Draft Development Control Plan



Warner Industrial Park

Sparks Rd and Hue Hue Rd
Warnervale
October 2009

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1.0 PRELIMINARY

1.1 Introduction

Precinct 14 is located at the Sparks Road – F3 Freeway Interchange in Wyong Shire. The site encompassed by the Warner Industrial Park forms the major part of Precinct 14 within the Wyong Employment Zone. Precinct 14 is bounded by the F3 Freeway, Sparks Road, Hue Hue Road and Kiar Ridge Road. Warner Industrial Park forms the southern section of the Precinct with an approximate area of 104 hectares and is the subject of this Draft Development Control Plan.

Creation of new employment opportunities in this part of the Central Coast has been a major objective of State, Regional and Local planning for a number of years. The Central Coast Regional Strategy identifies Precinct 14 as employment lands.

An appropriate mix of uses is important in achieving job forecasts, quality development and economic viability. Warner Industrial Park will comprise a mix of employment generating uses. This DCP provides guidelines for development within the public and private domain, including controls for the siting and design of buildings and further subdivision to meet market demand, together with specific controls in relation to Water Sensitive Urban Design.

1.2 Name of Plan and Commencement

This plan may be cited as the "Development Control Plan Warner Industrial Park 2009".

This DCP was adopted by the ### on ### and came into effect on ###.

1.3 The Consent Authority

Clause 3 of the *State Environmental Planning Policy (Major Projects) 2005 Part 15* (SEPP (Major Projects) 2005 Part 15 identifies the relevant consent authority for future development of the Warner Industrial Park DCP Area.

Each Development Application will be assessed having regard to the aims and objectives of the *Environmental Planning and Assessment Act 1979*, *SEPP (Major Projects) 2005 Part 15,* this DCP, and any other relevant policies.

1.4 Land and Development Covered by This DCP

This DCP applies to the land known as the Warner Industrial Park located in Precinct 14 as shown on Figure 1. This will now be referred to as the Warner Industrial Park DCP area.

1.5 Purpose of This Development Control Plan

This DCP has been prepared in accordance with Part 3 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000*. The DCP provides more detailed provisions than in the *SEPP (Major Projects) 2005 Part 15*.

Under Section 79C of the EP&A Act, the consent authority is required to take into consideration the relevant provisions of this DCP in determining an application for development.

1.6 Amendments to this Development Control Plan

This Development Control Plan may be amended and amendments will be outlined below.

Amendment No	Date	Details of Amendments

1.7 Relationship with other Planning Documents

Precinct 14 of the Wyong Employment Zone is a State Significant Site. *SEPP (Major Projects) 2005 Part 15* is the principal Environmental Planning Instrument that applies to the Warner Industrial Park DCP area. Other State Environmental Planning Policies apply to the Warner Industrial Park DCP area where relevant. The statutory provisions of any SEPPs will prevail over this DCP, unless otherwise stated.

Where nominated in this DCP, relevant clauses from the Wyong Shire Council Landscape Policy and Chapter 67 - Engineering Requirements for Development of the Wyong Shire Council DCP 2005, may also apply.

In the event of any inconsistency between this DCP and other technical policies, guidelines or codes, this DCP will prevail in relation to development of the Warner Industrial Park DCP area.

All works are to be in accordance with the Building Code of Australia where relevant.

1.8 Explanatory Notes

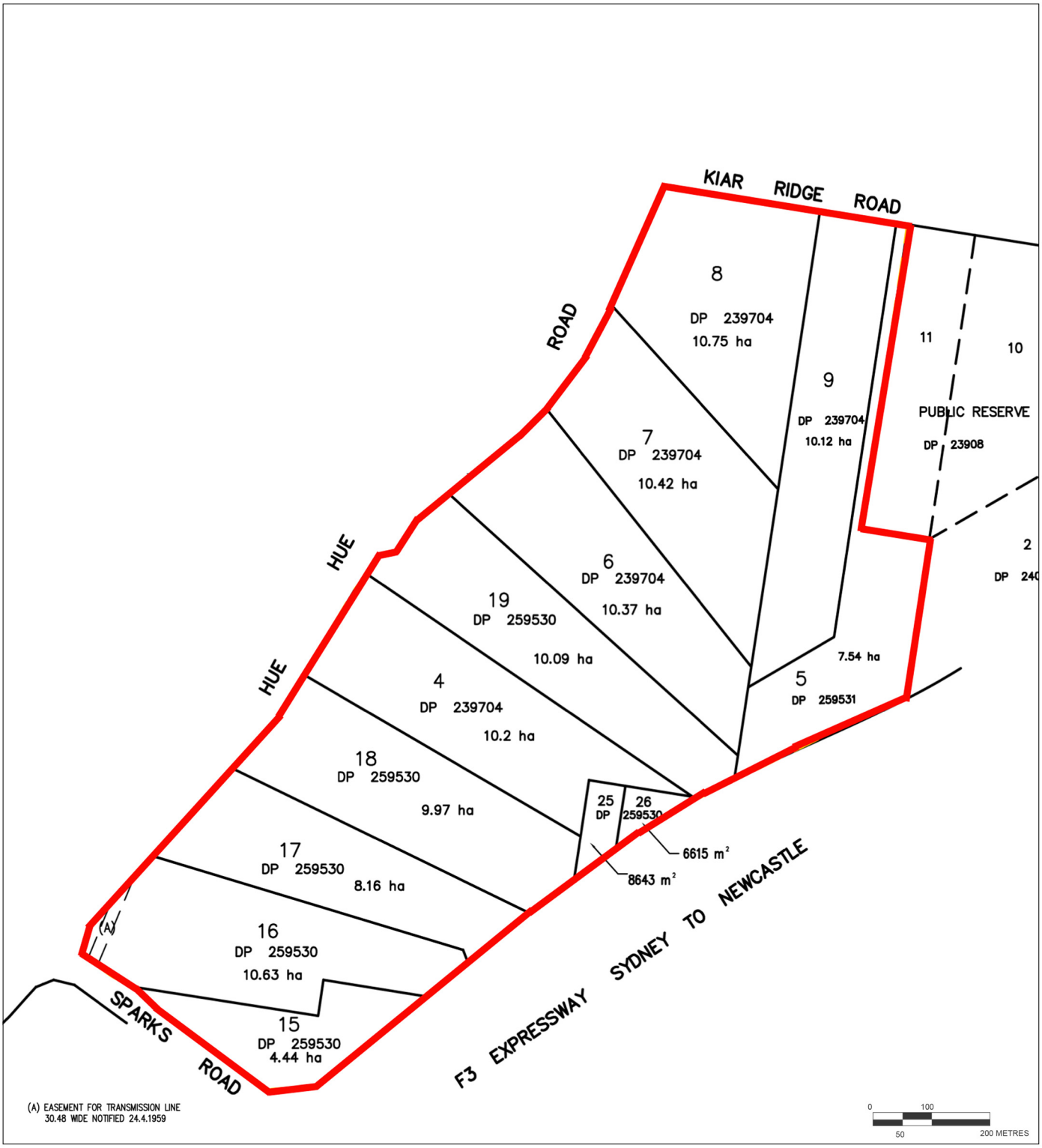
Terms used in this DCP are defined in the *Standard Instrument – Principal Local Environmental Plan*. Section 6.0 also provides guidance to applicants for the lodgment of development applications. Further advice on lodgment procedures can be obtained from the consent authority.

1.9 Development Controls

The requirements of this DCP are expressed as Objectives and Controls. Objectives are statements that define the overriding intention of each control element. Controls provide standards that must be met by a proposal, unless the applicant can demonstrate that the objectives can be better met through the application of a different standard than that provided in the controls.

1.10 Variations to the Plan

In special circumstances, the Consent Authority may allow variations arising from detailed design considerations, if the applicant has demonstrated that such variation does not contradict the aims and objectives of this Plan and the *SEPP (Major Projects) 2005 Part 15.* Variations and amendments shall be supported in writing and accompanied by explanation, demonstrating the way in which the requirements of these provisions have been satisfied.



Source: Trehy Ingold Neate 2007

LEGEND

Land to which this Plan applies

2.0 DEVELOPMENT GENERALLY

2.1 Zones and Objectives

SEPP (Major Projects) 2005 Part 15 has zoned the site IN1 General Industrial and E2 Environmental Conservation. Refer Figure 2 for the Zone Plan.

The general aims relating to the role and function of the Warner Industrial Park DCP area are to:

- promote the orderly use of land as a regionally significant site for employment generation;
- reduce the impact of development on natural eco systems including downstream waterways;
- encourage energy efficient design and principles of Ecologically Sustainable Development (ESD);
- encourage quality urban design and public domain appropriate to a contemporary industrial park; and
- manage the traffic and parking within the Warner Industrial Park DCP area and the adjoining road network.

In accordance with the *SEPP (Major Projects) 2005 Part 15*, the objectives of Zone IN1 General Industrial are as follows:

- to facilitate development for a wide range of employment-generating industrial, manufacturing, warehousing, storage or research purposes, including ancillary office space;
- to encourage employment opportunities in the Wyong Employment Zone;
- to minimise any adverse effect on industry on other land uses; and
- to ensure development enhances the amenity of the Wyong Employment Zone by including high quality landscaping, adequate building setbacks, high quality external finishes and the like.

In accordance with the *SEPP (Major Projects) 2005 Part 15*, the objectives of Zone E2 Environmental Conservation are as follows:

- to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values;
- to prevent development that could destroy, damage or otherwise have an adverse effect on those values.

2.2 Development Concept and Subdivision Plan

The Indicative Layout Plan (Figure 3) and Indicative Landscape Plan (Figure 4) generally guide development of the Warner Industrial Park DCP area. The location of the site in relation to the F3 Freeway and its proximity in relation to other centres is likely to see a greater emphasis on industrial, warehousing and distribution type uses, but it is intended that a mix of employment generating uses should be encouraged including:

- Boat Repair Facility
- Depots
- Freight and Transport Facility
- Function Centres
- Industries
- Industries Retail Outlet
- Light Industries
- Liquid Fuel depots
- Recreation facilities (indoor)
- Transport depots
- Truck depots
- Warehousing and Distribution Centres
- Ancillary support uses, such as child care centres, community facilities, food and drink premises, kiosks and neighbourhood shops. These uses are intended to support the Warner Industrial Park area.

The subdivision pattern is intended to create regular shaped parcels where possible with flexibility to consolidate or subdivide to meet market demands.

2.3 Landscape Masterplan

Landscape will play an important role in ensuring that the environmental and visual quality of the estate is maintained at a high standard. Landscape treatment will be a major unifying element within the area and is intended to create a distinctive character. The Indicative Landscape Masterplan guides treatment of the public domain and external areas to individual development lots.

The landscape treatment proposed will eventually mature to achieve a theme of urban landscape around the developed parts of the site, graduating to a native landscape character at the perimeters of the Warner Industrial Park DCP area and especially along Buttonderry Creek.

All landscape designs and works shall be carried out in accordance with the Landscape Masterplan (Figure 4) and the Visual and Landscape Management Strategy attached in Appendix 1.

2.4 Public Domain

The public domain will be developed in accordance with the Concept Plan and the Project Approval for the Warner Industrial Park. The Warner Industrial Park DCP applies to the private domain and its interface with the public domain.

2.5 Retailing and display in association with goods manufactured or processed on site

Retailing and showroom display of goods manufactured, processed, assembled, serviced or warehoused on sites within the Warner Industrial Park DCP area may be carried out subject to development consent and where the consent authority is satisfied that such retailing is an ancillary use.

2.6 Recreational Facilities

Commercial recreational facilities (such as indoor cricket, tennis and soccer centres, bowling alleys and the like) and educational or recreational training facilities may be carried out within the Warner Industrial Park DCP area subject to consent. A Development Application for such uses will require the applicant to submit a parking and traffic study to address the greater car parking demands often generated by such uses where carparking cannot be provided in accordance with the requirements in Section 3.14.

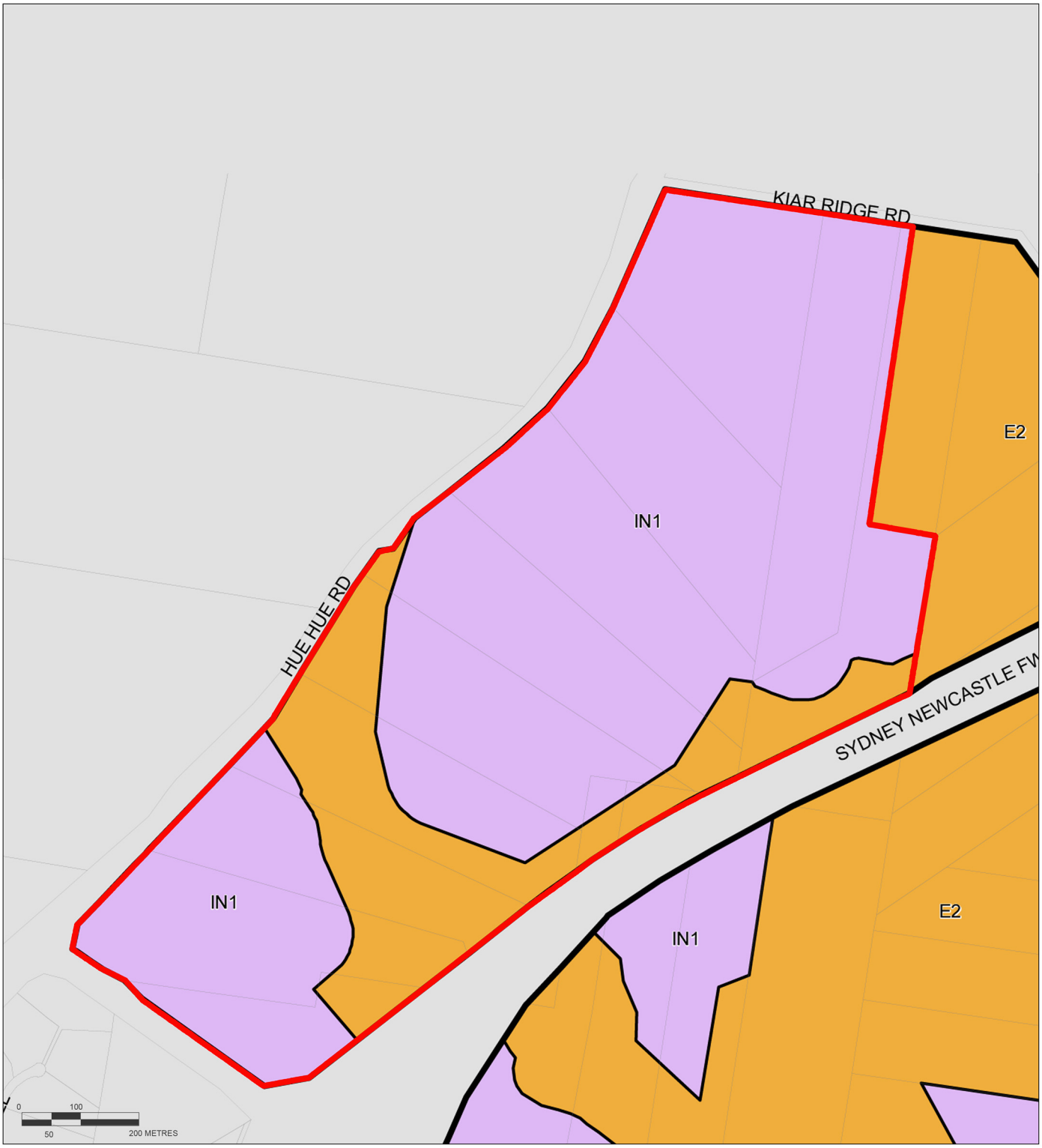
Employer-provided recreational facilities for employees of businesses within the Warner Industrial Park DCP area (such as tennis courts, cycleway/running track network) are encouraged.

2.7 Child Care Café and Tenant Services

The provision of child care centres and convenience services (such as café/food outlets, neighbourhood shops, photocopying centres, ATMs) are encouraged in the Warner Industrial Park DCP area.

Convenience services such as neighbourhood shops and café/food outlets shall not exceed a maximum gross floor area of 2,000m2 for the Warner Industrial Park DCP area and 250m2 for each individual tenancy.

These facilities should be located and signposted so that they are predominantly for the use of employees and users of the Warner Industrial Park DCP area and do not require exposure to the surrounding main roads to be viable.



Source: Wyong Employment Zone Land Zoning Map, NSW Department of Planning 2009

LEGEND

- Warner Industrial Park DCP Area
- E2 Environmental Conservation Zone
- IN1 General Indusrial Zone

Source: Trehy Ingold Neate 2007

LEGEND

- 5m SETBACK
- 10m SETBACK
- 15m SETBACK
- STORMWATER BASINS
- WETLANDS

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Figure 4 - Indicative Landscape Plan

Warner Industrial Park Development Control Plan
October 2009

3.0 PRIVATE DOMAIN

The private domain comprises all land within private ownership. This DCP is intended to ensure that all private development reflects the expectations of the local community and is appropriate for the locality and the intended use of the Warner Industrial Park DCP area as a high quality industrial estate. Following are the objectives and controls for the Private Domain, however other sections should also be referred to in relation to the Private Domain.

3.1 Subdivision

Objectives:

- To create lots that are of a size and shape that is compatible with employment generating uses.
- To allow flexibility for further consolidation or subdivision to meet market demands.

Controls:

- Subdivision of land shall satisfy the following criteria:
    - For irregular shaped lots, the minimum width shall apply at the building line setback.
    - No more than 10% of land zoned IN1 General Industrial zone in the Warner Industrial Park DCP area shall have a lot area less than 2,000m².
    - Frontages shall not be less than 30 metres and the width to length ratio is to be no more than 1:3.

3.2 Community Title and Strata Subdivision

Objectives:

- To enable multiple individuals and corporate entities to manage site and buildings on a collective basis.

Controls:

- Any application for strata subdivision shall:
    - provide capacity for sustainable use of the site for purposes permitted in the applicable land use zone;
    - demonstrate the lots are of an adequate size to enable truck movements;
    - provide a minimum of one loading/unloading bay per unit;
    - not be in the form of a battle-axe lot; and
    - include appropriate allocation of car parking by retaining the approved ratio of floor space to car parking spaces in accordance with Section 3.14 of this DCP.

3.3 Utility Services

Objectives:

- To ensure that all proposed lots have adequate services to cater for future occupants.
- To ensure that services provided on public land cater for the development of the adjoining land.

Controls:

- All lots shall be adequately drained and shall be reticulated to the public water and sewerage systems. The preferred method of sewerage disposal is gravity-fed connection to the reticulated sewer system.
- All sites shall be provided with adequate telephone, broadband and power services. Connection to gas is encouraged where available.

- All servicing shall be underground. All service installations shall be suitably screened from public areas by landscaping and be designed so as to not impact on significant vegetation.
- Utility services installation shall be carried out in accordance with Wyong Shire Council's DCP 67: Engineering Requirements for Development and the Utility Authority's requirements.
- Attractive, functional, energy efficient and appropriately located light is required to be installed in streets and proposed public spaces.

3.4 Setbacks

Objectives:

- To ensure adequate separation between buildings and public spaces.
- To ensure buildings are setback to provide visual amenity to the surrounding road network and adjoining land uses.
- To ensure parking and storage areas are not visually prominent from the external road network.
- To provide safety and surveillance of the surrounding road network and adjoining conservation zoned lands.
- To encourage activities in areas that adjoin open space.
- To provide, where necessary, setbacks to reduce the risk from bushfire.

Controls:

- The following minimum building setbacks shall apply. Also refer to the visual and Landscape Management Strategy in Appendix 1.

  General

  - 15 metres to the F3 Freeway on-ramps, Hue Hue Road and Sparks Roads.
  - 10 metres to all internal roads.
  - Corner lots require special consideration of the secondary street setback where a 10 metre setback is not practical. This will involve demonstrating that a reduced setback will not reduce the ability to achieve an acceptable presentation, and functional considerations such as sight lines and parking can be met. Also, refer Variations to Setbacks.
  - 5 metres side boundary setback. This may be reduced on one side only if the building is suitably fire rated as required by the Building Code of Australia. If the building on the adjacent site is built to the boundary a nil setback is encouraged. For all other cases, setbacks shall be in accordance with the provisions of the Building Code of Australia.
  - 5 metres rear setback other than lots adjoining the F3 Freeway, Hue Hue Road and Sparks Roads. This may be reduced if the building is suitably fire rated as required by the Building Code of Australia. For all other cases, setbacks shall be in accordance with the provisions of the Building Code of Australia.
  - Where the side or rear boundary is likely to be less than 2.5 metres, the building should be set on the boundary unless appropriate provision is made for maintenance of landscaping and general upkeep of the area within the setback.
  - Justification is required for proposals to encroach upon setback and landscape areas with carparking and in those instances, sites are to be densely planted to be screened from public places. Also, refer Section 3.14.
  - Storage within setbacks adjoining the F3 Freeway, Hue Hue Road, Sparks Roads is not permitted.

- Parking within setbacks adjoining the F3 Freeway, Hue Hue Road and Sparks Roads is discouraged except where it can be demonstrated that it meets the objectives and is adequately screened.
- A 10 metre setback is required on lots adjoining the reserve zoned Environmental Conservation to the north east of the Warner Industrial Park DCP area (Figure 5). This area is to be maintained as an APZ. Refer Figure 5 Bushfire Protection and Section 3.5 Bushfire Protection.
- A 10 metre setback is required on lots adjoining the Environmental Conservation zoned land proposed for water storage and water quality where it is vegetated (Figure 5). This area is to be maintained as an APZ. Refer Figure 5 Bushfire Protection and Section 3.5 Bushfire Protection.

Zone E2 Environmental Conservation Lands

- Quality presentation and active spaces are encouraged on lots that adjoin or front onto the conservation zoned lands.
- Buildings should address the street frontage and also address the conservation zoned lands.
- Development adjoining the Environmental Conservation zoned lands shall incorporate a minimum five (5) metre buffer and in some cases 10 metres as required by bushfire protection measures. Refer above and Section 3.5.
- Carparking or external storage is discouraged within the setback to the Environmental Conservation zoned lands to ensure that the development provides amenity to the area.
- Carparking may be provided in part of the APZ area required as outlined above, on Figure 5 and in Section 3.5 Bushfire Protection where it meets the APZ requirements of the Planning for Bushfire Protection 2006 and above objectives.

Variation to Setbacks

- Development seeking a variation in setbacks is required to demonstrate the following:
  - The visual impact of the variation is minimal;
  - The development is well integrated to ensure visual impact is properly addressed; and
  - The functioning of the development including traffic manoeuvrability and location of car parking and services areas is suitable.

3.5 Floor Space Ratio and Site Coverage

Objectives:

- To regulate the density and size of buildings.

Controls:

- Maximum floor space ratio is 0.8:1.
- Maximum site coverage is 50%.

3.6 Height

Objectives:

- To ensure buildings and structures have regard to the Obstacle Height Limits for Warnervale Airport.

Controls:

- Any development which exceeds the relevant height specified in the Obstacle Limitation Surface map for land in the vicinity of Warnervale Aerodrome (Figure 6) shall be referred to the Civil Aviation Authority for comment by the consent authority prior to determining the application.
- Subject to meeting the Obstacle Heights Limitation Map, the maximum height of buildings is 26 metres.

3.7 Built Form

Objectives:

- To encourage well designed attractive buildings appropriate to their function.
- To ensure that built form responds to the industrial landscape in an innovative and considered manner.
- To ensure buildings sit within a landscaped setting and within their street context.
- To encourage buildings which are water and energy efficient.
- To reduce stormwater flows from the site to assist downstream environmental flows.
- To encourage activity in areas that adjoins open space.
- To ensure that each development contributes to the overall landscape character of the Warner Industrial Park DCP area.
- To ensure high quality views from the F3 Freeway, Sparks Road and Hue Hue Road and potential visual impacts are minimised.
- To integrate buildings with open space corridors.

Controls:

- Building siting design and construction shall incorporate ESD principles and implement best practice approaches to water and energy efficiency including solar access.
- Buildings incorporating on site reuse of stormwater for passive heating and cooling are strongly encouraged. This DCP contains specific requirements in relation to stormwater management (Refer Section 3.19).
- Buildings and structures should be appropriately modulated and articulated to reduce the visual impact of large industrial buildings. Refer Figure 7 which shows appropriate examples of articulation of buildings for guidance only.
- Minor stepping of the street frontage and articulation of building facades is encouraged.
- Public entries to buildings should be clearly expressed and visible from the street (Figure 8).
- Shading devices to reduce solar heat load are encouraged.
- Large expanses of blank walls and curtain walling should be avoided where possible. Where this cannot be achieved, appropriate landscape treatments are to be incorporated to reduce the impact from public areas.
- Areas such as administration offices, staff rooms and the like should be located to face onto open space to provide active areas in these locations.

- Proposed buildings on sites adjoining land zoned for Environmental Conservation in the Warner Industrial Park DCP Area shall have regard to the visual and functional opportunities presented by the location, and orientate buildings to face onto the primary street frontage as well as the Environmental Conservation zoned lands in the Warner Industrial Park DCP Area.
- Buildings over a maximum length of 50 metres will require structural separation to cater for the mine subsidence parameters. The Mine Subsidence Board's approval is required for the erection of all improvements.
- Refer also to the following clauses for further design controls for built form.

Note: The Mine Subsidence Board's approval is required for the erection of all improvements. The Mine Subsidence Board has provided the following general surface development guidelines and will consider applications for:

- Single or two storey steel framed improvements clad with steel, or tilt up slab construction, with single storey masonry amenities and office blocks;
- All buildings are to be designed and certified by a structural engineer to be safe, serviceable and repairable taking into account the following mine subsidence parameters:
    - Maximum vertical subsidence of 200mm.
    - Maximum ground strains of -+2mm.
    - Maximum tilt of 2mm/m.

This means that finished surface heights are to include an additional 200mm freeboard above Wyong Shire Council's requirements to cater for the 1:100 year flood event. Please note that this additional freeboard has been included within this DCP in Section 3.10 Minimum Floor Level.

The Mine Subsidence Board will consider other types of development on its merits.

3.8 Bushfire Protection

Objectives:

- To provide occupants of buildings adequate protection from exposure to bushfire.
- To provide for a defendable space to buildings.
- Provide adequate separation between a hazard and buildings, which in combination with other measures to prevent direct flame contact and material ignition.

Controls:

- Buildings should be constructed from fire resistant materials such as pressed metal, or prefabricated concrete panels. All joints are to be sealed against ember attack.
- Establishing and maintaining a defendable space with a separation distance of 10 metres to any aspect of the development that faces retained bushland. Figure 5 outlines the properties that could adjoin bushland upon completion of the Warner Industrial Park and is provided for guidance only. Lots identified as requiring a defendable space on Figure 5 shall manage the 10 metre space as an inner protection area as outlined within section 4.1.3 and appendix 5 of the Planning for Bush Fire Protection 2006.
- Installation of metal mesh screens with an aperture size of less than 2mm on all windows, doors, skylights and roof ventilation shafts that are likely to come under ember attack.
- Provision of leaf barriers and roof valleys with a flammability index of less than 5 (AS1530.2).

- Undertake regular maintenance of garden/courtyard areas to reduce fuel loads and replacement or removal of fire sensitive vegetation and surface mulching.
- An emergency evacuation and bushfire suppression plan should be prepared for the development.

3.9 Safety and Surveillance

Objectives:

- To ensure that the siting and design of buildings and spaces, through casual surveillance, decreases the opportunity for crime.
- To ensure that the development encourages people to use streets and other open space areas.

Controls:

- Lighting shall be provided for safety and to engender a feeling of security and shall satisfy the relevant Australian Standards.
- Buildings should be designed and sited to overlook public spaces including streets and the Conservation zoned lands.
- Developments are to avoid blank walls onto streets.
- Development should provide casual surveillance of the streets and conservation zoned lands by addressing these areas with staff amenities or building form such as openings.
- All developments are to incorporate the principles of *Crime Prevention through Environmental Design.*

3.10 Minimum Floor Level

Objectives:

- To ensure buildings and sites address potential flood impacts.
- To ensure adequate site drainage.

Controls:

- The floor levels of buildings are to be a minimum 300mm above the 1% flood level.
- In determining finished levels for internal roads, car parking and external areas, ensure adequate falls to enable the site to drain. This is inclusive of the Mine Subsidence Board's requirements outlined in Section 3.4.

3.11 Building Materials, Finishes and Energy Efficiency

3.11.1 Building materials and energy efficiency

Objectives:

- To create attractive durable buildings.
- To encourage the minimisation of energy consumption as an integral part of building design and construction, with the suggested use of the Green Building Council's Green Star rating system.
- To encourage the minimisation of post-occupancy energy consumption, with the suggested use of a voluntary system such as the Australian Building Greenhouse Rating scheme.
- To have regard to potential risk from bushfire.

Controls:

- A preference for high quality, durable, UV stabilised/resistant building materials is favoured. Where lightweight cladding materials are used they are to be appropriately integrated into the design, particularly where visible from a public place.
- Developments are designed and constructed having regard to available energy efficient products.
- Installation of metal mesh screens with an aperture size of not greater than 2mm on all windows, doors, skylights and roof ventilation shafts that are likely to come under ember attack. Refer Section 3.5 Bushfire Protection.
- Glazing on north facing facades is encouraged to maximise solar access in winter and glazing to the west is to be minimised to reduce summer solar access.
- Building materials and insulation are to be used which assist in thermal performance and maintain comfort levels.
- Any hot water heaters to be installed are to be greenhouse gas friendly systems that achieve a minimum 3.5 SEDA Hot Water Greenhouse Score.
- The use of top star rated energy smart rated appliances and lighting is required. The Label Star Energy Rating System gives a rating to a range of appliances based on their energy efficiency. The more stars you see, the more efficient the model the model. Energy Smart lighting includes the use of fluorescent and compact fluorescent gloves, self-timing systems, dimmers and motion sensors etc.
- It is encouraged that larger developments (buildings exceeding 4,000m2 in area) utilise renewable energy resources for all lighting on site.

3.11.2 Building over and adjacent to sewer mains

Objectives:

- To protect and prevent damage to buildings, structure and existing sewer mains.
- To reduce maintenance required and costs of re-excavation.

Controls:

- Where a building is proposed to be located over a sewer main, the main must be encased with reinforced concrete. The encasement is to be in accordance with Council requirements, with the full cost of design and construction to be borne by the owner.
- Any footing located within the zone of influence of the sewer main trench will require a structural engineer's report with the full cost of such report to be borne by the owner.
- The building foundation system is to be designed so that pressure from the foundation is not transferred to the main. The design must also consider the effect of the sewer main and trench on the building foundations. The full cost of the design and construction of the foundation system is to be borne by the owner.
- Outbuildings of light construction erected on a concrete slab may be located over or near a sewer main. Such buildings may contain brickwork to a maximum height of one(1) metre.
- Concrete slab/footing construction of such outbuildings shall be in accordance with Council's Development Control Plan No 67 – Engineering Requirements for Developments.
- It is the responsibility of the owner or builder to determine the location of a sewer main, which may affect or be affected by the proposed building.
- All proposals shall comply with the requirements of the Water Management Act, 2000.

3.11.3 Reflective surfaces

Objectives:

- To minimise the effects of glare and reflected heat load.

Controls:

- The reflectivity index for glass used externally in construction of a building (as a curtain wall or the like) shall not exceed 20%.

3.11.4 Colours

Objectives:

- To ensure external colour schemes are appropriate to the setting of the Warner Industrial Park DCP area.

Controls:

- A colour palette, which reflects the existing natural landscape is encouraged generally with neutral greys, grey greens and blue greys.
- Allow the use of appropriate bold highlight colours on areas such as entry areas to highlight corporate graphics where it can be demonstrated they will not detract from the overall aesthetic quality. Refer Figure 9.
- Details of the colour scheme shall be submitted at the development application for the building, or where a development application is not required, shall be submitted prior to the issuing of the construction certificate.

3.12 Roofscape

Objectives:

- To minimise the visual impact of buildings when viewed from surrounding areas including the F3 Freeway and the Environmental Conservation zoned lands.

Controls:

- Simple roof forms are preferred which relate to the structural form of industrial buildings.
- Buildings should not dominate the skyline and should include roof lines and facades which provide visual interest and an appropriate sense of scale.
- Air-conditioning units, roof top pergolas, lift over-runs, telecommunications devices and other roof mounted equipment which protrude above the general roof line of the building shall not be permitted except where they are appropriately integrated into the design of the building or visually screened so as not to detract from the appearance of the development or dominate the skyline when viewed from any public road and the Environmental Conservation zoned lands.
- Structures such as masts, stacks, distilling towers, silos and the like shall not be permitted, except where they are appropriately integrated with the design of the building or visually screened in the manner described above.

3.13 Signage

Objectives:

- To provide structure and legibility to reinforce the Warner Industrial Park identity in an integrated manner.
- To ensure signage does not contribute to visual clutter.
- To integrate signage motifs and promotional requirements in an integrated, consistent and image conscious format.

- To ensure visibility of signage is considered in the context of each site's landscape design.

Controls:

- One directory board will be permitted at each entrance at Sparks Road and Hue Hue Road. Directory Board signage is to be as follows:
    - The size and proportions are to be in accordance with Figure 10.
    - The structure is not to obstruct traffic vision or cause any safety hazard and is to be clear of underground or overhead services.
    - The structure is to be suitably maintained by the owner at all times.
    - The structure can be placed in the lot setback in an appropriate position to meet the above objectives and controls.
- Placement of all signs should be carefully considered to ensure that they fit the environment and intended identity and character of the site. In this regard, a signage system with a degree of uniformity in design, colour and style is encouraged.
- Advertising signs will not be permitted in the setbacks to Sparks Road, or Hue Hue Road, unless it is presented as a free-standing (totem) style sign which complements and positively contributes to the streetscape.
- A maximum of one (1) free-standing sign is permitted per allotment (existing, consolidated or otherwise). The sign is to be made available to all businesses occupying that allotment for business identification, display or advertising purposes. Refer to Figure 10 for signage requirements.
- Illuminated signage which is visible from the F3 requires approval where appropriate from the responsible authority.
- Roof signage will only be considered where the sign does not visually dominate or detract from the skyline, the streetscape or the building. A roof/sky sign will only be permitted where it can be demonstrated that the sign does integrate with the architectural form or roofline of the building.
- Flush wall signs and hamper signs are not to extend laterally from the wall or beyond the edges of the wall. Signage must be 2.6 metres above ground level if internally illuminated. The total coverage is not to exceed 25% of the wall space for each frontage.
- Projecting wall signs must be 2.6 metres above ground level, not to extend above the top of the wall or beyond the edge of the footpath. The face of the sign is not to exceed 4 square metres.
- Signs mounted on trees are not permitted.
- Banners and inflatable advertising devices are not permitted as a permanent form of advertising.
- Signs should be designed for low maintenance and minimum chance of vandalism. All signs shall be maintained to an acceptable standard.
- Signs should be located so as not to create traffic hazard or cause obstruction.
- Signs should have adequate clearance from power poles and wires. Consult with Sydney Electricity regarding requirements.
- Signs erected in transmission easements require the prior written approval of the NSW Electricity Transmission Authority.
- Flashing signs, rotating signs and signs with animated text are not permitted.
- Real estate signs are to meet the following criteria:
    - A maximum one sign per agent per property.
    - Signs are to be removed within 10 days of settlement/leasing of the property.
    - Signs are to be professionally manufactured and securely fixed into the ground.
    - The maximum size of signs is 2440mm x 1830mm.

- Information signs for occurrences such as "Auction today" signs are permitted to be erected only on the days of the event. One sign is permitted at the front of the subject property and one at the nearest two intersections. Signs at intersections are to be located adjacent to the property boundary and are not to interfere with traffic visibility. All such signs are to be removed by the end of the day or immediately after the event.
- No signs are to be displayed on roundabouts, median strips or trees.
- One temporary sign may be erected on a site during the construction period for an approved development site for subdivision, commercial or industrial development provided it complies with the abovementioned size restrictions and is removed upon completion of the development.
- One sign with maximum dimensions of 150mm x 100mm may be mounted on the letter box or entry to a strata titled property advising of the managing agent's name. However, this is only permitted where there is not other signage for the property. It should be incorporated into the freestanding sign for the development.

- Directional real estate signs advertising a new land subdivision or development estate are permitted. The number of signs permitted will be dependent upon the scale of the development and the number of thoroughfares accessing the site. Such signs are to satisfy the following criteria:
  - Maximum height of 7 metres.
  - Not adversely impact the amenity of the locality.
  - Sign not to be illuminated after 9pm at night.
  - Not interfere with traffic visibility or present a safety hazard.
  - Be located adjacent to the property boundary and not interfere with any use of the footpath.

3.14 Access and Car parking

Objectives:

- To ensure carparking requirements are appropriate for the proposed use.
- To ensure the visual impact of carparking and hardstand areas is softened by landscape treatments.

Controls:

- Car parking areas are to be landscaped to provide shade screening and scale in accordance with Wyong Shire Council's Landscape Policy and Appendix 1 of this DCP.
- Parking within setbacks adjoining the F3 Freeway, Hue Hue Road, Sparks Roads and the Environmental Conservation zoned land is discouraged except where justification can be provided and it can be demonstrated that it meets the objectives of Section 3 of this DCP. The carparking area is to be densely landscaped from the road network.
- Proposals to encroach upon front setback and landscape areas with carparking may be considered where the carparking area does not exceed 50% of the front setback and are to be densely planted to be screened from public places.
- Proposals to encroach upon side and rear setbacks, which is exposed to adjoining properties, shall suitably landscape along such boundary to soften its visual impact.
- Minor variations of the requirements may be considered by the Consent Authority where special circumstances exist and appropriate justification is shown. Suitably qualified consultants should be engaged to justify such variations or to substantiate proposed parking numbers where no suitable standard exists.
- Justification is required for reduced parking rates where shared usage of facilities is proposed. This is to be suitably justified by a qualified traffic consultant's report.

- Entry and exit from the parking area to a public road is to be in a forward direction.
- Where access for the disabled is required to and within a building, parking for disabled persons shall be located adjacent to the nearest access for the disabled to the building and the path of travel from the parking area shall have adequate width and gradient for the purpose.
- Carparking spaces for the disabled shall be nominated on any application, shall have a minimum width of 3.2 metres, is to provide one space per one hundred spaces of parking and shall comply with the requirements of Australian Standard 2890.1.
- Materials of construction for parking areas and accessways shall have regard for the applicable wheel loadings, drainage, a non slip finish and decorative treatments to appropriately blend with the surrounding development and the landscaping.
- Parking areas shall be sign posted with standard signs and have “entry” and “exit” signs erected where appropriate.
- Where a change of use to another similar use is proposed without any enlargement, no additional parking provision is required.
- Where enlargement to a development is proposed, the parking requirements shall be applied to the proposed additions.
- Vehicle driveways, ingress and egress are to be a minimum of 6 metres from the tangent point of the kerb radius and to be greater than 1.5 metres from the common side boundary with another lot.
- Direct vehicular access from lots to and from Sparks Road, Hue Hue Road and the F3 Freeway will not be permitted.
- Safe movement of all vehicles, including bicycles, is required to be addressed by producing adequate sight distances, in particular at entry and exit points, for the safety of all road users including pedestrians, in accordance with the relevant Australian Standard.
- Generally access driveways are not to be located within the intersection and restricted areas as identified within AS 2890 Parts 1 and 2, and adequate sight distance is to be provided for vehicles and pedestrians.
- Requirements for carparking shall be as per the following table:

Land Use	Parking Requirements
Child Care Centres	1 space per 4 children in attendance. A drive-in/drive-out drop off arrangement without reversing off the site is encouraged. Temporary parking spaces in the driveway may be considered in the carparking calculation provided they do not impede traffic flow to and from the site.
Neighbourhood Shops, Food and Drink premises, Kiosks	1 space per 20 square metres of GFA
Community Centres	Carparking to be appropriate for the proposed use.
Function Centres	1 space per 10 – 20 square metres GFA depending on location and intended use.
Industries	1 space per 75 square metres of GFA
Industries Retail Outlet	1 space per 40m2 of office or showroom.
Boat Repair Facility, Depots, Freight and Transport Facility, Liquid Fuel Depots, Transport Depots, Truck Depots	1 space per 2 employees plus 1 space per vehicle associated with development at peak demand
Self storage units	1 space per 300 square metres GFA
Warehousing and Distribution Centres	1 space per 300 square metres GFA
Parking requirements for Recreation Facilities (indoor) as a separate use and not as an anxillary use of the proposed industrial development are as follows:	
Tennis, squash courts, swimming pool, bowling alleys	3 spaces per court/lane/
Gymnasiums	7 spaces per 100 square metres GFA

3.15 Servicing and Storage

3.15.1 Service Vehicles and Loading Docks

Objectives:

- To ensure adequate arrangements for servicing and vehicles.
- To ensure loading docks are well integrated.

Controls:

- Where practical, loading and manoeuvring areas for service vehicles should be separated from car parking and pedestrian access.
- Where shared access is provided, no loading or unloading shall be carried out over car parking spaces and access aisles.
- On-street loading and unloading will not be permitted.
- Service areas shall not be visible from the F3 Freeway, Sparks Road or Hue Hue Road, and where possible should be screened from internal roads and the Environmental Conservation zoned lands.
- Each development lot should satisfactorily cater for the turning movements of a semi-trailer or demonstrate capacity to accommodate the largest service vehicles likely to use the site. Where B Doubles are required for a particular use, the application should clearly describe how turning movements and parking requirements are to be managed.
- Developments are to comply with the requirements identified under the relevant Australian Standards.

3.15.2 External Storage

Objectives:

- To regulate storage in external areas.
- To ensure that the visual impact of storage areas is minimised.

Controls:

- Storage areas shall not be located in the front setback area of any development lot.
- Any external storage area shall:
    - Be appropriately screened from view from any public road and the Environmental Conservation zoned lands;
    - Be attractively designed and arranged; and
    - Integrate with the overall landscape theme for the proposed development.

3.16 Landscaping

This section is to be read in conjunction with the Visual and Landscape Management Strategy attached in Appendix 1. Water Sensitive Urban Design requirements in relation to landscaped areas are referred to in Section 3.19.

Objectives:

- To ensure landscaping on individual lots is of a high standard.
- To reduce the extent of hardstand areas and provide for on site absorption of stormwater. Landscape designs should aim to minimise the amount of water leaving the site through a combination of plant uptake, ground water absorption, evaporation and reuse. Noting that the Warner Industrial Park area will allow reuse water harvested from the wetland system for irrigation of the public domain.
- To ensure landscaping is complementary to the rest of the Warner Industrial Park DCP area.
- To enhance the appearance of the development.

- To provide a human scale and recreation facilities for staff.
- To define and/or screen site and building entries and car parking areas.
- Prevent uncontrolled storage on public open space.

Controls:

- All development proposals shall include a landscape plan and details of all landscape works associated with the development.
- The scale of landscaping required will be determined by the bulk, scale, visibility and character of the proposed development. Landscaping shall complement:
    - The proposed building;
    - Adjoining development; and
    - Adjoining landscaping.
- A Category 3 Landscape Design Report under Wyong Shire Council's *Landscape Policy* shall accompany development applications that adjoins the Environmental Conservation zoned lands, the F3 Freeway, Sparks Road or Hue Hue Road and for development as outlined in the Wyong Shire Council's Landscape Policy.
- Landscape Design Reports, if required under this DCP or Wyong Shire Council's Landscape Policy, shall address the following matters:
    - A strategy for dealing with surface flood flow across the site;
    - The integration of sediment pollution control into the landscape design;
    - General planting themes within the site and indicative species;
    - Visual penetration into site and control of views;
    - A thematic strategy for hard surface materials within the site including paving, terracing, ornaments, ponds, street furniture, lighting and the like;
    - Landscape management strategies for the short and long term;
    - Proposed protection measures of adjoining wetland and riparian systems; and
    - Protection and treatment of vegetation proposed to be retained on site.
- Planting is to be in accordance with the Visual and Landscape Management Strategy in Appendix 1.
- Where car parking and loading docks are visible from the street, they shall be screened with species from the Recommended Species list (see Appendix 1).
- Where the placement of electricity poles, easements for access or drainage corridors hinder the provision of screen landscaping within the five (5) metre setback, the setback should be widened to achieve the required level of screening.
- Security fencing is to be provided along the Freeway, Sparks Road, Hue Hue Road and Kiar Ridge Road frontages and land adjoining the Environmental Conservation zoned lands unless the plan incorporates recreation facilities and amenities for employees addressing the open space.
- Security fences are to be 2.4m high and black coated mesh with top and bottom rails.
- On the front setback, fences are generally not to be located in front of the building line.
- Fences are not to obstruct stormwater flows.
- Unless specified in this DCP, landscaping shall be designed and constructed in accordance with Wyong Shire Council's Landscape Policy and Guidelines.

3.17 Waste Management

Objectives:

- To ensure waste resulting from construction and operation is managed appropriately.
- To encourage the minimisation of waste.

Controls:

- Discharge of trade waste requires an application to Council.
- An area within each building / tenancy is to be nominated and provided for the storage of waste and recyclables.
- A waste management plan shall be prepared in accordance with Wyong Shire Council's Waste Management Guidelines. The following information should be provided:
    - Type and amount of waste / recycable materials which will be generated;
    - How waste/recycable materials will be stored and treated on site;
    - How disposal of waste/management or resale of recycable materials will take place; and
    - How ongoing waste management will be accommodated in the design of the building or use.
- A Waste Management Plan is not required for complying development. However, any complying development certificate issued will include conditions identifying Councils requirements for waste management of the approved use.

3.18 Lighting

Objectives:

- To enable the installation of external lighting which does not detract from the appearance of the development or amenity of the locality.
- To illuminate parts of the site for security reasons.
- To minimise energy waste by providing the correct lighting orientation and minimising overspill lighting.

Controls:

- The site should be sufficiently well lit at night to satisfy safety and security needs in an energy efficient manner.
- Lighting is to be designed so as to not cause light spill onto adjoining sites.
- Lighting powered by solar batteries or other renewable energy sources is encouraged.

3.19 Soil and Stormwater Management, Water Sensitive Urban Design and Water Harvesting and Reuse

Reducing excess stormwater flows from each site is important in maintaining downstream environmental flow regimes. Innovation in building design, landscape design and potential applications for on site reuse are important considerations. Applications will be required to be supported by a detailed water management plan describing methods aimed at reducing excess stormwater leaving the site. This includes initiatives such as rainwater tanks or alternative systems for collection and reuse of storm water. Reuse for passive heating and cooling as well as toilet flushing, water efficient appliances, irrigation, roadside swales and wash down areas, are all matters, which should be considered.

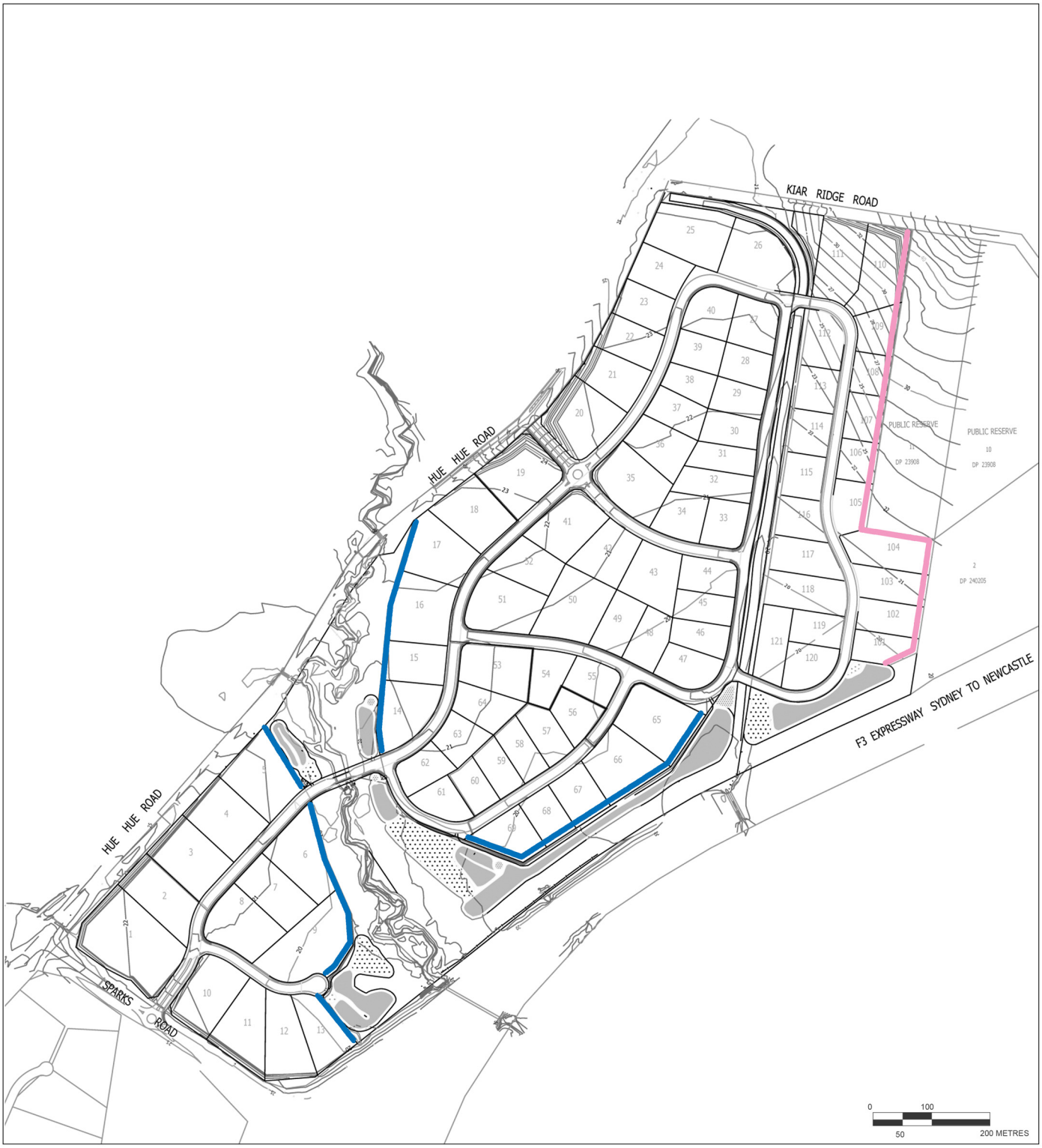
An integrated storm water and water quality management system has been developed for Precinct 14 as part of the Wyong Shire Council's Integrated Water Cycle Management Scheme (IWCMS 2006) for the Wyong Employment Zone. Warner Industrial Park includes a significant area of undeveloped Environmental Conservation land, together with roadside verges, which take up approximately 30% of the gross site area. In establishing controls for irrigation on individual allotments, it has been assumed that the 15% of the required 25% on site irrigation area identified in the IWCMS 2006 has been met by irrigation of the public domain (road verges and edge of environmental corridors) created within the Warner Industrial Park.

Objectives

- To minimise the impact of stormwater runoff on Porters Creek Wetland.
- To minimise soil erosion and sedimentation.
- To ensure efficient reuse of surplus stormwater flows.
- To maintain appropriate water quality standards.

Controls:

- An appropriately qualified consultant shall prepare a Soil and Stormwater Management Plan and Water Reuse Plan, addressing soil erosion, sediment control and stormwater management during construction and operation. The plan shall also demonstrate how water reuse and water quality objectives and controls below will be met.
- Each development is to provide rainwater tank storage for 1 kL per 100 m2 of roof area (65-70% of non-potable demand), for toilet flushing, irrigation, external wash down and air conditioning/cooling.
- If the non-potable water demand is less than 7.5kL/hectares then 25% of the allotment is to be set aside as a designated landscape area for irrigation (0.5metres per year). Refer Appendix E Draft DCP 88 Wyong Employment Zone. These controls may be varied where a proponent is able to demonstrate that the overall water quality design objectives can be achieved by other means, e.g. increasing the amount of non-porous pavement, or finding alternative areas for irrigation/water reuse.
- Individual pollutant loads from each development site are not to compromise the overall water quality design objectives for the Warner Industrial Park wetland system of reducing TSS by 90%,TP and TN by 50%.
- Each development shall meet the objectives stated in the Wyong Shire Council's *Integrated Water Cycle Management Strategy* (2006) for the WEZ unless otherwise required by this DCP.
- Erosion and sediment control shall be in accordance with the requirements of the NSW Environment Protection Authority (EPA) and Wyong Shire Council's *DCP Chapter 67 Engineering Requirements for Development*.
- The design, construction and implementation of the stormwater drainage systems for each development lot shall be in accordance with Landcom's *The Bluebook – Managing Urban Stormwater: Soils and Construction* (unless otherwise required by this DCP.

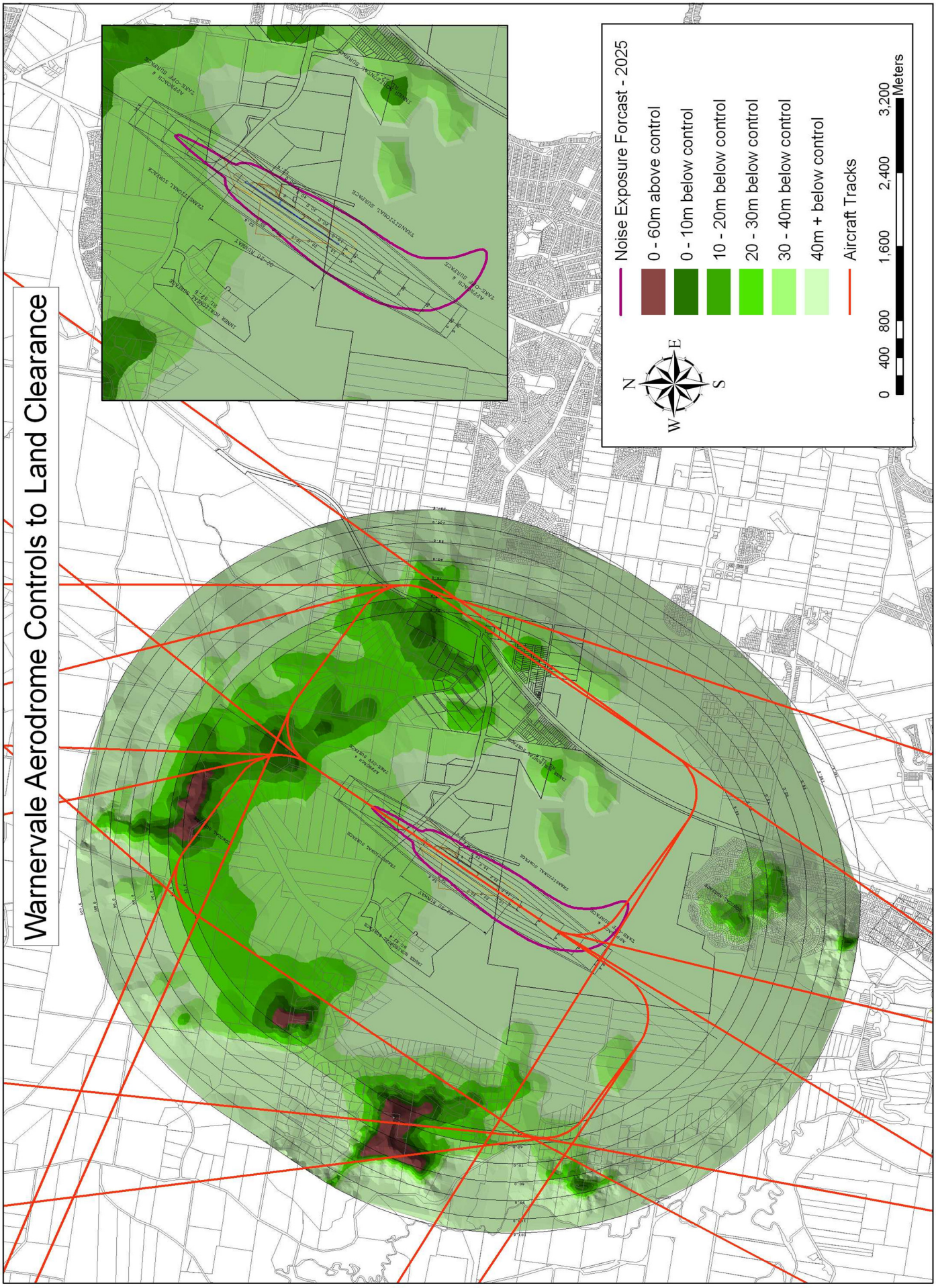


Source: Conacher Environmental Group, 2008

LEGEND

Defendable space 10m wide required

Defendable space 10m wide where area adjoins vegetation

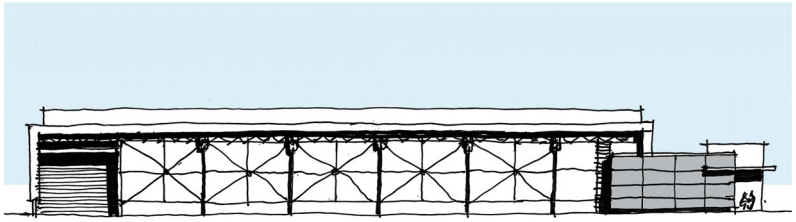


Source: Obstacle Limitation Surface Map - Wyong Shire Council

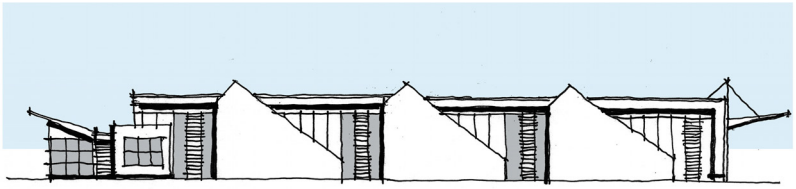
Figure 6 - Obstacle Height Limitation Map

Large, bold text to identify building use and add interest to long spans of wall.

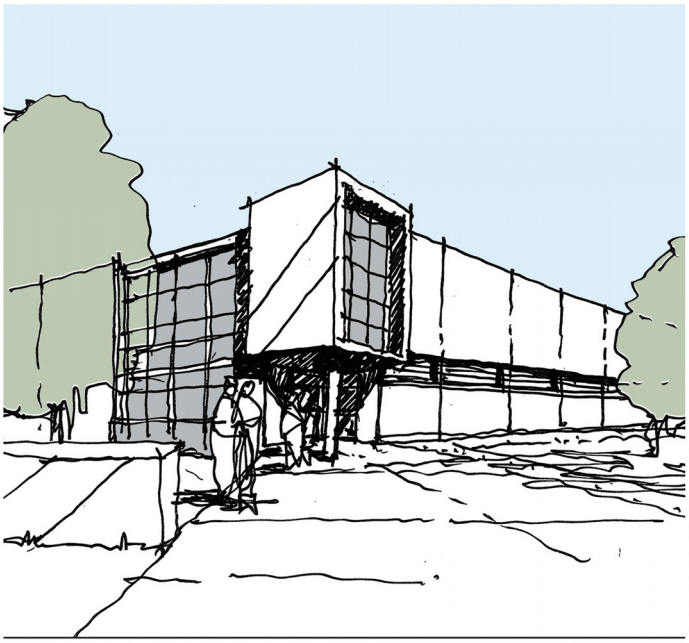
Use of elements such as ventilation, gutters and downpipes to break down the scale.

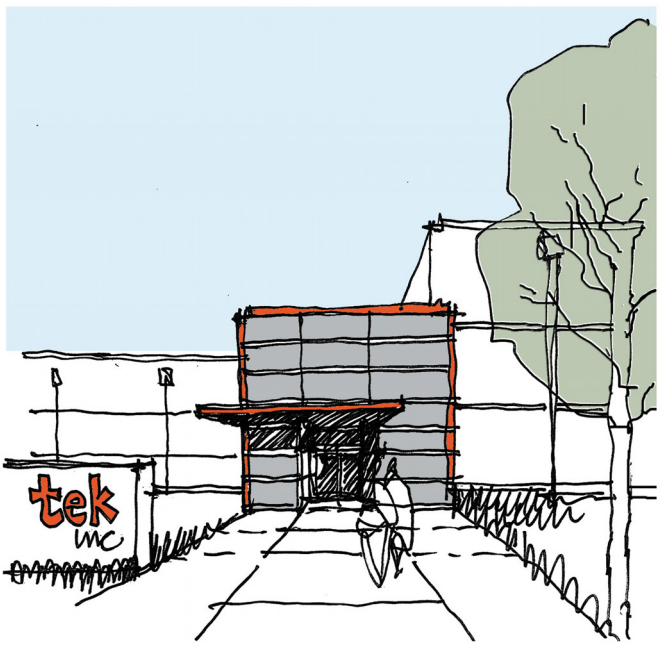


Expression of Structure.

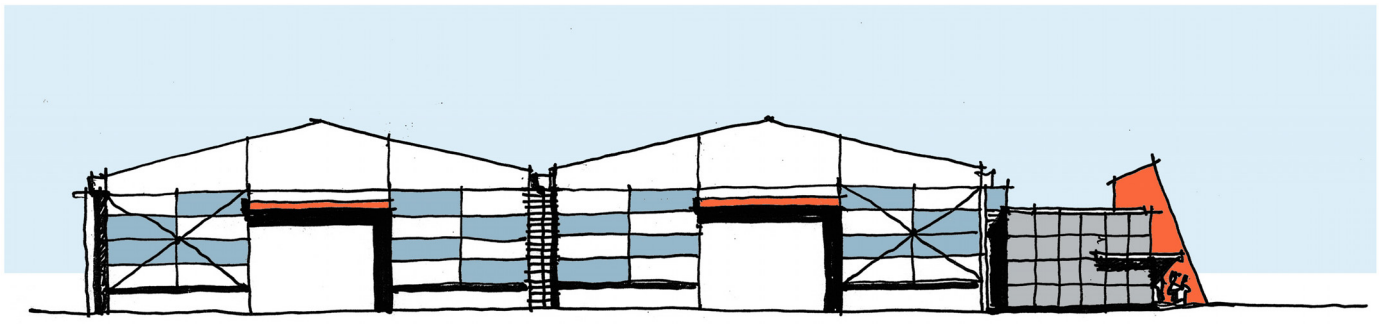


Variations in form and materials to break down the scale.



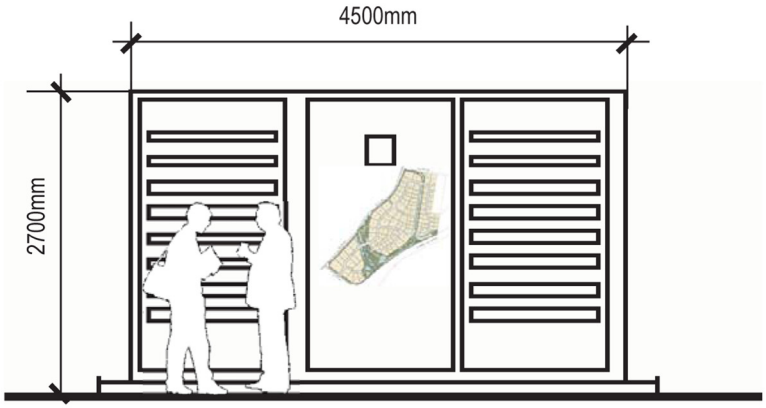


Expressed entry and landscaping.

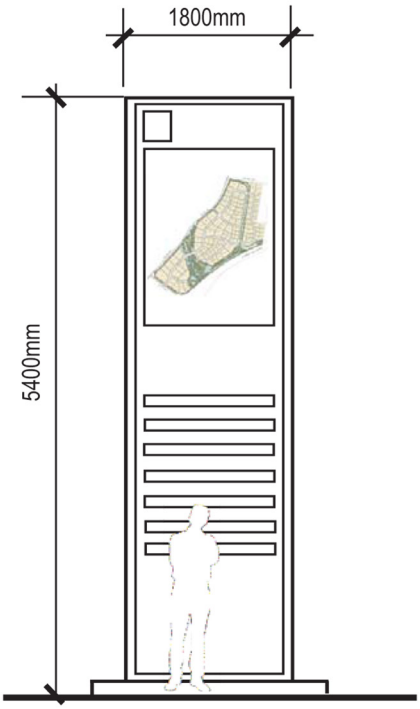


Use of bold colour.

ELEVATION: Warner Industrial Park,
corporate directory signage

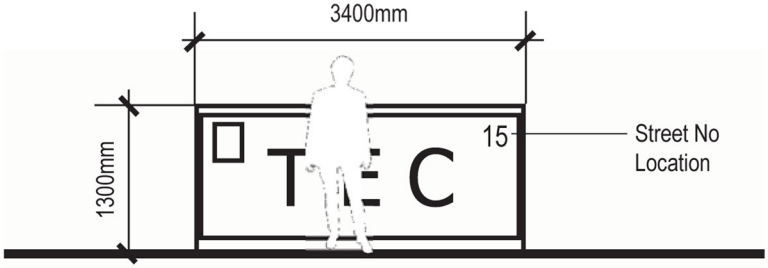


ELEVATION: Directory Board Vertical Option

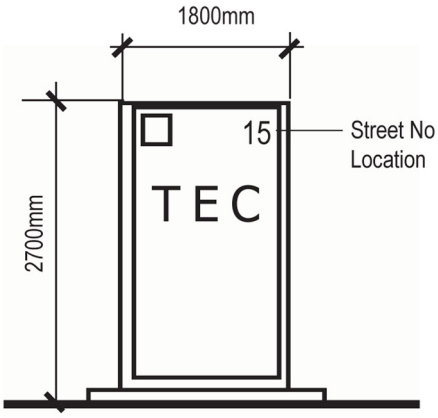


NOTE: Indicative signage format -
maximum dimensions 7000 x 3000mm

ELEVATION: Individual Corporate Signage,
horizontal format



ELEVATION: Individual Corporate Signage,
vertical format



4.0 DEVELOPMENT APPLICATIONS

The following procedures need to occur in the preparation of a development application within the Warner Industrial Park DCP area.

4.1 Pre-Application Consultation

Consultation with the consent authority prior to submitting a development application is recommended.

4.2 Designing Proposals and Preparing Applications

Applicants are encouraged to use the services of town planners, urban designers, architects, engineers, landscape architects and professional designers to undertake the site analysis, design their development and prepare the supporting documentation.

4.3 Application Requirements

The following documentation is required to be submitted as part of the development application:

- Completed application form with relevant fees.
- Site analysis.
- Statement of Environmental Effects.
- Landscape Design Report (if required).
- Plans including architectural plans, survey plan, landscape plan, erosion and sedimentation plan and a stormwater and soil management plan and information on site flooding.

The completed application form must be either signed by the owner of the land or accompanied by the written authority of the owner to lodge the application.

4.3.1 Site Analysis

The site analysis should be prepared for consideration during the pre-application discussion and lodged at the same time as the development application. Investigation of the site should identify:

- Site dimensions:
  - length
  - width
- Topography:
  - spot levels and/or contours
  - north point
  - natural drainage
  - any contaminated soils or filled areas
- Services:
  - existing service locations
  - easements/connections for drainage and utility services.

- Existing Vegetation:
  - location
  - species
  - height and width
- Location of:
  - buildings and other structures
  - heritage and archaeological features
  - fences
  - property boundaries
  - pedestrian and vehicle access
  - wetlands
- Neighbouring buildings:
  - location
  - height
  - use (especially potential hazards)
- Walls built to the site's boundary:
  - location
  - height
  - materials
- Difference in levels between the site and adjacent properties at the boundaries.
- Major trees on adjacent properties, particularly those within 9m of the subject site.
- Street frontage features:
  - poles
  - trees
  - kerb crossovers
  - bus stops
  - other services
- The built form and character of adjacent development, including:
  - architectural character
  - front fencing
  - landscaping
- Public open space:
  - location
  - use
- Adjoining bushland or environmentally sensitive land.
- Sources of nuisance:
  - noisy roads or significant noise sources
  - polluting operations

4.3.2 Statement of Environmental Effects

The Statement of Environmental Effects should address the following:

- How the proposal responds to issues raised by the site analysis.
- How the proposal responds to the relevant items contained in s.79C of the EP&A Act 1979.
- How the proposal responds to the objectives and development requirements of this, and other relevant policies and plans.

4.3.3 Plans

The plans submitted to the consent authority are the principle means of describing a proposal. It is important that they are clearly presented and contain enough detail so that well informed decisions can be made. Excessive time and expense can be avoided by clarifying issues and details before a development application is submitted.

Plans prepared by an appropriately qualified professional should show:

- dimensions, levels of all floors and heights of roofs;
- detailed floor plans;
- a site plan, including the north point; and
- all elevations and relevant sections.

Site survey plan prepared by a qualified surveyor should show:

- spot levels and contours on the site and, where necessary, adjoining sites to indicate changes of levels;
- the position of the buildings on the site and adjoining sites;
- the position of significant trees;
- levels of the road and footpath fronting the site.

This can be done in conjunction with the preparation of the site analysis.

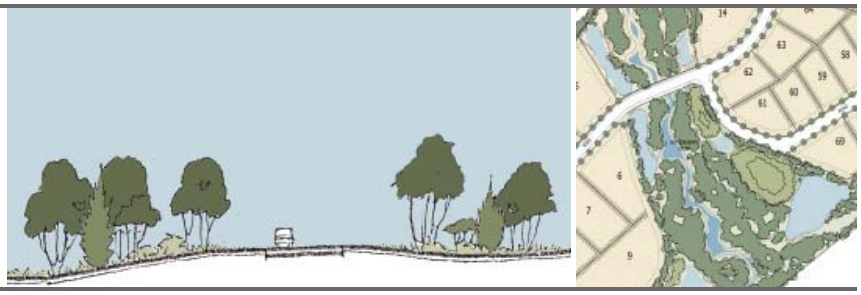
A landscape design prepared by a landscape consultant should outline design principles and:

- the location, height and species of all existing vegetation;
- the location, height (at maturity) and species of proposed vegetation;
- cross-sections through the site showing level changes and proposed landscape works;
- areas proposed for the retention or re-use of stormwater;
- ground levels such as spot levels or contours; and
- general information on fencing, access points, furniture, pavement materials and on-going maintenance requirements.

REFERENCES

Conacher Environmental Group (2008)	*Bushfire Assessment Report – Proposed Industrial Development, Precinct 14 Wyong Employment Zone Warnervale, June 2008*
Conacher Environmental Group (2008)	*Vegetation Management Plan – Proposed Industrial Development, Precinct 14 Wyong Employment Zone Warnervale, June 2008*
Department of Planning	Standard Instrument – Principal Local Environmental Plan
Department of Water and Energy (2008)	*Guidelines for Riparian Zones February 2008*
Wyong Shire Council (2005)	*Development Control Plan 2005*
Wyong Shire Council (2008)	*Draft Wyong Employment Zone Ecological Plan of Management February 2008*

Appendix 1
Visual and Landscape Management Strategy



Warner Industrial Park
Draft Development Control Plan

October 2009

Peter Andrews + Associates Pty Ltd
paa.design architecture planning urban design

CONTENTS

EXECUTIVE SUMMARY

Warner Industrial Park is located adjacent to the F3 Freeway and forms part of the Warnervale growth corridor, which includes the Wyong Employment Zone and Warnervale Town Centre.

The site is visible from the F3 Freeway and the surrounding road network. This report assesses the visual impacts and describes measures to mitigate those impacts. These measures are explained in the Visual Management and Landscape Strategy section. Mitigating the visual impacts of development involves the retention and enhancement of existing vegetation, particularly Buttonderry Creek and the proposed buffer along the freeway boundary. These elements also form part of the Water Sensitve Urban Design and general landscape management for the site. Additional measures include guidelines to control building placement and design, including setbacks from the Freeway and surrounding road network.

This Visual and Landscape Management Strategy is an integral part of the Draft Warner Industrial Park Development Control Plan (DCP). The DCP provides the mechanisim to manage development and ensure the provision of a high quality built and natural environment, within the context of creating new employment opportunities for the Central Coast.

SITE DESCRIPTION

Warner Industrial Park comprises Precinct 14 of the Wyong Employment Zone. The site is bounded by the F3 Freeway, Sparks Road, Hue Hue Road and Kia Ridge Road. Land to the north east is owned by Wyong Shire Council and is to be retained as open space (Figure L1).

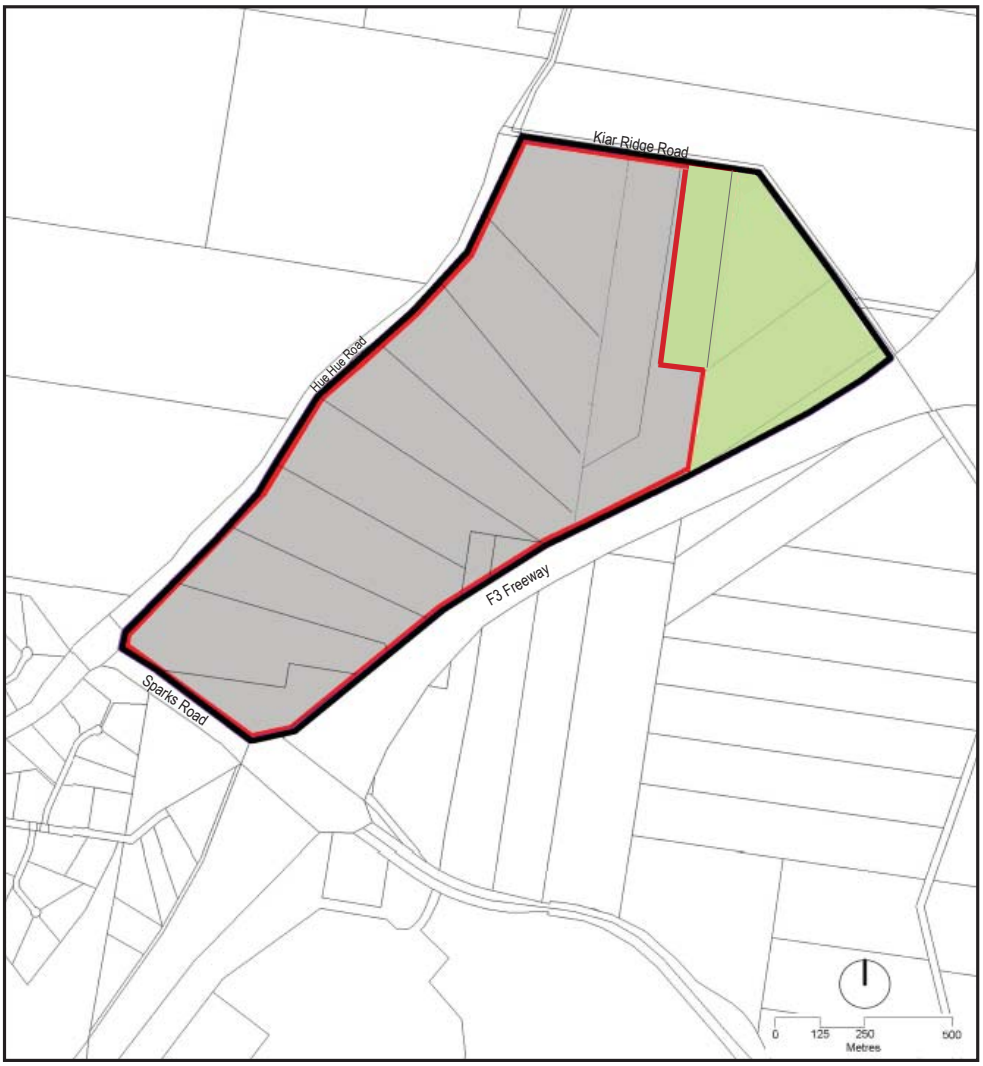


Figure L1 - Site Plan

Council-owned proposed conservation land
Warner Industrial Park
Precinct 14

VISUAL ASSESSMENT

Introduction and Context

The site is located on a major intersection of the F3 Freeway and Sparks Road, and is known as Precinct 14 within the Wyong Employment Zone. Development of the Wyong Employment Zone will change the existing rural character of the northern part of the Central Coast.

Methodology

This visual assessment is based on onsite inspections, supported by oblique and vertical photography and cross section analysis at various locations around the site perimeter. The cross sections developed for the visual analysis and proposed landscape treatment, are based on survey and cross sections.

An assessment of surrounding land uses, visual and landscape character was developed from field investigations, and a general review of:

- existing land uses and land ownership based on Council's LEP and documentation supporting the proposed Wyong Employment Zone;
- proposed land uses surrounding the site based on the draft Central Coast Regional Strategy and the WEZ documentation;
- terrain and landform based on 1:25,000 contour maps; and
- aerial photography.

This data was used to determine the general visual catchment of the Warner Industrial Park and identify potential visual impacts arising from the development. In particular, where the site is visible from major public spaces and thoroughfares or where there are likely to be significant impacts on sensitive uses close to the site, such as existing residences.

A series of measures were then developed to mitigate those impacts through:

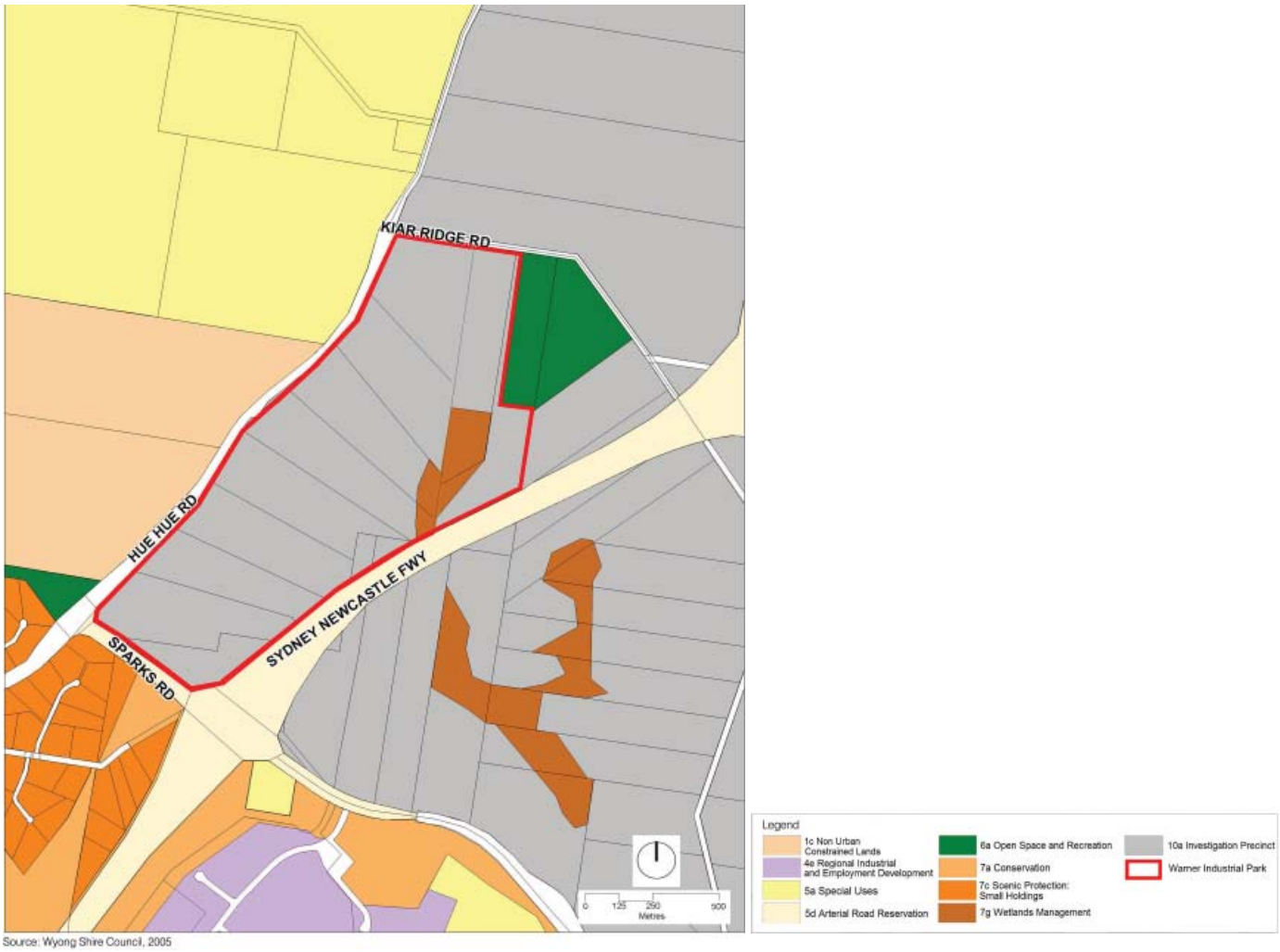
- retention of existing vegetation;
- provision of buffer zones;
- use of landscaped setbacks within proposed allotments; and
- controls on the siting and design of buildings.

Visual catchment and views from the surrounding lands

The site is located in the middle reaches of the Buttonderry Creek catchment. The visual catchment is generally defined by Sparks Road, the F3 Freeway, elevated land to the north and north west, and rural land to the west of Hue Hue Road. The steeper terrain to the north and north west form the northern extent of the Buttonderry Creek catchment, and are part of a significant landscape element defining the northern boundary of the Warnervale / Kiar Ridge precinct. Buttonderry Creek is an important landscape element in its own right.

There is little surrounding development overlooking the site. Wyong Council's Buttonderry Waste Management Facility occupies a significant area to the north west. Wyong Council also owns an area of heavily vegetated land to the north of the site which is to be retained as part of the Biodiversity Strategy for the WEZ.

Land to the west is zoned non-urban constrained lands, open space and special uses, and areas to the east of the freeway are proposed to be incorporated into the environmental corridors identified in the Biodiversity Strategy. Land to the south comprises the freeway offramp, a limited number of rural hobby farms and conservation zoned land. The dwellings are set well back from Sparks Road (refer to Figures L2 and L3).



Source: Wyong Shire Council, 2005

Figure L2 - Existing Zoning Plan

Figure L3 - Aerial photograph of the Site

Views from the surrounding road network and within the site

The Sparks Road F3 Interchange is an important entry into Warnervale, and the northern part of Wyong Shire. Consideration is to be given to mitigating the exposure of the site to both of these roads and in particular, the north bound lane of the F3 Freeway.

Views into the site are partly mitigated by existing vegetation around the perimeters (refer to Figures L4 to L7 for existing views to and within the site). Along the F3 corridor, this vegetation is to be retained and enhanced in accordance with the Landscape Masterplan included in the latter part of this document. This corridor, together with retention of the Buttonderry Creek corridor, provides significant green links between the rural lands to the west and north in line with the site's Conservation and Water Sensitive Urban Design Strategy.

As can be seen in the Typical Landscape Treatments (Figures L8 - L23), overlooking into and out of the site varies. Travelling north from the Sparks Road off-ramp, the site is below the road level of the F3 Freeway, around the location of Buttonderry Creek. Further north, the site is above the pavement level of the F3. The site is generally below the level of Sparks Road, Hue Hue and Kiar Ridge Roads.

Wyong Council's exhibited landscape strategy for the WEZ highlights the importance of retaining existing vegetation along Sparks Road and the F3 corridor wherever possible.

Landscape treatment of the site's entries at Sparks Road and Hue Hue Road, the internal street network, and general open space along Buttonderry Creek and the F3 boundary is to be carried out as part of the initial site development. Landscaping within setbacks is to be provided by individual developers, in accordance with the site's Development Control Plan and the Landscape Masterplan.

Views from F3 Freeway

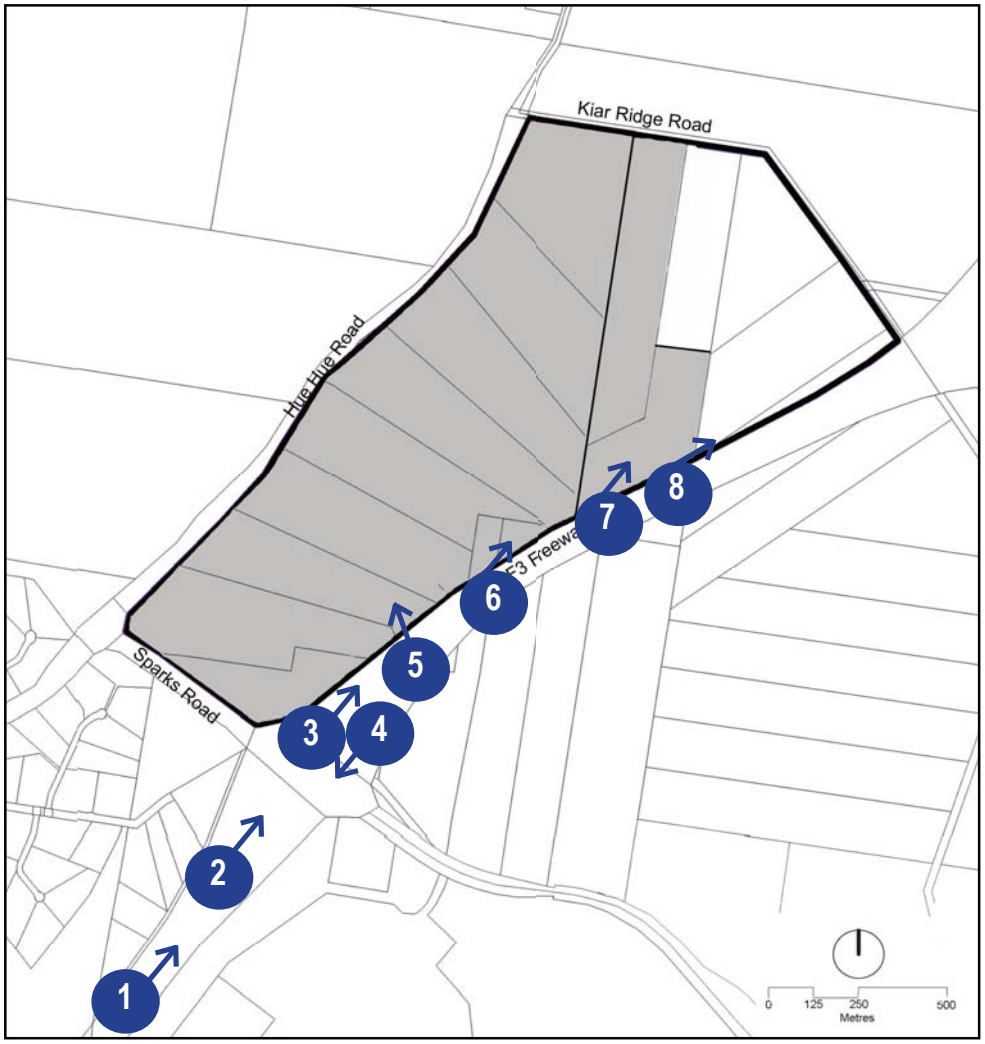


Figure L4 - Views of site from the F3 Freeway

Views from F3 Freeway

1

View of F3 northbound, with Sparks Road off-ramp at left

2

View of Sparks Road off-ramp, F3 at right

3

View of F3 northbound, southern corner of site at left

4

View of F3 southbound at right, with Sparks Road off-ramp at left

5

View from F3 of existing vegetation to southern boundary, near Buttonderry Creek

6

View of existing vegetation to southern boundary, adjacent to F3

7

View of existing vegetation to southern boundary, north of Buttonderry Creek

8

View of existing vegetation to the north

Views from Sparks Road

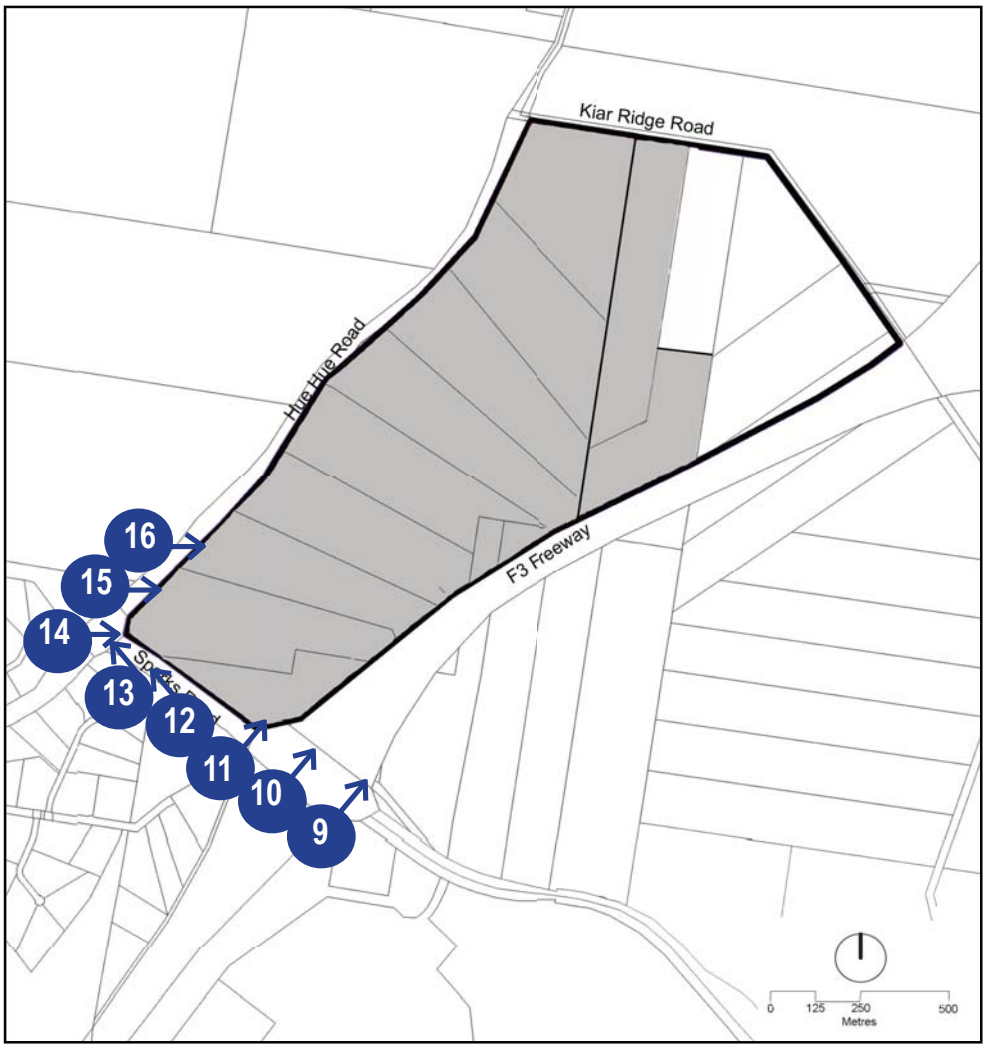


Figure L5 - Views of site from Sparks Road

Views from Sparks Road

9

View of the site from Sparks Road crossing of F3

10

View of Sparks Road and F3 northbound on-ramp intersection

11

View from Sparks Road, to southern most corner of the site

12

View north west down Sparks Road, with site at right

13

View along Sparks Road, to intersection with Hue Hue Road

14

View east looking across site, at corner of Sparks Road and Hue Hue Road

15

View east looking across site, north of intersection of Sparks and Hue Hue Roads

16

View east looking across site, north of intersection of Sparks and Hue Hue Roads

Views from Hue Hue Road and Kiar Ridge Road

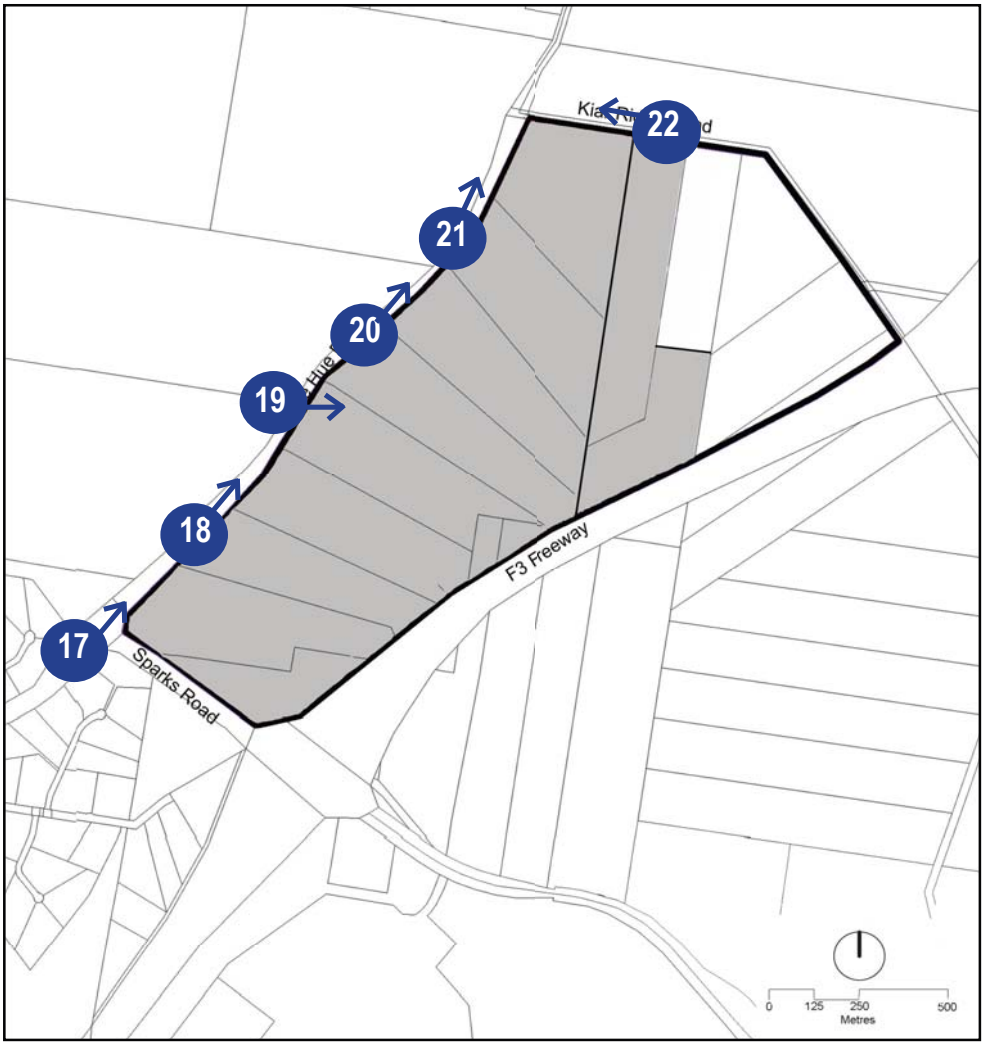


Figure L6 - Views of site from Hue Hue Road and Kiar Ridge Road

Views from Hue Hue Road and Kiar Ridge Road

17

View looking north along Hue Hue Road

18

View looking north along Hue Hue Road

19

Looking east into the site, from Hue Hue Road

20

View looking north along Hue Hue Road, with the site to the right

21

View looking north along Hue Hue Road, with the site to the right

22

View from Kiar Ridge Road looking towards intersection with Hue Hue Road and Buttonderry Waste disposal site

Views from within the site

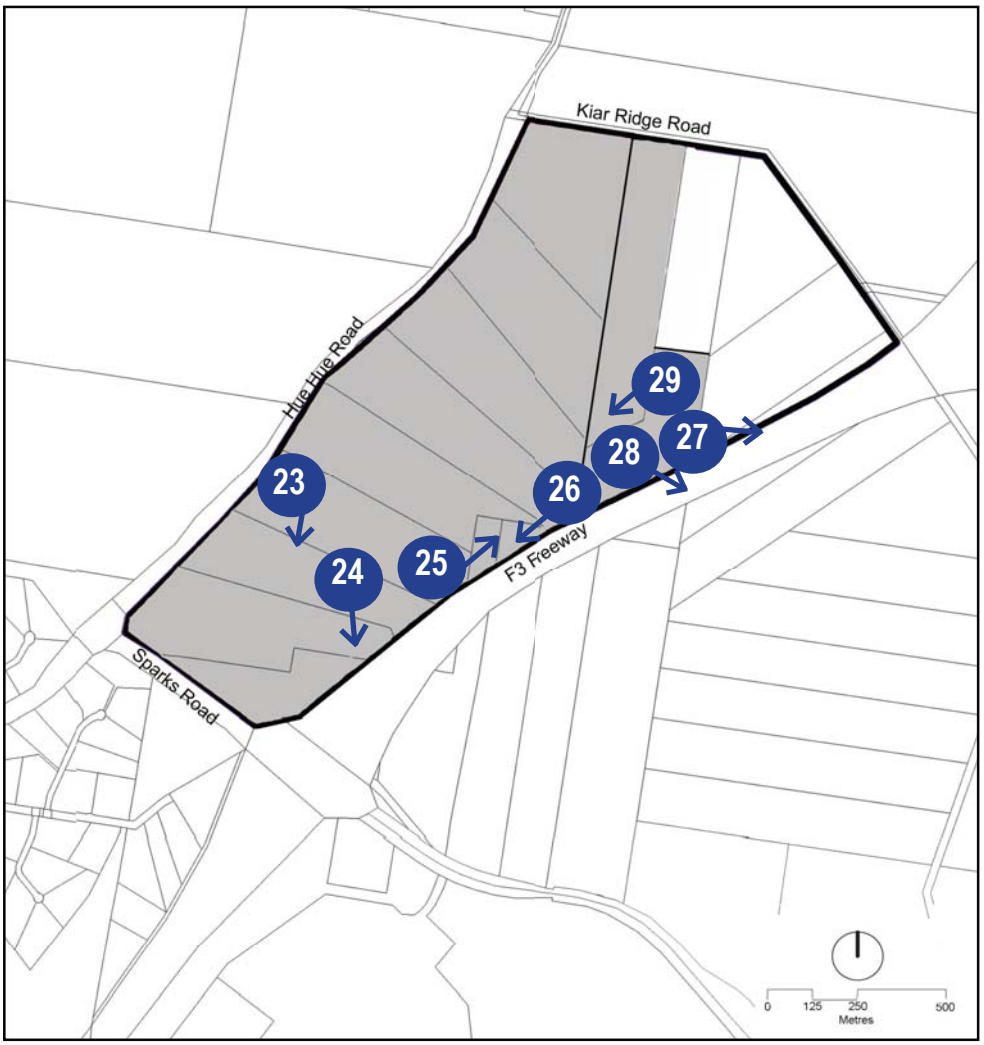


Figure L7 - Views from within site

Views from within the site

23

Views along Buttonderry Creek

24

Views along Buttonderry Creek at F3 boundary

25

View of existing services easement, looking north, parallel to F3 boundary

26

View of existing services easement, looking south, parallel to F3 boundary

27

View towards freeway from northeast corner of site

28

View from north east corner of site, adjacent to freeway reservation near existing spoil

29

View in north east corner of site, adjacent to freeway showing spoil from freeway construction

VISUAL MANAGEMENT AND LANDSCAPE STRATEGY

Visual Management Principles

The primary objective of the Visual Management and Landscape Strategy is to mitigate the visual impacts of development when viewed from surrounding major roads, public areas or other sensitive land uses, and ensure that major landscape elements within the site are retained and managed as part of the regional landscape.

Mitigating the impact of development with respect to regional landscape considerations will be achieved by incorporating major open space elements into the estate masterplan, including:

- **Buttonderry Creek** - retaining the Buttonderry Creek corridor with appropriate setbacks and supplementary planting of native species in accordance with the Landscape Masterplan; and

- **Freeway buffer** - creating a buffer zone along the F3 Freeway boundary to ensure adequate separation of future buildings. The buffer zone will provide a landscape link between Buttonderry Creek and the proposed conservation areas to the north of the site.

Mitigating the impact of development when viewed from major roads around the perimeter of the site, and from roads and public spaces within the site, will be achieved by appropriate controls in the Warner industrial Park Development Control Plan, including:

- **Setbacks** - that provide visual amenity to the surrounding road network and adjoining land uses, as well as to ensure adequate separation between built form and public space. Setbacks are generally to be 15 metres to the F3 Freeway ramps, Hue Hue Road and Sparks Road, with 10 metres to all internal roads, and a 5 metre side boundary setback. The Buttonderry Creek corridor requires a minimum 5 metre, and up to, 10 metre buffer. Landscape within the setbacks is to be in accordance with the Typical Landscape Treatments and the Recommended Species list, with special consideration to be given to the retention of existing vegetation;

- **Landscape -** that ensures a high quality landscape within the site and minimises built form impacts on the local environment; and

- **General Building Controls** - that ensure the provision of well-designed built form, that is appropriate to the landscaped setting of Warner Industrial Park.

Landscape Design Guidelines

Introduction

Landscape works are intended to play an important role in ensuring that the environmental and visual quality of the Warner Industrial Park develops and is maintained at a high standard. Landscaping will be a major unifying element within the area and give it a distinctive character. Details of the overall landscape themes and intentions for public areas are described below. Figures L1 to L16 provide guidelines for the landscape treatments for Warner Industrial Park.

Warner Industrial Park is based on proper integration of landscape and building design. Removal of existing trees will be offset by new plantings within road reserves, drainage swales and setback areas on development lots.

The Landscape Masterplan identifies potential corridors along side and rear boundary setbacks. It is proposed that the plantings on private lands will integrate with plantings in the public domain to visually link Warner Industrial Park to the surrounding natural landscape along Buttonderry Creek.

Streetscape and street tree planting

The objective is to create a distinctive character for the site which complements the existing natural landscape of the area. A number of distinct precincts will be created with an emphasis on areas such as the roundabout and the main entrance. Street trees will be indigenous to the site and the use of these trees will clearly define the street edge as well as creating a strong visual character within the site.

Vegetation indigenous to the site shall be used to screen views in and out of the development while enhancing the visual appearance and stabilising the embankment in the drainage channel.

The creek bank shall be planted with indigenous trees, shrubs and groundcovers. Weed removal and bush regeneration shall be carried out using accepted procedures for bushland management including working from the least weed infested areas to the most heavily infested, minimal soil disturbance and allowing native plant regeneration to dictate the rate of weed removal.

Development Lots

The following areas of the site shall be landscaped by developers of individual sites:

- front setback excluding driveways;
- side and rear setbacks if visible from a public place;
- car parking and areas adjoining the building to maintain a high quality appearance; and
- screening of service areas, loading and storage areas.

Entry Areas

One free-standing corporate sign designed generally in accordance with the Warner Industrial Park DCP. Signs may be located within the front setback area. The preferred positions are adjacent to the vehicular and / or pedestrian access from the street to the site. The sign should be located 2 metres from the boundary and should be positioned to maintain sight lines for vehicles and pedestrians entering or leaving the site. Visibility of the sign should be taken into account in the landscape design.

Setbacks

The Landscape Masterplan identifies landscape corridors to be created along side and rear setbacks of certain development lots. This planting within setback areas generally should integrate with the streetscape planting and landscape works on adjoining properties.

Planting in front setbacks should relate to the general theme established for the Warner Industrial Park. Areas such as the main entrance to a building and access for pedestrians and vehicles should be emphasised as part of the landscape design.

Canopy trees in landscape corridors should be restricted to local indigenous species. Within general setback areas, use of indigenous species is also preferred due to its general adaptation to conditions, lower water demand, and potential value as habitat. Use of exotic species should be limited to use as features (e.g.: entry point) and lower level planting where there is no equivalent native species and only in circumstances where the introduced species is unlikely to create or exacerbate a weed problem in the Warner Industrial Park or in surrounding bushland.

Local indigenous species are preferred for grasses, other groundcovers and trees.

Surface drainage from car parking areas should be diverted from the open space and where appropriate collected in wetland filters to be constructed at the discharge point.

Car parking Areas

The following landscape objectives should be addressed in the preparation of car parking designs:

- screening from the F3 Freeway, Sparks Road, Hue Hue Road and internal collector roads within the industrial park;
- creating an appropriate scale of landscape works using shrub and tree planting;
- creating an attractive and functional environment;
- erosion and sediment control from building sites; and
- achieving WSUD objectives.

Landscape Maintenance Guidelines

Introduction

Landowners are responsible for maintaining all landscaped areas within private property. Upon completion of construction works, a site shall be properly cleaned up with all rubbish removed in a manner consistent with best practice waste management principles and any approved waste management plan applying to the development. Grassed areas shall be mowed and landscape beds mulched. Any damage to footpaths and the nature strip shall be repaired including replacement of street trees and restoration of grassed areas as required.

Maintenance of buildings, car parking area signs and services should be carried out without detrimental effect on landscaping works. Where damage does occur it should be rectified immediately upon completion of the maintenance works.

Landscape Maintenance

Landscape works shall be maintained to achieve the intention of the landscaping to enhance the appearance of a development, provide a human scale and recreation facilities for staff, and to define and / or screen site and building entries and car parking areas.

The management of Buttonderry Creek is to be in accordance with the Draft *Wyong Employment Zone Ecological Plan of Management* (February 2008).

The following guidelines are not exhaustive and are intended as a checklist to ensure that landscape works are retained as envisaged in the approved plans.

- **Mowing**: The frequency of mowing should be in response to the climate and seasons throughout the year. A blade height of between 20mm - 75mm is recommended.

- **Edges**: Motorised edgers (e.g.: Whipper snipper) should be used with care and not closer than 100mm to the trunk of any tree as contact may accidentally ring bark the tree. Edges of grassed areas should be trimmed on each occasion that the grass is cut. These include the edges of garden beds, and the junctions of lawn with pavements, kerbs poles, pits and splayed edges around trees on turf.

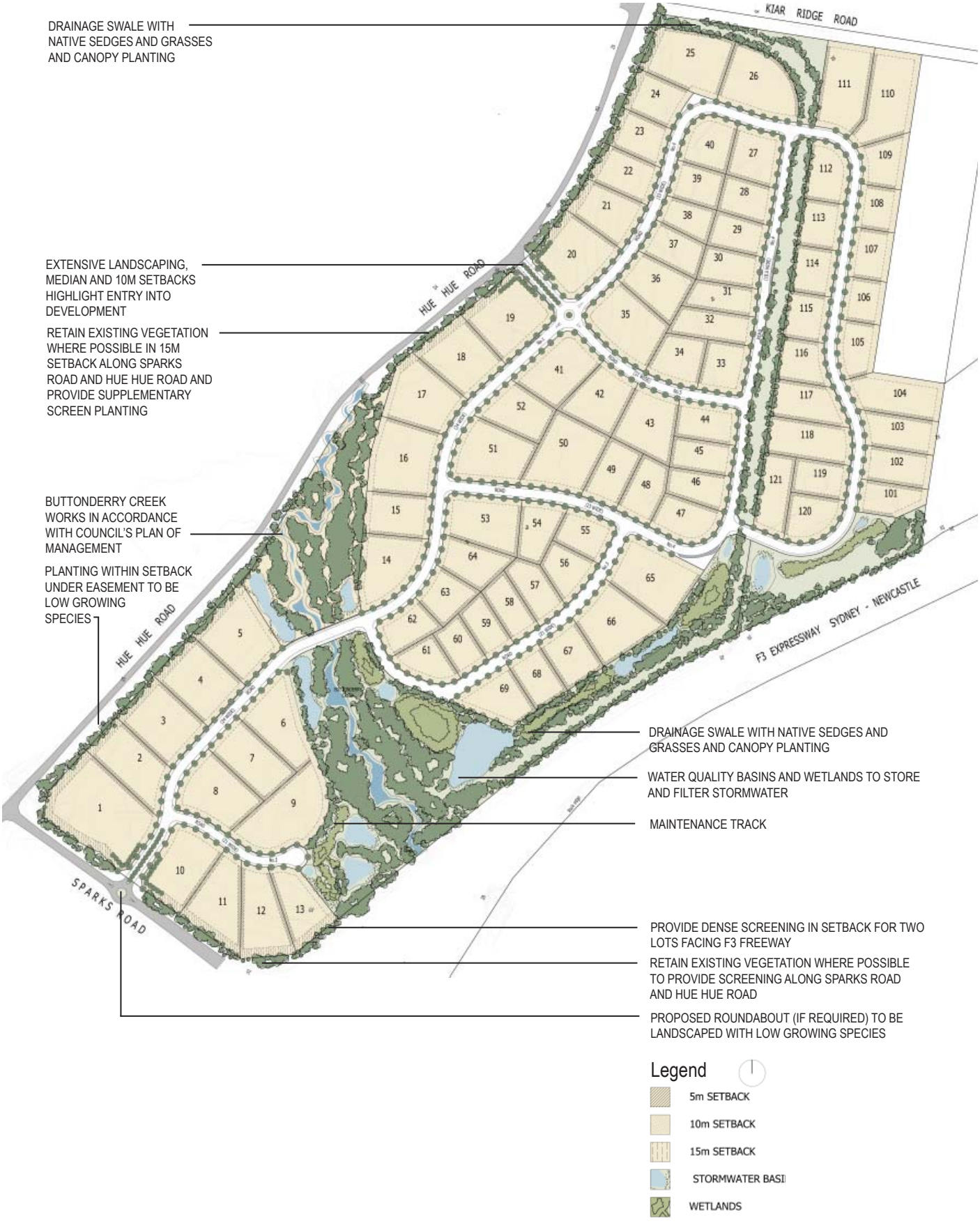
- **Fertilising**: Fertiliser should be applied with care to avoid the run-off of excess nutrients to the drainage system.

- **Pest and Disease**: Plants should be regularly checked for pests and disease. Where it is identified that a particular pest or disease is likely to cause damage to planting, remedial action should be taken. Natural remedies are preferred but where spraying is required, the pesticide should be specific for the pest rather than broad range and should be of low toxicity and non-residual.

- **Weed Control**: Weeds may lead to the long term degradation of landscape works. There are a number of existing weed sources on the Warner Industrial Park site in the locality so it is expected that weed infestation will be a recurring problem. The most effective means of weed control are effective site restoration and planting (especially mulching and groundcovers) and judicious use of herbicides. A schedule of undesirable plant species is contained in Wyong Council *Development Control Plan No 14 - Vegetation Management* and includes plants such as Privet, Camphor Laurel, Cocos Palms, Cassia, Moth Vine, Asparagus Fern, Honeysuckle, Lantana and Ochna.

Landscape Masterplan

Figure L1



Planting Schedules and Recommended Species

15M LANDSCAPE SETBACK,

10M LANDSCAPE SETBACK,

5M LANDSCAPE SETBACK

TREES	
Callistemon salignus	3m centres
Casuarina glauca	" "
Eucalytus robusta	" "
Eucalytus saligna	" "
Melaleuca quinquenervia	" "

SHRUBS	
Acacia longifolia	2m centres
Callistemon citrinus	" "
Doryanthes excelsa	" "
Leptospermum polygalifolium	" "
Melaleuca ericifolia	" "
Melaleuca nodosa	" "
Szygium australe	" "
Westringia fruticosa	" "

GROUNDCOVERS	
Dianella caerulea	*6/m2*
Grevillea 'Bronze Rambler'	*3/m2*
Hardenbergia violacea	*3/m2*
Lomandra longifolia	*6/m2*
Pennisetum alopecuroides	*6/m2*
Poa labillardieri 'Eskdale'	*6/m2*

SUPPLEMENTARY NATIVE PLANTING

SHRUBS	
Acacia ulicifolia	2m centres
Banksia spinulosa	" "
Dodonaea triquetra	" "
Epacris pulchella	" "
Leptospermum polygalifolium	" "
Melaleuca nodosa	" "
Pimelea linifolia	" "

Note: Landscaping to the site is to comply with the principles of appendix 5 of Planning for Bushfire Protection 2006.

SUPPLEMENTARY NATIVE RIPARIAN PLANTING

TREES	
Angophora floribunda	3m centres
Eucalytus pilularis	" "
Eucalytus saligna	" "
Glochidion ferdinandi	" "

SHRUBS	
Daviesia ulicifolia	2m centres
Dodonaea triquetra	" "
Melaleuca nodosa	" "
Polyscias sambucifolia	" "

GROUNDCOVERS	
Entolasia stricta	*4/m2*
Imperata cylindrica	*4/m2*
Lomandra longifolia	*4/m2*

WETLAND PLANTING

TREES	
Casuarina glauca	3m centres
Eucalytus robusta	" "
Melaleuca quinquenervia	" "

MACROPHYTES	
Baumea articulata	*4/m2*
Eleocharis acuta	" "
Gahnia sieberana	" "
Isolepsis nodosa	" "
Juncus usitatus	" "
Schoenoplectus validus	" "

STREET TREES

Corymbia maculata	20m centres
Eucalytus robusta	" "
Eucalytus saligna	" "
Syncarpia glomulifera	" "
Toona ciliata	" "
Tristaniopsis laurina	" "
Watehousia floribunda	" "

EXISTING VEGETATION TO BE RETAINED

Existing vegetation typically includes:
Angophora costata
Allocasuarina torulosa
Corymbia maculata
Eucalytus pilularis
Eucalytus robusta
Syncarpia glomulifera

Typical Landscape Treatments

Figure L2 - SITE KEY PLAN: for Landscape Sections

Figure L3 - SECTION 1: Entry off Sparks Road and Hue Hue Road to Precinct 14 (variable as typical)

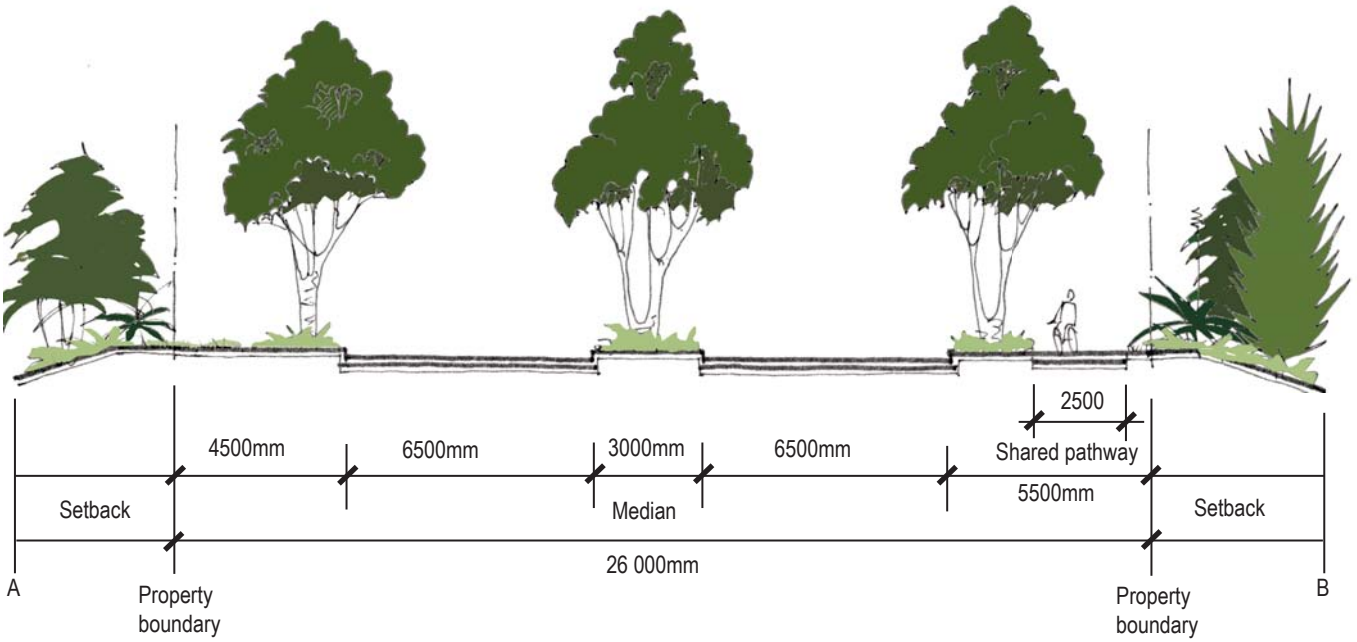


Figure L4 - CONCEPT PLAN: Proposed entry treatment at intersection of Sparks Road and entry to Precinct 14
New entry from Hue Hue Road - similar treatment but seagull intersection design

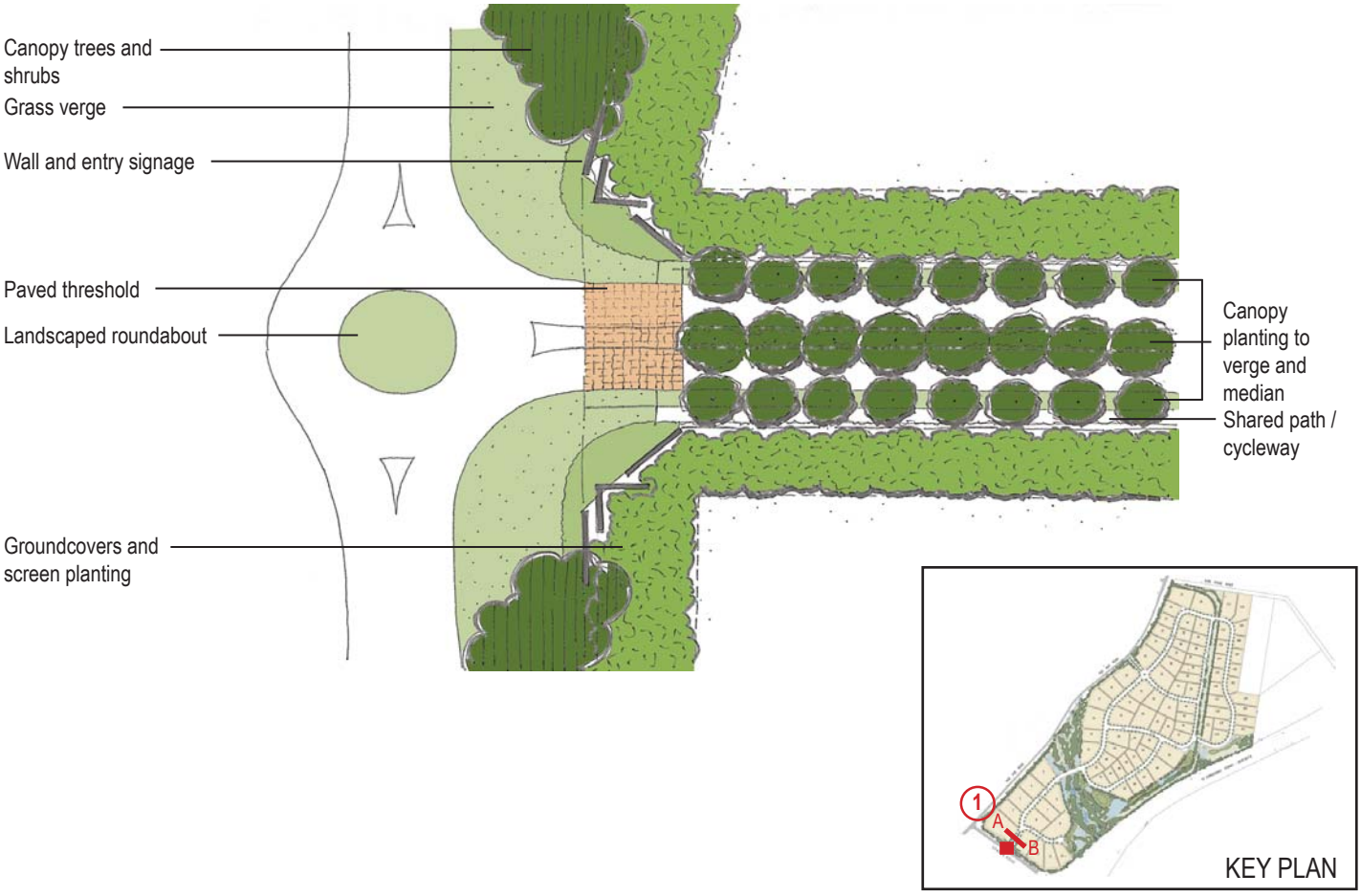


Figure L5 - SECTION 2: Typical Section Road No 1

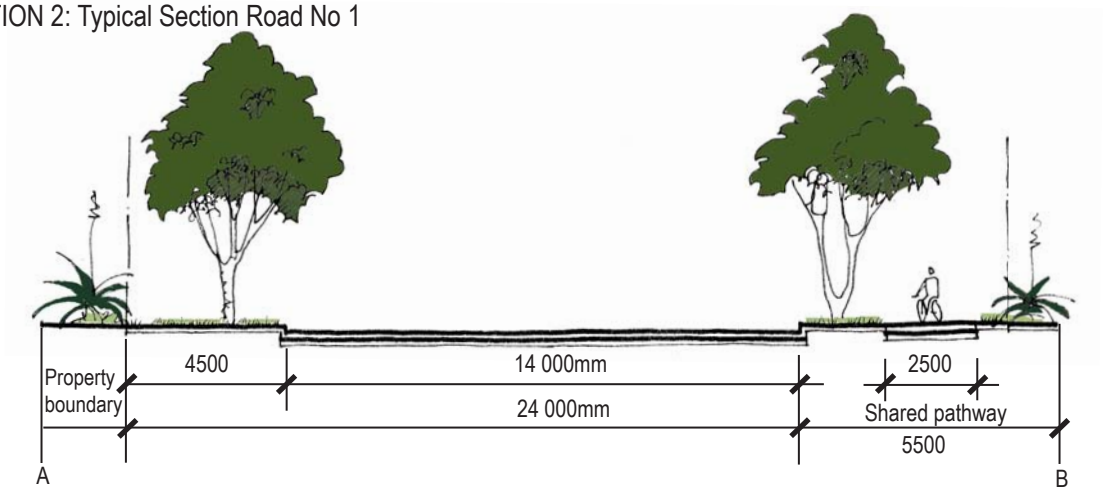


Figure L6 - SECTION 3: Roads 2 and 6 (21m road reserve)

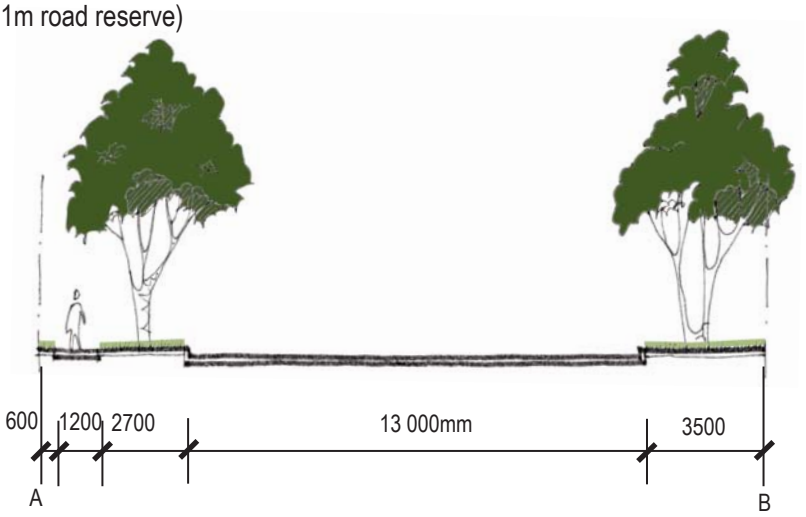
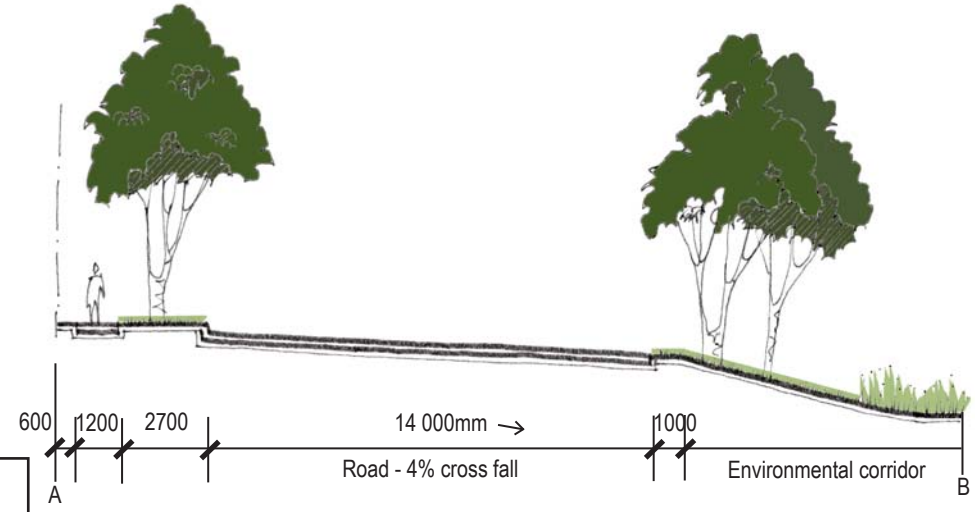


Figure L7 - SECTION 4: Road 3 (19.5m road reserve) and Environmental Corridor



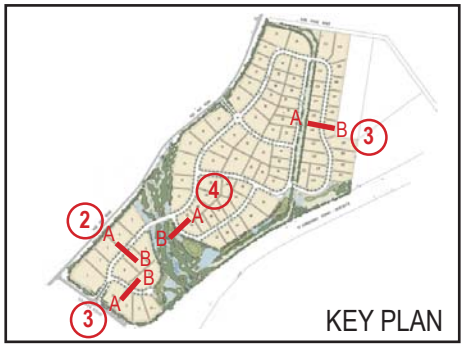


Figure L8 - SECTION 5: Road 4 (19.5m road reserve) and Drainage Corridor

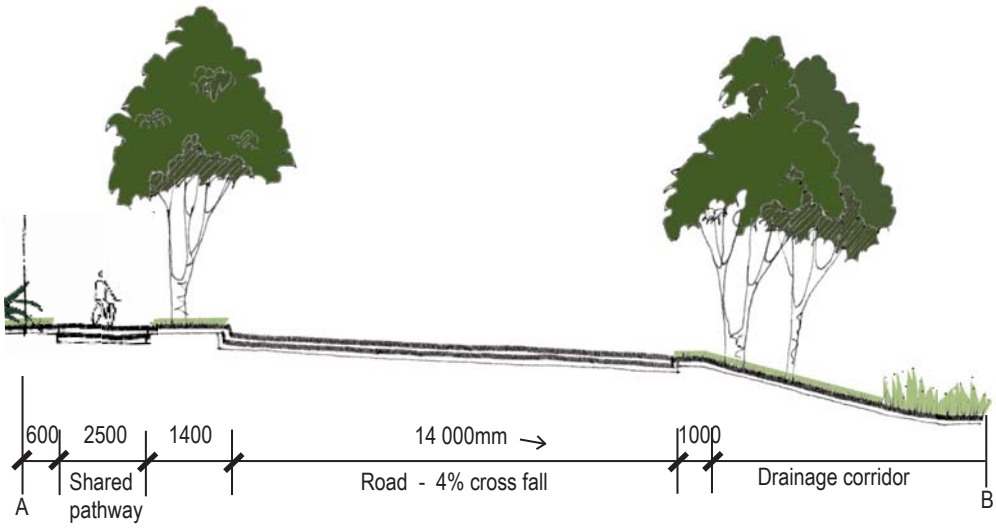


Figure L9 - SECTION 6: Road 4 (23m road reserve)

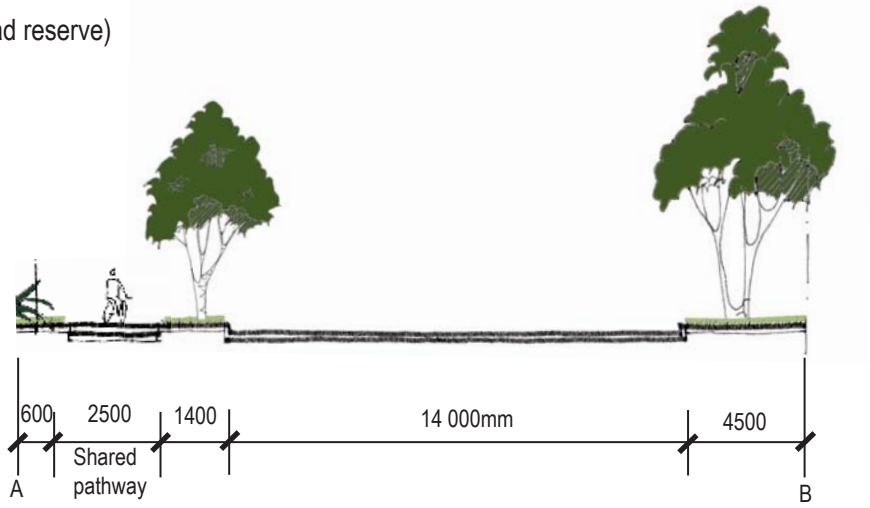
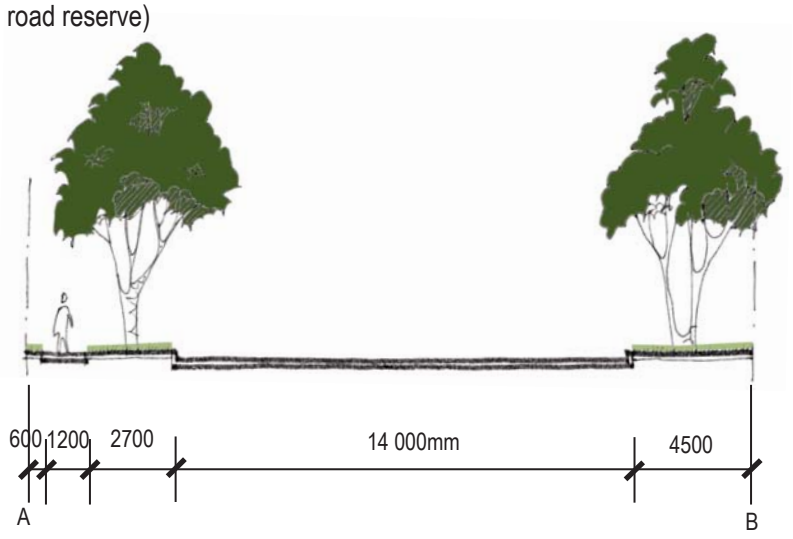


Figure L10 - SECTION 7: Roads 3 and 5 (23m road reserve)



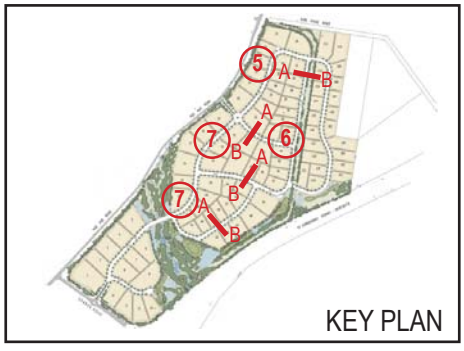


Figure L8 - SECTION 8

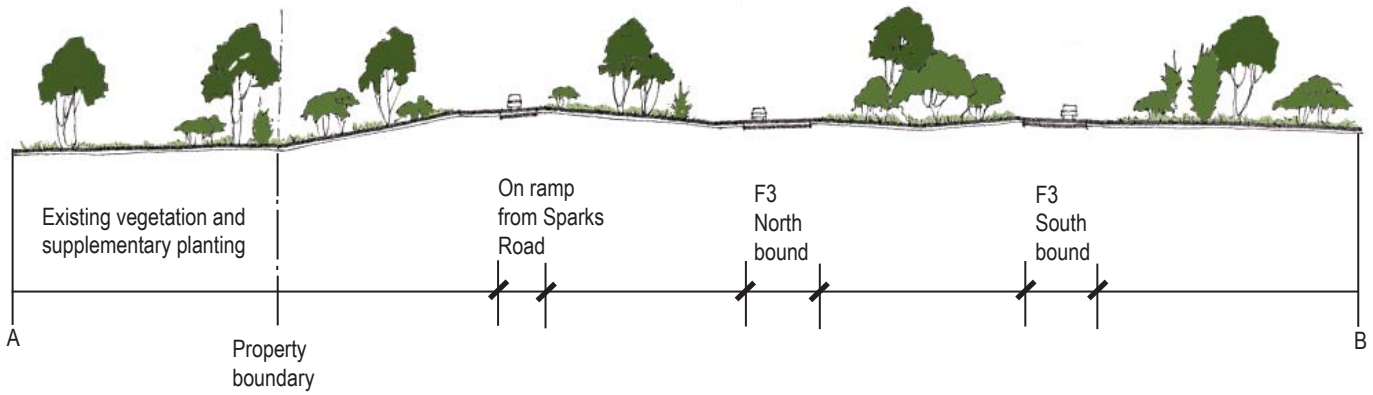


Figure L9 - SECTION 9

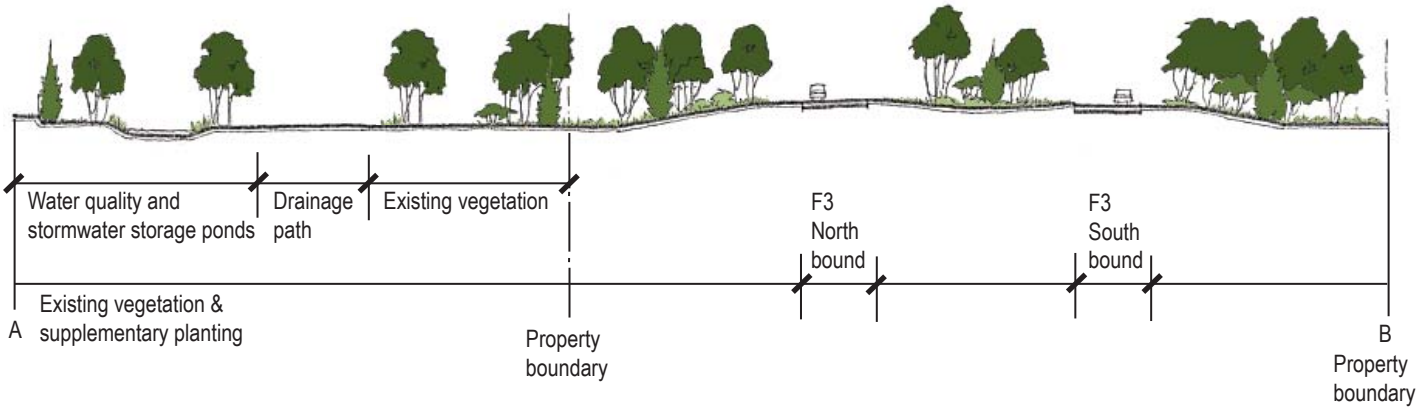
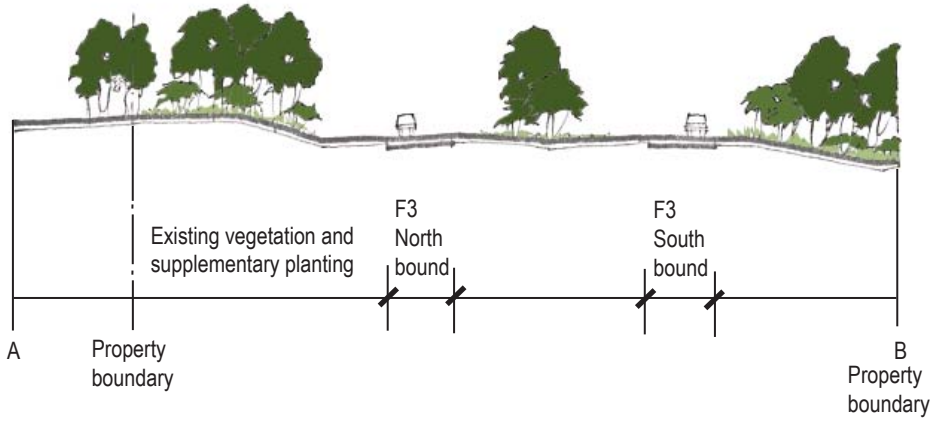


Figure L10 - SECTION 10



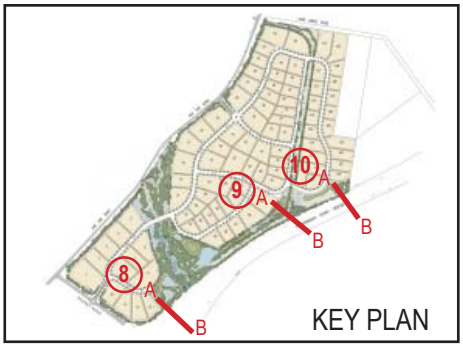


Figure L11 - SECTION 11: Landscape setback along Sparks Road and southern portion of Hue Hue Road

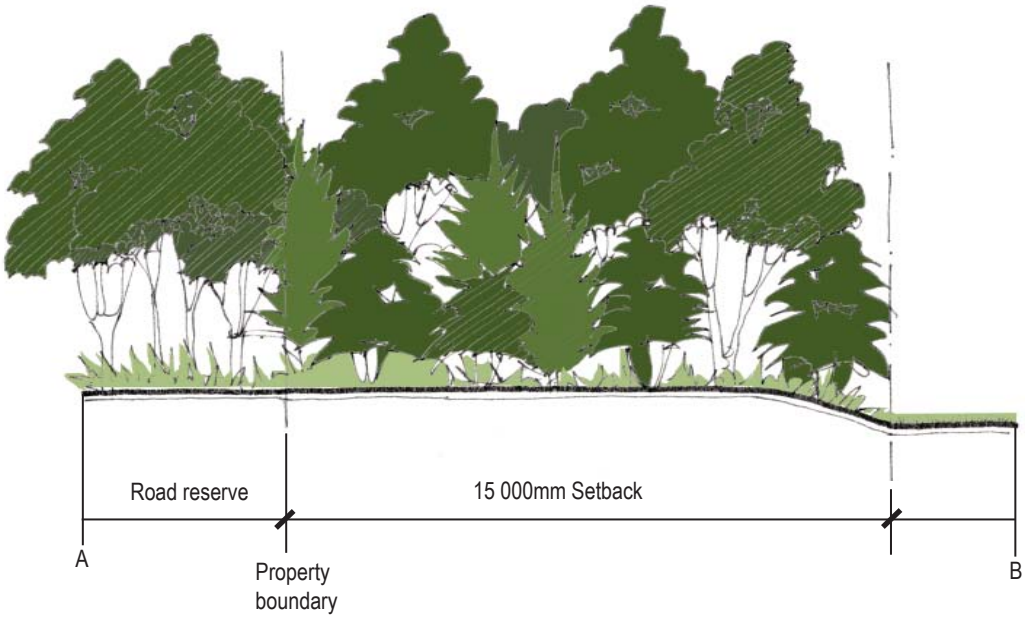
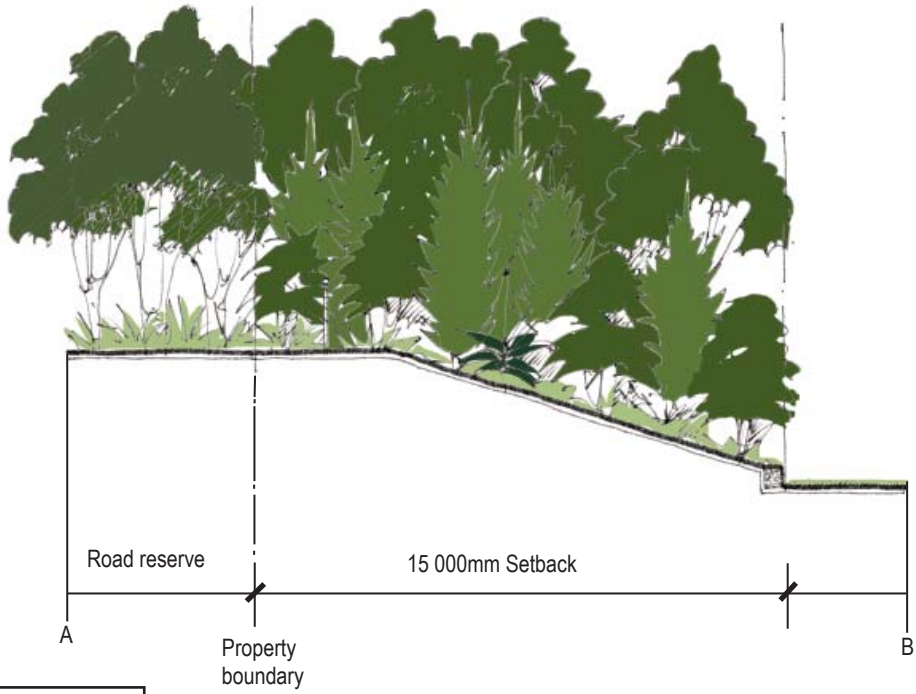


Figure L12 - SECTION 12: Landscape setback along northern portion of Hue Hue Road



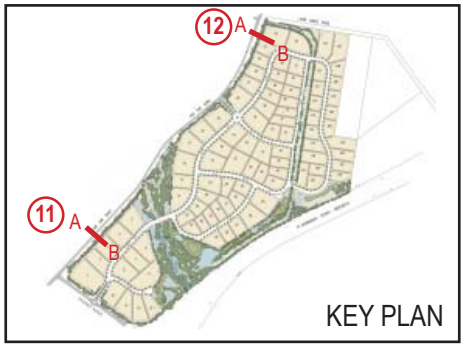


Figure L13 - SECTION 13 - Northern portion of Hue Hue Road

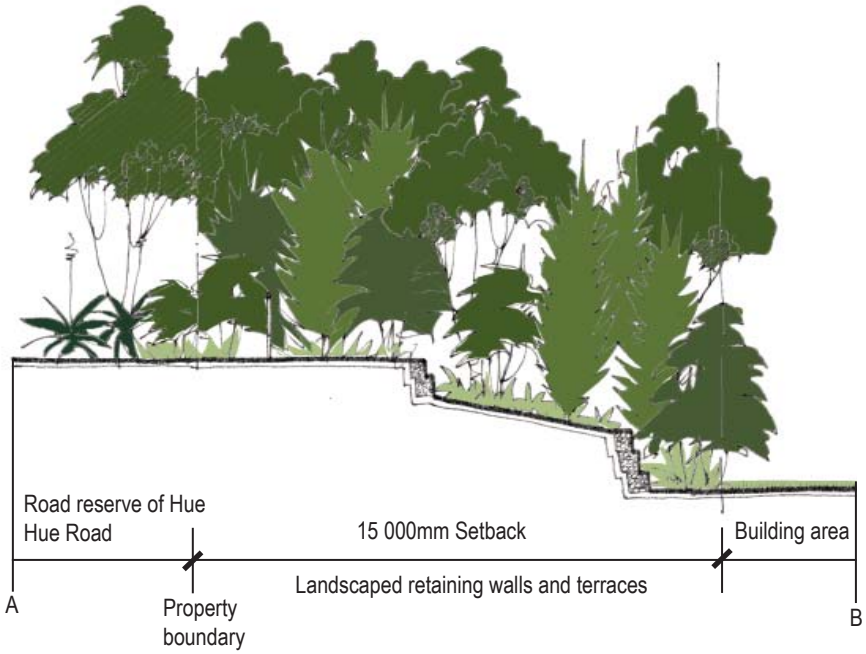
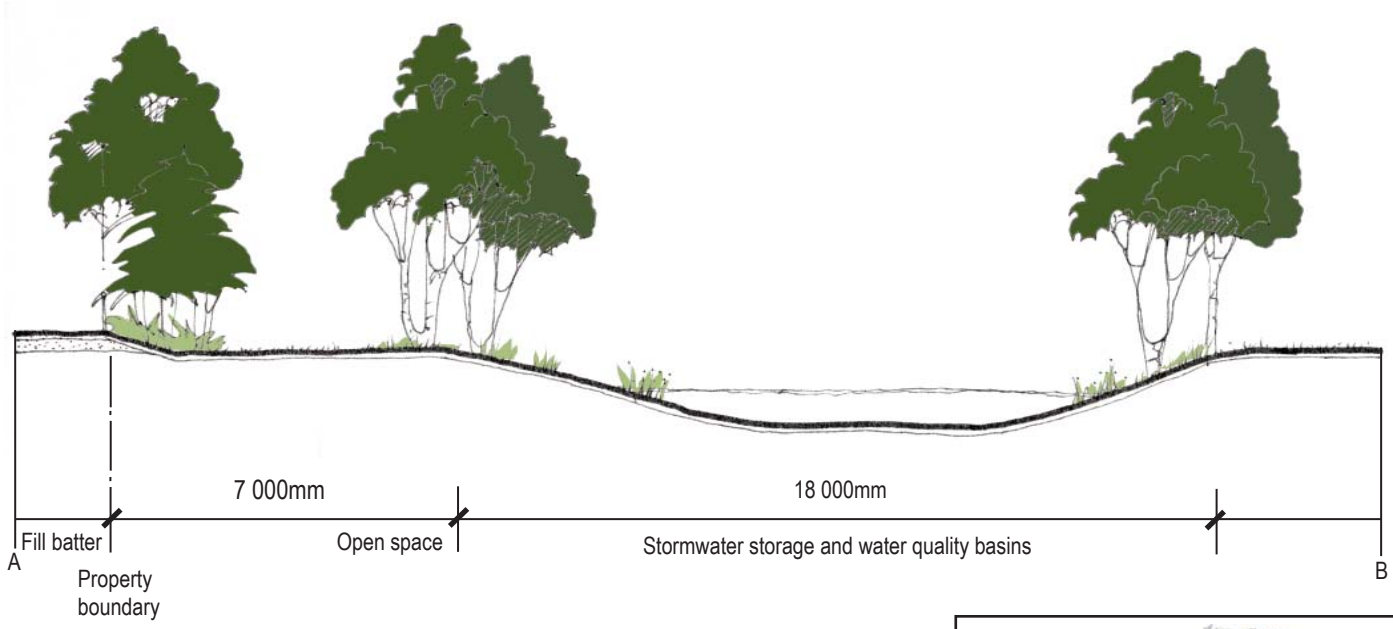


Figure L14 - SECTION 14: Section through back of lots (No 66) showing stormwater storage area



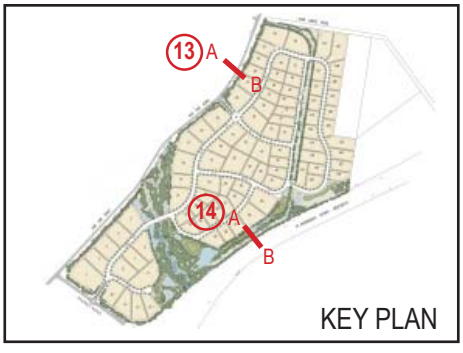


Figure L15 - SECTION 15: Typical 5 metre landscape side setback

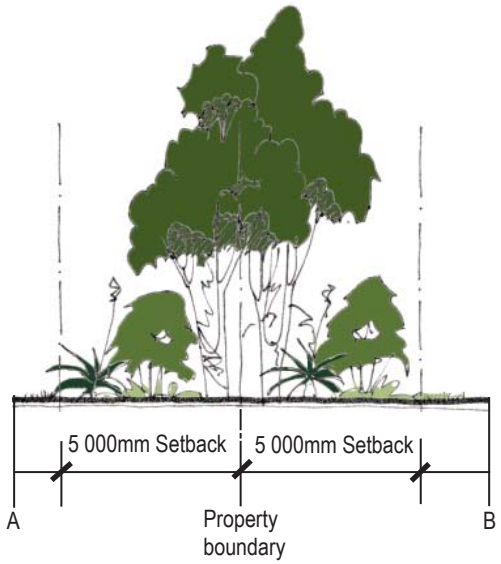


Figure L16 - SECTION 16: Typical 10 metre landscape front setback