SENIORS HOUSING

LOT 1 DP 780801, WINDWARD WAY, MILTON, NSW

VISUAL ANALYSIS SUMMARY REPORT

April 2018

scape design

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DATE	ISSUE	DESCRIPTION	BY	APP
16 January 2017	A	Draft Development Application - 80%	CH	CH
02 March 2017	B	Draft Development Application - 90%	CH	CH
17 May 2017	C	Development Application	CH	CH
26 March 2018	D	Draft Revised Development Application	CH	CH
30 April 2018	E	Revised Development Application	CH/SY	CH

Contents

Introduction

Backgound

This Visual Analysis Summary Report has been prepared by Scape Design on behalf of Aansca Property Group for submission to Shoalhaven City Council (SCC), for a Development Application for a multi-residential seniors housing facility in Milton, NSW. The proposal has been designed by Stephen Jones Associates.

We have undertaken an assessment of built form and landscape context and character to gain an understanding of the potential impacts on shared views from medium to long-range viewpoints potentially resulting from the proposal.

A previous proposal for the site was lodged in 2005. Many of the associated documents have formed the background for the new proposal and where additional detail is not required as part of this study or where the proposal has not changed significantly, reference is made back to these previous reports.

Location

Milton is a suburb located within the Shoalhaven City Council (SCC) Local Government Area (LGA), situated 220 kilometres (km) south of Sydney and 7 km north west of Ulladulla on the South Coast of New South Wales (NSW). The site is located approximately 2 km south east of the Milton township, close to the Princes Highway near the intersection with Slaughterhouse Road and an existing caravan park. Windward Way forms the site's southern edge.

Study Area

The study area, which is dominated by two local ridge lines, can broadly be described as cleared, fairly open rural land with pockets of regrowth vegetation and large remnant "paddock" trees. The visual and character assessment has included review of the immediate surrounding area including the distinct township of Milton to the north and adjacent rural-residential properties to the south, east and west. The towns of Mollymook and Ulladulla have generally not been considered as they are more urban and coastal in conext.

Purpose

This report has been undertaken to assist with an overall assessment of the development by the consent authority and other interested parties. This report has not been prepared for the purpose of Land and Environment Court judgements.

Reference Documents

The following documents have been reviewed for the preparation of this report:

A. *Planning principles and consistency of decisions*, *Part 3: Planning principles on the assessment of view impact*. Talk delivered by Dr John Roseth, Senior Commissioner, Land and Environment Court of New South Wales to the Law Society's Local Government and Planning Law Seminar on 15 February 2005
B. Visual and Landscape Constraints Report, Richard Lamb and Associates, 2005
C. *Preliminary Flora and Fauna Report and Ecological Constraints Analysis,* Bushfire + Environmental Services, 2005
D. *Rezoning Application Report,* Sd Masterplan, 2005
E. *EIA N04 Practice Note: Guidelines for Landscape Character and Visual Impact Assessment V2.0*, Roads and Maritime, 2013.

This report should be read in conjunction with the following documents:

A. Architectural DA report and drawings by Stephen Jones Associates, revision D, dated 02/04/2018
B. Civil Concept Design drawings by Greenview Consulting, revision D, dated April 2018
C. Landscape Architecture drawings by Zenith Landscape Designs, revision C, dated 19/04/18
D. Visual Assessment drawings VA.01-09 included with this Report.

BELOW. Site viewed from Windward Way, looking north east. Source: Tim Mooney Photography

Site Analysis

Site Context

The study area primarily comprises a fairly open rural paddock set within two local ridge lines, with a local gully/creek located in the north of the site. The southern boundary of the site comprises a vegetated ridge line followed by Windward Way, which services two rural-residential properties, while the northern boundary is defined by Warden Way, an unformed road. To the west lies the Milton Tourist Van Park and the Princes Highway. To the west of the site, the rural lands continue, albeit in a less vegetated state.

Notable features of the site include a derelict concrete grain silo and a planted hedge-row located near the two existing properties on Windward Way, two distinct vegetated areas to the north and south, a caravan park to the west and a small gully/creek in the north east corner of the site. A derelict propagation shed lies close to Windward Way and an existing power line runs north south across the site.

Milton is a town in the South Coast region of New South Wales, within the City of Shoalhaven. It was founded in 1860, however early settlers are known to have resided in the area since about 1827. Milton is one of the two main commercial centres of the Milton-Ulladulla district, and has a population of about 1,500 people. It is a popular stopping place for travellers on the Princes Highway South Coast tourist route and as such benefits from tourism. The town has seen recent growth due to an increase in people wanting to live in the area as opposed to bigger cities to enjoy the benefits of the town and region. Several new housing estates are being developed on the fringes of the village and new stores, cafes and bed and breakfast type businesses have recently opened in the town. The town is classified with the National Trust due to many fine examples of buildings from the mid nineteenth century.

Prior to European settlement, the area was inhabited by the Yuin People, a local Aboriginal tribe who's land extends from Kiama to Eden, who made use of the areas abundant natural resources.

A google earth aerial photo of the site and its context appears below. Refer to visual analysis drawing VA01 and VA02.

Character of the Study Area

The study area is characterised by a distinct combination of natural and cultural features resulting from the interaction of humans and nature since occupation by Aboriginal and non-Aboriginal cultures. These interactions primarily include clearing of vegetation, grazing and other agricultural activities and relatively minor construction activities. Regrowth of vegetation contributes to the site's character and in the last 10 years, significant regrowth has occurred.

Four key character zones have been interpreted through a process of visual inspection and desktop studies. These character zones are described on drawing VA02 and comprise the following:

A. Vegetated areas
B. Pastoral areas
C. Low density development
D. Roads and streetscapes.

Classification of these zones has enabled an understanding to be gained of site and site elements and assists with setting a basis for the visual analysis undertaken in the next chapter of this report.

LEGEND.
Site location

RIGHT. Site location

Topography and Hydrology

The topography of the study area, comprises gently rolling hills with local ridge-lines and gullies. Elevation across the site ranges from it's lowest point at the gully/creek in the north eastern corner at approximately 50 m above sea level (a.s.l), to about 75 m.a.s.l near the existing silo on the southern boundary at Windward Way.

Overland flow drains off the Windward Way ridge towards the north east, once in the creek, water flows to the north west towards Milton, before turning sharply to the south where it enters Burrill Lagoon and eventually the Pacific Ocean south of Ulladulla about 4 km from the site.

Vegetation and Soils

The site consists of one primary soil type being the Permian Shoalhaven Group - comprising siltstone, sandstone, shale and conglomerate (Ulladulla 1:250000 Geological Series Sheet S1 56-13) and one primary vegetation type being the Milton-Ulladulla Subtropical Rainforest. A mixture of remnant and regrowth species are scattered across the site. Dominant tree species are Blackbutt (***Eucalyptus pilularis***), Turpentine (***Syncarpia glomulifera***), Bangalay (***E. botryoides***), and Sydney Peppermint (***E. piperita***), to a height of 20-30 m. Another notable species group is a single Small-leaved fig Tree (***Ficus obliqua***) with adjacent Lilypily (***Acmena smithii***) and Cabbage Tree Palms (***Livistona australis***). The combination of these species contributes to the character of the site and along with topography perform a vital role in controlling views in and out of the site. It is understood that a Vegetation Management Plan will be prepared should the development application with council proceed.

Access

The site is accessed by Windward Way along the southern boundary of the site, which joins Slaughterhouse Road, which in turn connects with the Princes Highway. Windward Way provides access to the township to the north west via Wilfords Lane, however these roads are unsealed and narrow. There is currently no other access to the site apart from an unsealed track adjacent to the existing caravan park. The highway provides direct access to the Milton township to the north west and Mollymook/ Ulladulla to the south east.

Structures

Two existing rural-residential properties can be found along Windward Way. The properties are single story residences with landscaped/ manicured gardens and perimeter hedge-rows. A derelict silo can also be found along Windward Way. It sits on a local high point, which combined with its own height of approximately 9 m, creates a local landmark. The existing caravan park to the east along the highway consists of low-rise dwellings set out in rows. Further afield lies primarily low-density/ low-rise residential and commercial development associated with the Milton township and outer-lying suburban development associated with Mollymook.

RIGHT. Aerial image of site

LEGEND.
Site Boundary
Existing structure or built form

The Proposal

Architectural Vision

The over-arching vision for the proposal is to create a seniors living community that sits appropriately within its environment and caters to a range of needs for its residents. The proposal aims to provide a scheme that reflects upon the previous work undertaken in 2005, respond to previous feedback and existing site constraints and provide a modern, well-designed community facility.

Architectural Design

The proposal consists of a multi-housing project catering specifically to the needs of seniors. A series of facility and dwelling types have been developed, consisting of:

- A single story at front (facing Windward Way) "clubhouse" and medical facility, gym within the under croft of the lower ground floor at the rear
- Residential care facility of one storey
- Seven apartment buildings, containing 133 apartments and consisting of 3 storeys
- 64 Duplex buildings of single storey; and
- Three triplex buildings of single stories.

This combination of structures and facilities is similar to the 2005 proposal, as are setbacks of the development from adjacent roads. Some building heights and footprints vary from the 2005 scheme and where this occurs, have been referred to the visual assessment chapter of this report.

Refer to latest architectural drawings for detailed information.

Architectural Finishes

The architectural finishes as currently proposed (interim) comprises a contemporary collection of colours and finishes aimed to complement this style of development and create building identity to assist with wayfinding throughout the site.

Colours and finishes are proposed for each building type in order to create a unique identity and assist with wayfinding. Examples and an assessment of the colour palette are in the Mitigation chapter of this report.

Building type	**Roof & gutters**	**Facade**	**Detailed elements**	**Window and door frames/ screens**
Clubhouse	– "Charcoal Grey" oxide roof – "Woodland Grey" powdercoated gutters	– "Woodland Grey" – Natural timber	– "Light Shale Grey" powdercoat – "Orange" powdercoat	– "Woodland Grey" powdercoated
Residential Care Facility	– As above	– "Light Shale Grey" – Natural timber – "White" painted	– "Light Shale Grey" – "White" painted	– "Yellow", "Light Shale Grey" & "White" powdercoated – Natual timber
Apartment Buildings	– "Charcoal Grey" oxide roof – "Charcoal Grey" powdercoated gutters	– "Woodland Grey" – "Light Shale Grey" – Natural timber	– "Light shale grey" powdercoat – "White" painted – "Charcoal Grey"	– "Woodland Grey" powdercoated – "Dirty Yellow" & "Terran" powdercoated
Duplex/ Triplex	– "Charcoal Grey" oxide roof – "Light Shale Grey" powdercoated gutters	– "Light Shale Grey", "Charcoal Grey" & "White" – Natural timber	– "White" powdercoated	– "Woodland Grey" powdercoated

RIGHT. Site plan, Stephen Jones Associates

Landscape Design

The landscape design prepared by Zenith Landscape Designs indicates that the development will consist of substantial landscaped areas including the planting of trees and street trees. These areas are critical in mitigating views of the development from the surrounding area, as is management of existing vegetation. Screen planting will be located to supplement existing stands of vegetation at key locations and trees will be planted along all new streets. This, in combination to planting of communal and private open space areas will assist with mitigation of short and long range views as well as improving amenity for residents and visitors.

Landscape objectives

Related landscape objectives for the project are summarised as follows:

- Existing trees to be retained are to be protected from damage during construction
- Small-medium trees planted along internal roads to provide visual relief and shade and assist with wayfinding and precinct identity
- Dense planting of indigenous species along boundaries to assist with screening from short to long-range viewpoints
- Bush regeneratoion of creek gully environmental zone to assist with environmental and visual objectives
- Scattered trees and open parkland as transition zone between environmental zone and development
- Planting of appropriate character species to Windward Way frontage.

The landscape objectives are demonstrated on the following plan (refer Page 8).

scape design

PLANT LIST 1.

1 = low fire hazard species

Milton Ulladulla subtropical rainforest - Endangered Ecological Community
MUSR-EEC
(source: Cumberland Ecology VMP)

*Asmena smithii - Lilly Pilly
Adiantum fabellifolium - Necklace Fern
Adiantum formosum - Giant Maidenhair Fern
Adiantum hispidulum - Rough maidenhair Fern
*Alectryon subcinereus - Native Quince
*Alphitonia excelsa - Red Ash
Alphanopterium neurosum - Gum Vine
Arthropteris tenella - Climbing Fishbone Fern
Asplenium australasicum - Birds Nest Fern
Baloghia inophyla - Brush Bloodwood
*Brachychiton acerifolius - Flame Tree
Breyinia oblongifolia - Coffee Bush
*Ceratopetalum apetalum - Coachwood
Cissus antarctica - Kangaroo Vine
Cissus hypoglauca - Native grape
Clitoria beauifolius - Native Orange
Claoxylon australe - Brittlewood
*Diploglottis australis - Native Tamarind
*Dendrocnide excelsa - Australian Nettle Tree
*Doaxyrrs australis - Black Plum
Dipodia aspera - Prickly Rasp Fern
*Elaeocarpus kuinia - Beiwarra
Elaeocarpus kelthiae - Wombat Berry
*Ficus spp. - Fig Tree
*Ficus coronata - Sandpaper Fig
Gleichenia dicarpum - Scrambling Lily
*Glycine sericigauca - Guiza
Glycosmis citrya ancepa - Settlers Twine
Legrandrema moore - Round Leaf Vine
*Livistona australis - Cabbage Fan Palm
Melaleuca scandens - Bushy Vine
Marsdenia rostrata - Milk Vine
Notelaea venosa - Large Mock Olive
Oplismenus imbecillus - Pandemelon Grass
Pandorea pandorana - Wonga Wonga Vine
Pellaea falcata - Sickle Fern
*Pittosporum undulatum - Sweet Pittosporum
Platycrathus parviflorus - Cockspur Flower
Sarcopetalum harveyanum - Pearl Vine
Smilax australis - Lawyer Vine
Stephania japonica - Snake Vine
*Strebulus brunonianus - Whalebone Tree
*Syzygium australe - Brush Cherry
*Toona ciliata - Red Cedar

PLANT LIST 2.

1 = low fire hazard species

Clyde Gully Wet Forest
CGWF
(source: Cumberland Ecology VMP)

*Asmena smithii - Lilly Pilly
Angophora floribunda - Rough-barked Apple
*Backhousia myrtifolia - Grey Myrtle
Blechnum cartilagineum - Gristle Fern
*Callicoma serratifolia - Black Wattle
Cissus hypoglauca - Native Vine
Cliymatis aristata - Old Man's Beard
Cyclophorum tomentosum - Hairy Clerodendrum
Cityrmbia gummifera - Red Bloodwood
*Dyrontia maculata - Spotted Gum
Dianella caerulea - Blue Flax Lily
Dipodia aspera - Prickly Rasp Fern
*Elaeocarpus reticulatus - Blueberry Ash
Eucalyptus paniculata - Grey Ironbark
Eucalyptus pilularis - Blackbutt
Eucalyptus piperita - Sydney Peppermint
*Eucrypia lucrina - Beiwarra
Hibbertia dentata - Trailing Guinea Flower
Hibbertia scandens - Climbing Guinea Flower
*Livistona australis - Cabbage Fan Palm
Lomandra longifolia - Spiny-headed Mat-rush
Lysicopogon lanceolatus - Lance Beard Heath
Oplismenus imbecillis - Creeping Beard Grass
Pandorea pandorana - Wonga Wonga Vine
Persicaria lineata - Narrow-leaved Geebung
Pittosporum revolutum - Wild Yellow Jasmine
Pteridum esculentum variatale - Pasture Bracken
Pteridum esculentum - Common Bracken
Syncarpia glomulifera - Turpentine
*Tristaniopsis collina Mountain Water Gum

PLANT LIST 3.

Common species of:
Clyde Gully Wet Forest +
Milton Ulladulla subtropical rainforest - Endangered Ecological Community
= low fire hazard species

*Asmena smithii - Lilly Pilly
*Alectryon subcinereus - Native Quince
*Cissus hypoglauca - Native Vine
*Dipodia aspera - Prickly Rasp Fern
*Elaeocarpus reticulatus - Blueberry Ash
*Eucalyptus pilularis - Blackbutt
*Livistona australis - Cabbage Fan Palm
*Lomandra longifolia - Spiny-headed Mat-rush
*Oplismenus imbecillis - Creeping Beard Grass
*Pandorea pandorana - Wonga Wonga Vine
*Strebulus brunonianus - Whalebone Tree

STREET TREES

(source: S.C.C."Strathaven Species List for Milton")

PLANT LIST 4.

PRIMARY ROADS & WINDWARD WAY SITE FRONTAGE ALONG RIDGELINE

Corymbia maculata - Spotted Gum
Eucalyptus botryoides - Bangalay
Eucalyptus paniculata - Grey Ironbark
Eucalyptus pilularis - Blackbutt
Syncarpia glomulifera - Turpentine

UNDERSTOREY TO MAIN TREES

Dianella caerulea 'Little Jess' - Flax Lily
Lomandra longifolia 'Tanika' - Mat Rush
Poa labillardieri 'Eskdale' - Poa

PLANT LIST 5.

SECONDARY ROADS THROUGHOUT HOUSING AREAS

Agonis flexuosa - Willow Myrtle
Banksia serrata - Old Man Banksia
Callistemon salignus - Willow Bottlebrush
Callistemon viminalis - Weeping Bottlebrush
Lagerstroemia indica var. - Crape Myrtle
Syzygium australe - Brush Cherry

PLANT LIST 6.

CARPARK AREAS TO COMMUNITY AND RESIDENTIAL CARE FACILITIES

Brachychiton acerifolius - Gordonia
Fraxinus oxyanpa 'Raywood' = Claret Ash
Lagerstroemia indica var. - Crape Myrtle
Syzygium australe - Brush Cherry
Ulmus glabra - Golden Elm
Ulmus parvifolia - Chinese Elm

PLANT LIST 7.

DETENTION POND ENVIRONS

TUFF SURROUNDS

Zoysia macrantha - Nara

TUFTED PLANTS

Ainsliea vagans - Spear grass
Austrostipa ramosa - Corkscrew grass
Carex appressa** - Tall Sedge
Cyperus lenevis - Sedge
Dianthonia fastuosa - Wallaby grass
Dianella caerulea - Blue Flax Lily
Dianella longifolia - Flax Lily
Dichelachne micrantha - Short-hair Plume-grass
Echinopogon ovatus - Forest Hedgehog grass
Entolasia stricta - Wiry Panic grass
Lomandra hystrix var. - Creek Mat Rush
Lomandra filiformis - Mat Rush
Lomandra fluviatilis var. - River Mat Rush
Lomandra longifolia - Spiny Mat Rush
Lomandra multiflora - Mat Rush
Microlaena stipoides - Weeping Meadow Grass
Poa Lanitlardieri - Poa
Themeda australis - Kangaroo grass

SEDGES/RUSHES (EMERGENT PLANTS)

Baumea juncea (Bare Twig-rush)
Carex appressa** Tall Sedge
Cyperus lenevis - Sedge
Fimbristylis dichotoma - Common Fringe-sedge
Fiorina nodosa*** - Knobby Club Rush
Gahnia aspera - Rough Saw-sedge
Gahnia melanocarpa - Black Fruit Saw-sedge
Lepidosperma elatius - Tall Sword-sedge
Lepidosperma laterale - Sword-sedge
Juncus bufonius - Toad Rush
Juncus usitatus*** - Common Rush
Lomandra filiformis - Wattle Mat-Rush
Lomandra longifolia - Spiny Mat-Rush

SMALL SHRUBS

Daviesia ulicifolia - Bitter Pea
Dodonaea viscosa - Hop Bush
Goodenia hederacea - Forest Goodenia
Goodenia ovata*** Hop Goodenia
Leptospermum continentale - Prickly Tea-tree
Melaleuca nanoscens - Pink Honey Myrtle
Pratia purpurascens - White root
Pultenaea villifera - Bush Pea

TALL SHRUBS / TREES

Bursaria spinosa - Blackthorn
Leptospermum trinervium - Paperbark Tea-tree
Melaleuca bracteata - 'Revolution Green'
Melaleuca decora - White Feather Honey Myrtle
Melaleuca ericifolia*** - Swamp Paperbark
Melaleuca linariifolia - Snow in Summer
Melaleuca nodosa - Prickly Leafed Paperbark
Melaleuca styphelioides - Prickly Leafed Paperbark

PLANT LIST 8.

RESIDENTIAL NATIVE GARDENS; INDEPENDANT LIVING & APARTMENTS

(source: S.C.C."Strathaven Species List for Milton")

NATIVE / NATIVE CULTIVAR

TREES

Agonis flexuosa - Willow Myrtle
Banksia serrata - Old Man Banksia
Callistemon 'Harkness' - Bottlebrush
Callistemon salignus - Willow Bottlebrush
Callistemon viminalis var. - Weeping Bottlebrush
Glochidion ferdinandi - Cheese Tree
Leptospermum laevigatum - Coastal Tea Tree
Livistona australis - Cabbage Tree Palm
Melaleuca linariifolia - Flax-leaved Paperbark
Melaleuca ericifolia - Swamp Paperbark
Melaleuca styphelioides Prickly-leaved Tea Tree
Syzygium australe Brush Cherry
Syzygium luehmannii Small-leaved Lilly pilly

SHRUBS

Acmena smithii 'Minor' - Dwarf Lilly Pilly
Austromyrtus 'After Dark' 'Pink Blush' - Midgen Berry
Banksia ericifolia - Heath Leaved Banksia
Banksia marginata - Silver Banksia
Banksia robur - Swamp Banksia
Banksia spinulosa - Hairpin Banksia
Callistemon 'Captain Cook' - Dwarf Bottlebrush
Cyathea sp. - Tree Fern
Dodonaea triquetra - Large-leaf Hop-bush
Grevillea 'Honey Gem' - Honey Gem Grevillea
Grevillea 'Moonlight' - Moonlight Grevillea
Grevillea longiana - Woolly Grevillea
Indigofera australis - Austral Indigo
Leptospermum scoparium var. - Tea Tree
Syzygium 'Aussie Compact' - Brush Cherry
Syzygium 'Bush Christmas' - Brush Cherry
Syzygium 'Cascade' - Dwarf Weeping Lilly Pilly
Prostanthera ovalifolia - NZ Flax
Prostanthera ovalifolia 'Purple Haze' - Mint Bush
Pittosporum tenuifolium - Silver Sheen
Strelitzia reginae - Bird of Paradise

GROUNDCOVER

Convolvulus mauritanicus - Morocco Glory

GRASSES & OTHER STRAPPY LEAVED PLANTS

Liriope muscari - Turf Lily
Ophiopogon japonicus - Tall Green Mondo
Ophiopogon japonicus 'Nana' - Dwarf Green Mondo Grass
Phormium tenax spp. - New Zealand Flax

CLIMBER / GROUNDCOVER

Trachelospermum jasminoides - Star Jasmine

PLANT LIST 9

MASS PLANTING TO COMMUNITY AND RCF GARDENS

(source: S.C.C."Strathaven Species List for Milton")

EXOTIC

TREES

Betula pendula - Silver Birch
Calodendrum capense - Cape Chestnut
Cedrus deodara - Golden Himalayan Cedar
Cupressus macrocarpa - Golden Cypress
Cupressus sempervirens 'Stricta' - Pencil Pine
Ficus rubiginosa (aka Gordonia australis) - Fig Tree
Fraxinus oxycarpa - 'Raywood' Claret Ash
Lagerstroemia spp (grafted cultivars) - Crape Myrtle
Liriodendron tulipifera - Tulip Tree
Magnolia 'Little Gem' - Dwarf Magnolia
Pistacia chinensis - Chinese Pistacio
Prunus cerasifera 'Nigra' - Purple Flowering Plum
Pyrus calleryana - Callery Pear
Ulmus pumila - Golden Elm
Ulmus parvifolia - Chinese Elm
Zelkova serrata - Keyaki

SHRUBS

Abelia grandiflora - Abelia
Brunfelsia latifolia - Yesterday, Today & Tomorrow
Camellia sasanqua - Sasanqua Camellia
Calocephalus compositum - Pink Diosma
Convolvulus cneorum - Silverbush
Cordyline australis spp. - Cordyline
Gardenia angusta 'Golden Magic' - Gardenia
Gardenia angusta 'Magnolia' - Gardenia
Hebe buxifolia - Hebe
Hebe hybrid 'Inspiration' - New Zealand Lilac
Hebe vert var. - New Zealand Lilac
Lavandula dentata - French Lavender
Lavandula stoechas - Italian Lavender
Murraya exotica - Scented Murraya
Phormium tenax - NZ Flax
Photinia glabra 'Rubens' - Red Photinia
Pittosporum tenuifolium - Silver Sheen
Strelitzia reginae - Bird of Paradise

GROUNDCOVER

Brachycome multifida - Cut-Leaf Daisy
Cissus antarctica - Kangaroo Vine
Dichondra repens - Kidney Weed
Grevillea 'Bronze Rambler' - Groundcover Grevillea
Grevillea 'Pink Mantle' - Groundcover Grevillea
Myoporum parvifolium - Creeping Boobialla
Viola hederacea - Native Violet

CLIMBERS

Hibbertia scandens - Yellow Guinea Vine
Pandorea jasmindes 'Lady Di' - White Flower Vine

REFER ALSO TO VEGETATION MANAGEMENT PLAN AS PREPARED BY CUMBERLAND ECOLOGY AND BUSHFIRE PROTECTION ASSESSMENT AS PREPARED BY AUSTRALIAN BUSHFIRE PROTECTION PLANNERS P/L FOR PLANTING/VEGETATION MANAGEMENT REQUIREMENTS

NOTES
1. Vehicular pavement, fencing and built structure details shall be to Architect's specification.
2. All surface and sub-surface drainage requirements shall be to Engineers details.
3. Numeric dimensions should be taken in preference to scaling.
4. All dimensions should be checked on-site prior to commencing construction.
5. Contractors shall verify the location of all site features prior to commencing works.
6. Soil testing has not been undertaken as part of the preparation of this design; Contractors shall determine the need for soil testing prior to any planting works.
7. A search of underground services has not been undertaken as part of the preparation of this design; it is recommended that Contractors contact DIAL BEFORE YOU DIG ON 1100 prior to commencing any works.
8. This plan is to be read in conjunction with the architectural and engineering plans

SITE PLAN

A1

10 20 30 50
0 20 40 100m

LANDSCAPE OBJECTIVES ZONE

(& plant list to be applied)

- **A** — **EXISTING TO REMAIN:** including trees, understorey vegetation and landform
- **B** — **WINDBREAK HEDGE:** retain and reinforce existing - *Cupressus sp.*
- **C** (2) — **WINDWARD WAY & PRINCES HWY STREET VERGE:** retain existing trees + replant additional 15m+ CGWF canopy species to reinforce ridge treeline
- **D** (2+4) — **WINDWARD WAY FRONTAGE TO RCF + COMMUNITY CENTRE:** 15m+ CGWF canopy species to reinforce ridge treeline + understorey of SSC Milton native species to compliment local area character
- **E** (2+10) — **RCF + COMMUNITY CENTRE GARDENS:** mass planting of SSC Milton native + exotic species (trees and understorey) to compliment local area character
- **F** (2) — **TERRACED EMBANKMENTS:** mass planting of CGWF species including all strata of vegetation ie canopy trees, screen trees, shrubs and groundcovers
- **G** (4) — **CENTRAL AND WATONGA AVE STREET VERGES:** clusters of 15m+ canopy trees and native understorey grassy species
- **H** (4+5) — **NEW PUBLIC STREET VERGE TOWARDS GARRADS LANE:** 5-10m screen trees to protect and screen views from Princes Highway
- **I** (5+8) — **RESIDENTIAL STREET VERGES AND GARDENS:** small native tree species and native SSC Milton native understorey species
- **J** (1) — **SIGNIFICANT FIG TREE ENVIRONS:** existing to remain undisturbed including ground levels, understorey vegetation and landform - Tree Protection and Tree Management to Arborist's specification
- **K** (1) — **INDEPENDANT LIVING UNITS ADJACENT TO FIG P.O.S. AREAS:** mass planting of indigenous MUSR -EEC Rainforest Species - refer also typical unit concepts
- **L** (8) — **INDEPENDANT LIVING P.O.S. AREAS & APARTMENT GARDENS:** mass planting of indigenous CGWF and native SSC Milton native understorey species - refer also typical unit concepts
- **M** (3+7) — **APZ INNER PROTECTION AREA - MANAGED PARKLAND ZONES:** widely spaced (min 10m clearance between canopies) clusters of small CG MUSR -EEC low fire hazard tree and groundcover species & mown grassl comply with APZ requirements
- **N** (7) — **APZ OUTER PROTECTION AREA - MANAGED MASS PLANTING:** widely spaced tree clusters and mass planting of shrubs (max 30% density), groundcovers and emergent plants adjacent to detention pond to comply with APZ requirements
- **O** (1) — **MILTON-ULLADULLA SUBTROPICAL RAINFOREST - EEC ZONE:** existing trees, understorey vegetation and landform + management and bush regeneration as specified by VMP
- **P** — **EMERGENCY ACCESS SECTIONS OF ROAD & WALKING TRAIL:** decomposed granite occasional access road sections and walking trails to edge of LEP E2 zone

Rev. no.	Description:	Date:
C	REVISED DA ISSUE	18.04.18
B	REVISED DA ISSUE	12.05.17
A	DA ISSUE	25.11.16

ARBORIST:
SURVEY: RYGATE & WEST
HYDRAULIC: GREENVIEW CONSULTING
ARCHITECT: STEPHEN JONES ASSOCIATES
CLIENT: ANNSCA PROPERTY GROUP P/L

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LOT 1 DP780801 & LOT 1 DP737576
PRINCES HIGHWAY / WINDWARD WAY
MILTON
MILTON MEADOWS

TITLE:	LANDSCAPE OBJECTIVES		
STATUS:	DA	SCALES:	1:1000
DRAWN:	MAG	SHEET 2 OF 10	REVISION:
CHECKED:	MFG	DRAWING No. 16-3351 L02	C
DATE:	14.11.16		

SENIORS HOUSING DEVELOPMENT, MILTON

Civil Design

The civil design prepared by Greenview Consulting indicates that the development will require a large onsite detention pond, which will effectively separate the development from the environmental zone associated with the existing gully. An open style managed parkland around the pond will allow sporadic tree planting, which will assist with visual impact mitigation for longer range views. The bulk earthworks design is still in it's early stages. Care should be taken to avoid cut and fill within drip lines (or tree protection zones defined by project arborist). Land available for landscape treatments and tree planting should be maximised along internal road corridors, so that tree planting can assist with long range visual impact mitigation and short-range landscape character and shade.

The civil design is shown on the following plan (refer Page 9).

LEGEND

EXISTING		PROPOSED
	PROPERTY BOUNDARY	
5.00	CONTOUR	
	BUILDING	
	CONCRETE	
	EDGE OF BITUMEN	
	KERB ONLY	
	KERB AND CHANNEL	
	KERB RAMP	
SW	STORM WATER MAIN	SW
SW	STORM WATER MANHOLE	
SW	STORM WATER GULLY PIT	
RW	ROOFWATER	
W	WATER	W
C	WATER CONDUIT	C
S	SEWER	S
S	SEWER MANHOLE	
RM	RISING MAIN	RM
G	GAS	
T	TELSTRA	
O	OPTUS	
E	U/GROUND ELECTRICITY	
E	OVERHEAD ELECTRICITY	
	FENCE	
RET WALL	RETAINING WALL	
	SWALE DRAIN	
	TREE	
	BIO-RETENTION FILTER MEDIA	

NOTE:
1. THIS PLAN HAS BEEN PREPARED FOR REVIEW ONLY AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES
2. THIS APPROACH WILL REQUIRE BOTH DETAILED DESIGN AND A REVISED WATER CYCLE MANAGEMENT REPORT AND PLAN
3. TANK SIZES TO BE DETERMINED IN ACCORDANCE WITH THE REVISED WATER CYCLE MANAGEMENT PLAN

0 10 20 30 40 50
SCALE 1:1000@A1

REV.	DATE	BY	DESCRIPTION	REV.	DATE	BY	DESCRIPTION
D		QT	ISSUED FOR REVIEW				
C	12.05.17	RF	ISSUED FOR APPROVAL				
B	27.01.17	MKP	ISSUED FOR APPROVAL				
A	12.12.16	MKP	ISSUED FOR APPROVAL				

DESIGN: RF
DRAWN: QT
SCALE: 1:1000
SIZE: A1

greenview CONSULTING

APPROVED
ALISTAIR McKERRON
CPEngNPER

PROPOSED AGED CARE FACILITY
Windward Way, MILTON, NSW 2538
ANNSCA PROPERTY GROUP

CONCEPT CIVIL DESIGN
STORMWATER LAYOUT

160529
PRELIMINARY
P02

scape design

Visual Analysis Methodology

Overview

This chapter aims to undertake a qualitative assessment of the potential impacts on shared views from long range viewpoints. It is not an assessment of views between neighbours in and around the subject site within the study area. The long range views have been selected following a review of the 2005 ***Visual and Landscape Constraints Report*** by Richard Lamb Associates and discussions between the project team and Shoalhaven City Council.

The methodology for the visual analysis has been developed in response to the brief in conjunction with the author's previous experience in similar projects and visual assessments. The two key tests for the assessment are:

- *EIA N04 Practice Note: Guidelines for Landscape Character and Visual Impact Assessment V2.0* (Roads and Maritime Services, 2013)
- *Planning principles and consistency of decisions, Part 3: Planning principles on the assessment of view impact*. Talk delivered by Dr John Roseth, Senior Commissioner, Land and Environment Court of New South Wales to the Law Society's Local Government and Planning Law Seminar on 15 February 2005.

The relevance of the first document is that it considers the site within its landscape setting (context and character) and considers views from other user groups and longer-range locations. The second document outlines principles relating to the assessment of impacts on 'shared views' between neighbours.

Heritage Views

Whilst heritage has been a consideration in the development of an understanding of the context and character of the study area, no further heritage considerations have been undertaken, as the site is not heritage listed and scenic relationships between local heritage items are unlikely to be impacted.

Study Process

The process for the analysis is as follows:

- Desktop study of background documents and mapping
- Visual inspection of subject site and study area and associated photography to determine potential viewpoints and confirm site character
- Review of architectural documents (drawings, reports, models etc) and discussion of the intent of the proposal with the architect
- Preparation of contextual and character mapping of the study area
- Preparation of visual analysis drawings of the study area and immediate site
- Preparation of photographic analysis identifying potential viewing locations both 'of' and 'from' the proposal
- Establishment of an appropriate qualitative value system to categorise types of views (refer below)
- Confirm the proposal complies with the appropriate planning and development control framework and is considered 'reasonable' for the type of development proposed and the site (this is based on advice from the proposal designer).

Qualitative Value System

The visual analysis has been assessed in relation to a number of key viewpoints. The method of assessing these views has involved:

- Defining the scale or size, form and type of the proposal within the context of the study area
- Establishing an estimated visual envelope, through desktop analysis and ground-truthing on site
- Identifying key viewpoints from where the proposal would be visible and distances involved
- Identifying key viewpoints 'of' and 'from' neighbouring properties
- Assessing the 'magnitude of change' and 'sensitivity to change' of each viewpoint (refer below).

Visual Envelope

A combination of the physical characteristics of the site, the nature of the existing road corridor and the proposal itself define the visible area and the catchment from where the works are visible. This visual envelope has been defined as occurring 25, 50, 100 and 250 m from the subject site.
Refer to drawing VA03 for visual envelope identification.

Viewpoints

Viewpoints within visual assessment precincts have been selected and assessed (sometimes as a group) for potential impacts. The chosen viewpoints have been assessed using the following methods:

- Field investigations, site photography and mapping
- Computer generated visualisations based on 3-dimensional design and survey data
- Aerial views and transects using Google Earth™ Professional software.

Magnitude

The 'magnitude of change' to existing views refers to the nature and scale of the proposal, and the extent and proximity of the view to the work. Magnitude represents the contrast in scale, form and type of work and to the location and context to which it is to be placed. A high magnitude results if the proposal is of a major scale and considered out of scale or uncharacteristic of the existing visual character, or if there is considerable modification to the existing built fabric or landscape. A moderate magnitude would result if the upgrade is prominent but not considered to be substantially uncharacteristic with the existing visual character. A low magnitude results if there is minimal alteration to the existing view and the upgrade is of a scale and nature that is consistent with the existing visual character.

Sensitivity

Sensitivity is the measure of the visual importance of the view and the 'completeness' of the view and is dependent on the following:

- The category of viewer such as resident, visitor or worker
- The elements of the proposal that are visible
- Importance of the view
- Consideration of the perceived cultural, natural and heritage values of the visual environment and the elements within it. Generally, viewers with the highest sensitivity include:
  - Residents who have existing views that would be affected by the proposal and the context of this view ie. kitchen window, balcony, bedroom, living room
  - Users of public open space where their attention is focused on the visual landscape, for example, lookouts or other scenic natural areas
  - Communities that place high cultural and historical significance on the visual landscape
- Viewers with the lowest sensitivity are most likely to be:
  - Employees working within an enclosed workplace and focused on their work (however interesting views should be provided for them within a short walk from their workplace)
  - Motorists (apart from tourists) whose attention is focused on driving – however it is important to provide a stimulating motorist experience, particularly for tourists.

Impact

Impact is the combination of the 'magnitude' and 'sensitivity' rating in accordance with the Visual Analysis Grading Matrix (refer table below). It captures impacts felt by viewers of the proposal and to a lesser extent views from the proposal.

Whilst generally the analysis will be determining negative impacts on views, in some case impacts on views may be considered positive and of benefit to viewers of the proposal.

In assessing impact, vegetation buffering is considered however, due to potential changes to vegetation over time, full value is not given to its screening potential (as opposed to built form and topography which is seen as more permanent).

Where sensitivity and magnitude ratings are considered lower than a particular rating level, but not low enough for the rating below, then the upper rating will be used, particularly in areas valued for their cultural or natural values generally.

RIGHT. Visual analysis grading matrix
Roads and Maritime Services

		Magnitude			
		High	Moderate	Low	Negligible
Sensitivity	High	High Impact	High-Moderate	Moderate	Negligible
	Moderate	High-Moderate	Moderate	Moderate-low	Negligible
	Low	Moderate	Moderate-Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Visual Analysis

Overview

Key viewpoints and potential viewpoints have been identified and visualised on the following page and on drawings VA01 & 03. The grading matrix table (refer previous page) sets out the components of the qualitative value system and assesses magnitude, sensitivity and potential impacts on each viewpoint.

The site's setting, in terms of topography and aspect, in combination with areas of existing vegetation, provide a good visual screening of the site from many, if not most, potential viewpoints. The setting, in combination with the architectural design, bulk earthworks levels and subsequent landscaping of the site, all have an important role in mitigating visual impact.

In order to assess this potential impact, four key viewpoints have been selected for detailed assessment including visual representation. A series of other locations have been selected for less intense scrutiny, as a broad assessment can be made from desktop studies in conjunction with the previous 2005 proposal and assessment in the Visual and Landscape Constraints Report (Richard Lamb and Associates, 2005).

The 2005 report has also identified areas of exposure and provided ratings of Low, Moderate and High. The visual analysis for the selected viewpoints has taken into account these zones as part of the "sensitivity" rating (refer figure below and following tables).

BELOW. Visual exposure map - Richard Lamb Associates, 2005

Assessed Viewpoints

Viewpoint 01

— Location and description

Viewpoint 01 is located near the intersection of the subject site boundary with the adjacent tourist van park alongside the Princes Highway. This location has been selected as an example of potential pedestrian views from the highway.

— Analysis

The visual analysis depicted in the following google earth generated viewshed model and perspective montage (refer below and following), indicates that from this location, framed vistas of the proposal are possible due to the nature of the ridge line and existing vegetation, however the percentage of visible built form is considered low. In addition, the ridge line is densely vegetated and elevated, forming a backdrop to the view and therefore ensuring the visual 'horizon' remains unobstructed.

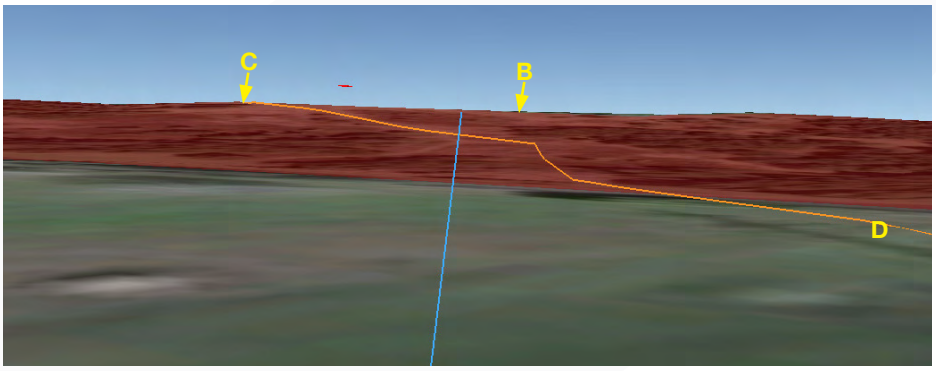
BELOW. Viewpoint 01 location

Although located within a moderately sensitive view, the nature of the topography, existing foreground vegetation and unobstructed background/horizon, results in a low magnitude of work being visible and enables a visual impact mitigation strategy that will further reduce potential impacts (refer following table).

— 2005 Proposal

The nearest viewpoint assessed in the 2005 proposal is referred to as "Location D", taken from the road surface near viewpoint 01. The viewpoint was assessed as a ***"Limited vegetation within the eastern part of the site gives access to this view along the eastern boundary of the site. The south-eastern corner of the site is screened by intervening vegetation"***.

The assessment undertaken in the 2005 proposal is considered to be very similar although, impacts are considered to be lower along the eastern boundary due to the foreground vegetation having grown substantially since along with the opportunity to supplement the existing vegetation with new planting.



ABOVE. Potential viewshed model - VIEW-POINT 01

LEGEND.
A Concrete tank
B #52 Windward Way property
C Silo
D Power lines

ABOVE. Viewpoint 01 from edge of highway, 150m from edge of proposed built form

BELOW. Visual analysis assessment table - VIEWPOINT 01

VP#	Description of setting	Distance to built form (m)	Elements of proposal considered	Visual exposure (RLA, 2005)	Sensitivity	Magnitude	Potential Impact
01	View from edge of highway, north eastern corner of the site	150 m approx	Partial roofs and facades of buildings, architectural finishes, tree planting	High rating in foreground, with moderate and high ratings through centre of view	Moderate – Close views but tightly framed by vegetation – Range of (mainly transient) viewer types – Visual horizon intact – Locally valued undulating rural landscape with patches of native vegetation.	Moderate – Views screened by vegetation, however existing vegetation reduced by entry drive – Roofs and upper level facades only visible elements	**Moderate**

ABOVE. Viewpoint 01 rendered with no future planting growth

ABOVE. Viewpoint 01 rendered with 10 years future planting growth

Viewpoint 02

— Location and description

Viewpoint 02 is located on Garrads Lane near the intersection with the Princes Highway. The view has been selected as an example of pedestrian and resident views on Garrads Lane.

— Analysis

The visual analysis depicted in the following google earth generated viewshed model and perspective montage (refer below and following), indicates that from this location, framed vistas of the proposal are possible due to the nature of the ridge line and existing vegetation, however the percentage of visible built form is considered low. In addition, a densely vegetated and elevated ridge line forms a backdrop to the view and therefore assists with mitigating the impact as the visual 'horizon' remains unobstructed.

BELOW. Viewpoint 02 location

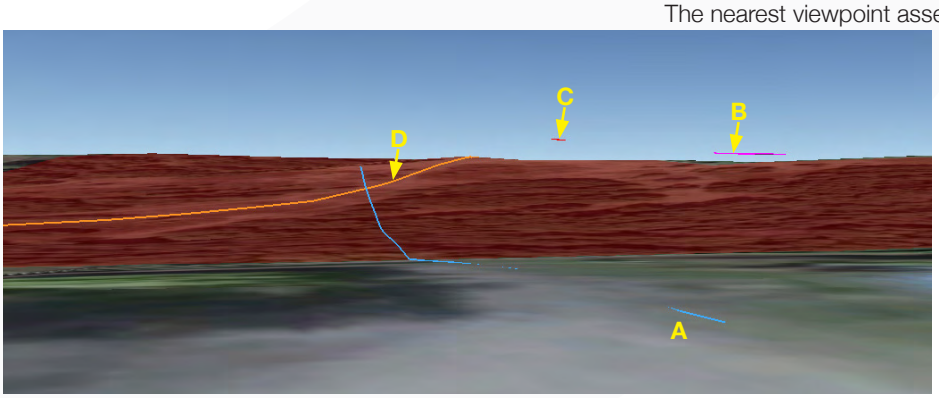
Although located within a moderately sensitive view due the proximity of existing residences, the aspect of these properties, as well as the nature of the topography, existing foreground vegetation and unobstructed background/horizon, result in a low magnitude of work being visible and enable a visual impact mitigation strategy that will further reduce potential impacts (refer following table).

In addition the built form related visual impact, the proposal would see the construction of a new entry road off Garrads Lane. This would result in the sealing of Garrads Lane, planting of street trees, footpath works and the like. This could be argued to be a positive visual impact on the streetscape.

— 2005 Proposal

The nearest viewpoint assessed in the 2005 proposal is referred to as "Location B", taken from the highway at the intersection with Garrads Lane. The viewpoint was noted that ***"There is a restricted view of part of the site from close viewing locations within the Princes Highway"***.

The assessment undertaken in the 2005 proposal is considered to be very similar although, impacts are considered to be lower along the eastern boundary due to the foreground vegetation having grown substantially since along with the opportunity to supplement the existing vegetation with new planting.



ABOVE. Potential viewshed model - VIEW-POINT 02 (excluding vegetation)

LEGEND.
A Garrads Lane
B #52 Windward Way property
C Silo
D Power lines

BELOW. Visual analysis assessment table - VIEWPOINT 02

VP#	Description of setting	Distance to built form (m)	Elements of proposal considered	Visual exposure (RLA, 2005)	Sensitivity	Magnitude	Potential Impact
02	View from edge of highway, intersection with Garrads Lane	200 m approx	Partial roofs and facades of buildings, architectural finishes, tree planting	Low rating in foreground, with moderate and high ratings through centre of view	Moderate – Close views but tightly framed by vegetation – Existing residential properties not facing proposal directly – Range of viewer types – Visual horizon intact – Locally valued undulating rural landscape with patches of native vegetation.	Low – Views screened by vegetation – Roofs and upper level facades only visible elements	**Moderate to low**

ABOVE. Viewpoint 02 from Garrads Lane showing 3D model analysis and superimposed view

ABOVE. Viewpoint 02 rendered with no future planting growth

ABOVE. Viewpoint 02 rendered with 10 years future planting growth

Viewpoint 03

— Location and description

Viewpoint 03 is located at the southern edge of Milton township, along the southern fenced boundary of the Milton Showground. This location has been selected as an example of potential views from the edge of Milton.

— Analysis

The visual analysis depicted in the following google earth generated viewshed model and perspective montage (refer below and following), indicates that from this location, framed vistas of the proposal are possible due to the nature of the ridge line and existing vegetation, however the percentage of visible built form is considered low. In addition, a densely vegetated and elevated ridge line forms a backdrop to the view and therefore assists with mitigating the impact as the visual 'horizon' remains unobstructed.

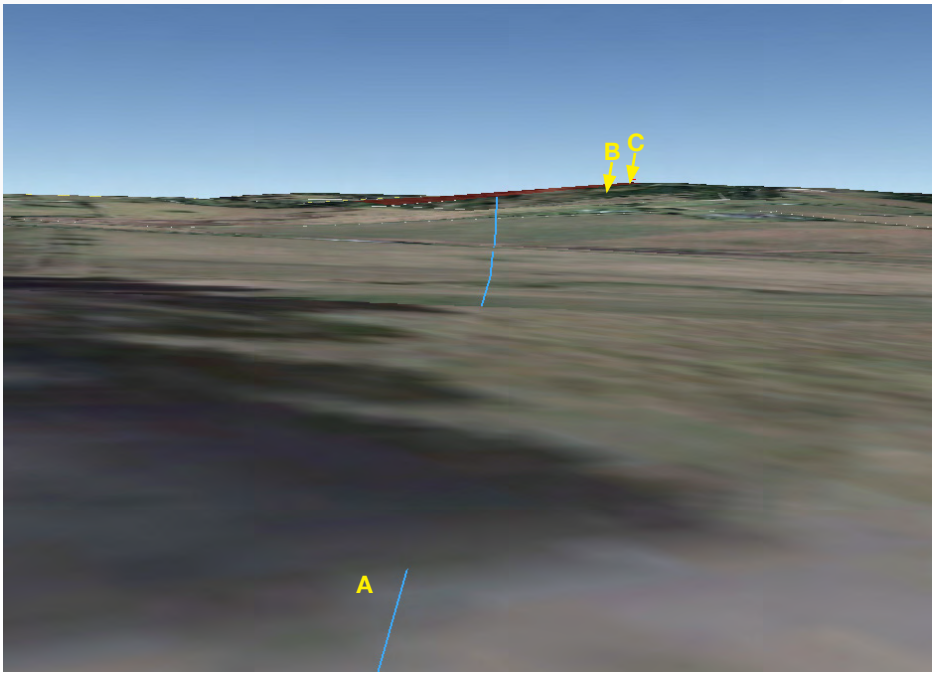
BELOW. Viewpoint 03 location

Although located within a moderately sensitive view, the nature of the topography, existing foreground vegetation and unobstructed background/horizon, result in a low magnitude of work being visible and enable a visual impact mitigation strategy that will further reduce potential impacts (refer following table).

— 2005 Proposal

The nearest viewpoint assessed in the 2005 proposal is further west referred to as "Location J" near the intersection of Crooybar Road and Ringland Lane. The viewpoint was assessed as a ***"very distant view from which most of the site is not visible. Vegetation on the western boundary of the site screens most views"***.

The assessment undertaken in the 2005 proposal is considered to be unchanged, as the current proposal has respected the development guidelines developed from the site analysis and is generally not visible due to dense vegetation along the site's nearest boundary.



ABOVE. Potential viewshed model - VIEW-POINT 03 (excluding vegetation)

LEGEND.
A Showground gates
B #52 Windward Way property
C Silo

ABOVE. Viewpoint 0 3 from edge of Milton showground, approximately 1 km from site

BELOW. Visual analysis assessment table - VIEWPOINT 03

VP#	Description of setting	Distance to built form (m)	Elements of proposal considered	Visual exposure (RLA, 2005)	Sensitivity	Magnitude	Potential Impact
03	View from edge of Milton showground - indicator of potential views from southern edge of Milton township	1,100 m approx	Partial roofs and facades of buildings, architectural finishes, tree planting	Primarily low rating in foreground with partial exposure to high rated zones associated with the Windward Way ridgeline	Moderate – Distance views – Range of (mainly transient) viewer types – Visual horizon intact – Existing residential properties not facing proposal directly – Locally valued undulating rural landscape with patches of native vegetation.	Low – Views screened by topography and vegetation – Roofs and upper level facades only visible elements	**Moderate to low**

ABOVE. Viewpoint 03 rendered with no future planting growth

ABOVE. Viewpoint 03 rendered with 10 years future planting growth

Viewpoint 04

— Location and description

This viewpoint is also located at the southern edge of the Milton township and situated along Crooybar Road next to an existing helipad and bus stop about 350m west of the Princes Highway.

— Analysis

The visual analysis depicted in the following google earth generated viewshed model, aligned image and perspective montage (refer below and following), indicates that from this location, it will be possible to see mainly roofs and upper facades due to the nature of the ridge line and existing vegetation. A densely vegetated and elevated ridge line forms a backdrop to the view and therefore assists with mitigating the impact as the visual 'horizon' remains unobstructed.

BELOW. Viewpoint 04 location

The dominant roof form visible is associated with the RACF building, while the tops of some of the other blocks are visible. Despite this, the Windward Way residence is visible in the montage, indicating the proposal sits below this structure.

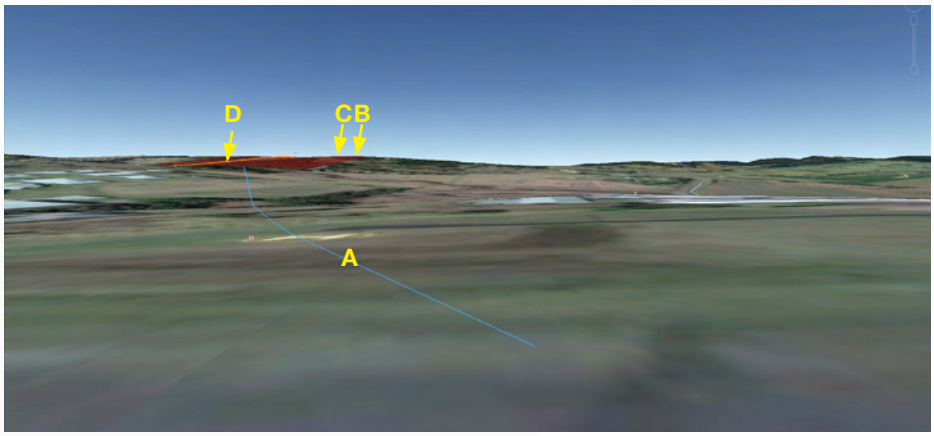
— Assessment

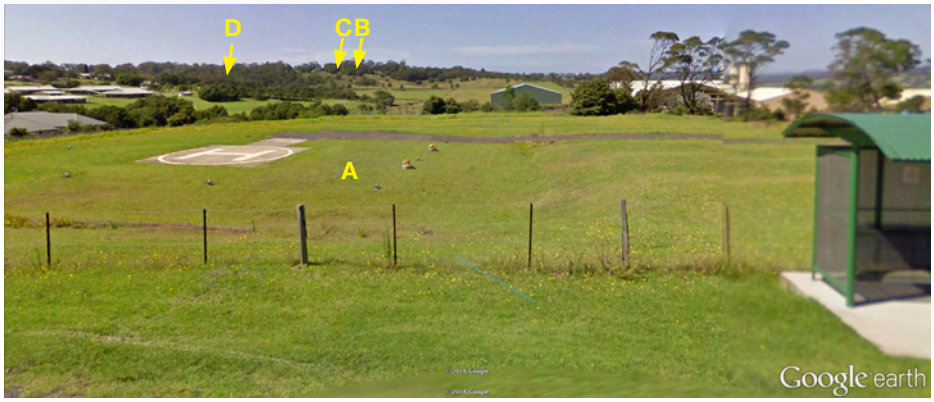
Although located within a moderately sensitive view, the nature of the topography, existing foreground vegetation and unobstructed background/horizon, along with the architectural design which has terraced the building forms, results in a low magnitude of work being visible and enables a visual impact mitigation strategy that will further reduce potential impacts (refer following table).

— 2005 Proposal

Assessed in the 2005 proposal as "Location H", the viewpoint was assessed as a *"distant view from in the vicinity of the helipad. Most of the site is not visible from this location with the exception of some of the upper parts of the site in the area of the western boundary."*

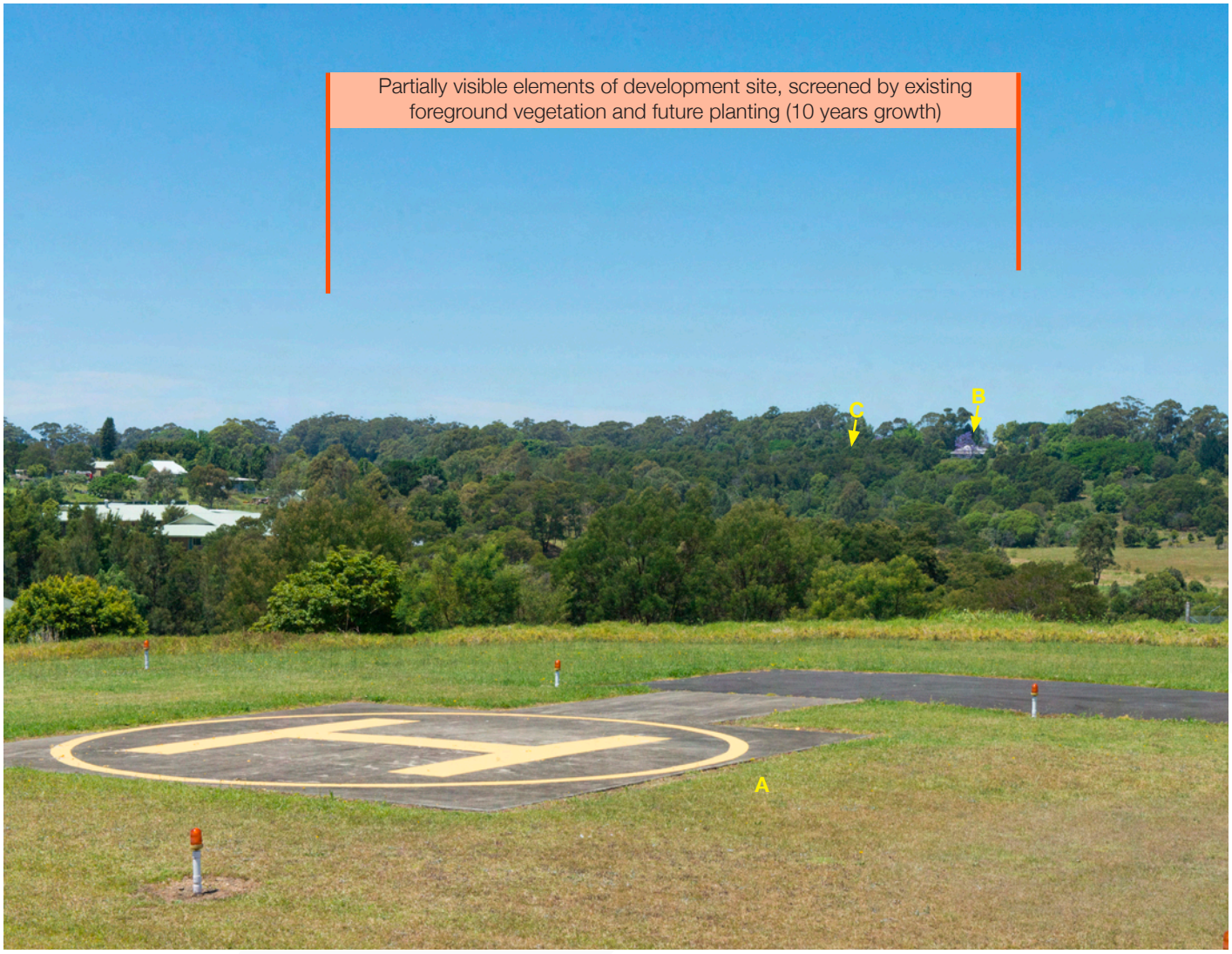
The assessment undertaken in the 2005 proposal is considered to be unchanged, as most of the site remains out of direct view and the current proposal has respected the development guidelines developed from the site analysis and is generally not visible due to dense vegetation along the site's nearest boundary.





ABOVE. Potential viewshed - VIEWPOINT 04

LEGEND.
A Helipad
B #52 Windward Way property
C Silo
D Power lines

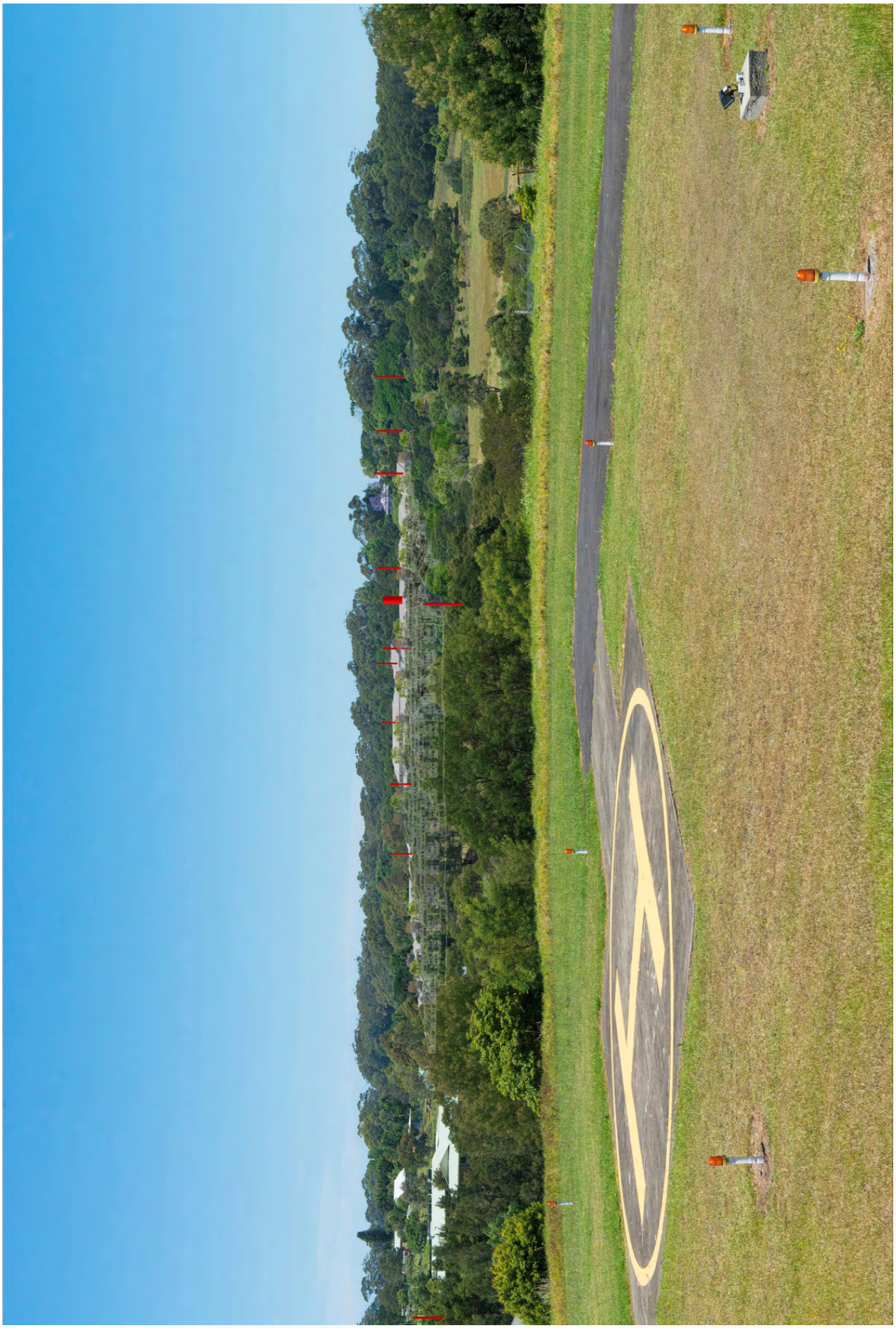


ABOVE. Viewpoint 04 from helipad on Crooybar Road, about 750m from the site

BELOW. Visual analysis assessment table - VIEWPOINT 04

VP#	Description of setting	Distance to built form (m)	Elements of proposal considered	Visual exposure (RLA, 2005)	Sensitivity	Magnitude	Potential Impact
04	View from Crooybar Road helipad	750 m approx.	Partial roofs and facades of buildings, architectural finishes, tree planting	Primarily low rating in foreground with partial exposure to moderate to high rated zones associated with the Windward Way ridgeline	Low – Distance views – Range of (mainly transient) viewer types – Visual horizon intact – Existing commercial properties not facing proposal directly – Vegetated backdrop – Existing development precedents	Moderate – Views screened by topography and vegetation – Roofs and upper level facades only visible elements	**Moderate to low**

ABOVE. Viewpoint 04 rendered with no future planting growth



ABOVE. Viewpoint 04 rendered with 10 years future planting growth

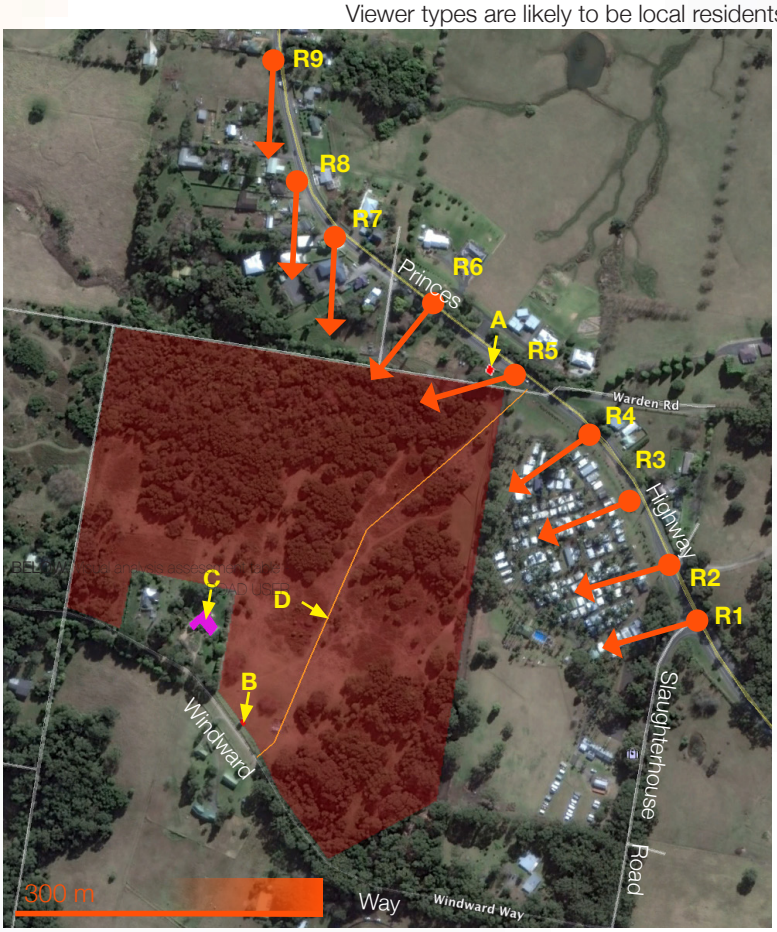
Road User Views

Motorists on the Princes Highway will be passing the site at 60 km/h, with only fleeting vistas of the site in either direction. Views would be framed between copses of vegetation, existing structures and only possible where topography allows. Pedestrian and cyclist activity along the highway would be at slower speeds, however frequency is considered minimal and no dedicated facilities are provided for these uses.

Motorists, cyclists and pedestrians on Windward Way are few in number due to the low density of development serviced by this road and lack of formal footpaths. Views of the proposal are only possible in the vicinity of the existing silo, along the frontage of the proposal, however the proposed buildings step down the hill away from the viewer and will be screened by planting including trees. Road users on Slaughterhouse Way are screened from the proposal by existing vegetation and lower elevations.

BELOW. Road user viewpoints

Viewer types are likely to be local residents, tourists and transport drivers, which due to their transient nature, focus on driving and brief timing of views, are considered have low sensitivity.



LEGEND.
A Existing site entry
B Silo
C #52 Windward Way property
D Powerlines

2005 Proposal

The 2005 proposal discussed road user views from the highway and local roads. The main conclusions were that there are *"some close and middle distant views to the site from parts of the Princes Highway"*, and that..."*There is no one point along the Highway from which the entire site is visible at any one time, and some parts of the site are almost always screened from view as a result of the topography and the effects of intervening vegetation"*.

— Analysis

The visual analysis depicted in the following google earth generated viewshed models and aligned images (refer below and following), indicates that from this location, framed vistas of the proposal and entry road are possible due to the nature of the ridge line and existing vegetation, however the percentage of visible built form is considered low. In addition, a densely vegetated and elevated ridge line forms a backdrop to the view and therefore assists with mitigating the impact as the visual 'horizon' remains unobstructed. The entry road has been designed with curvature and in combination with topography aims to minimise views of the development along the new driveway.

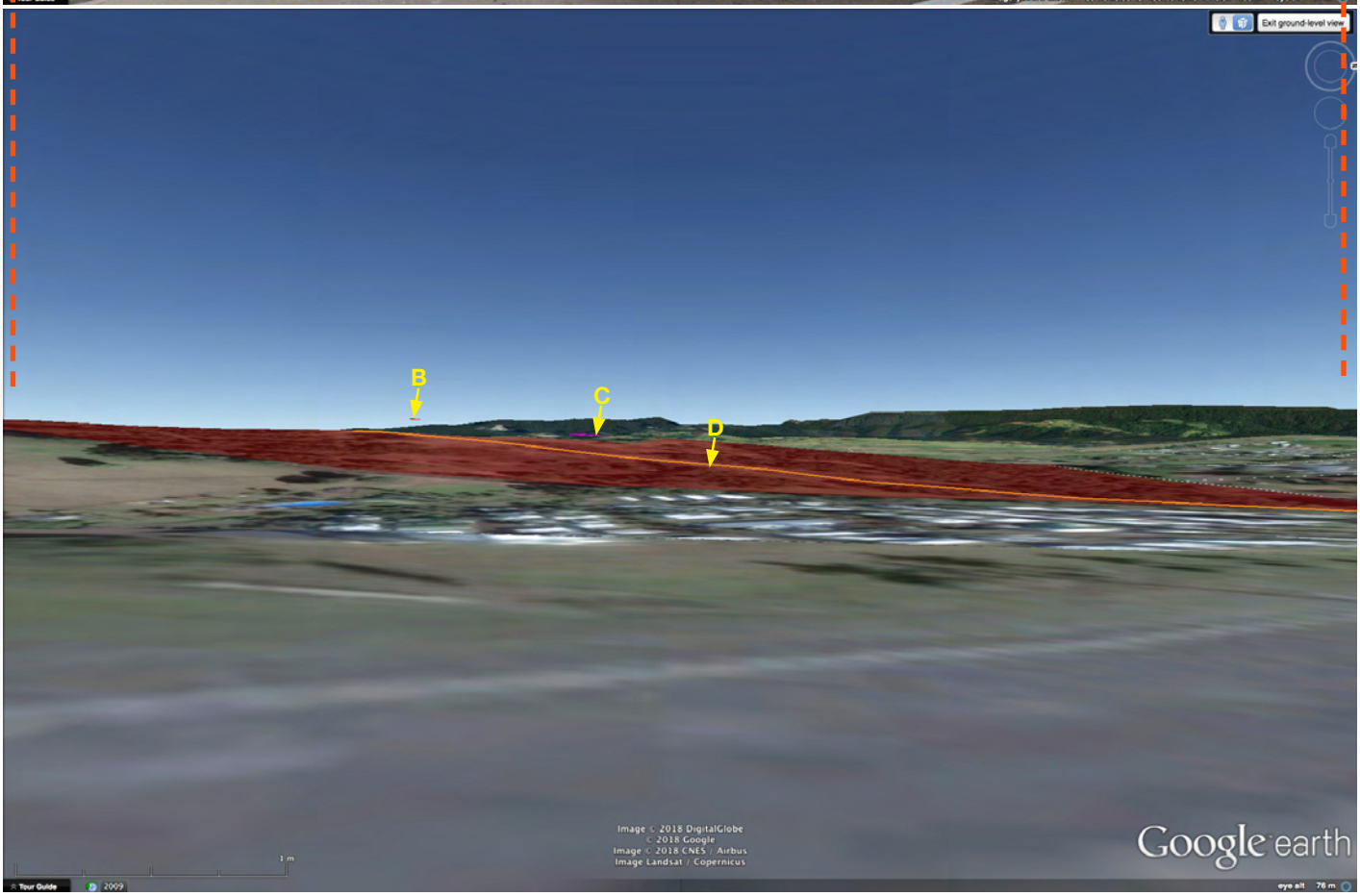
— Assessment

Due to the low sensitivity of potential viewers and the nature of the topography, existing foreground vegetation and unobstructed background/horizon, a low magnitude of the proposal being visible, an overall low visual impact will occur. A visual impact mitigation strategy will further reduce potential impacts (refer following table).

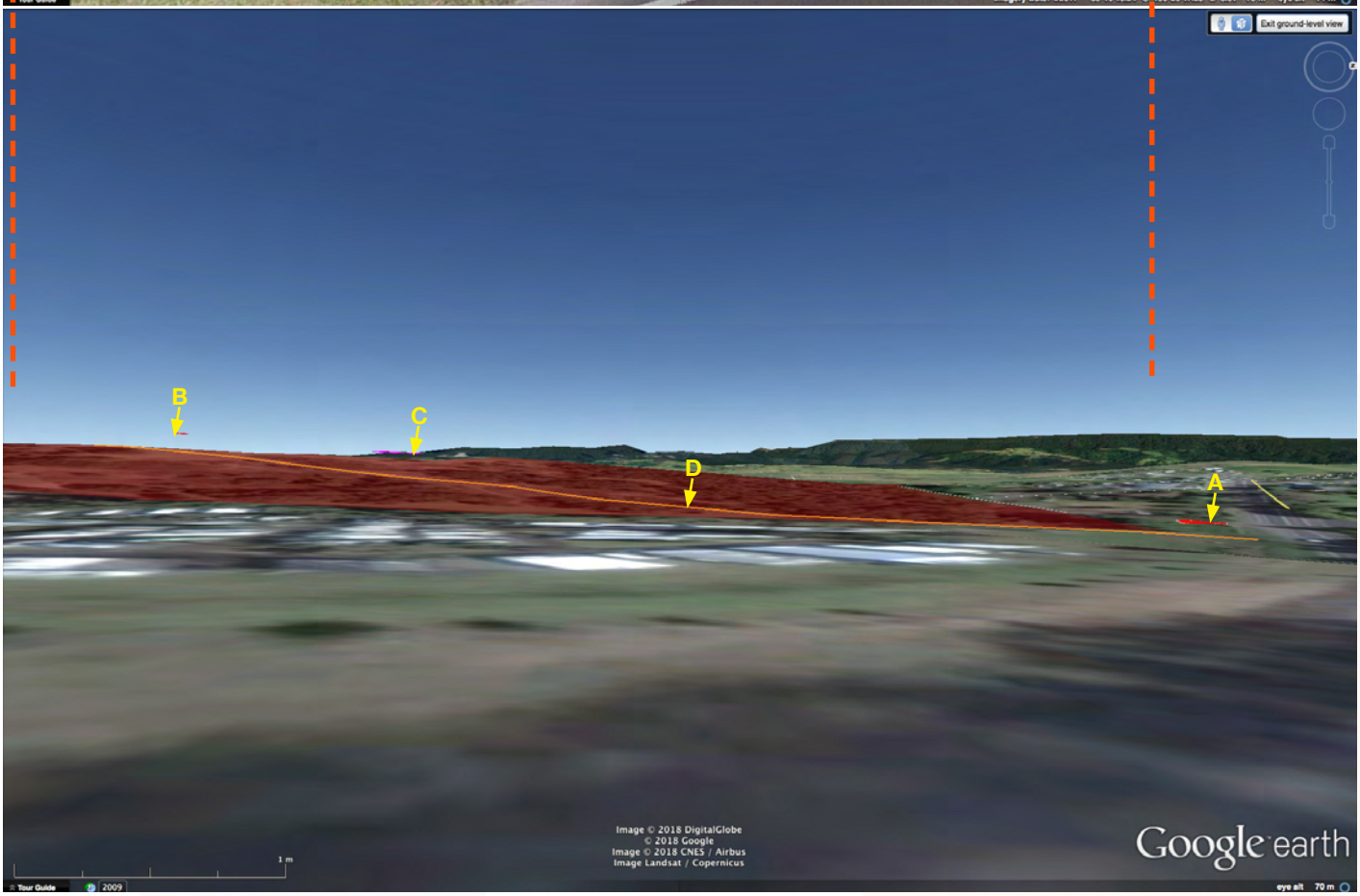
The following road user viewpoints have been generated to visually represent the road user analysis outcomes.

VP#	Description of setting	Distance (m)	Elements of proposal considered	Visual exposure (RLA, 2005)	Sensitivity	Magnitude	Potential Impact
Road User	Highway - Vegetated roadside, undulating topography, vegetated backdrop	100-300 m approx.	Entry driveway, partial roofs and facades of buildings, architectural finishes, tree planting and landscaping	Primarily high rating in foreground with partial exposure to moderate to high rated zones associated with the Windward Way ridgeline	Low	Low	**Low**

ABOVE. Road user view analysis R1



ABOVE. Road user view analysis R2



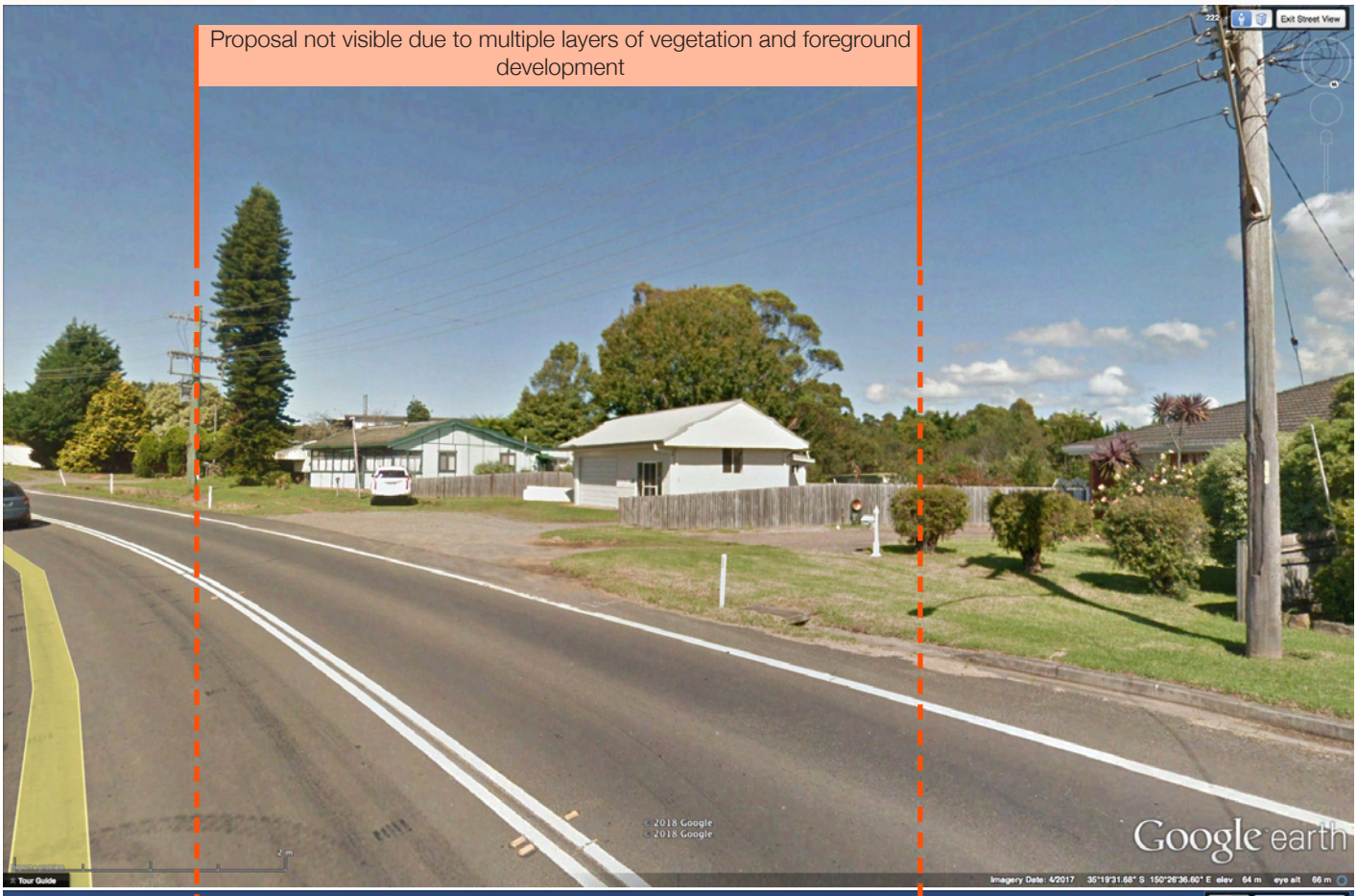
ABOVE. Road user view analysis R3

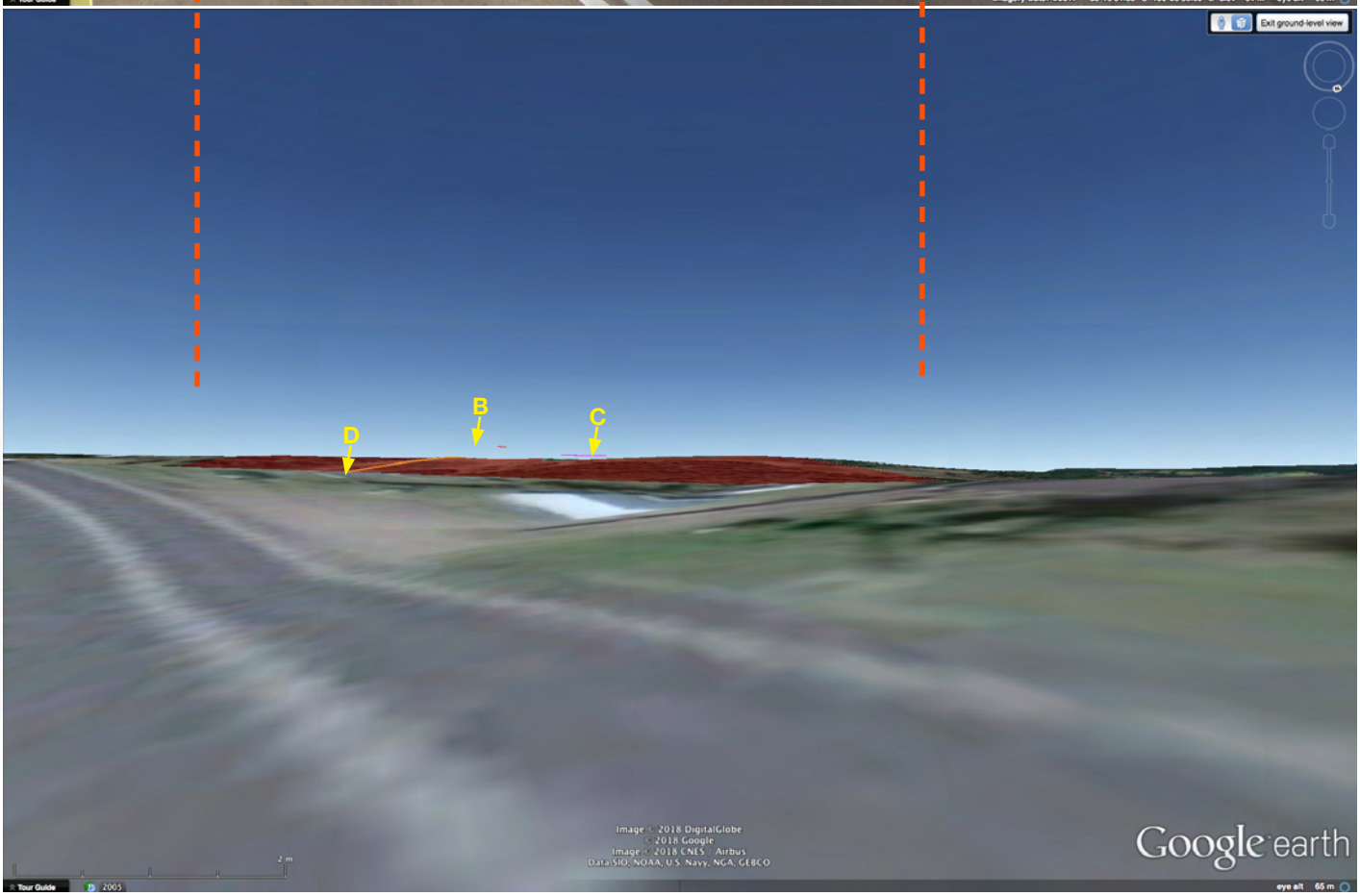
ABOVE. Road user view analysis R4

ABOVE. Road user view analysis R5

ABOVE. Road user view analysis R6

ABOVE. Road user view analysis R7





ABOVE. Road user view analysis R8

ABOVE. Road user view analysis R9

Other Potential Viewpoints

Other potential viewpoints are located around the subject site. These include rural-residential properties on Windward Way, residences on the Princes Highway and Garrads Lane, a local school, helipad and industrial complex on Crooybar Road. Most of these viewpoint locations are well screened by topography, aspect or existing vegetation or are distance views of 250-500 m or more. Apart from two adjacent properties at #52 and #60 Windward Way, residences tend to be orientated away from the proposal, which reduces their sensitivity.

#52 and #60 Windward Way have the potential to be most impacted of all nearby residential properties. Existing boundary screen planting is for the most part well-established. Further planting is to be undertaken along the boundary to screen the development, but done so in a way that allows views from the properties over the proposal to the broader landscape to the north.

Only viewpoints with a potential impact of moderate or higher would be considered worthy of further examination, which is unlikely to be the case. Most are considered to be in the Low or Moderate-to-Low range (as was the case with the 2005 proposal) and will benefit from the mitigation measures outlined in the following section of the report.

Visual assessment summary

The visual impact analysis has identified four viewpoints, from which visual impacts resulting from the proposal can be demonstrated. The impact ratings range from Moderate to Moderate-to-Low, which is primarily due to minimal views of the proposal afforded by a combination of aspect, topography and existing vegetation.

The highest impacts would be experienced at the north eastern corner of the proposal, primarily due to proximity of the built edge. Although the view is sensitive to change, this location is not frequented by sensitive viewers.

Residents viewing the proposal from Garrads Lane and elevated positions of the Princes Highway, are unikely to experience full open views of the proposal and are generally not oriented towards the development.

Residents on Windward Way generally face a way from the proposal apart from two properties, which may have views over the development where not screened by boundary vegetation.

Road user views will have low to neglible impact due to distance from the proposal being in the range of 100-300m, views along the road not being directed directly towards the proposal and the road user being focused on driving tasks at 60 km/h.

The visual impact of the proposal across the study area is summarised in the following table.

For mitigation measures refer to Section 5 of this report.

VP#	Sensitivity	Magnitude	Impact
01	Moderate	Low	**Moderate**
02	Moderate	Low	**Moderate-to-low**
03	Moderate	Low	**Moderate-to-low**
04	Low	Moderate	**Moderate-to-low**
Road user	Low	Low	**Low**

Mitigation Measures

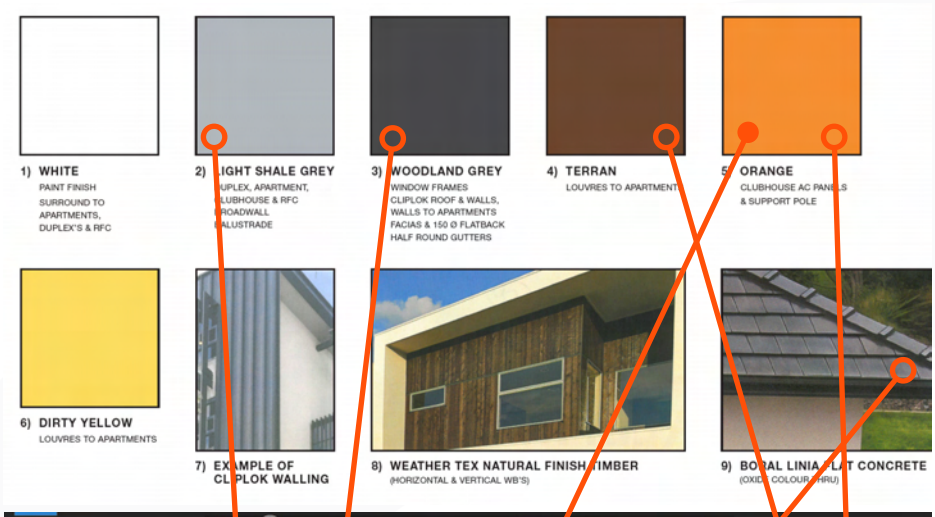
Overview

This section describes the mitigation measures that have been included as part of the design for the proposal and as a summary of further mitigation measures to be considered during the detailed design and construction phases of the project. The measures have been developed in order to address the impacts identified in the Visual Analysis section of the report.

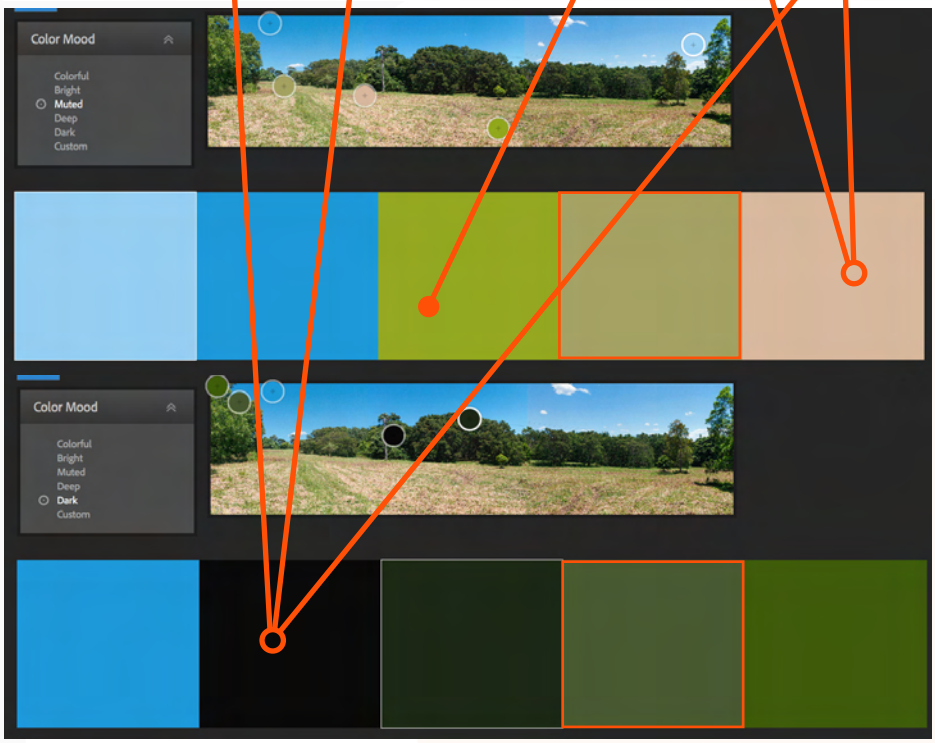
Finishes

An assessment of the current finishes proposed has been undertaken by assessing colour selections against views of the existing site. The purpose of this assessment is to determine whether the colour selections will blend or contrast with the existing site when viewed from the selected viewing positions. Refer to the summary of mitigation measures for recommendations.

RIGHT. Architectural finishes selections
Stephen Jones Associates



RIGHT. Site colours
Tim Mooney Photography/ Adobe Systems Inc.

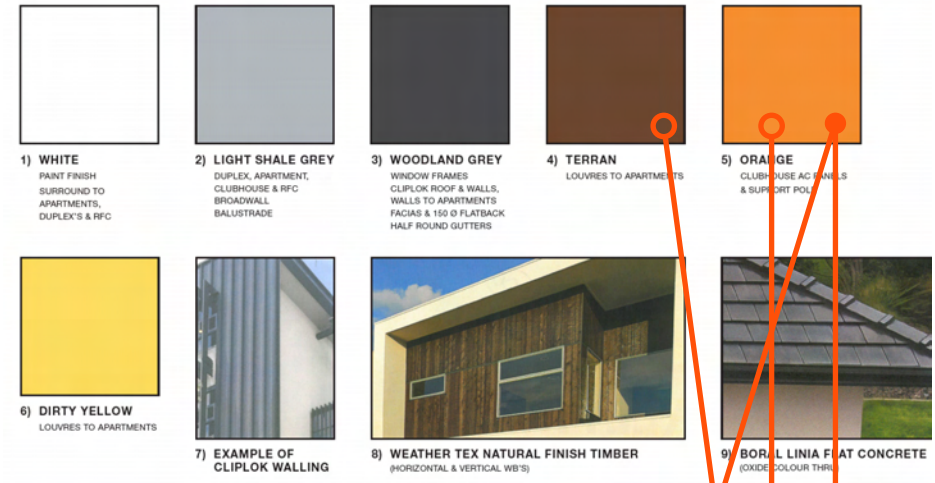


LEGEND.
Complementary colours

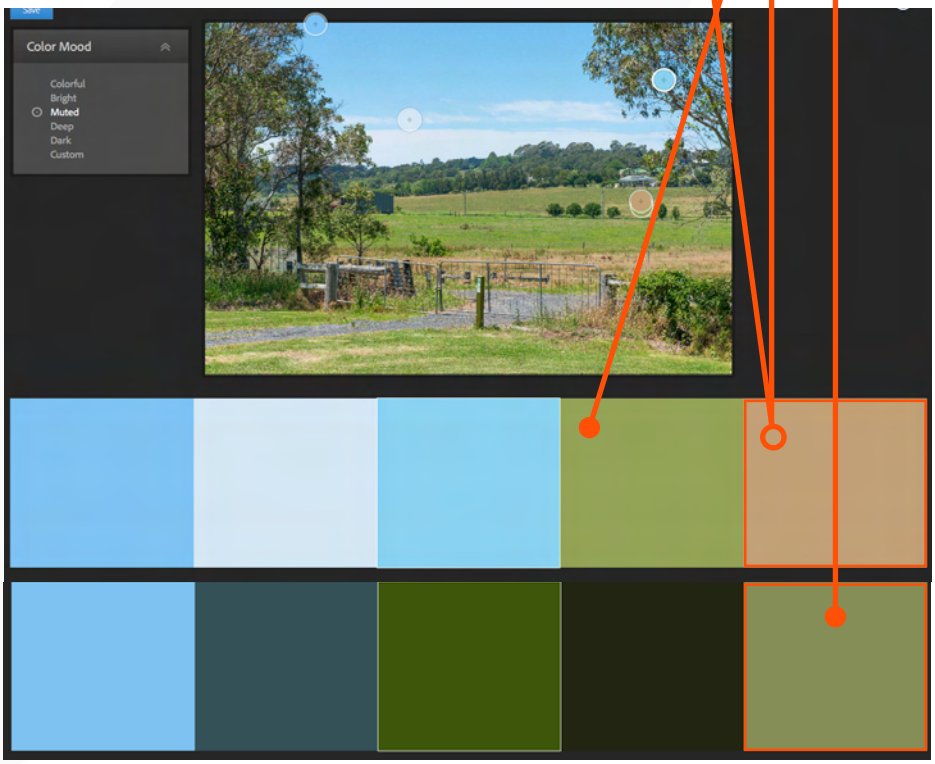
Contrasting colours

Recommended for inclusion

RIGHT. Architectural finishes selections
Stephen Jones Associates



RIGHT. Site colours
Tim Mooney Photography/ Adobe Systems Inc.



LEGEND.
Complementary colours

Contrasting colours

Recommended for inclusion

Finishes recommendations for detailed design

Overall the finishes respond well to the colours and textures of the existing landscape, with the exception of green colours. Green colours and tones should be adopted into the scheme in order to mitigate visual impacts. Green should be used on facades in combination with grey tones and potentially as a feature colour to assist with building identification and wayfinding.

Development Principles

The 2005 visual analysis (*Richard Lamb and Associates, 2005*) outlined several principles for development, which are captured here in the mitigation section of the report. The principles have been assessed in relation to the current scheme (where relevant) in order to ascertain whether the proposal is acceptable under these guidelines.

#	2005 Principle	Response in relation to current scheme	Compliance
1	Future development of the site should ensure that no development would be seen to protrude above the visual horizon, especially when viewed from locations at lower relative levels than the site.	This has been reviewed in relation to viewpoints from the township side as well as the highway, the visual horizon is not broken in these locations and is unlikely to be broken in other locations due to the nature of the existing topography and vegetation. The upper portion of the site is limited to single storey structures.	Complies
2	The vegetated character of the visual horizon as it appears presently in most views should be retained.	The vegetation associated with Windward Way and the upper portion of the site will be retained as much as possible and supported with new planting.	Complies
3	The area within the southern and middle parts of the site, which follow a spur through the site from the southern ridgeline, should generally be retained undeveloped. This part of the site is relatively highly visible to places outside the site, especially from the Highway and should be retained in its character as far as is feasible. The combination of this land and ridge top vegetation is critical to conserving the scenic values of the land.	These parts of the site are proposed to be developed with single storey residences surrounded by new landscaping. Visual analysis has indicated that the visual horizon will not be obstructed and that there will be only Moderate-to-low visual impacts.	Partially Complies
4	Denser vegetation along the northern boundary of the site could be incorporated into any future development of the site. The aim should be to filter views into the site rather than to provide a dense screen along the Highway boundary.	Existing vegetation along the northern boundary of the site is to be largely retained and supported with new tree planting and landscaping	Complies
5	A similar approach to screening along the eastern boundary of the site should be adopted. Generally it is not considered that there is any conflict between the development of the site and the existing Van Park adjacent. Some softening of the views between the sites would however benefit both existing and future residents.	Existing vegetation along the eastern boundary of the site is to be retained where possible and supported with new planting and landscaping forming a dense screen	Complies
6	Some additional plantings could be established in the south eastern corner of the site. Generally this area is relatively unconstrained but the additional planting would ensure that any development in this area would not be visible from the Highway or from more distant locations to the north of the site.	The landscaping proposal includes perimeter planting including the south east corner of the site. In addition the buildings proposed for the upper contours of this corner are single storey structures.	Complies
7	Additional plantings should also be located along the western boundary of the site. This planting should aim to fill in gaps presently existing in this relatively dense screen of vegetation on this boundary.	The landscaping proposal includes perimeter planting including the western boundary of the site	Complies
8	Additional plantings approximately located through the mid slopes of the site would also benefit any future development of the site.	The landscaping proposal includes street tree and garden bed planting throughout the site	Complies
9	Generally all future plantings within the site should be of a character that is similar to existing vegetation within the area. These plantings should be of indigenous species, be of a relatively informal arrangement and should include a variety of vegetation types.	The landscaping proposal includes a planting species list, which comprises a large proportion of indigenous species. In addition, large areas are set aside for revegetation/regrowth of indigenous species	Complies

Mitigation measures

The key design intent of the proposal aims to produce a design outcome that fits sensitively with the existing qualities and characteristics of the area. In order to achieve this, a range of mitigation measures have been incorporated into the project as the concept has developed. These measures combine to develop a solution that seeks to protect and enhance the existing visual character of the area and minimise impacts on neighbouring properties.

Further work is required to develop the final design and opportunities will arise during detail design to produce enhanced outcomes. The following mitigation measures should be used to guide the development of the design.

VP#	Element affected	Description of mitigation
1-4, general	Roofs and gutters	– Greater variety of roof tones in order to 'pixelate' distance views and to improve individual building identification and wayfinding – Use of dark green tone to blend roof visually with vegetated background when viewed from distant locations.
1-4, general	Facades	– Incorporation of green/grey colour scheme in order to blend upper facades visually with vegetated background when viewed from distant locations and to improve individual building identification and wayfinding
1-4, general	Feature facades	– Use of timber and zinc feature cladding is supported as timber tones and darker metal tones assists with visual mitigation from distance views
1-3, general	Feature elements	– Feature soffits and porticos should incorporate feature colours in order to assist with wayfinding. Generally these elements do not create visual impacts from views around the site
1-3, general	Barriers, balustrades and screens	– Use of recessive colours is supported to minimise visual impacts from distance views. – Note sufficient contrasting colours should also be used to ensure visibility of objects on accessible paths of travel is achieved.
1-4, general	Streetscape	– All streets are to be planted with street trees in order to reduce bulk and scale of built form when viewed from close range and distant locations and to contribute to amenity and functioning of streets
1-4, general	Buffers/ site edges	– All site edges of the development are to be densely planted with native vegetation to assist with screening when viewed from neighbouring locations, Windward Way properties, as well to mitigate views the Princes Highway
2 & 3, general	Landscaping	– Landscaping is to be undertaken to the perimeter and within the site to assist with visual amenity and screening
1-4, general	Floor/ roof levels	– Floor levels are to be kept as low as possible (following bulk earthworks and drainage design) in order to minimise views of roofs and facades from distance views

Conclusion

Following a review of landscape context and objectives, principles, strategies and mitigation measures associated with the 2005 proposal, a visual analysis has been undertaken of the current proposal. The assessment has made an initial assessment of visual exposure and has identified recommendations for further consideration in the detailed design stage.

The visual analysis of the proposal represents a qualitative assessment based on the identification of landscape character zones and selected representative viewpoints, which have been determined based on an investigation of landscape and cultural context and an analysis of land use, vegetation, topography and scenic values. Although potential visual impacts resulting from the proposal are greatly reduced by the topography and aspect of the site and the presence of existing vegetation, potential impacts have been identified and mitigation measures proposed In order to address these impacts.

The key mitigation measures for long distance views are:
- Tree planting generally and perimeter revegetation
- Varying roof colours within a recessive tonal range suiting the vegetative backdrop
- Ensuring floor levels/roof levels are as low as possible.

The key mitigation measures for shorter distance and road user views are:
- Tree planting generally and perimeter revegetation
- Incorporation of olive green tones to the architectural finishes
- Ensuring floor levels/roof levels are as low as possible.

The 2005 proposal assessment (*Richard Lamb and Associates, 2005*) concluded that:

> *...Generally there are parts of the site, especially the less elevated and more densely screened areas, which are largely unconstrained by potential visual impacts. However, the part of the land adjacent to the Princes Highway to the north and Windward Way to the south remains highly constrained and sensitive to change in visual character.*
>
> *While the land has considerable future potential to absorb development, particularly by reducing visual exposure and also reducing potential impacts by using vegetation in an integrated regeneration and landscape design approach, the more highly constrained parts of the site need to be respected and their existing scenic quality and rural character acknowledged.*
>
> *Parts of the site identified as being of moderate or lower visual exposure and less constrained could appropriately be developed using the recommendations provided above as a foundation.*

The current proposal has respected these outcomes and fully or partially complies with the associated recommendations/ principles. This is demonstrated by the Development Principles matrix and the Visual Assessment matrix, which focuses on the more highly constrained viewpoints and indicates impact levels ranging from Moderate to Low. Despite the larger development footprint, the current proposal has met the requirements of the previous 2005 scheme and attempts to further reduce visual exposure through sensitive design and application of mitigation measures.

Appendices

The following appendices have been prepared with this report:

VA01 Visual Analysis Context Plan [1:2000]_revF

VA02 Visual Analysis Character Plan [1:100]_revF

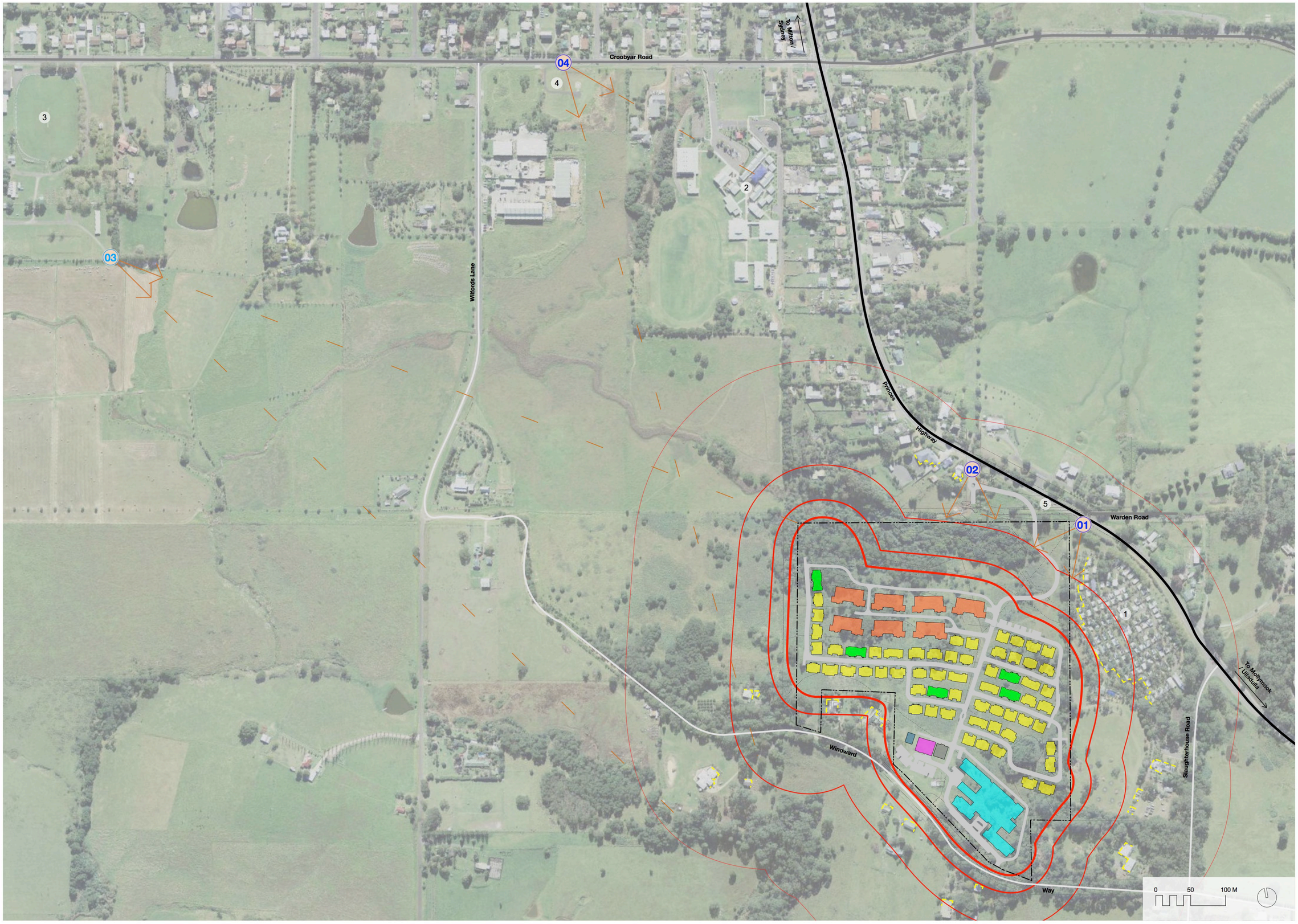
VA03 Visual Analysis & Mitigation Plan [1:100]_revF

VA04 Visual Analysis View 01_revC

VA05 Visual Analysis View 02_revC

VA04 Visual Analysis View 03_revF

VA05 Visual Analysis View 04_revF.



LEGEND

Existing Features

1 Milton Tourist Van Park
2 Shoalhaven Anglican School
3 Milton Showground
4 Helipad
5 Proposed Vehicle Entry

General

Subject Site
Site Boundary
Constraints Boundary

Existing Feature

Existing Road - Highway
Existing Road - Major
Existing Road - Minor

Visual Analysis

Potential Viewpoint - General
Potential Viewpoint - Cultural
Potential Viewpoint - Heritage
Visual Envelope - 25m
Visual Envelope - 50m
Visual Envelope - 100m
Visual Envelope - 250m
Visual Envelope - Contour (approx.)
Visual Envelope - Built Form (approx.)
Proposed Footpath

Built Form

Building 1 - Residential Care Facility
Building 2 - Clubhouse/ Medical Centr
Building 3 - Apartments (3 Storey)
Building 4 - Duplex
Building 5 - Triplex

Notes:
1. For viewpoint images and analysis tables refer to Visual Analysis Summary Report by Scape Design

VA01

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis Context Plan

REVISION F | MAR 2018 | 1:2500 @ A1

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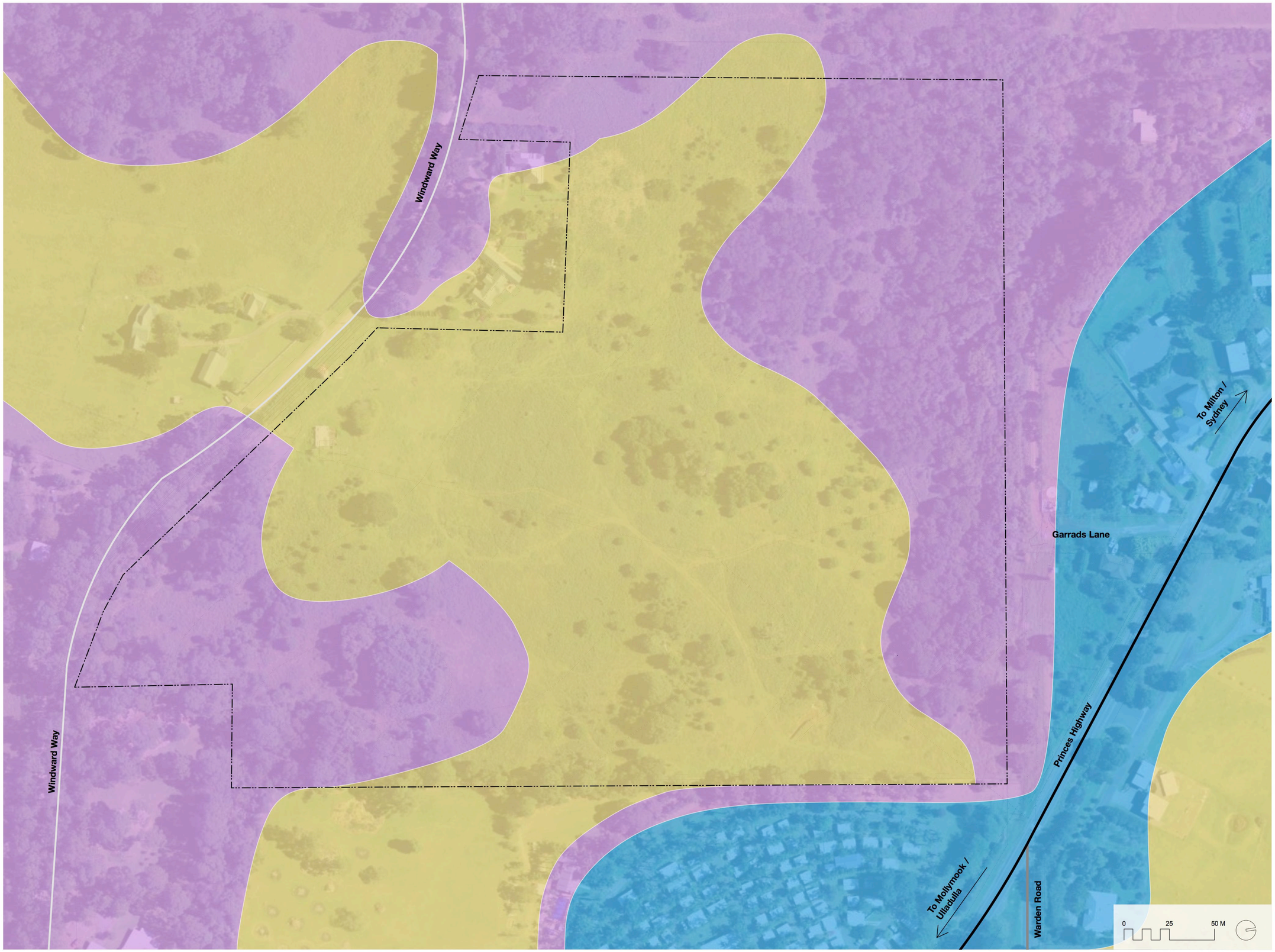

LEGEND

General

Site Boundary

Existing Feature

Existing Road - Highway

Existing Road - Major

Existing Road - Minor

Character Zones

Zone 1 - Rural - Residential Lands

Zone 2 - Vegetated Gullies & Ridges

Zone 3 - Highway Urban Development

Existing Character

Zone 1 - Rural / Residential Lands

Zone 2 - Vegetated Gullies and Ridges

Zone 3 - Highway / Urban Development

VA02

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis Character Plan

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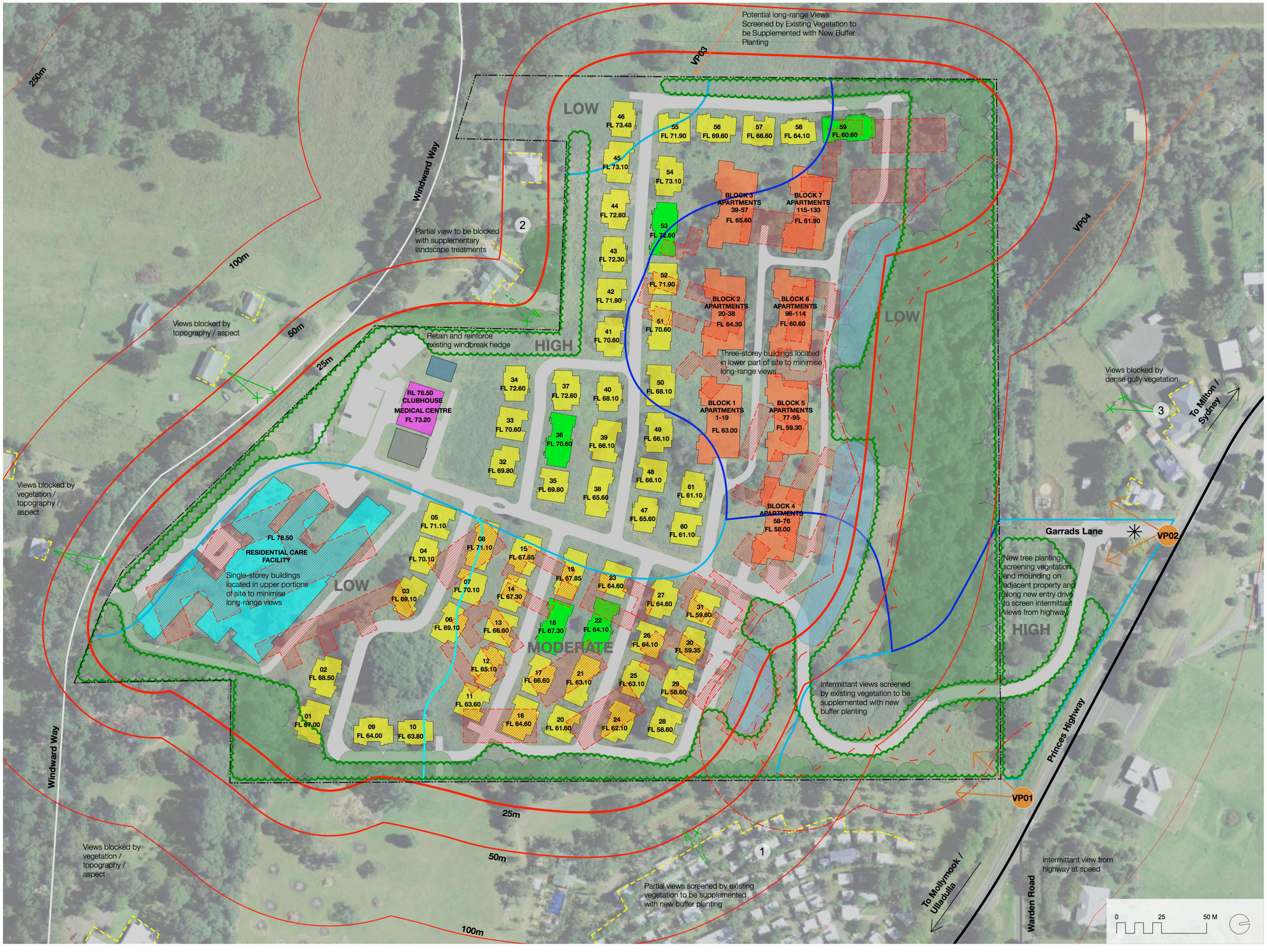

LEGEND

General
- Site Boundary
- Constraints Boundary
- Existing tree approx.

Existing Feature
- Existing Road - Highway
- Existing Road - Minor
- 1 Milton Tourist Van Park
- 2 Windward Way Residential Properties
- 3 Princes Highway Residential Properties
- Existing Trees

Visual Analysis
- Potential Viewpoint - General
- Potential Viewpoint - Cultural
- Potential Viewpoint - Heritage
- Visual Envelope - 25m
- Visual Envelope - 50m
- Visual Envelope - 100m
- Visual Envelope - 250m
- Visual Edge - Built Form (approx.)
- Viewpoint Visual Field Approx.
- Blocked View Approx.
- Intermittant or Partial View
- Mitigation Measure (Refer Report)
- Visual Exposure - Low
- Visual Exposure - Moderate
- Visual Exposure - High
- Asset Protection Zone Line
- Lep - E2 Zone Line

Proposed Features
- Building 1 - Residential Care Facility
- Building 2 - Clubhouse/ Medical Centre
- Building 3 - Apartments (3 Storey)
- Building 4 - Duplex
- Building 5 - Triplex
- Swimming Pool Area
- Parking Area
- Building - Previous - 2005 Proposal
- Proposed Footpath
- Proposed Detention Ponds
- Proposed Vehicle Entry

Mitigation Meatures
- Proposed Revegetation and Screen Planting

Notes:
1. For viewpoint analysis tables refer to Visual Analysis Summary Report by Scape Design
2. For long-range viewpoint locations refer to drawing VA01
3. All buildings single storey unless stated otherwise
4. Visual exposure categories defined by Richard Lamb Associates, Visual & Landscape Constraints Report, 2005

VA03

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis & Mitigation Plan

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A - View 1 - Existing

B - View 1 - Proposed with 15m High Boundary Markers

C - View 1 - Proposed with 15m High Boundary Markers & 10 year Growth Boundary Screening

Note: refer visual assessment report by Scape Design for analysis of these views.

VA04

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis View 1

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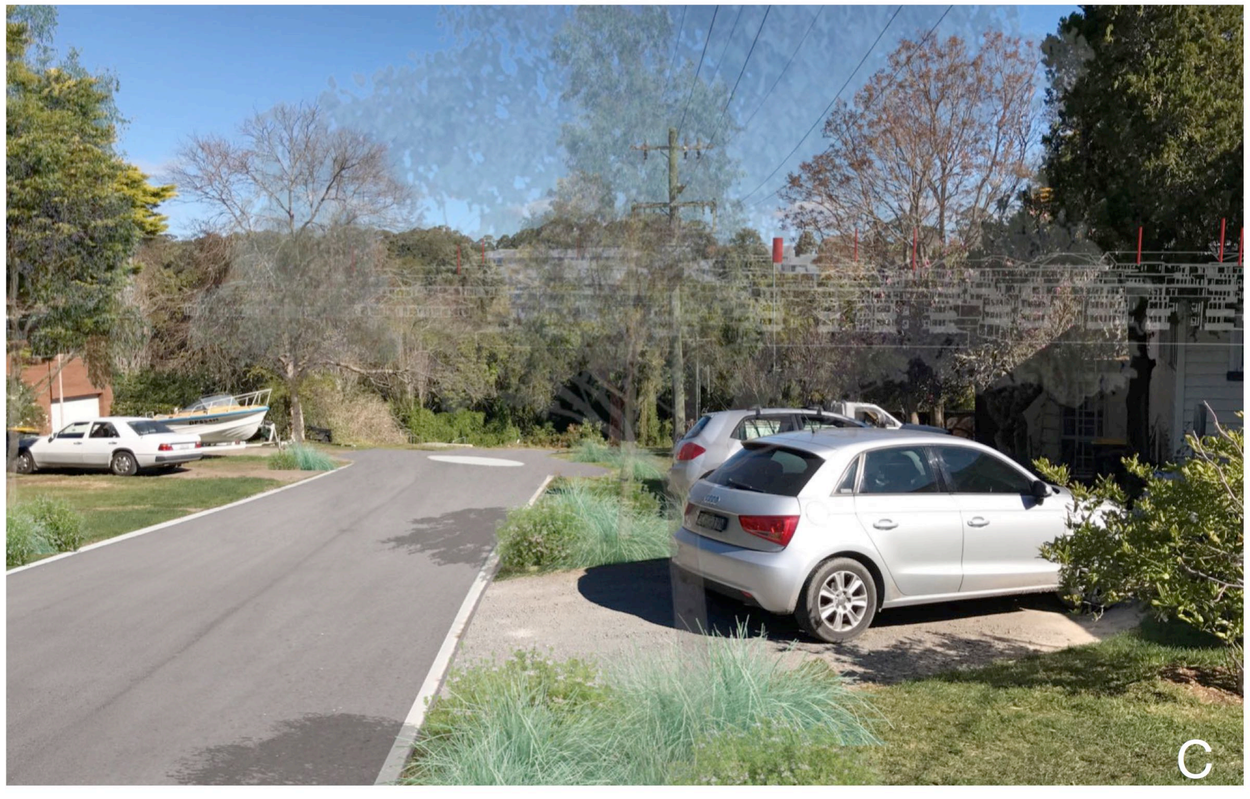

A - View 2 - Existing

B - View 2- Proposed with 15m High Boundary Markers

C - View 2 - Proposed with 15m High Boundary Markers & 10 year Growth Street Planting

Note: refer visual assessment report by Scape Design for analysis of these views.

VA05

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis View 2

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A - View 3 - Existing

B - View 3 - Proposed with 15m High Boundary Markers

C - View 3 - Proposed with 15m High Boundary Markers & 10 year Growth Boundary Planting

Note: refer visual assessment report by Scape Design for analysis of these views.

VA06

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

Visual Analysis View 3

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A - View 4 - Existing

B - View 4 - Proposed with 15m High Boundary Markers

C - View 4 - Proposed with 15m High Boundary Markers & 10 year Growth Boundary Planting

Note: refer visual assessment report by Scape Design for analysis of these views.

VA07

SENIORS HOUSING DEVELOPMENT

Aansca Property Group Pty Ltd c/- Stephen Jones Associates

Lot 1 DP 780801, Windward Way, Milton, NSW

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Visual Analysis View 4

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2-6 Smith Lane
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scape design

Ref: [SL110-16 Milton Seniors]

19 October 2018

Aansca Property Group

Attention: David T Calgaro
cc: Mairead Hawes | Hawes and Swan Planning

RE: SENIORS HOUSING 'MILTON MEADOWS' - LOT 1 DP 780801, WINDWARD WAY, MILTON, NSW - VISUAL ASSESSMENT ADDENDUM MEMO

David
At your request we have reviewed recent changes to the proposal for the Milton Seniors Development 'Milton Meadows', and have undertaken a high level review of potential impacts to the Visual Assessment Report_revE.

KEY CHANGES ASSESSED

The key changes assessed are as follows:

- Realignment and shortening of the northern entry drive to remove the connection with Garrads Lane (civil drawing 160529-C13_revE by Greenview Consulting)
- Relocation of the local road network connection from a roundabout intersection with Garrads Lane to a intersection with the Pacific Highway (subject to RMS approval) (Drawing 1806-C04_rev1 by Footprint Sustainable Engineering)
- Design of a new service lane connecting the entry drive with Garrads Lane (civil drawing 160529-C13_revE by Greenview Consulting)
- Adjustments to revegetation and planting resulting from the civil & traffic adjustments (drawing 16-3351-L05 by Zenith Landscape Designs).

AFFECTED VIEWPOINTS

With reference to the VA Report and drawings VA01 & VA03-05 (May 2018), the viewpoints previously assessed, which would be potentially impacted by the changes are as follows:

- VP01: From the Pacific Highway verge at the north eastern corner of the site
- VP02: At the intersection of Garads Lane with the Pacific Highway
- R5: On the Pacific Highway near a set of existing gates into the property (about 30m west of the north eastern corner of the site)
- R6: On the Pacific Highway, about 100m west of the north eastern corner of the site and 50m east of Garrads Lane.

NEW POTENTIAL IMPACTS

New potential new impacts would be experienced by residents of two properties on the northern side of the highway, west of the intersection with Warden Road. These properties are accessed via an unamed service road that runs parallel to the highway, and which is connected to the highway via a small stub located approximately 100m west of Warden Road and 100m east of Garrads Lane.

HIGH LEVEL ASSESSMENT

A high level assessment of the changes has ben undertaken, which is summarised in the following table:

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VP#	Description of setting	Distance to built form (m)	Elements of proposal considered	Sensitivity	Magnitude	Previous Impact	New Impact
01	View from edge of highway, north eastern corner of the site	150 m approx 30m approx	Partial roofs and facades of buildings, architectural finishes, tree planting. New intersection with Pacific Highway	Moderate – Close views but tightly framed by vegetation – Range of (mainly transient) viewer types – Visual horizon intact – Locally valued undulating rural landscape with patches of native vegetation.	Moderate – Views screened by vegetation, however existing vegetation reduced by entry drive – Roofs and upper level facades only visible elements – Minor widening of pavement on existing highway – Non-signalised, so only minor additional signage/road furniture.	**Moderate**	**Moderate**
02	View from edge of highway, intersection with Garrads Lane	200 m approx 50m approx	Partial roofs and facades of buildings, architectural finishes, tree planting Entry drive and roundabout removed from centre of street, service lane added near end of street	Moderate – Close views but tightly framed by vegetation – Existing residential properties not facing proposal directly – Range of viewer types – Visual horizon intact – Locally valued undulating rural landscape with patches of native vegetation.	Low – Views screened by vegetation – Roofs and upper level facades only visible elements – Minor widening of pavement at end of existing road – removal of proposed roundabout intersection.	**Moderate to low**	**Moderate to low**
R5 R6	Highway - Vegetated roadside, undulating topography, vegetated backdrop	100-300 m approx. 20-50m approx	Entry driveway, partial roofs and facades of buildings, architectural finishes, tree planting and landscaping New intersection with Pacific Highway	Low – Existing highway environment.	Low – Minor widening of pavement on existing highway – Non-signalised, traffic likely to unaffected.	**Low**	**Moderate to low**
-	Properties on Pacific Highway northern verge	50-100m approx	New intersection with Pacific Highway	Low – Close proximity, however property aspect is north (away from proposed intersection) – Dense screening vegetation along highway	Low – Existing access via stub and service road unimpeded	**Low**	**Low**

CONCLUSION

In consideration of the above analysis of modifications to the scope of the proposal and potential impacts to the previous assessment, we expect that changes would have no increased impacts to previously assessed viewpoints, apart from a minor increase in visual impacts to road users.

Yours faithfully,
Scape Design

CHRIS HOUGHTON RLA AILA
Director