Kemps Creek Logistics Project

Urban Design / Master Planning Report

LOGOS

Corner of Bakers Lane & Mamre Road
Kemps Creek NSW

20th of September 2010

mackenziepronk architects

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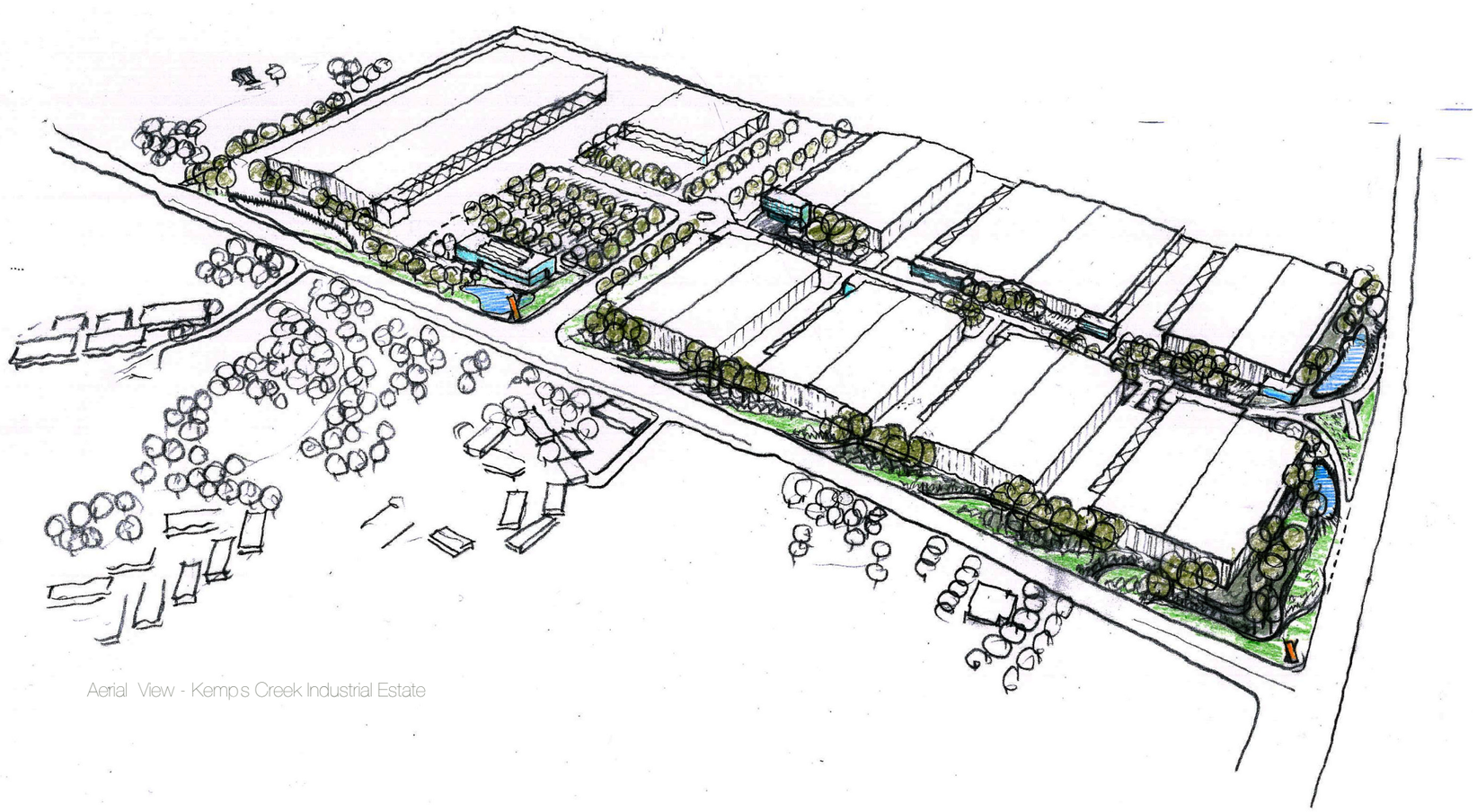


Aerial View - Kemps Creek Industrial Estate

0.0 Executive Summary

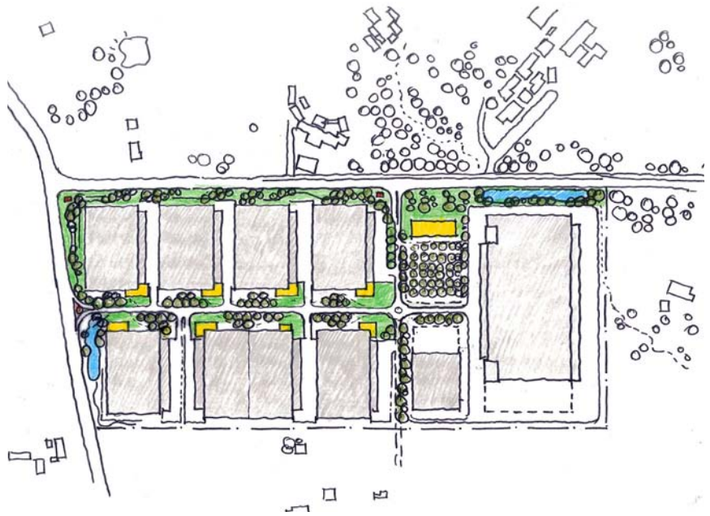
0.1 Executive Summary

Mackenzie Pronk Architects were engaged to assist in the development of the master plan and urban design of the Kemps Creek Logistics Project.

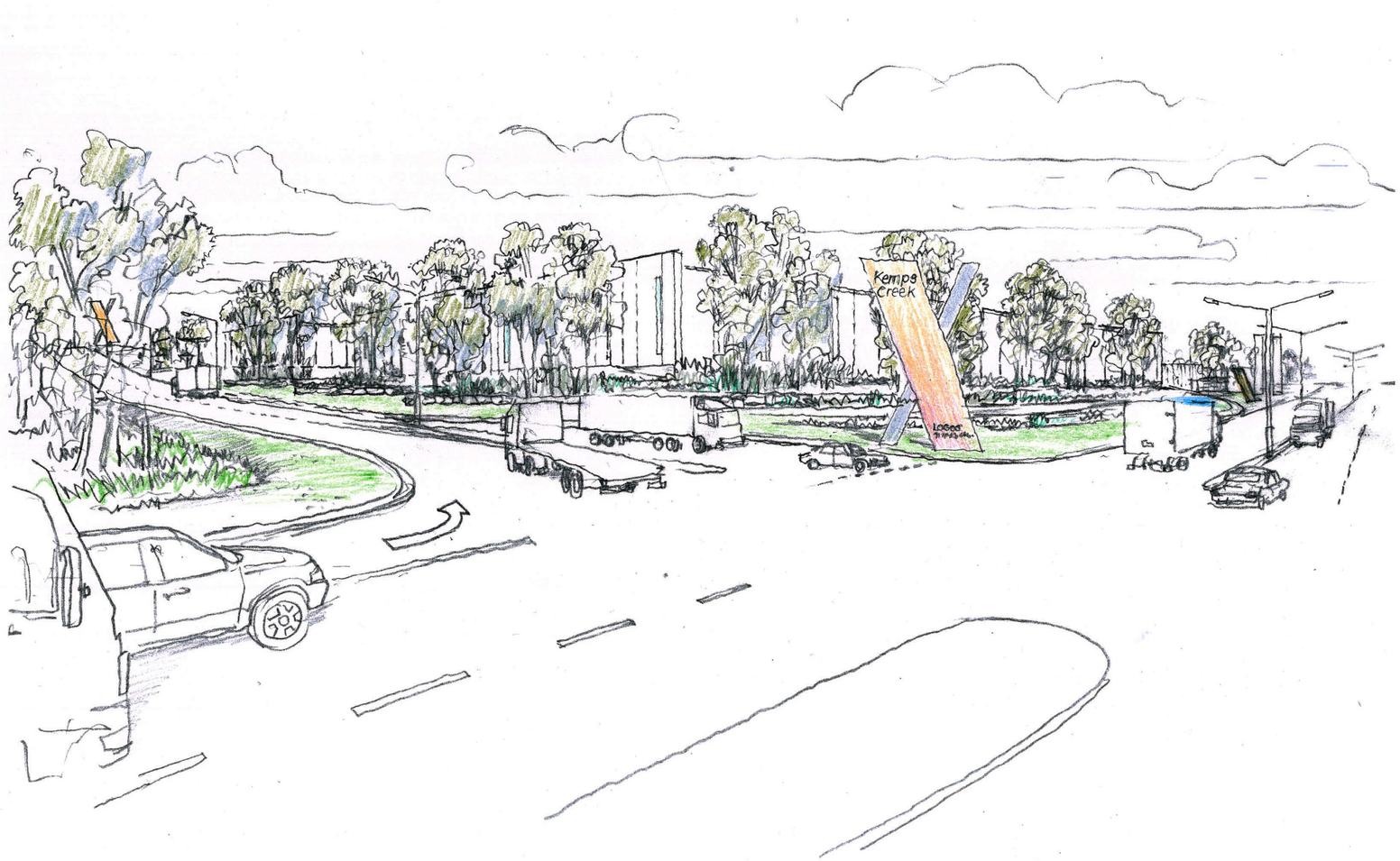
The LOGOS vision is to create a high quality logistics estate taking advantages of the sites strategic position. The estate masterplan concept is to create a simple, rational estate layout with restrained, well proportioned buildings set in a considered urban domain.

The LOGOS estate will be landscaped and themed to create a cohesive and attractive estate. Common architectural themes and suite of urban elements will unify the estate.

The LOGOS estate will be developed with best practice environmentally sustainable design including water sensitive urban design, water storage and reuse, native flora and habitat regeneration and a range of passive and active measures employed in the design of buildings.



Sketch Master Plan

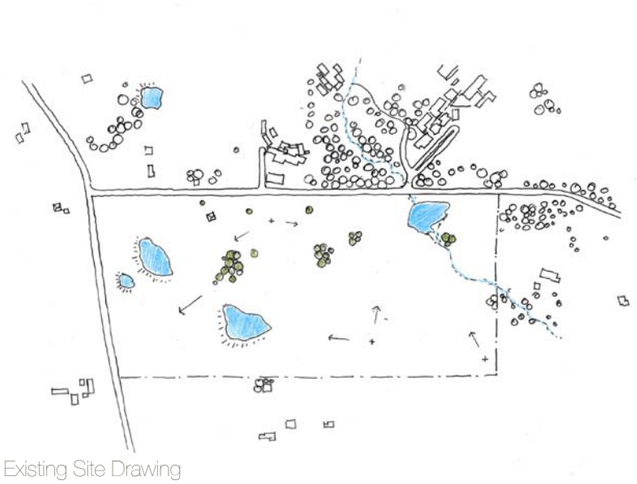


Sketch Perspective View - corner of Bakers lane and Mamre road

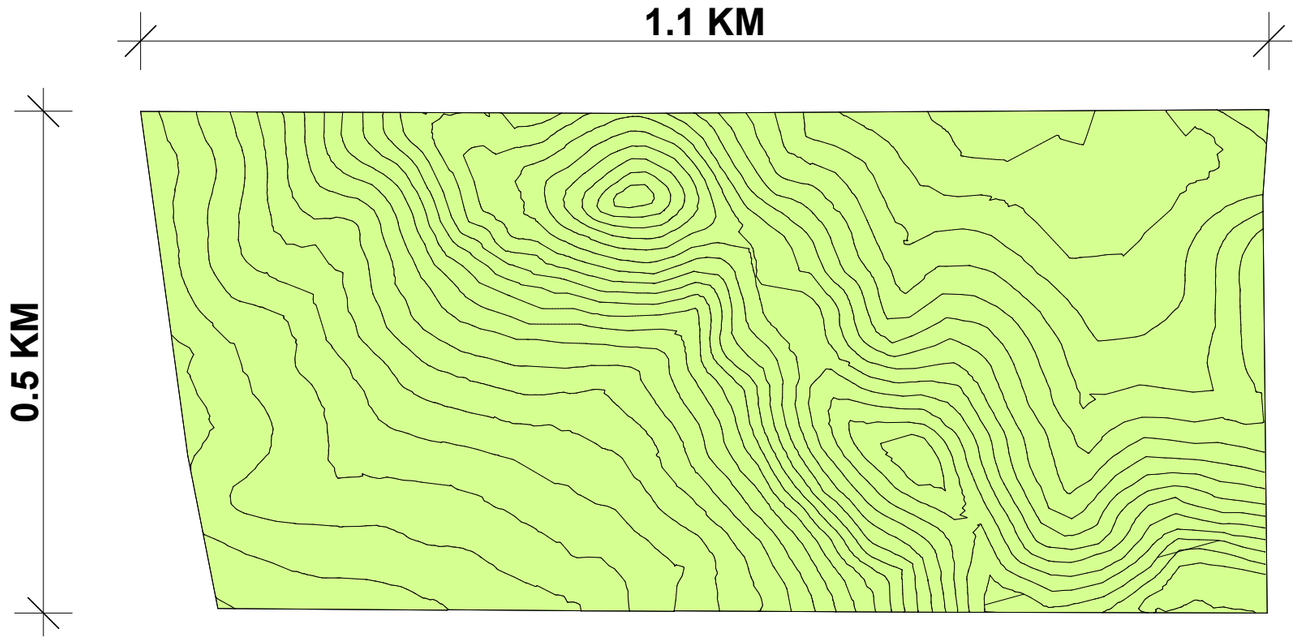
1.0 Kemps Creek Logistics Project - Master Plan Diagrams

1.1 Scale

The site located on the corner of Mamre Road and Bakers Lane in Kemps Creek is approximately 1.1km East/West x 0.5km North/South the site falls to the West and North East.

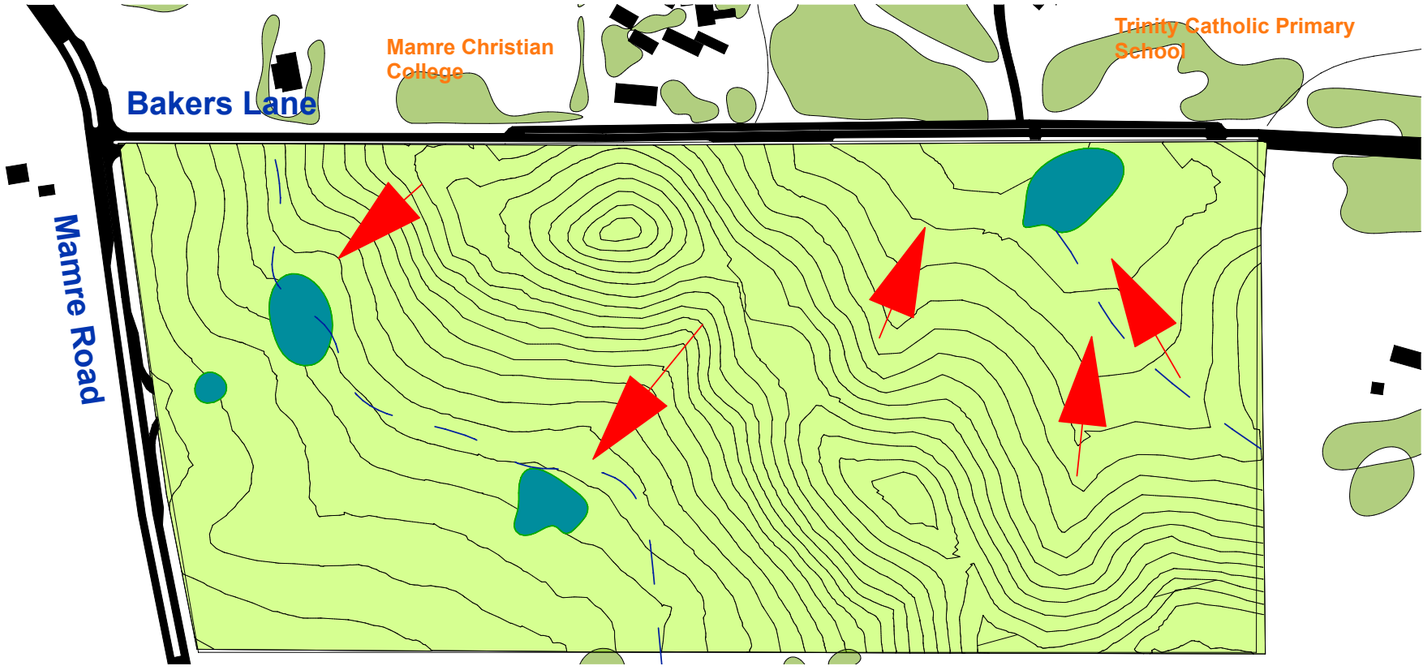


Existing Site Drawing



1.2 Topography

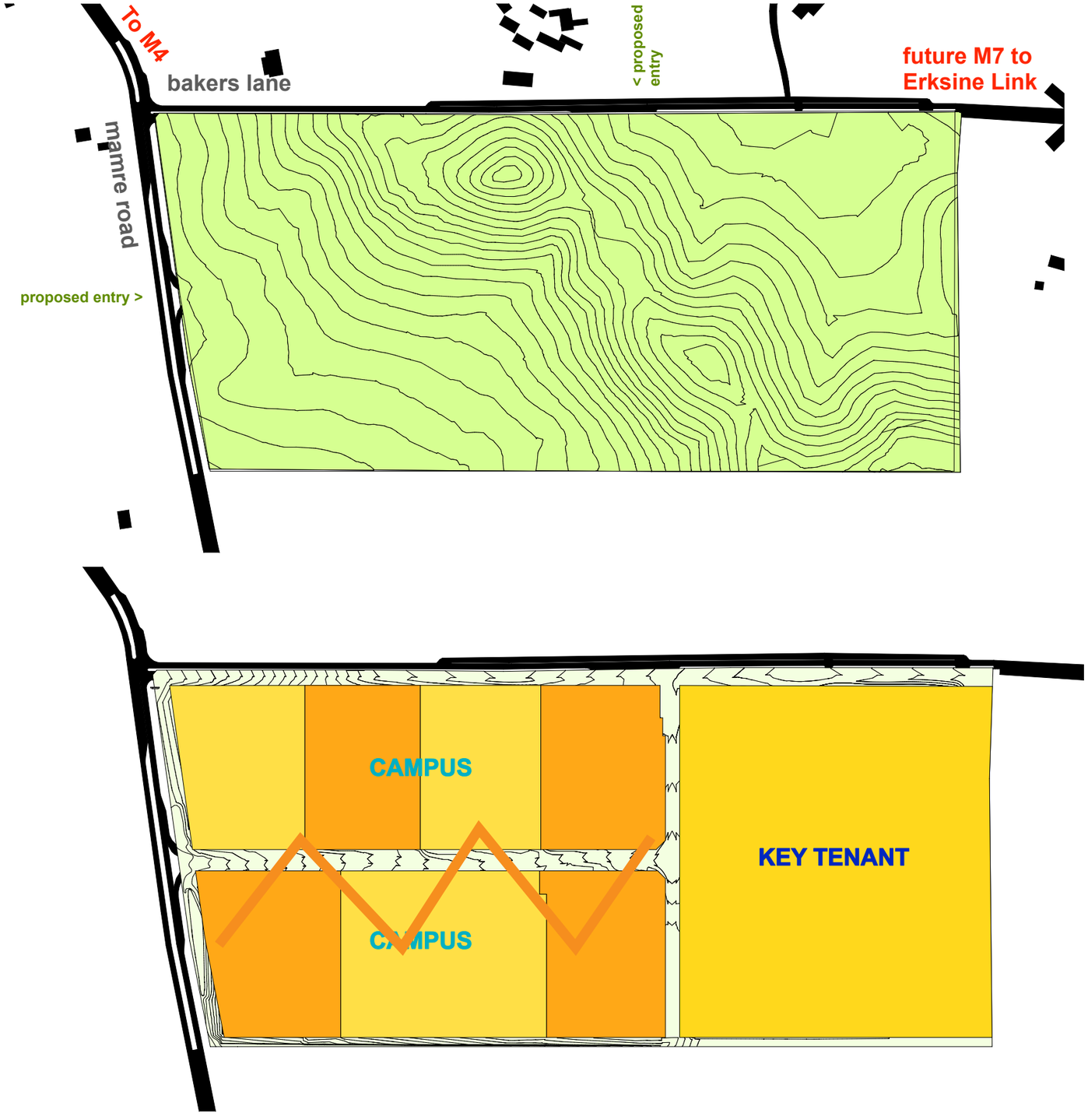
The site is presently degraded agricultural land characterised by a gently undulating topography, the high points occur along a ridge running from the South East corner to the middle of the Northern boundary.



1.0 Kemps Creek Logistics Project - Master Plan Diagrams

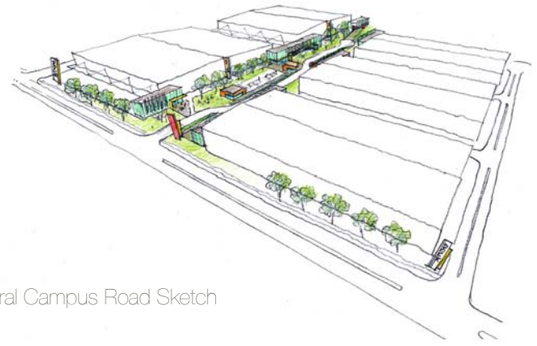
1.3 Connections

The Kemps Creek Logistics Project is located at the Western end of the Western Sydney Employment area, 1 km south of the Erskine Park Industrial estate and 5kms South of the M4 Western Motorway. The proposed new East West link road will connect the estate to the M7 Westlink 5kms to the East.



1.4 Lots

The estate has been designed to create 2 precincts according to site conditions and briefed lot sizes. The estate layout posits a facility for Metcash / IGA the larger anchor tenant at the upper end of the site east of the main Bakers Lane entry. The development to the West of the Bakers Lane entry has been configured in a campus style layout for the DHL logistics facility.

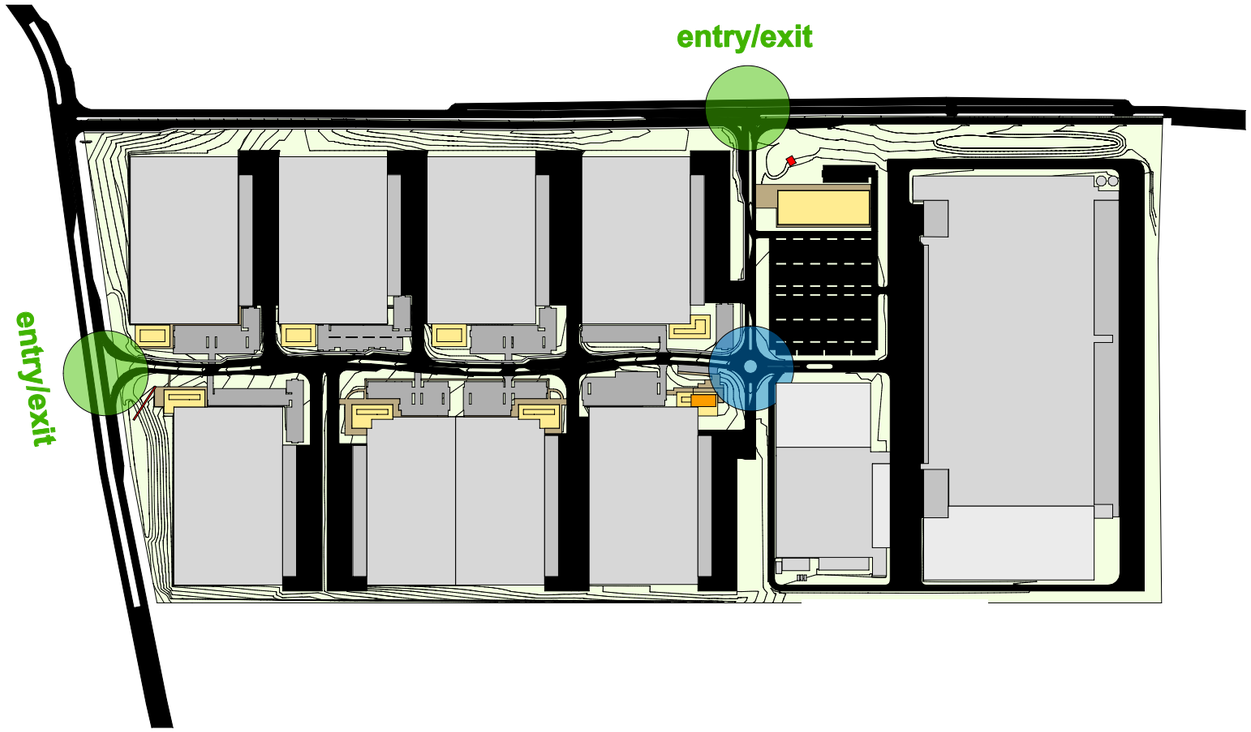


Central Campus Road Sketch

1.0 Kemps Creek Logistics Project - Master Plan Diagrams

1.5 Entry Points

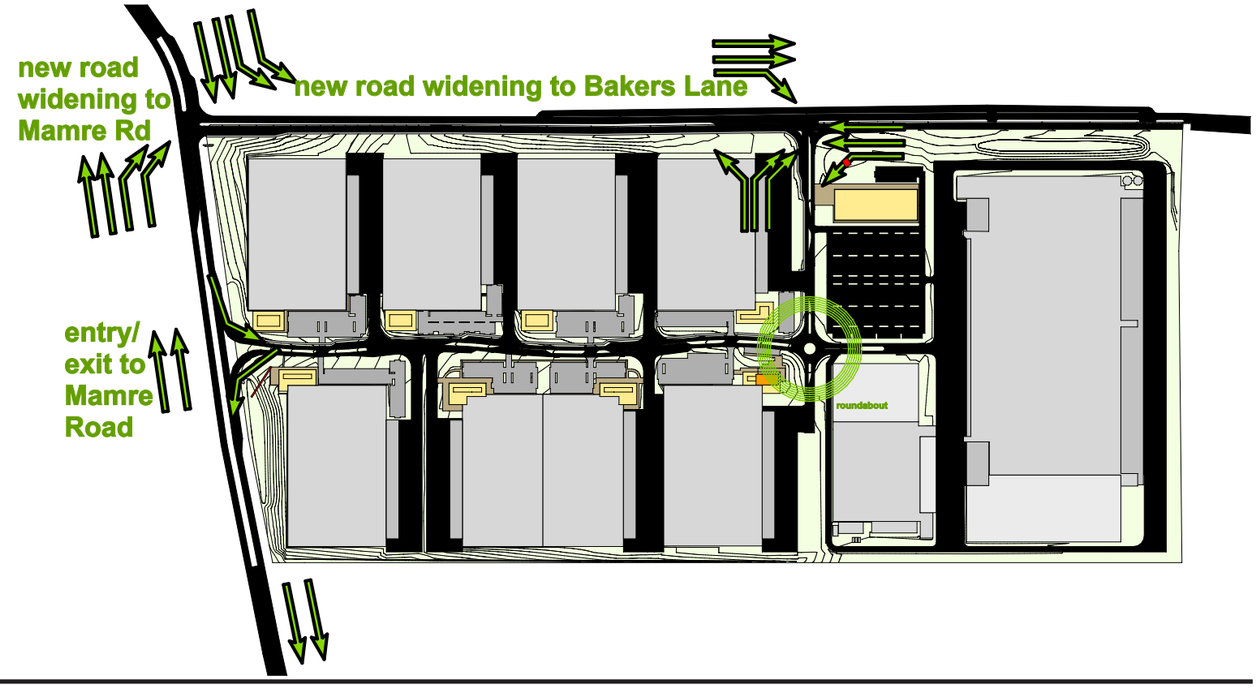
The Kemp s Creek Logistics project will be served by twin entry and exit points; The main estate entry will be located off Bakers Lane at the sites high point, this entry is adjacent the larger facility to the East and connects directly to the East West campus Road through the centre of the site. To maximize the efficiency of vehicular movements an additional left in left out onto Mamre Road is proposed. The main entry located off the upgraded Bakers lane has been designed with capacity to serve potential adjacent developments sites to the south.



1.6 Traffic

The development will create an estate with efficient traffic movements. The Masterplan Locates the roads to best serve the estate and the interests of all adjacent land owners. The layout employs a simple two way through plan to enhance way-finding and legibility, improve traffic movements and ensure development and end user flexibility. The clarity and simplicity of the orthogonal road system will ensure ease of way finding and efficiency of vehicular movements.

Refer To Traffic Report.



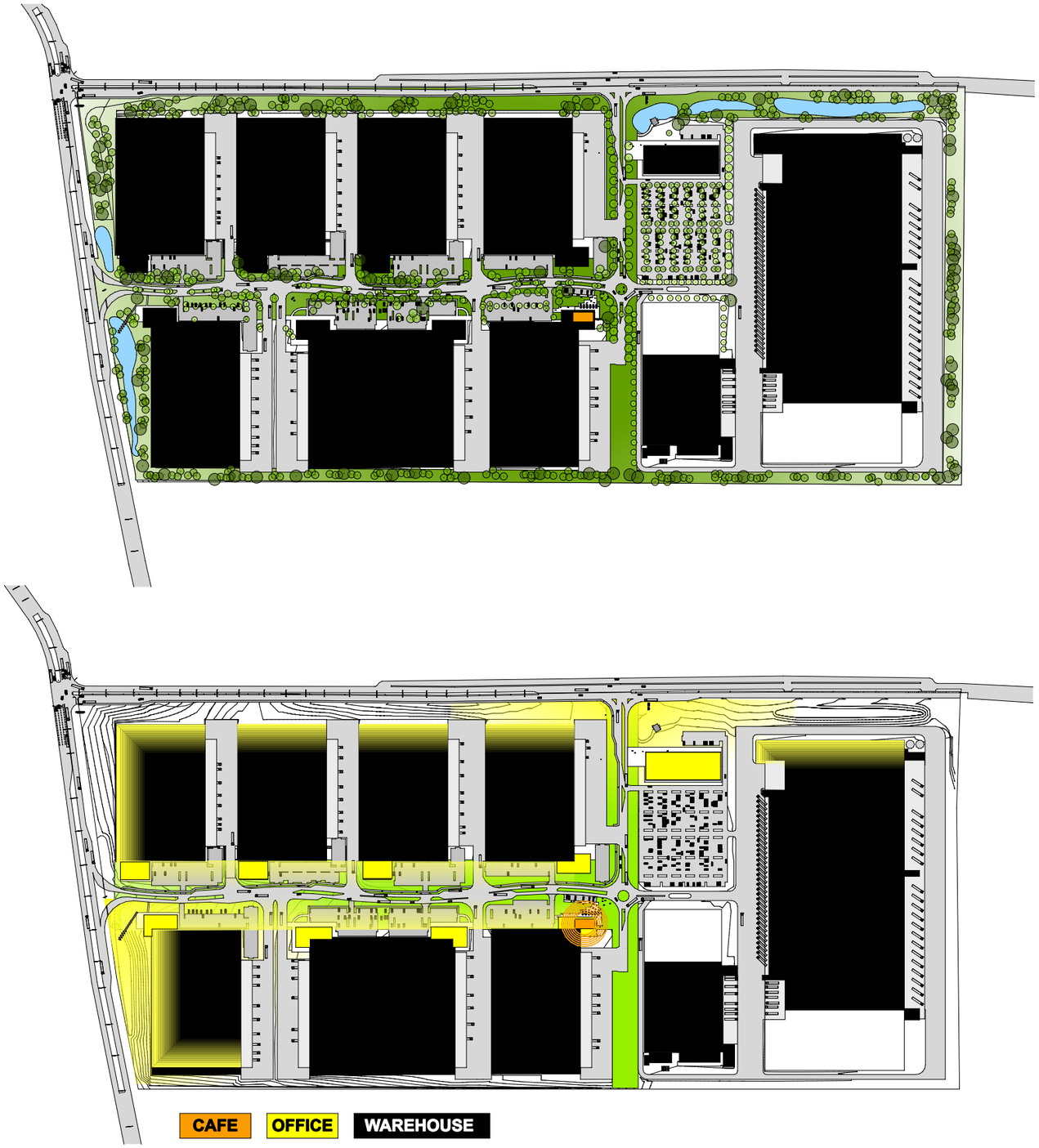
2.0 Kemps Creek Logistics Project - Urban Design Diagrams

2.1 Landscape

The Estate landscaping will re-establish the sites former Cumberland plain plant communities. The landscape character will be naturalistic and not subservient to the architectural structure groupings of endemic trees and under-storey planting will selectively reveal the distinctive elements of the estate

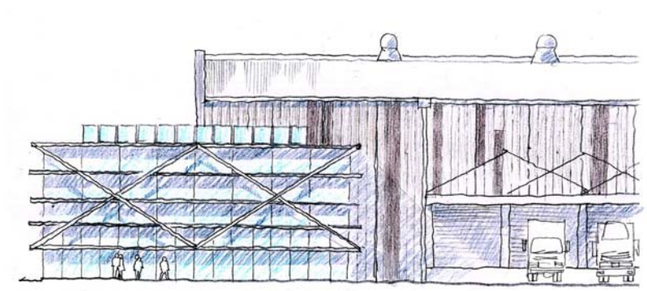
The sites landscape character will consist of Cumberland plains planting to the perimeter, informal groupings to the campus core and formal street planting to the main entry axis road.

Refer to landscape design statement and landscape drawings



2.2 Streetscape / Architecture

The estates architecture will be developed with a focus on the sites that will be required to make a positive impact on the presentation of the estate. These sites are generally corner sites and have the greatest impact on the public domain. Elements such as the office component and the common facilities and key frontages should display the highest quality architectural treatments.



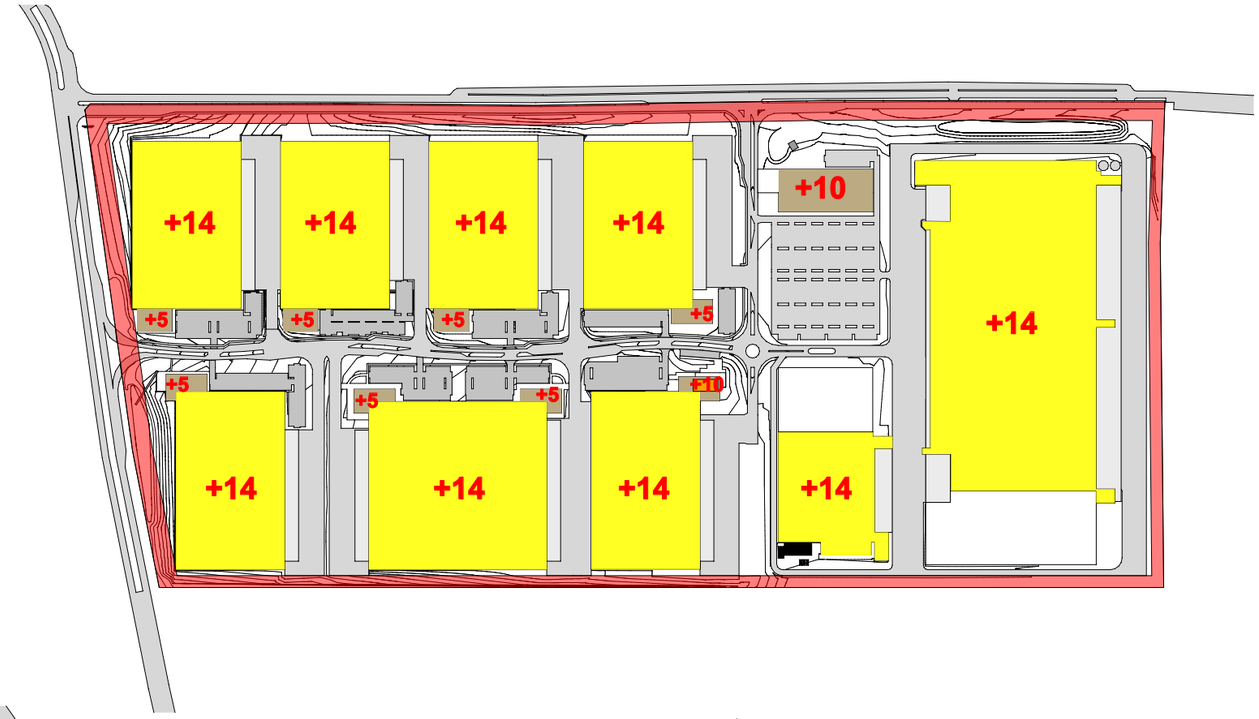
Estate Architecture

2.0 Kemps Creek Logistics Project - Urban Design Diagrams

2.3 Building Heights and Setbacks

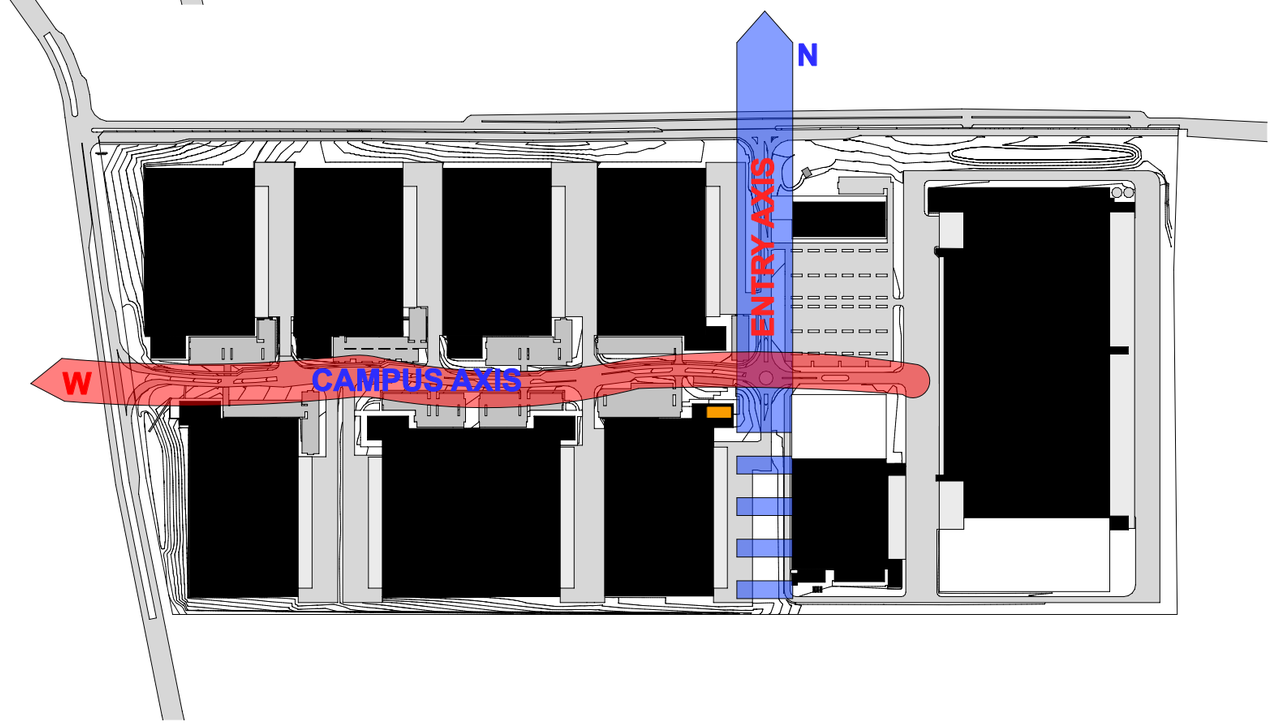
Establish uniform setbacks and height controls for all buildings.
Large facility eastern site = 14m max height
Campus Facilities = 14m max height
Offices = 5m max height
Double storey offices = 10m max height

The layout of buildings across the site respects a 20m landscaped setback zone to the primary road frontages (Bakers Lane and Mamre Road), a 12 m setback from the eastern boundary and southern boundary.



2.4 Axis

The urban design will develop the unique character of the two estate axis. The North/South entry axis is the primary axis and enters at the sites high point across the fall - this axis will establish a structured urban character befitting the sites main entry. The East/West axis running with the fall of the site will develop a campus character office frontages in a landscaped setting, carparking screened by plantings adjacent generous loading dock entries.

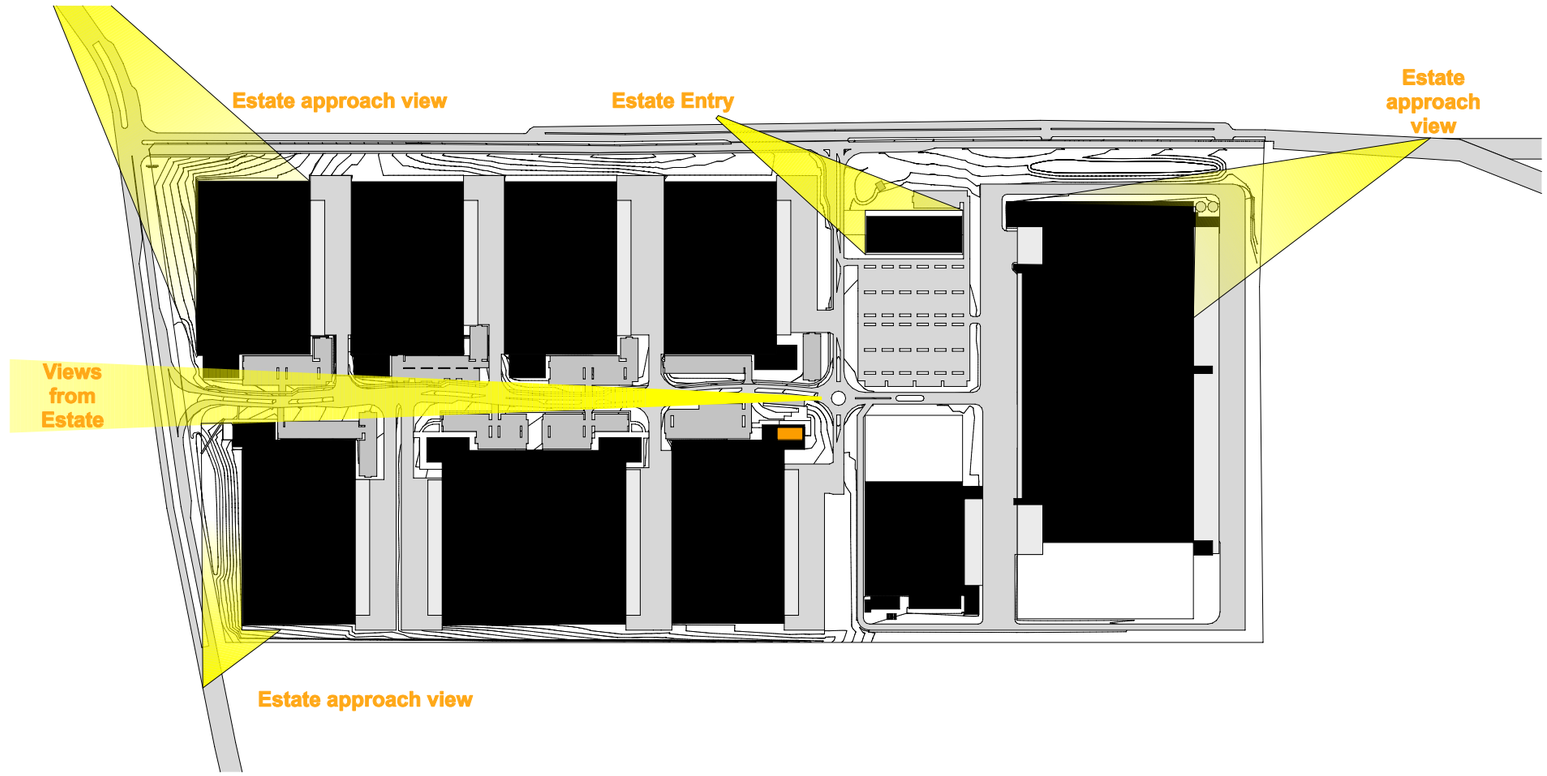


2.0 Kemps Creek Logistics Project - Urban Design Diagrams

2.5 Views

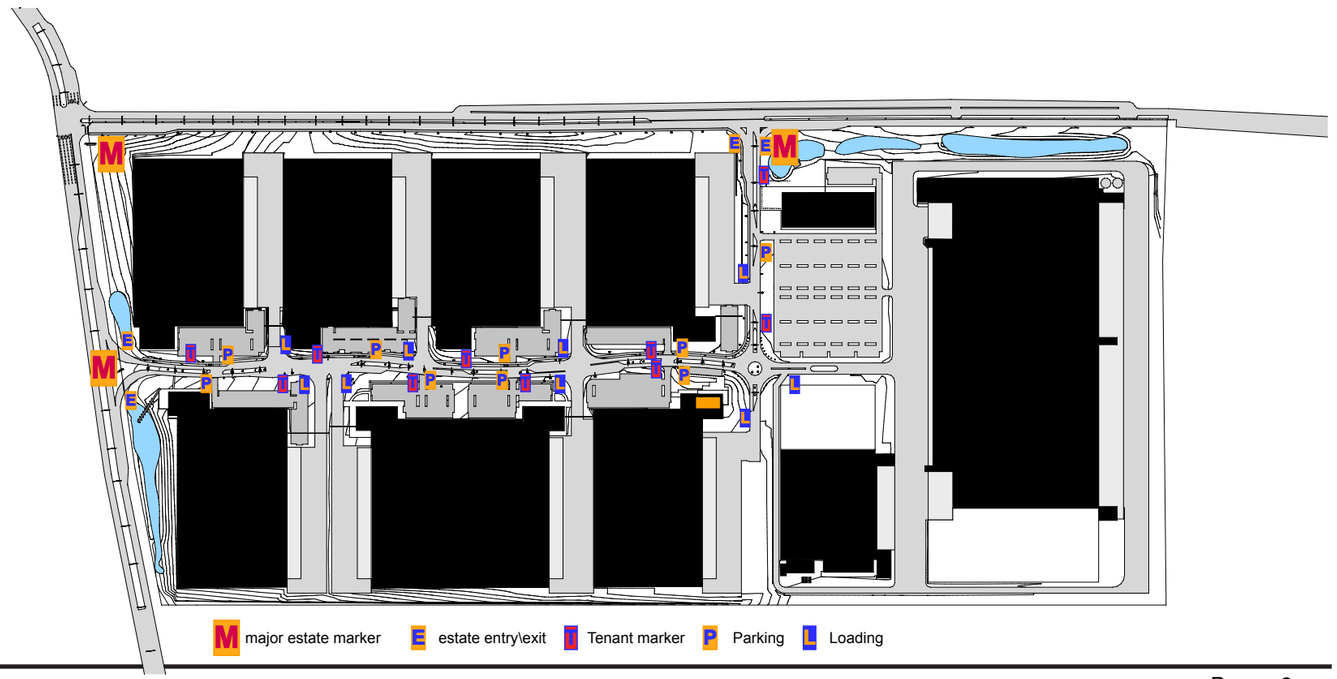
The site has views west to the Blue Mountains, the offices fronting the East/West campus axis will share these views.

The estates North and West perimeter will be visible from the roadways each will be given special treatment befitting those frontages. The experience of the estate from these roadways is intended to be characterised by a naturalistic sylvan frontage revealing glimpses of the estates buildings and opening up at each entry.



2.6 Urban Elements

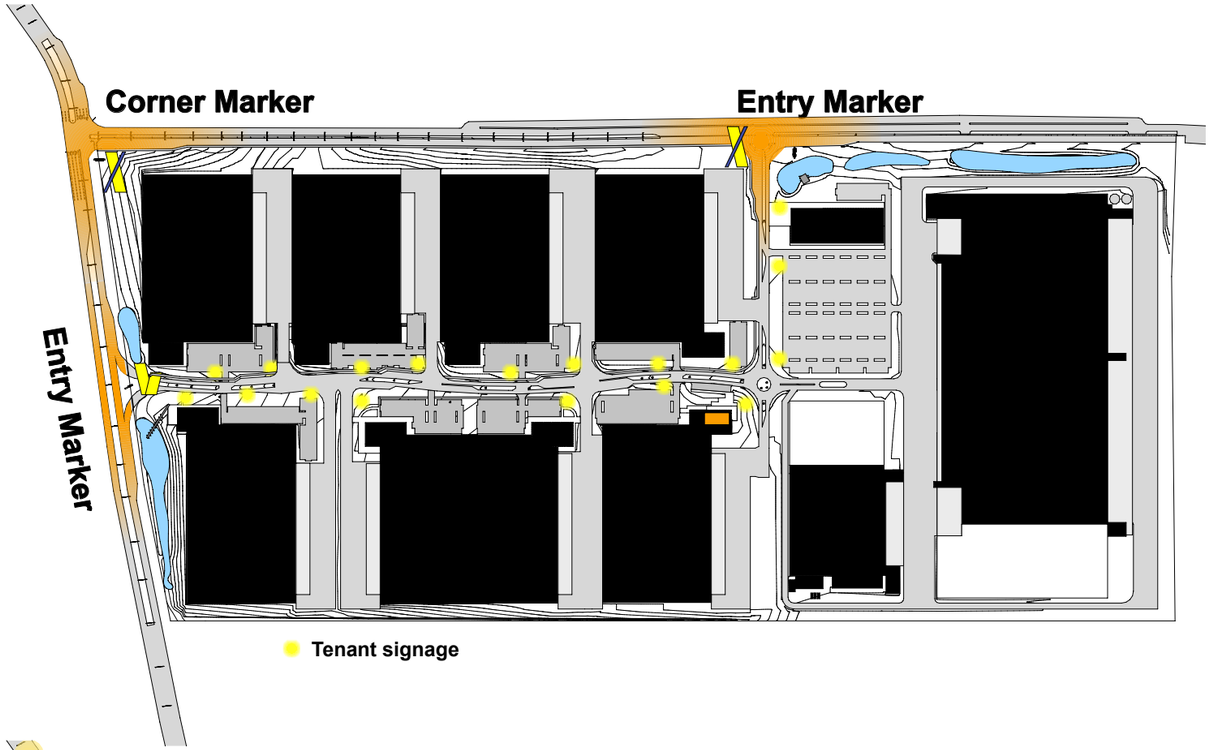
The estate will be developed with a suite of urban elements that will become an important identifying signature of the development. The estate design manual will provide a list of common urban elements with guidelines for their use, placement and co-ordination. The manual will include a mix of unique and proprietary elements such as paving, signage, lighting and fencing.



2.0 Kemps Creek Logistics Project - Urban Design Diagrams

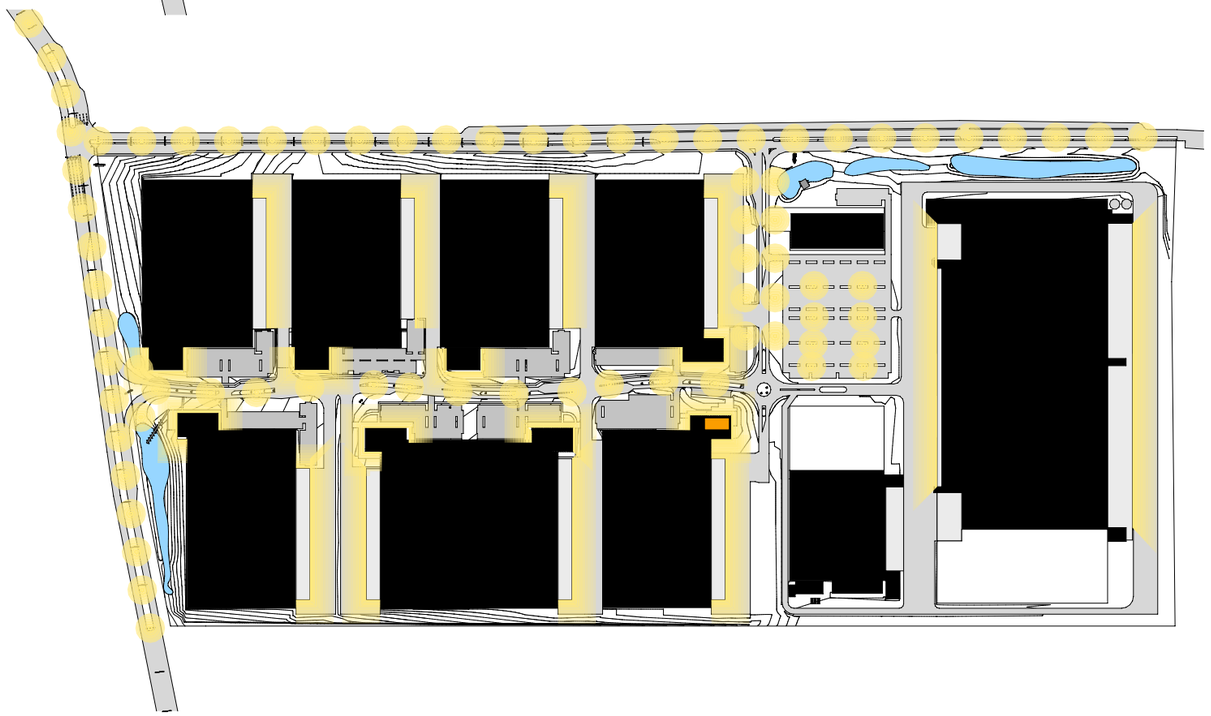
2.7 Signage

The estate will be developed with a signage strategy in place, the strategy will be closely allied with the lighting design. Signage should prioritize wayfinding, estate cohesion and tenant identity. The strategy will include larger site entry markers, internal estate tenant identity, lot numbering, local road and parking information.



2.8 Lighting

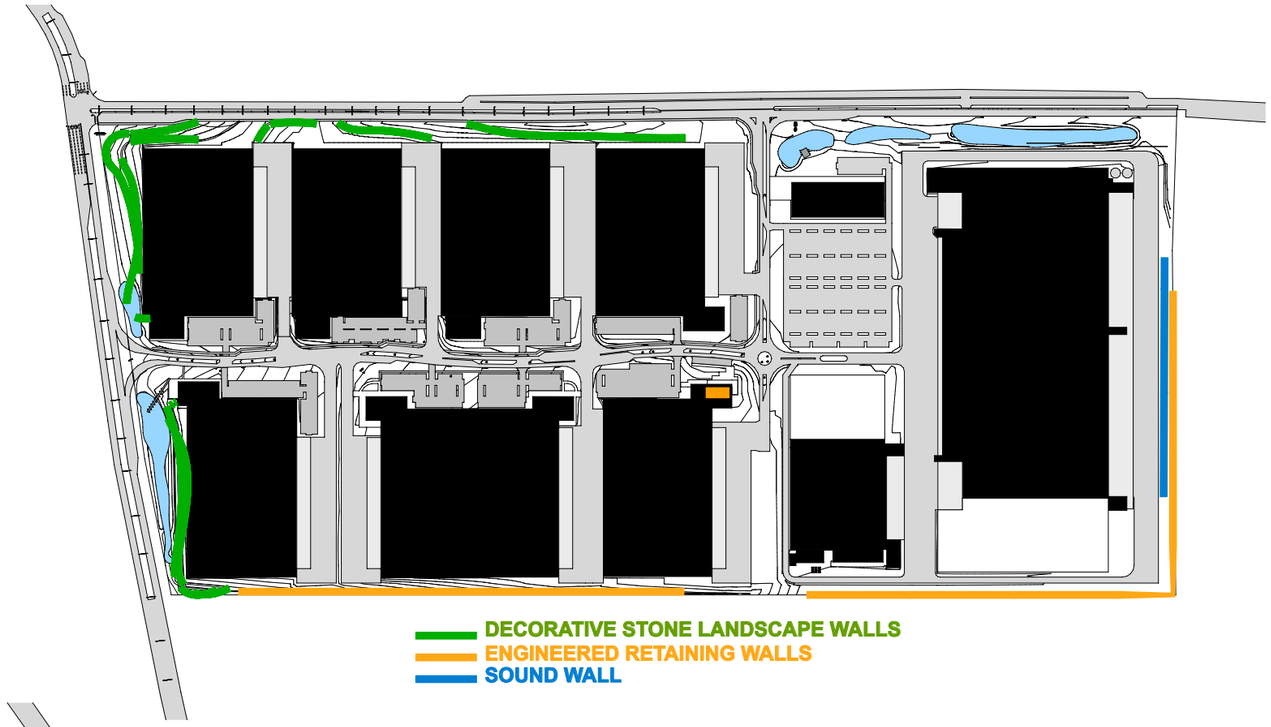
The lighting strategy will ensure highly efficient work areas and well lit parking areas and street lighting to code. The design of lighting in other areas will be carefully considered including sparse uplighting of tree stands, angled illumination of the water planes strong lighting to signage, entry points and dramatic pools of light at dock entries



2.0 Kemps Creek Logistics Project - Urban Design Diagrams

2.9 Retaining Walls / Sound walls

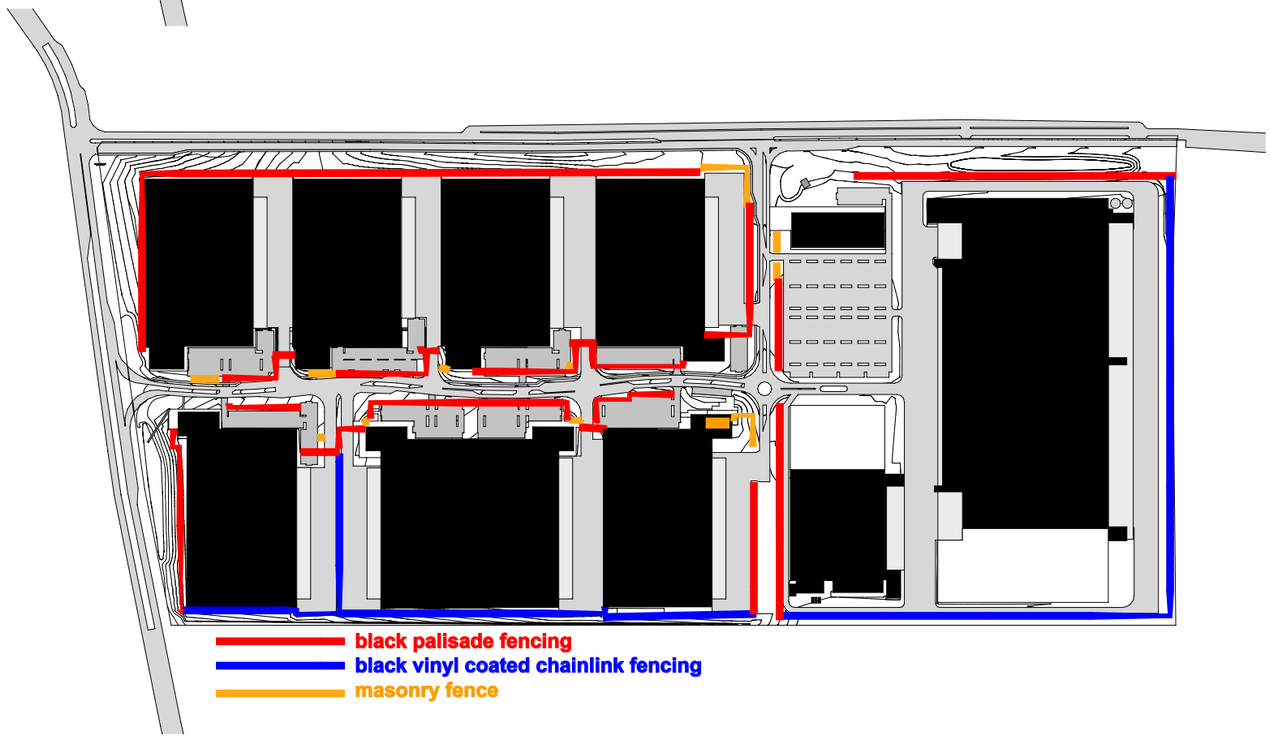
Retaining walls will be stepped and planted with appropriate native species, foot and top of walls will be battered to reduce apparent height of walls. Sound walls will be designed to be integral to fencing and site design strategies and be situated with landscape screening. The landscaped setback zones to the road frontages will include decorative landscape walls to add interest to the estates landscaped frontages.



2.10 Fencing

A site wide fencing design strategy will be implemented across the site. There will be 3 fence types; palisade, security and masonry. All fencing to street frontages shall be sited generally behind the setback line. Fencing to Bakers Lane and Mamre Road will be located 4 m from the building alignment to ensure a generous landscaped zone to the street frontages.

Fencing shall be sited so it does not impede sight lines for drivers and will be co-ordinated with the landscape, signage and lighting design.

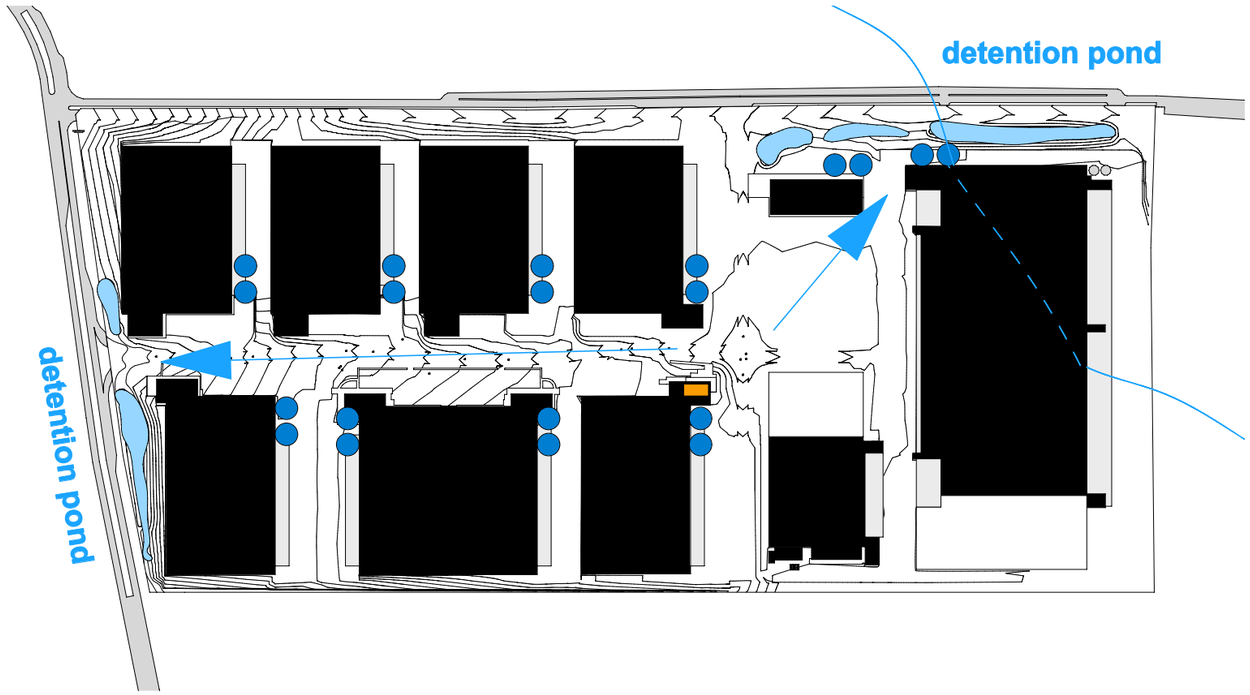


2.0 Kemps Creek Logistics Project - Urban Design Diagrams

2.11 Stormwater management

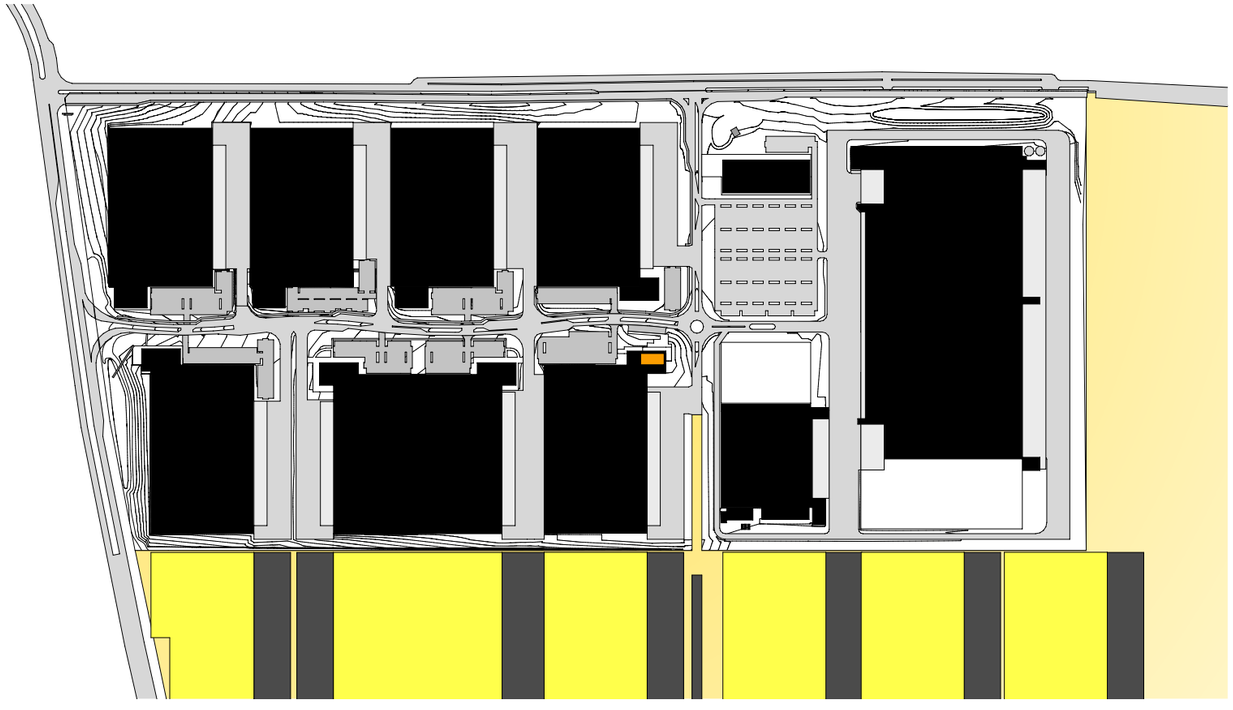
The stormwater system shall capture roof water for reuse in WC s and in landscaping. Water from hardstand parking and roadways will be captured and diverted via pipes, grass swales and buffer strips through local temporary detention storages. The system will include the incorporation of attractive water and landscape features in the design of the stormwater management system.

Refer to stormwater design report.



2.12 Future Developments

The Masterplan as developed allows for potential future development of adjoining sites.



3.0 Kemps Creek Logistics Project - Estate Design

3.1 Architectural Design Statement

The design of buildings across the site has been informed by a precedent study that has identified a range of industrial building typologies and their suitability for end users and the specifics of the Kemps Creek Site.

The architectural language utilizes a simple and restricted palette. The functional elements of Office, Dock, and Entry have been exaggerated and celebrated whilst the structure and skin have been manipulated to achieve an appropriate recessive functional architecture for the estate.

The Kemps Creek Logistics Project will be characterised by an architecture that utilizes a restrained colour palette, has simple elemental forms and has a high architectural quality to the offices and public domain treatments.

The Kemps Creek estate building facades have been designed to work in sympathy with the landscaped frontages vertically accented metal cladding in 3 colour tones will subtly emboss a variegated landscape pattern across the facades. The metal cladding will be predominately Zincalume finish with both translucent sheeting and dark grey vertical stripes - a subtle abstraction of the Cumberland plain forests.

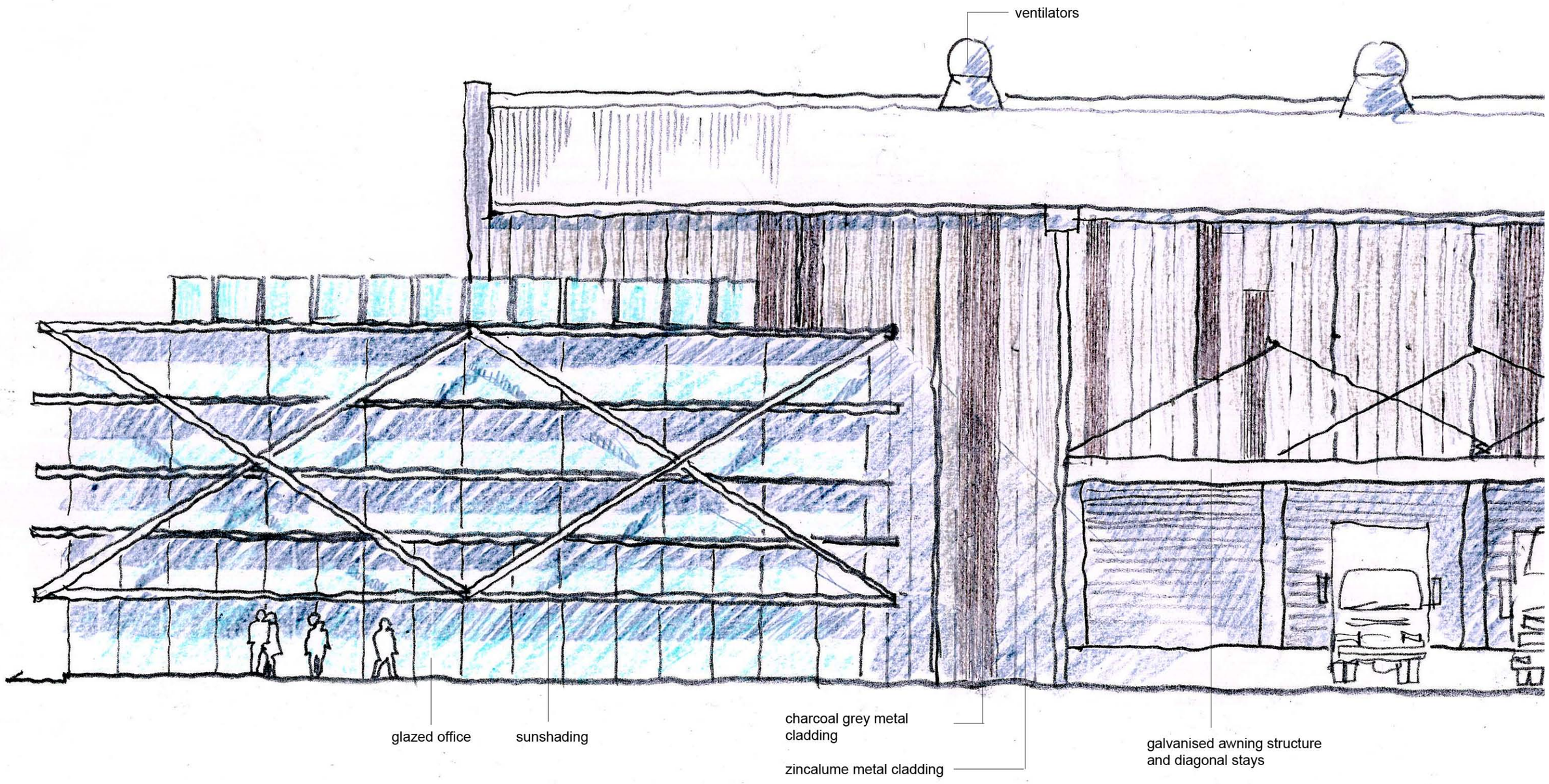
The awnings and office sunshading will be braced with diagonals creating a quality architectonic accent to these primary building elements.

Arthur Boyd

Untitled (Shoalhaven Landscape)
1984, Oil On Canvas

Typical side elevation and dock.

Bakers Lane Streetscape



Typical Estate Architecture

3.0 Kemps Creek Logistics Project - Estate Design

3.2 Environmentally Sustainable Design

The design of the Kemps Creek Estate should aim to investigate the economic feasibility of a range of sustainable measures. Full life cycle costing should be applied for such systems and initiatives.

-Efficiency of Development

The creation of a high level of efficiency within the LOGOS estate is an important aspect of sustainability as such efficiency reduces the need to develop further natural areas. An efficient estate where there is an aggregation of facilities and increased density will lead to increases in the estate s yield.

- Daylighting

All new buildings on the site should aim to reduce the need for artificial lighting through a range of measures rooftop monitors, skylights and translucent wall materials can all contribute to reducing the need for artificial light inside the buildings by about half on sunny days.

-Water Sensitive Design and Water Harvesting

Water sensitive urban design seeks greater compatibility between management of storm water and natural hydrological and ecological processes. The large extent of roofing and paved surfaces in the developed estate will generate larger peak storm flows and flow volumes than would occur naturally. It should be possible to mitigate the adverse effects of such increased flows on the environment and to make use of the surplus stormwater using water sensitive design and storm water harvesting techniques. This involves rainwater tanks, local temporary detention storages, grass swales and buffer strips and major filtration and retention basins.

- Ventilation

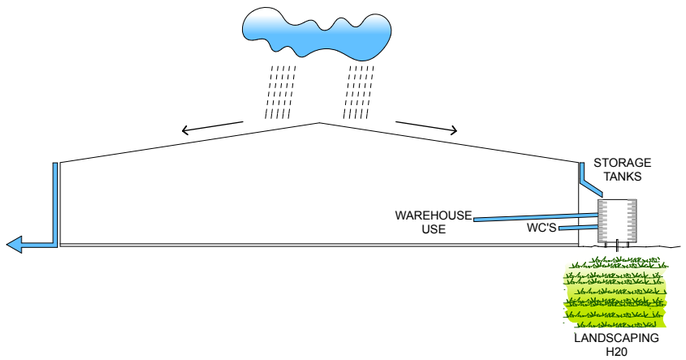
A range of measures to achieve user comfort and prevent extreme temperature stratification in larger logistics facilities from potentially damaging stock.

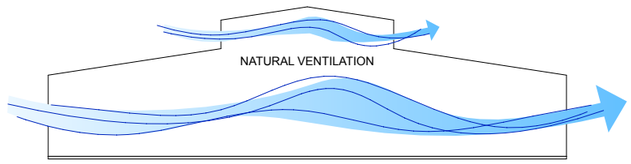
- Heating

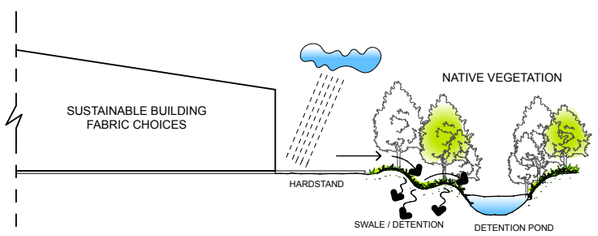
All new buildings on the site should aim to minimize the reliance on artificial heating and cooling.

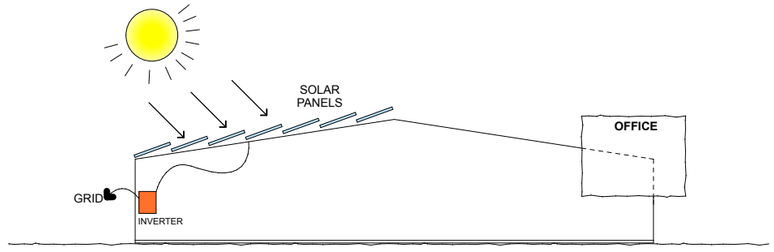
- Power Generation

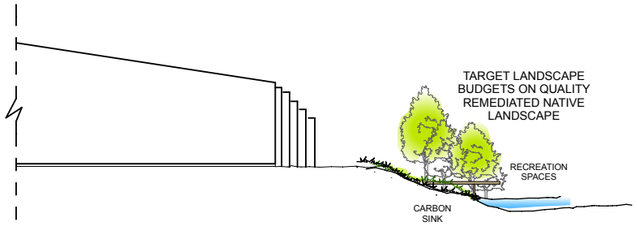
The large roof areas of the Kemps Creek estate can be used as a platform to set up PV grid to sell the power back to the grid. The concept that electricity generated by PV units provide power to at least equal energy consumption used in air conditioning office accommodation could be a realistic initial target. With technological advances and reductions in cost PV s may feasibly be spread over a large portion of the roof area.

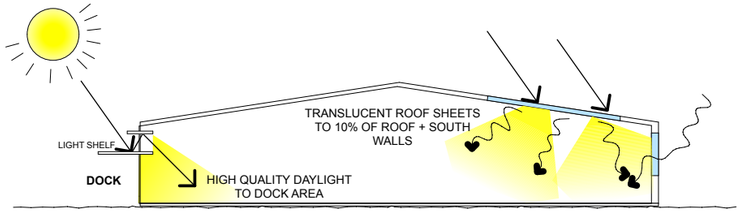










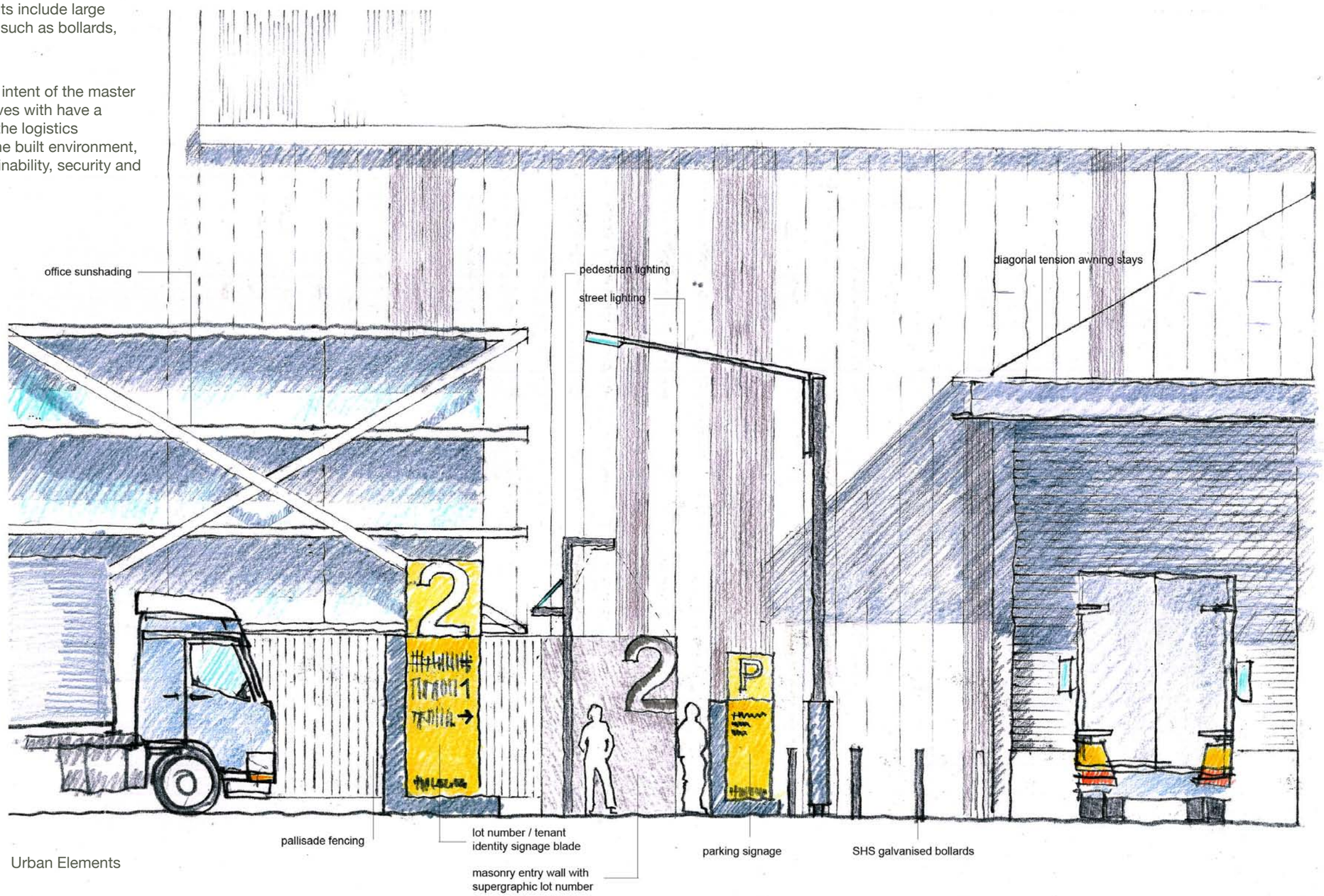


4.0 Kemps Creek Logistics Project - Public Domain Design

4.1 Urban Elements

The Kemps Creek Logistics Project will be developed with a unified suite of urban elements and will co-ordinate signage, lighting paving, fencing and street furniture. The designed elements include large estate entry markers through to smaller elements such as bollards, kerb details, bins, seating and tree guards.

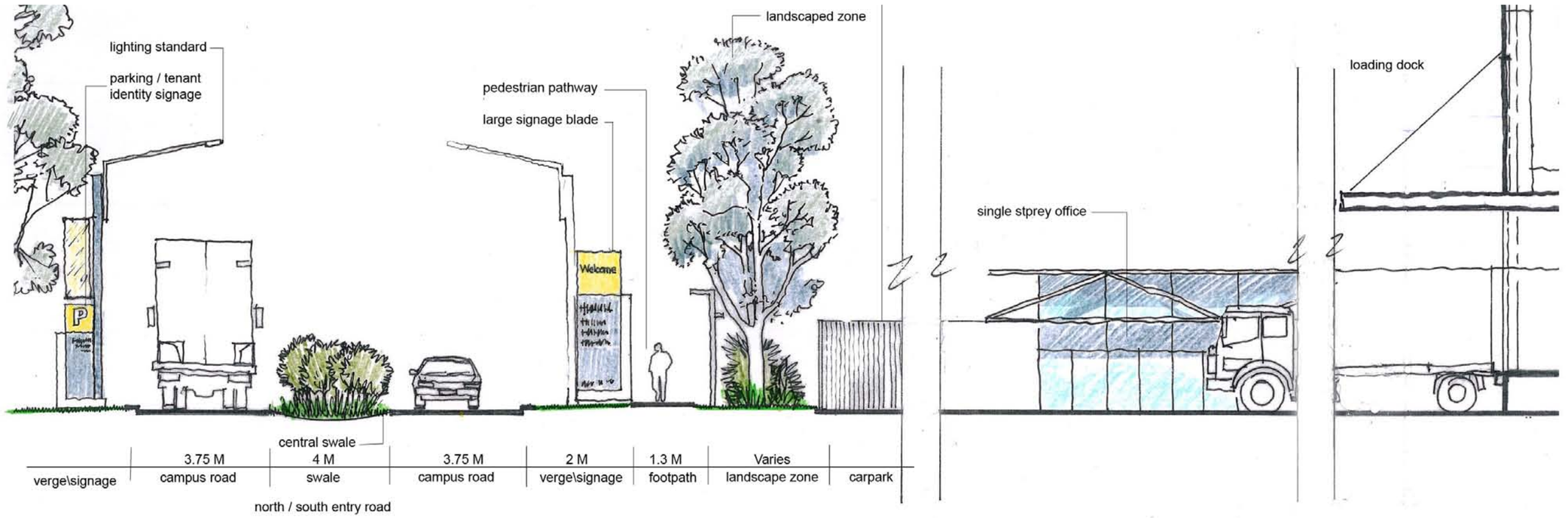
The design of the public domain will reinforce the intent of the master plan: simplicity and clarity. The elements themselves with have a directness, scale and elemental nature reflecting the logistics environment. The elements will suit the scale of the built environment, the public domain design will also reinforce sustainability, security and estate efficiency.



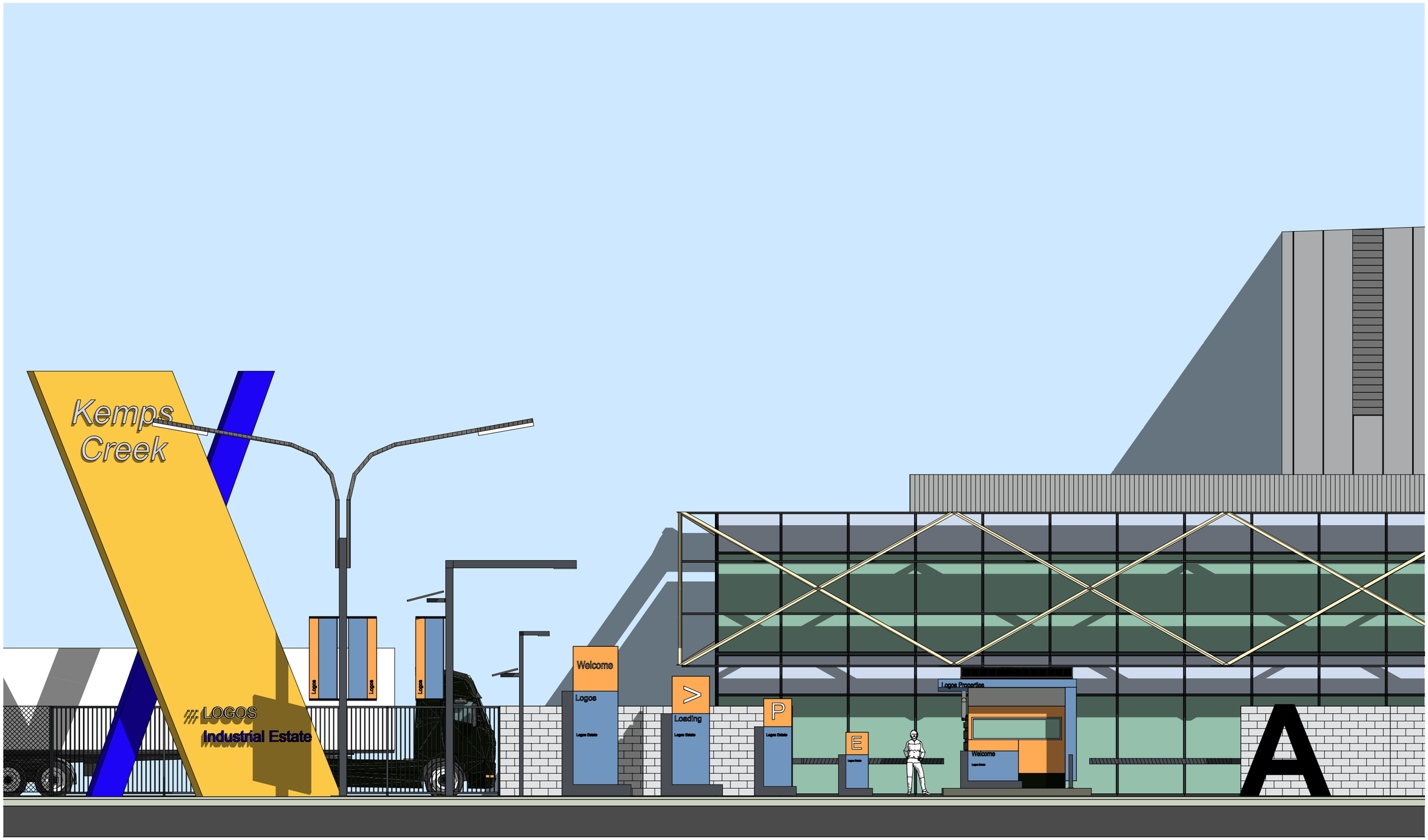
Urban Elements

4.0 Kemps Creek Logistics Project - Public Domain Design

Cafe and East West Campus Road

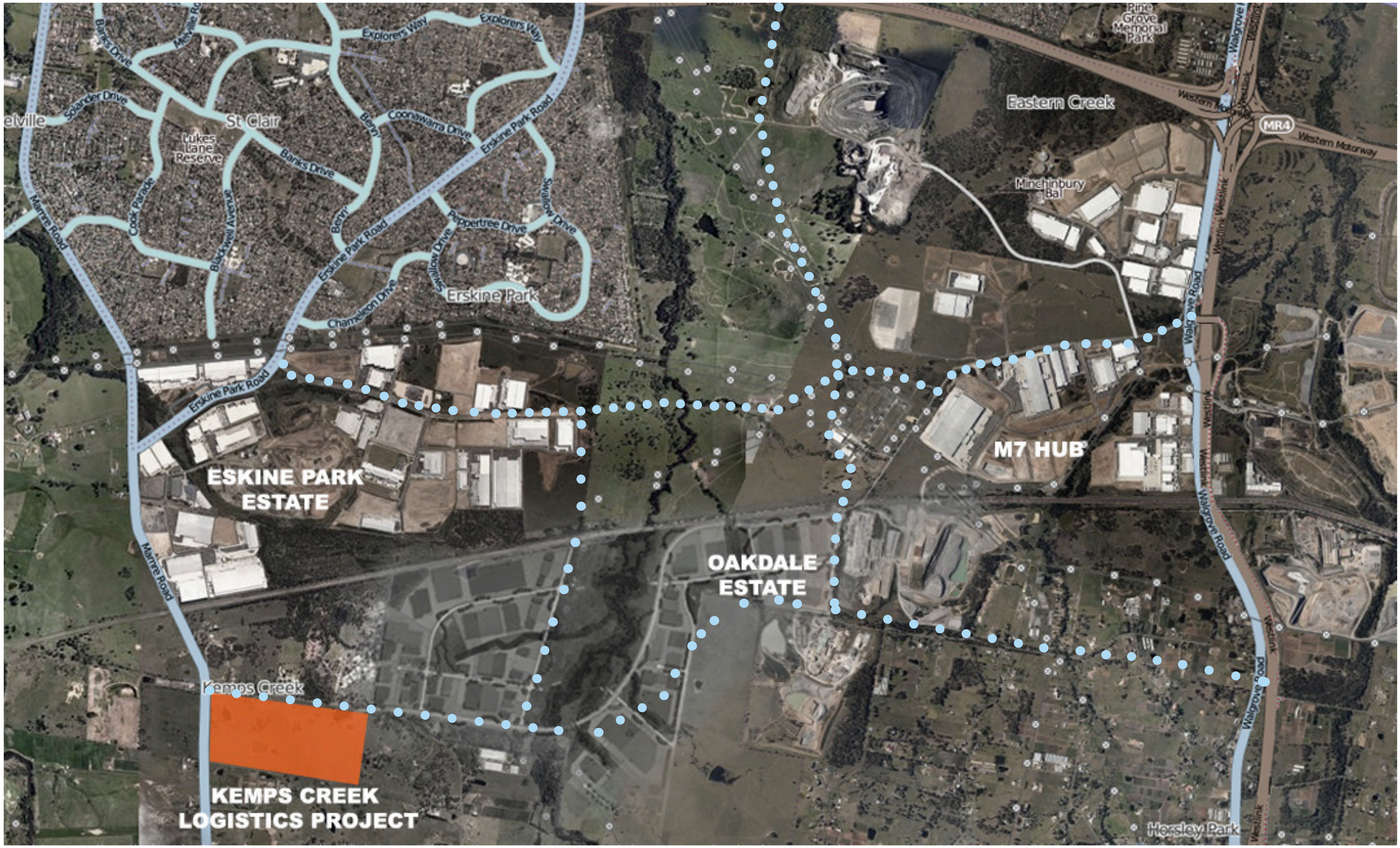


North South Campus Road and Office



Urban Elements 1:100

5.0 Kemps Creek Logistics Project - Masterplan Drawings

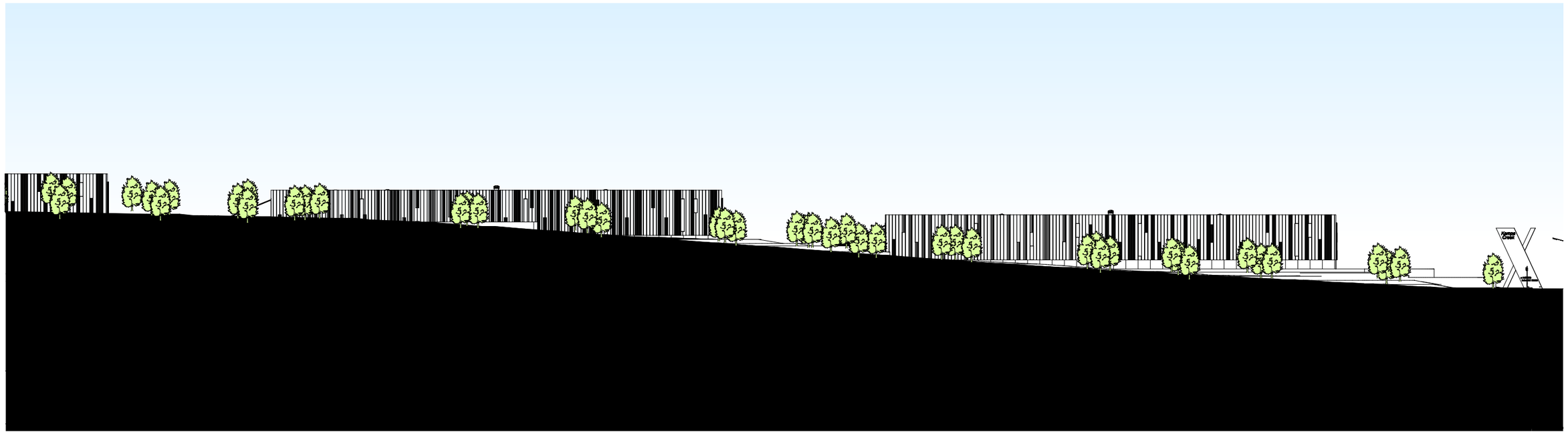


5.1 Kemps Creek Logistics Project Master Plan Location NTS

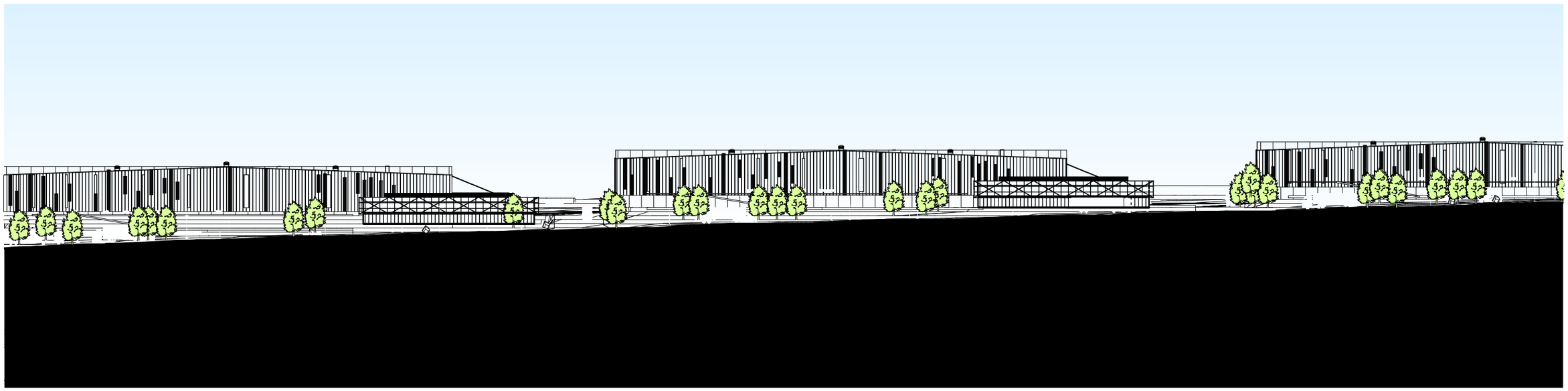
5.0 Kemps Creek Logistics Project - Masterplan Drawings

5.2 Kemps Creek Logistics Project Master Plan 1:3000

5.0 Kemps Creek Logistics Project - Masterplan Drawings



BAKERS LANE LOOKING SOUTH



CAMPUS ROAD LOOKING NORTH

5.4 Kemps Creek Logistics Project - Aerial View

5.5 Kemps Creek Logistics Project - Corner of Bakers Lane and Mamre Road

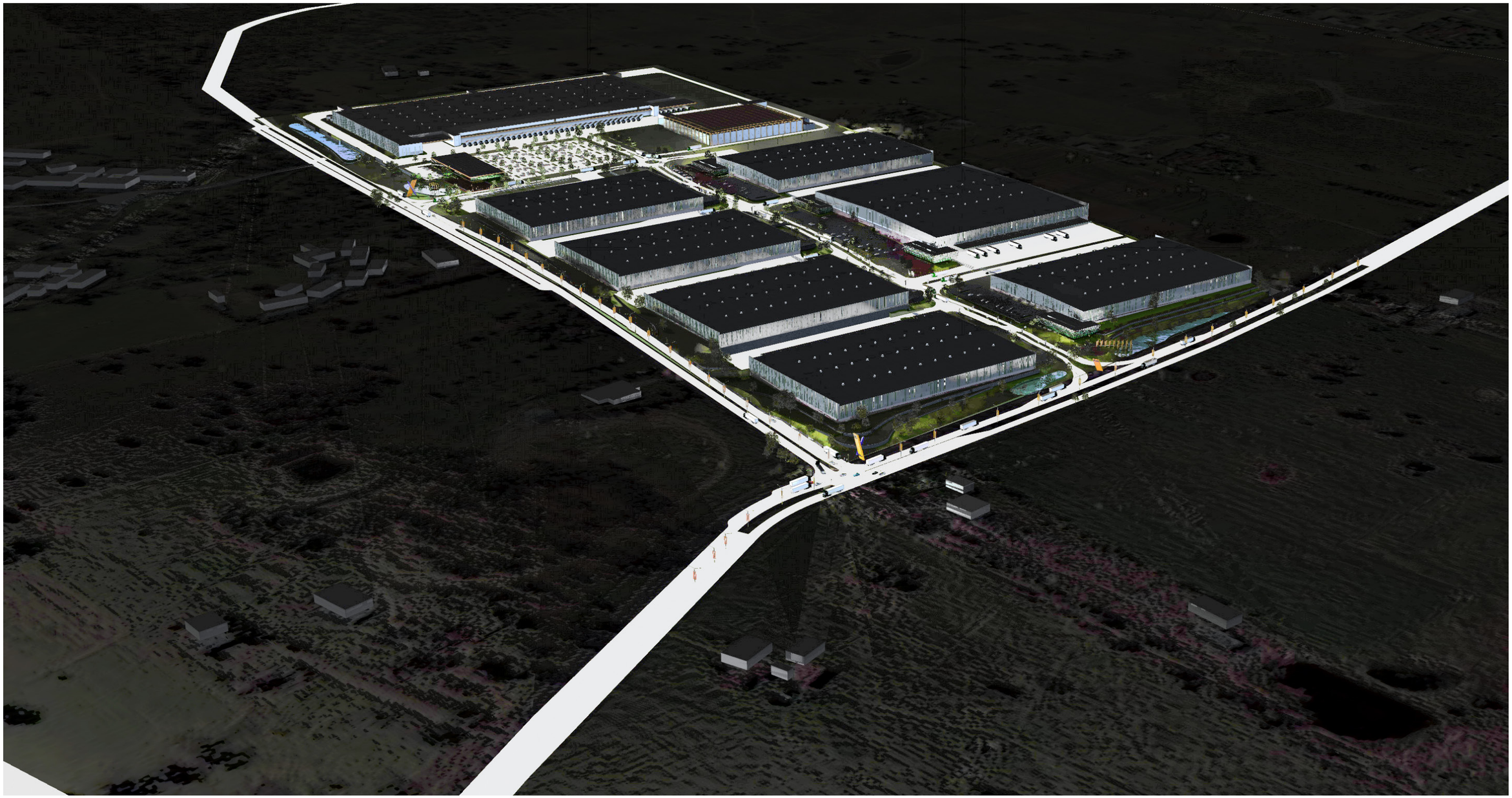
5.6 Kemps Creek Logistics Project - Approach From Mamare Road

5.7 Kemps Creek Logistics Project - North Estate Entry on Bakers Lane

5.8 Kemps Creek Logistics Project - View of Cafe and Campus Road

5.9 Kemps Creek Logistics Project - View of Campus Road

5.10 Kemp's Creek Logistics Project - Typical Office and Warehouse on Campus Road



5.11 Kemps Creek Logistics Project - Night Aerial View