supplied by: Mirvac
   - Format: DWG file

4) Camera location and alignment point surveyed data (Appendix A)
   - Created by: CMS Surveyors
   - Format: DWG and PDF files

5) Site Survey
   - Created by: Land Partners
   - Format: DWG and PDF files

6) Site photography
   - Created by: Virtual Ideas
   - Format: CR2 and JPEG files

METHODOLOGY

Site Photography

Site photography was taken from predetermined positions as directed by Clouston Associates. Photographs were taken using a Canon EOS 5DS R.

The positions of the photographs were surveyed and then plotted onto a survey drawing in DWG format.

Alignment

The first step in our process was the creation of an accurate, real-world scale digital 3D scene that is positioned at a common reference point using the MGA 56 co-ordinates system. We used a variety of data from various sources to create the 3D scene including a building massing 3D model, a 2D site plan drawing, a site survey and a landscape design drawing.

All data has been imported into the 3D scene at real world scale and positioned to a common reference point. This common reference point is established by using the MGA-56 co-ordinates system. When we receive data sources that are not positioned to MGA-56 co-ordinates we use common points in the data sources that can be aligned to points in other data sources that are positioned at MGA-56. This can be data such as site boundaries and building outlines.

Once the various data sources were imported and positioned with reference to each other, we then created digital 3D cameras in the 3D scene. The camera locations selected for the 9 photomontages locations in this report has been reccomended by Virtual Ideas, taking into consideration the topology of the site, the future built form, residential properties adjacent to the site and existing vegetation.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer, that the images provided accurately portray the level of visibility and impact of the proposed buildings and landscaping.

Yours sincerely,

Grant Kolln

CV of Grant Kolln, Director of Virtual Ideas

Personal Details

Name: Grant Kolln
DOB: 07/09/1974
Company Address: Suite 71, 61 Marlborough St, Surry Hills, NSW, 2010
Phone Number: 02 8399 0222

Relevant Experience

2003 - Present	Director of 3D visualisation studio Virtual Ideas. During this time, Grant has worked on many visual impact studies for council and planning submission for projects across various different industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has assisted Grant to develop a highly accurate methodology for the creation of visual impact media and report creation.
1999 - 2001	Project Manager for global SAP infrastructure implementation - Ericsson, Sweden
1999 - 1999	IT Consultant - Sci-Fi Channel, London
1994 - 1999	Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

Relevant Education / Qualifications

1997	Advanced Diploma in Architectural Technology, Southbank TAFE, Brisbane, QLD

Key map indicating location of photography positions

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details
Location:
Mamre Road

Photo Date
16th May 2020

Camera Used
Canon EOS 5DS R

Camera Lens
EF24-105mm f/4L IS USM

Focal length in 35mm Film
24mm


509
511
514
510
515
516
517
513
50mm lens frame


509
511
514
510
515
516
517
513


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details
Location:
Driveway of 859 Mamre Road

Photo Date:
15th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm


515
516
517
50mm lens frame

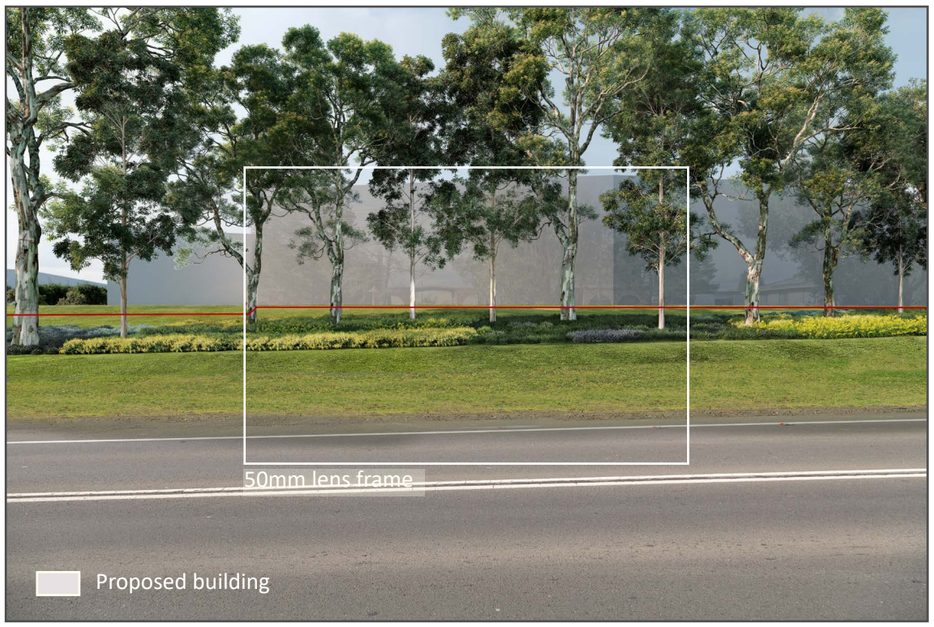

515
516
517


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping



Photograph details
Location:
Driveway of 833B Mamre Road

Photo Date:
16th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm


522
521
520
519
50mm lens frame

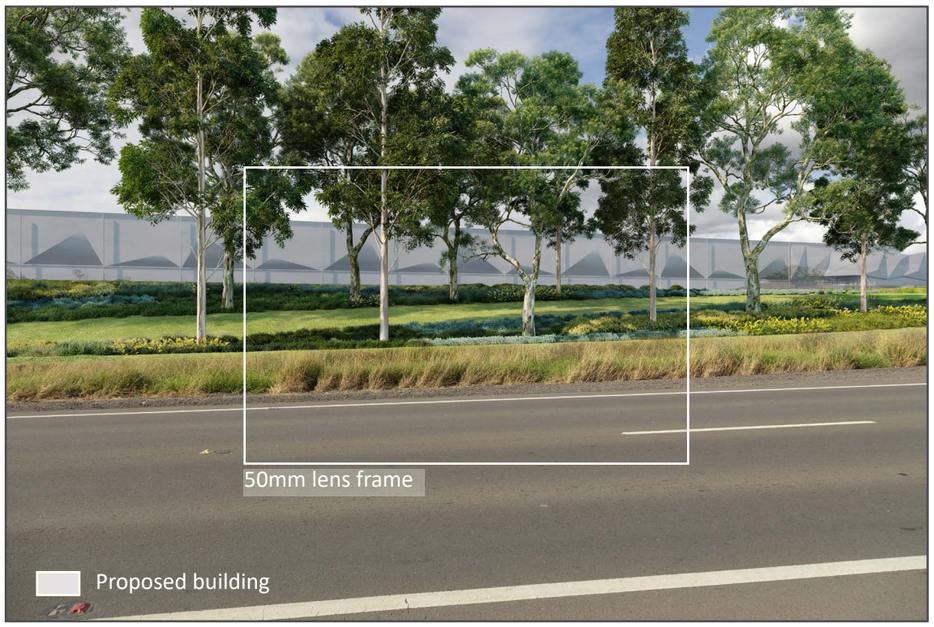

522
521
520
519


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping



Photograph details
Location:
Driveway of 805 Mamre Road

Photo Date:
16th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm


524
525
526
527
50mm lens frame


524
525
526
527


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details
Location:
Driveway of 783 Mamre Road

Photo Date:
16th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm


506
507
508
505
50mm lens frame


506
507
508
505


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details
Location:
Driveway of 1 Bakers Lane

Photo Date:
16th May 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF24-105mm f/4L IS USM

Focal length in 35mm Film:
24mm


504
503
502
501
50mm lens


504
503
502
501


50mm lens
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details

Photo Date:
6th October 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF16-35mm f/4L IS USM

Focal length in 35mm Film:
24mm


50mm lens frame


28
29
30
31
32
33


50mm lens frame
Proposed building envelope

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details

Photo Date:
6th October 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF16-35mm f/4L IS USM

Focal length in 35mm Film:
24mm


50mm lens frame


50
45
44
46
47
48


50mm lens frame
Proposed building envelope

Camera Position 17 - Overview

Original photograph

Original photo indicating surveyed reference points

Photomontage indicating proposed building & landscaping

Photograph details

Photo Date:
6th October 2020

Camera Used:
Canon EOS 5DS R

Camera Lens:
EF16-35mm f/4L IS USM

Focal length in 35mm Film:
24mm


50mm lens frame


36
37
38
39
40


50mm lens frame
Proposed building envelope

CMS Surveyors Pty Limited
A.B.N. 79 096 240 201
LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

CMS SURVEYORS

Date: 18-05-2020
Our Ref: 18368 Photo Locations

Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

Virtual Ideas
Reena Dhupar

As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations for 1 Bakers Lane Kemps Creek.

Coordinates are MGA zone 56 (GDA 94) and elevation to Australian Height datum (AHD).

Measurements were taken using GNSS and theodolite measurements.

DWG of locations has also been supplied.

Point Number	Easting	Northing	Reduced Level (RL)	Photo Point
1	294836.772	6254282.616	57.20	PHOTO 10-2
2	294839.816	6254296.762	57.38	PHOTO 10-1
3	294660.295	6253532.330	41.17	PHOTO 8
4	294955.251	6252459.021	49.28	PHOTO 1-2
5	294955.624	6252443.661	49.19	PHOTO 1-1
6	294779.858	6252699.292	48.91	PHOTO 3
7	294702.433	6252940.114	46.99	PHOTO 5
8	294682.371	6253202.536	41.13	PHOTO 7-2
9	294674.847	6253199.784	41.08	PHOTO 7-1
500	294806.432	6254173.711	59.92	TREE
501	294837.996	6254279.002	58.41	FENCE
502	294840.585	6254270.413	57.62	TREE
503	294849.042	6254265.235	58.72	TREE
504	294861.762	6254265.723	60.32	TREE
505	294667.749	6253521.631	40.97	BOLLARD
506	294682.552	6253521.523	41.37	TREE
507	294691.482	6253492.324	40.74	POWER POLE
508	294685.278	6253478.165	40.68	TREE
509	294962.363	6252470.324	59.76	POWER POLE
510	294987.188	6252557.682	61.45	POWER POLE
511	294913.065	6252530.775	61.11	POWER POLE

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Web: www.cmssurveyors.com.au

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A.C.GILBERT & Co.
(Rosehill)
WBS GREEN & ASSOCIATES
(Mona Vale)

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90 Wallendbeen St, COOTAMUNDRA NSW 2590
Ph: 02 6942 3295 Fax: 02 6942 4846
Email: cootamundra@cmssurveyors.com.au

Point Number	Easting	Northing	Reduced Level (RL)	Photo Point
513	294958.099	6252578.954	54.75	POWER POLE
514	294973.494	6252512.903	58.79	POWER POLE
515	294817.370	6252675.979	61.65	POWER POLE
516	294826.756	6252696.899	59.74	POWER POLE
517	294845.284	6252734.895	61.26	POWER POLE
518	294766.000	6252951.361	52.05	ROOF RIDGE
519	294716.486	6252936.331	46.75	BOLLARD
520	294725.259	6252943.969	47.24	FENCE
521	294719.798	6252949.011	46.90	POST
522	294722.428	6252958.065	46.91	POST
523	294752.470	6253263.004	45.39	TOP OF GUTTER
524	294699.375	6253208.819	42.14	FENCE
525	294699.976	6253198.157	42.31	FENCE
526	294776.354	6253144.275	46.84	WINDOW
527	294776.319	6253141.581	46.84	WINDOW
528	294681.136	6253199.931	41.14	POWER POLE
529	294695.545	6253187.712	41.39	BOLLARD

Note: Ground level of camera positions are surveyed. Camera heights to be added if required.

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Email: cootamundra@cmssurveyors.com.au

Yours faithfully,
CMS Surveyors Pty Limited

Damon Roach

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CMS Surveyors Pty Limited
A.B.N. 79 096 240 201
LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

CMS SURVEYORS

Date: 07-10-2020
Our Ref: 19368 Photo Report 2

Reena Dhupar
Virtual Ideas
Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

Dear Reena,

RE: PHOTO LOCATIONS – MAMRE ROAD – KEMPS CREEK

As requested, we have attended site and measured the co-ordinates and elevations of the photo features for three different views (known as viewpoints 15,16,17) around 784-786 & 788-804 Mamre Road, Kemps Creek.

Co-ordinate's are MGA 56 **(GDA 94)** and elevation is relative to the Australian Height datum (AHD).

Measurements were taken using theodolite measurement and GNSS measurements.

A .dwg file of the locations has also been supplied.

Note that we have also surveyed additional features/points which have been included in the electronic file that may be useful as additional photo reference points if required.

If we can be of any further assistance in this matter, do not hesitate to contact the author.

Yours faithfully,
CMS Surveyors Pty Limited

Christopher Larmour
Registered Surveyor

Consulting Surveyors NSW
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(Roseville)
MBS GREEN & ASSOCIATES
(Mona Vale)

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Email: coota@cmssurveyors.com.au

ISO 9001:2008 REGISTERED FIRM

Viewpoint #15

Point No.	Easting	Northing	Point Elevation	Description
28	294765.554	6253446.189	44.597	LEFT CORNER OF SHED
29	294756.213	6253432.637	45.04	RIGHT CORNER OF SHED
30	294707.86	6253471.391	42.272	TOP OF FENCE POST
31	294772.218	6253281.937	47.597	TOP OF LEANING POWER POLE
32	294696.766	6253471.076	46.038	TOP OF POWER POLE
33	294697.916	6253383.679	50.247	TOP PF POWER POLE
34	294693.617	6253496.899	40.83	CAMERA LOCATION (AT GROUND LEVEL)

Consulting Surveyors NSW
ISNSW THE INSTITUTION OF SURVEYORS NSW INC

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(Roseville)
MBS GREEN & ASSOCIATES
(Mona Vale)

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ISO 9001:2008 REGISTERED FIRM

Viewpoint #16

Point No.	Easting	Northing	Point Elevation	Description
44	295008.589	6253464.772	48.471	TOP OF GATE POST
45	295124.838	6252994.194	56.098	RIGHT SIDE OF ROOF RIDGE
46	294997.163	6253442.404	48.49	LEFT EDGE OF METAL SHED
47	294996.561	6253468.51	48.46	TOP OF FENCE POST
48	294825.079	6253126.107	46.668	TOP RIGHT CORNER OF HOUSE WALL
50	294998.901	6253363.455	66.731	HIGHEST POINT OF TREE
51	295000.9994	6253482.966	47.64	CAMERA LOCATION AT GROUND LEVEL

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INCORPORATING
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Viewpoint #17

Point No.	Easting	Northing	Point Elevation	Description
36	295305.198	6253348.112	50.935	TOP OF WOODEN POST
37	295318.118	6253369.434	51.623	TOP OF MIDDLE POST OF 3 POSTS
38	295313.237	6253393.99	51.751	TOP OF TALLER OF PAIR OF POSTS
39	294965.855	6253457.657	50.976	LEFT CORNER OF SHED
40	295308.596	6253417.291	51.933	TOP OF WOODEN FENCE POST
41	295378.846	6253395.793	51.33	CAMERA LOCATION AT GROUND LEVEL

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DIGITAL CAMERA LENSES FOR PHOTOMONTAGES AND VISUAL IMPACT ASSESSMENTS

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Field of View of the Human Eye

The field of view of the human eye is a topic that varies depending on the source of information. In many cases, the field of view of the eye is stated to be 17mm. Other opinions claim a smaller field of view of around 22-24mm.

Whichever the case, it is accepted that the human eye has a wide field of view. When a person stands close to a subject - for instance a building - their field of vision can potentially read all of the top, sides and bottom of the building simultaneously in a single glance.

In addition to this, the human eye can change focus and target direction extremely rapidly, allowing a person to view a large structure in a very short period of time, effectively making the perceived field of view even larger.

The Perspective of the human eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. The eye's image sensor - the retina - is curved along the back surface of the eyeball, whereas the sensor on a camera is flat. Consequently, the perspective of a photograph can look quite different to how a person views a scene in the real world, especially when comparing to a photo captured with a wide camera lens.

In digital photography circles, it is widely accepted that using a longer lens (approximately 50mm) reduces the amount of perspective in an image and therefore more closely replicates what the human eye would see in reality. This, however, only addresses how the eye perceives perspective and does not consider the field of view of the eye.

If a photo is taken of a scene using a 50mm camera lens, printed out and then held up in front of the viewer against the actual view at the same location as the photo was taken, it is unmistakable that the human eye can see much more of the surrounding context than is captured within the photo.

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Changing the field of view on a digital camera

The main difference in using a longer lens vs a wider lens is the amount of information that is displayed at the edges of the subject. Changing the lens to a smaller FOV produces the same result as cropping in on the wide angle image, providing that the position and the angle of the camera remains constant while taking the photographs.

In short, a lens with a wider field of view does not create an image that has incorrect perspective, it simply means that the perspective is extended at the edges of the image showing more of the surrounds in the image.

Summary

With regards to visual assessment, there is no definitive solution for camera lens selection.

Longer lenses produce images that are more faithful to the perspective of the human eye, though the field of view is more limited, making it difficult to capture the entirety of a subject or enough of the surrounding context in which the subject resides.

Conversely, the perspective of wider camera lenses can make subjects appear further away than they would appear through the perspective of the human eye. This also limits a persons ability to accurately assess visual impact.

For these reasons, Virtual Ideas has taken the view that it is not possible to exactly replicate the real world view of the human eye in an image created with a camera and for visual impact photomontages, camera lenses are selected that strike a balance between these two considerations and can accurately display the built form in its surroundings.

The most effective way to accurately gauge visual impact and achieve a real world understanding of scale, is to take prints of the photomontages to the exact site photography locations and compare the prints with the scale of the existing built form.