

PROPOSED MIXED USE AND RESIDENTIAL DEVELOPMENT
DUDLEY ROAD AND KOPA STREET, WHITEBRIDGE



VISUAL IMPACT ASSESSMENT

**PROPOSED MIXED USE AND RESIDENTIAL DEVELOPMENT
DUDLEY ROAD AND KOPA STREET, WHITEBRIDGE**

VISUAL IMPACT ASSESSMENT

PREPARED FOR SNL BUILDING CONSTRUCTIONS PTY LTD

Date issued: 16 December 2014

Envisage document No: E64/14 VIA

Status: Final Report

Report author: Stacey Brodbeck, Director, Envisage
MEnvPlan, BLArch, CPP, Registered Landscape Architect, MPIA



ENVISAGE CONSULTING PTY LTD
ABN 89 139 313 296
www.envisageconsulting.com.au



Contents

Executive Summary	1
1. Introduction	3
1.1 Purpose of this report	3
1.2 Description of site	3
1.3 Description of Proposal.....	4
1.4 Methodology	5
2. Site context.....	6
2.1 General context of the site	6
2.2 Site attributes	8
2.3 Fernleigh Track.....	9
2.4 Site's existing visual environment	9
2.4.1 Landscape setting and scenic quality	12
2.4.2 Visibility and visual-sensitivity of landscape.....	12
2.4.3 Visibility and potential viewpoints.....	12
2.5 Planning environment	12
3. Likely visual changes due to proposed development	14
3.1 Description of main visual changes.....	14
3.2 Dudley Road frontage	15
3.3 Kopa Street frontage	15
3.4 Lonus Avenue boundary	15
3.5 Fernleigh Track boundary.....	16
3.6 Landscape design.....	16
3.7 Lighting.....	16
3.8 Height of the development	17
3.9 Recommended design measures for development types from Guidelines.....	17
4. Landscape and visual impact assessment	19
4.1 Assessment requirements of Guidelines	19
4.2 Height reference points.....	19
4.3 Assessment of direct site impacts	20
4.4 Assessment of impacts to surrounding viewpoints.....	21
4.4.1 Close foreground viewpoints (less than 300m)	21
4.4.2 Foreground viewpoints (300m to 1km)	32
4.4.3 Foreground viewpoints (300m to 1km)	33
4.5 Assessment of impacts to site and viewpoints following mitigation	33
5. Proposed design and other mitigation measures	34
5.1 Positive visual attributes of proposed development	34
5.2 Impacts requiring mitigation	34

5.3	Further recommendations.....	35
6.	Conclusion	36
6.1	Impact on landscape character.....	36
6.2	Impacts to viewpoints	36
6.3	Overall level of impact.....	36
7.	References	38

LIST OF FIGURES

Figure 1-1: Site Location	3
Figure 2-1: Whitebridge shops (site is to right of far shop)	6
Figure 2-2: Broader site context	7
Figure 2-3: Fernleigh Track looking north from near 'Whitebridge Station'.....	8
Figure 2-4: Recently constructed pathway down Kopa Street road reservation (near 'Whitebridge Station')	9
Figure 2-5: View towards Station Street and Whitebridge entrance to Fernleigh Track, NE corner of site (composite photograph).....	10
Figure 2-6: View from Kopa Street and looking over site (composite site)	10
Figure 2-7: Visual site context	11
Figure 4-1: Assessed surrounding viewpoints within 300m.....	22
Figure 4-2: View from Dudley Road near Whitebridge Shops.....	23
Figure 4-3: View from Dudley Road east of site	25
Figure 4-4: View from corner of Station and Hudson Streets.....	26
Figure 4-5: View looking towards site from nearest part of Fernleigh Track where open views are possible	27
Figure 4-6: View looking in direction of site from Station Street	28
Figure 4-7: View looking towards site from Fernleigh Track near historic bridge abutment (proposed development not seen)	29
Figure 4-8: View looking towards site from Fernleigh Track just south of Dudley Road (proposed development site not seen)	29
Figure 4-9: View looking down Kopa Street with new path under construction (site to right).....	30
Figure 4-10: View towards site at lower end of Hudson Street.....	31
Figure 4-11: View towards site of proposed taller buildings from Lonus Avenue.....	32

APPENDICES

Appendix A –Illustrative Masterplan, Elevations and Revised Landscape Plans

Executive Summary

Purpose of report

The purpose of this report is to address the potential visual effects associated with the proposed mixed use and residential development at Dudley Road and Kopa Street, Whitebridge. This assessment forms part of the development application to the approval authority, Joint Regional Planning Panel (JRRP).

The report has been prepared for SNL Building Constructions Pty Ltd.

Methodology

The report has been prepared in accordance with Lake Macquarie City Council's *Lake Macquarie Scenic Management Guidelines* (2013).

The Proposal

The proposed development provides for an extension of the Whitebridge shops along Dudley Road and transitions into a residential precinct with a mix of apartment buildings, townhouses and semi-detached and attached small lot housing. The streets and open spaces would be publicly accessible, including both a pathway through the centre of the development and another along the Fernleigh Track boundary connecting to the track.

Appendix A includes the most relevant plans for the proposed development in terms of visual effects, that being the Illustrative Masterplan, Elevations and two recently revised Landscape Plans. It is understood that Council has access to all plans and documentation that have been submitted by the Proponent. A more detailed description of the proposed development is provided in **Section 3.0**.

Three 'artists' impressions' of the proposed development are provided in **Section 4.0**. These images have been prepared by the project architects, Smith & Tzannes as part of the project documentation and are referenced in this report as a general illustration of the likely look of the proposed development.

Landscape and visual impact assessment

The surrounding area of Whitebridge is planned for increased future densities which will gradually change the future character of the area over time, with this site being one of the largest and earliest of such developments to occur.

There would be a substantial change to the landscape character of the site and immediate area due to the broadscale transformation of the site from vacant to an urban and commercial development that is noticeably more intensive and of a scale of built form than has been historically present in this part of Whitebridge. Although the magnitude of visual change would be quite high, it is considered that the character of the proposed development would integrate with the existing urban environment over time, as well as contributing to enhancing the conservation land along the Fernleigh Track.

There are four viewpoints where the impact has been assessed as requiring mitigation measures, with the first three concerned with views of the north-eastern corner and the fourth from Dudley Road near Whitebridge Shops. However, for all four of these viewpoints, it is considered that proposed mitigation measures (predominantly

additional landscape planting along the north-eastern and south-eastern edge, muted building colours for the Park Villas and reducing the visual contrast and dominance of the proposed architectural projections on the south-eastern facing side of the residential flat building facing the Fernleigh Track), would reduce the impact to a minor level over time.

Overall the level of impact seems acceptable considering the urban nature of the surrounding area and context of planned increased densities. That such a relatively large vacant site is rare in this area means that the new development would be initially more visually obvious, becoming less contrasting over time as viewers become more familiar with it, trees mature and other development continues to occur. The proposed landscape screening is a critical component in ensuring a high quality future urban area that integrates with and visually activates this part of Whitebridge.

1. Introduction

1.1 Purpose of this report

The purpose of this report is to address the potential visual effects associated with the proposed mixed use and residential development at Dudley Road and Kopa Street, Whitebridge. This assessment forms part of the development application to the approval authority, Joint Regional Planning Panel (JRRP).

The report has been prepared for SNL Building Constructions Pty Ltd.

1.2 Description of site

The site location is shown in **Figure 1-1**. It comprises the following land: D.P. 436503 Lots 1 – 3, Lot D.P. 349377 Lots 1 – 3, D.P. 663765 Lot 4, D.P. 26039 Lots 2-3. It covers a land area of approximately 24,390m², with an 83m street frontage along Dudley Road and 118m street frontage along Kopa Street, with part of that road closest to the site yet to be constructed.

The application is being assessed under *Lake Macquarie Local Environmental Plan (LEP) 2004*, under which three different land use zones apply to the site:

- 2(2) Residential (Urban Living) – 19,725 m²
- 3(1) Urban Centre - 1,820m²
- 7(2) Conservation (Secondary) – 3,980 m².



FIGURE 1.1: SITE LOCATION

1.3 Description of Proposal

The proposed development provides for an extension of the Whitebridge shops along Dudley Road and transitions into a residential precinct with a mix of apartment buildings, townhouses and semi-detached and attached small lot housing. The streets and most open spaces would be publicly accessible, including both a pathway through the centre of the development and another along the Fernleigh Track boundary connecting to the track.

The development involves the following main visual changes:

- Construction of a 4-5 storey mixed use development fronting Dudley Road, effectively viewed as a three to four storey development above ground (containing 22 dwellings and 325m² commercial space)
- Creation of new car parking and 'Whitebridge Square', a public space, along the Dudley Road frontage
- Construction of 20, 2-3 storey dwellings (i.e. small lot housing)
- Construction of six, 3-4 storey residential flat buildings (containing 49 dwellings)
- Creation of an internal park with play equipment (for the residents)
- Landscaping and revegetation of the 20m wide conservation zone along the south-eastern boundary, integrated with a pathway connection to the Fernleigh Track and sedimentation ponds
- Internal roads, with street trees, parking and paths
- Access driveways from Kopa Street (associated with the construction of the lower section of Kopa Street by LMCC)
- Minor site earthworks (mostly some filling in centre of site)
- Demolition of two dwelling houses and associated outbuildings on Kopa Street.

The development is proposed to be staged, however, the visual impact assessment considers the total development when implemented, and does not cover different stages or construction aspects.

This report has been based on current plans at the time of writing, including recently re-issued architectural plans to LMCC (refer **Appendix A** for a list of those plans). **Appendix A** also includes the most relevant plans for the proposed development in terms of visual effects, that being the Illustrative Masterplan, Elevations and two Landscape Plans recently revised to reflect feedback during the preparation of this report (i.e. 'Ecological Corridor Landscape' (DA – EC-01) and 'Fernleigh Area Typical Landscape Plan' (DA-LP-05, Issue C), both dated 15 December 2014). It is understood that Council has access to all plans and documentation that have been submitted by the Proponent.

A more detailed description of the proposed development is provided in **Section 3.0**.

Three 'artists' impressions' of the proposed development are provided in **Section 4.0**, which show the existing view, one with no mature landscaping and one with mature landscaping. These images have been prepared by the project architects, Smith & Tzannes as part of the project documentation and are referenced in this report as a general illustration of the likely look of the proposed development.

1.4 Methodology

The report has been prepared in accordance with Lake Macquarie City Council's *Lake Macquarie Scenic Management Guidelines* (2013), as required by Council. As such the report has the following format, in that it:

- firstly describes the landscape and visual context of the site in terms of location and visual environment, landscape character and identifies the likely visibility and visual-sensitivity of the landscape and any surrounding viewpoints (**Section 2.0**)
- describes the likely visual changes resulting from the proposed development (**Section 3.0**)
- assesses the likely landscape and visual impacts, including visibility and visual-sensitivity of surrounding viewpoints
- describes design and mitigation measures that have been incorporated into the design to address any identified landscape and visual impact issues, and makes further recommendation where appropriate (**Section 5.0**)
- provides an overall summary of potential landscape and visual effects and impacts (**Section 6.0**).

The requirements of the *Lake Macquarie Scenic Management Guidelines*, and where these are addressed in this report, are set-out in **Table 1.1**.

This report has taken into account that the proposed transformation of this vacant site in Whitebridge into a mixed use development is supported by the LMLEP 2004 and other relevant planning documents. As such, the report focusses on identifying measures to manage the potential visual changes and reduce landscape and visual impacts of the proposed development whilst in general accepting that this type of development is acceptable for this location.

Table 1.1: Summary of requirements of Lake Macquarie Scenic Management Guidelines

Main headings in guidelines	Relevant reference to guidelines	Addressed in this report
1. Describe the landscape and visual context	The site falls within the 'Dudley Beach Landscape Setting', with the overall unit described as having generally a high scenic quality. It is within an urban landscape that is currently undergoing a degree of redevelopment. The site is within Scenic Management Zone 7 (coastal edge, low settlement), yet visually separated from views to or from the coast.	Section 2.0
2. Identify the visibility and related visual-sensitivity of the landscape and any viewpoints	The E2 - Environmental Conservation zone part of the site has been identified as being a visually-sensitive landscape type under Guidelines. The site is also identified as a place with potentially a high visibility and visual sensitivity due to its proximity to the Fernleigh Track.	Section 2.3
3. Describe likely visual changes	The following development guidelines apply: medium density development, residential flat buildings and commercial development.	Section 3.0
4. Assess the likely landscape and visual impacts		Section 4.0
5. Direct site impacts		Section 4.1
6. Surrounding viewpoints		Section 4.2
7. Mitigation measures		Section 5.0
8. Alternative mitigation measures		Section 5.3
9. Report illustration	Three 'artist's impressions' have been provided	Section 4.0
10. Summary and conclusion		Section 6.0

2. Site context

2.1 General context of the site

The site is located within and beside the neighbourhood shopping centre of Whitebridge, with surrounding suburbs including Dudley, Kahibah, Charlestown and Gateshead. The area has been historically dominated by low density residential development, with increased residential densities occurring in recent times.

The site is close to the coast and within an area with substantial native bushland conserved in the nearby Glenrock State Recreation Area and Awabakal Nature Reserve as well as other more formal parkland areas.

Next to the site on Dudley Road is the local neighbourhood shopping area of Whitebridge which comprises a small supermarket, pharmacy, newsagency, a café and other businesses (refer **Figure 2-1**). A public car park is on the northern side of Dudley Road, while there is on street parking and a small car park at the rear of the food and retail premises.



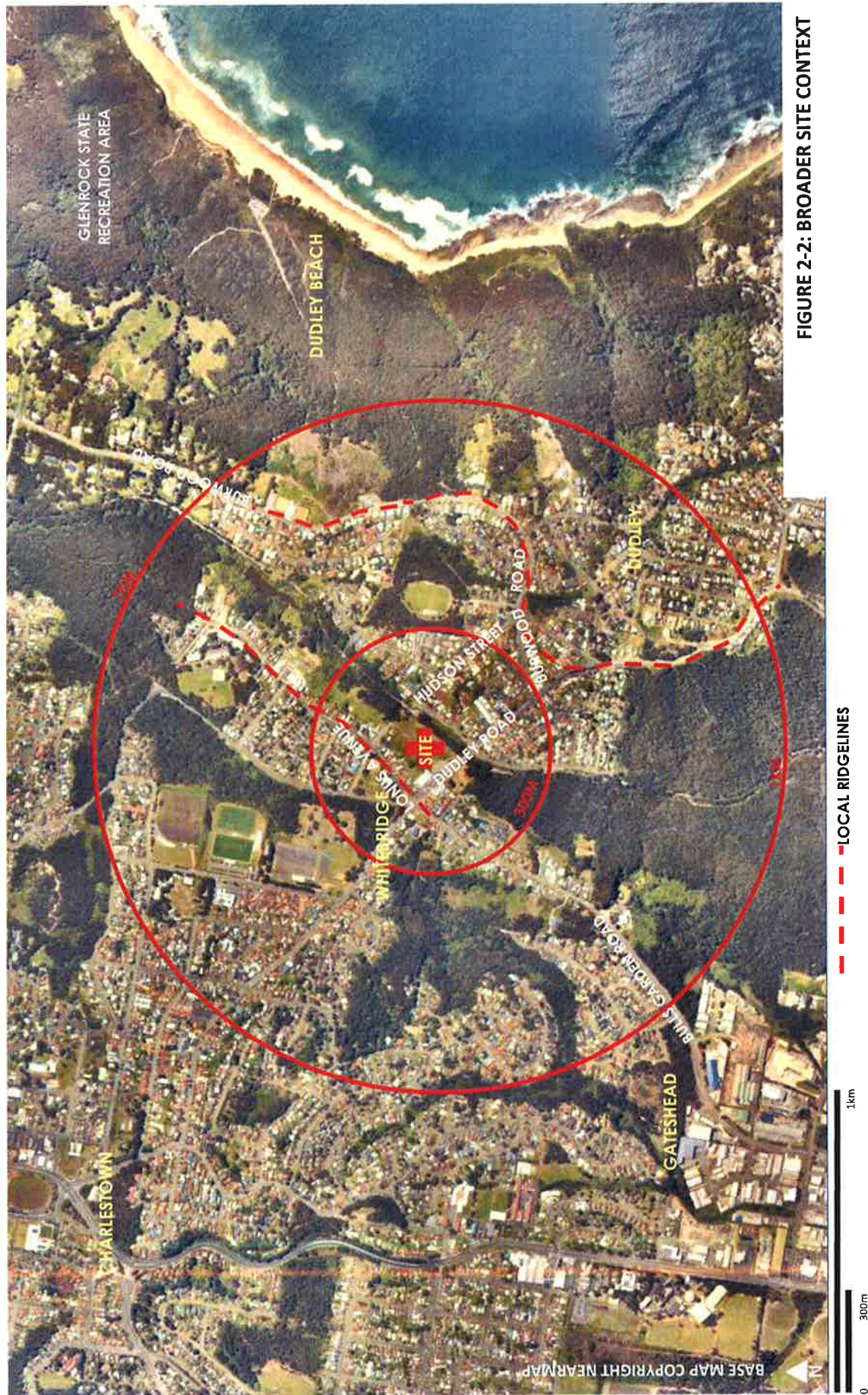
Figure 2-1: Whitebridge shops (site is to right of far shop)

Surrounding land uses

The following land uses immediately surround the site:

- North-east boundary – (opposite side of the partly unformed Kopa Street) is a combination of a vacant/partially bushland site on the opposite side of Kopa Street (zoned for residential).
- North-west boundary – is existing low density housing that fronts Lonus Avenue, with the rear fences of those properties facing the site.
- South-west boundary – (opposite side of Dudley Road) is vacant land that is partly clear and mostly bushland that has been zoned E2 Environmental Conservation on the eastern side and Whitebridge shops further west.
- South-east – is the Fernleigh Track and a corridor of flanking native bushland, with Station Street running parallel and housing on the opposite side.

The broader site context is shown in **Figure 2-2**.



2.2 Site attributes

Landform

The site has a slight slope from the north-west (Lonus Avenue) side towards the Fernleigh Track boundary, dropping approximately nine metres with a low point at the northern corner.

Vegetation and Ecology

The site contains no remnant vegetation and no significant flora and fauna have been identified. There are nine existing trees, with an understorey of introduced grasses and weeds. These trees include a small stand of trees in the north-west corner, a Camphor Laurel on the Dudley Road boundary and a large Eucalypt in the north-east corner (identified as Tree 15).

The conservation zoned land on the eastern boundary is identified as a vegetation corridor on the Lake Macquarie Native Vegetation and Corridor mapping, however, this area is effectively currently clear of any trees, yet is alongside the existing bushland corridor of the Fernleigh Track.

Bushfire

The site is identified as part bushfire prone land. The primary source of bushfire risk is remnant vegetation north of Kopa Street and south of Dudley Road.



Figure 2-3: Fernleigh Track looking north from near 'Whitebridge Station'

Heritage

The following heritage information is contained in the SoEE (SNL Building Constructions, 2013):

- European: The site contains no item of heritage significance in the State Heritage Register or Schedule 4 of the Lake Macquarie LEP 2004. It does adjoin the LEP listed former Adamstown to Belmont rail corridor (RT-04 L Belmont Railway, now the Fernleigh Track).
- Natural: The site contains no item of heritage significance in Schedule 5 of the LMLEP 2004.

- **Aboriginal:** The site contains no items on the AHIMS. It is not expected to contain any items of significance given its location, topography and land use history.

2.3 Fernleigh Track

The Fernleigh Track is one of the region's most popular shared pathways, which follows a disused coal haul rail line between Adamstown and Belmont (refer **Figure 2-3**). The 15 kilometre route passes through the suburbs of Adamstown, Kahibah, Whitebridge, Redhead, Jewells and terminates in the south adjacent to the Belmont TAFE college.

The landscape along the track varies substantially from sandy wetland areas around Belmont, through urban areas and bushland. Views also vary to reflect the landscape with many parts heavily vegetated with enclosed views and other areas partially vegetated and having more open views into nearby urban areas. Part of the Fernleigh Track runs along the site's north-eastern boundary, with a key access point, 'Whitebridge Station' on the opposite side of the track along Station Street. A recently constructed pathway, replacing a previous one, connects Kopa Street to the Fernleigh Track (refer **Figure 2-4**).



Figure 2-4: Recently constructed pathway down Kopa Street road reservation (near 'Whitebridge Station')

2.4 Site's existing visual environment

As required by the Lake Macquarie's Scenic Management Guidelines, this section describes:

- The site's landscape setting
- Visibility and visual sensitivity of site's landscape
- Visibility and potential viewpoints.

Figures 2-5 and **2-6** show composite photographs of the existing site. The visual context of the site is shown in **Figure 2-7**.



Figure 2-5: View towards Station Street and Whitebridge entrance to Fernleigh Track, NE corner of site (composite photograph)



Figure 2-6: View from Kopa Street and looking over site (composite site)



2.4.1 Landscape setting and scenic quality

Under *Lake Macquarie's Scenic Management Guidelines* the site falls within the 'Dudley Beach Landscape Setting', which is described as having generally a high scenic quality.

However, the site's location is visually separate from the coastal edge of this landscape setting and therefore it could be argued of lesser importance to its overall character. The surrounding area seen from the site is a mixture of the small commercial area of Whitebridge, low and medium density residential development, open space and some large tracts of native bushland, much of which is protected in public reserves or as conservation land. The multi-storey buildings of Charlestown are clearly visible on the skyline from several public vantage points close to the site such as Hudson Street and Dudley Road.

Due to the disturbed the vacant nature of the site, and the presence of few trees, the site itself has what could be described as a low scenic quality. Yet this scenic quality also varies in close proximity to the site, with the enclosed bushland views possible from the majority of the bounding Fernleigh Track very attractive and considered of high scenic quality, contrasting with the relatively bare urban look of the Dudley shops and nearest parts of Dudley Road which have a more moderate scenic quality.

2.4.2 Visibility and visual-sensitivity of landscape

Part of the site is listed as a visually-sensitive landscape type under *Lake Macquarie Scenic Management Guidelines* (refer Table 2 in Guidelines) due to it being within the E2 - Environmental Conservation zone.

The site is also identified as a place with potentially a high visibility and visual sensitivity due to its proximity to the Fernleigh Track, which has a high use rate (refer Table 3 in Guidelines).

2.4.3 Visibility and potential viewpoints

The visibility of the site is defined by the existing landform, with the main site sitting in a local low point between:

- a low ridge to the west (which runs north along Lonus Avenue from the roundabout at Dudley Road)
- and a slightly higher ridge to the east (which begins east of Station Street and rises to a high point east of Burwood Road)

The landform then falls away both to the north-east and south west towards the gullies in which the Fernleigh Track is located in both of these directions. Potential viewpoints to the proposed development that have been identified are then assessed in detail in **Section 4.0**.

2.5 Planning environment

A full description of the applicable legislation and planning policies which apply to the site are provided in the SoEE (2014), which in general supports the development of the site in terms of the proposed uses.

Lake Macquarie Local Environmental Plan (LEP) 2004

The application is being assessed under *Lake Macquarie Local Environmental Plan (LEP) 2004*, under which three different land use zones apply to the site:

- 2(2) Residential (Urban Living) – 19,725 m²

- 3(1) Urban Centre - 1,820m²
- 7(2) Conservation (Secondary) – 3,980 m².

The approximate boundaries of these zones are indicated in **Figure 2-7**. The SoEE states that in accordance with the provisions of LEP 2004 the proposed uses are permissible within the relevant zones.

This report has therefore taken into account that the proposed transformation of this vacant site in Whitebridge into a mixed use development is supported by the LEP 2004 and other relevant planning documents.

Lake Macquarie Development Control Plan No 1

Lake Macquarie Development Control Plan No 1 (DCP) applies to the development, with a full description of the relevant sections presented in the SoEE. The most relevant sections, and the intents of each, in terms of visual impact considerations, are:

- 2.1.3 Scenic values - To protect and maintain scenic values of the City, whether being viewed by land or water.
- 2.7.1 Streetscape and Local Character - To ensure development responds and contributes to the existing or desired future streetscape character.
- 2.7.2 Landscape - The provision of quality site landscaping appropriate to the nature and scale of the development that enhances city amenity and air quality in a practical manner.
- 2.7.6 Views - To ensure that development does not unreasonably impact or intentionally obstruct views from areas of high public usage, or from existing or future private development.
- 3.4.2 Building Heights - To ensure that building height is compatible with surrounding development and the locality including its desired future character.

This report addresses all of the above most relevant components which are effectively covered by the more detailed requirements of the *Lake Macquarie Scenic Management Guidelines*. The implications of the proposed building height, which exceeds the 10m height limit along parts of the Dudley Road frontage, has been specifically addressed in **Section 4.0**, most notable **Section 4.4.1** which assesses the effects on viewpoints from Dudley Road.

3. Likely visual changes due to proposed development

3.1 Description of main visual changes

The proposed development provides for an extension of the Whitebridge shops along Dudley Road and transitions into a residential precinct with a mix of apartment buildings, townhouses and semi-detached and attached small lot housing. The streets and open spaces would be publicly accessible, including both a pathway through the centre of the development and another along the Fernleigh Track boundary connecting to the track.

The development involves the following main visual changes:

- Construction of a 4-5 storey mixed use development fronting Dudley Road, effectively viewed as a three to four storey development above ground (containing 22 dwellings and 325m² commercial space)
- Creation of new car parking and 'Whitebridge Square', a public space, along the Dudley Road frontage
- Construction of 20, 2-3 storey dwellings (i.e. small lot housing)
- Construction of six, 3-4 storey residential flat buildings (containing 49 dwellings)
- Creation of an internal park with play equipment (for the residents)
- Landscaping and revegetation of the 20m wide conservation zone along the south-eastern boundary, integrated with a pathway connection to the Fernleigh Track and sedimentation ponds
- Internal roads, with street trees, parking and paths
- Access driveways from Kopa Street (associated with the construction of the lower section of Kopa Street by LMCC)
- Minor site earthworks (mostly some filling in centre of site)
- Demolition of two dwelling houses and associated outbuildings on Kopa Street.

The development is proposed to be staged, however, the visual impact assessment considers the total development when implemented, and does not cover different stages or construction aspects.

This report has been based on current plans at the time of writing, including recently re-issued architectural plans (refer **Appendix A** for a list of those plans). **Appendix A** also includes the most relevant plans for the proposed development in terms of visual effects, that being the Illustrative Masterplan, Elevations and two Landscape Plans recently revised to reflect feedback during the preparation of this report (i.e. 'Ecological Corridor Landscape' (DA – EC-01) and 'Fernleigh Area Typical Landscape Plan' (DA-LP-05, Issue C), both dated 15 December 2014). It is understood that Council has access to all plans and documentation that have been submitted by the Proponent.

The following provides a more detailed description of some elements of the proposed development, concentrating on the outer boundaries of the site and the presentation

to street frontages, as these are the areas that would be most easily potentially seen from outside the site.

3.2 Dudley Road frontage

The second building is closest to the Fernleigh Track end is approximately 43m in length (along Dudley Road frontage). This is a residential flat building which has a four storey level covering about half the building towards the south-eastern end (Fernleigh Track side), with the remainder three storeys. The south-eastern upper level is set-back some 3m from the remainder of the building. The lower storey at the south-eastern end is achieved by the building stepping down to a lower ground level, with apartment courtyards opening off this level. This change in slope means that the building at this end effectively appears as four storey from the Dudley Road frontage and from the south-eastern side when viewed from further east along Dudley Road.

The proposed development along the Dudley Road frontage is comprised of two buildings that are a maximum of four storeys above the existing ground level, plus basement parking. The building closest to the existing shops is approximately 27m in length (along Dudley Road) and has retail space on the ground floor with two storeys of apartments above for approximately half of the building length, and three storeys of apartments above for just over half of the western end of the building. The upper storey is set-back from Dudley Road some 3m from the lower levels.

There is an approximate 5m break between the buildings where there is a pedestrian /cyclist access that is 4m wide at ground level. The ground level of the mixed use building along Dudley Road is designed for predominantly smaller scale retail, with large windows and a 3m wide awning. The alignment of the shops follows the same alignment as the existing shops on Dudley Road. There would be a new public car park which joins the existing one, and a new public space, 'Whitebridge Square' (approximately 8m x 10m), and accompanying street tree planting and other landscaping. It is intended that these changes will build upon the existing neighbourhood shopping centre.

3.3 Kopa Street frontage

There would be a row of terrace-style houses constructed along Kopa Street and orientated towards it, with basement parking. The buildings are two storeys above the basement and approximately 6.3m high.

A new section of Kopa Street is to be constructed along the existing road reservation, extending the carriageway approximately 12m further, at a reduced width of 15m. The new street then turns right into the internal 'Street D'. There is a new driveway (approximately 4m wide and 12m long) located from the end of Kopa Street to the residence on Lot 23 (the 'Park Villas').

3.4 Lonus Avenue boundary

There would be split level, semi-detached dwellings constructed along the boundary of the rear of the existing properties that face Lonus Avenue. These buildings would be approximately 6m above ground level and face the internal 'Street A', with the nearest part of the buildings approximately 4m from the shared rear boundary with the Lonus Avenue properties.

3.5 Fernleigh Track boundary

The Fernleigh Track corridor would be widened to incorporate the parallel conservation zone, with a mix of turfed open space and indigenous tree plantings that reinforce the ecological corridor. It is understood that bushfire safety considerations limit the establishment of any small trees or shrubs within the 20m zone. A new pathway would connect from Dudley Road, through this area, to the Fernleigh Track.

The side of the development facing towards the Fernleigh Track boundary comprises (from Dudley Road end to Kopa Street end):

- The four storey apartment building described above that faces both towards Dudley Road and the conservation area boundary
- Behind that building, would be two storey 'maisonettes' which are two storey attached dwellings, with the elevation facing the conservation area having a balcony on the upper floor
- There would then be a break where the internal 'Street B' is located, followed by two to three storey townhouses (above ground, which from that side would appear as three storey), then three split level dwellings and then two other two to three storey townhouses (above ground, which from that side would also appear as three storeys)
- There would then be a small park with trees, a playground and other landscaping, followed by the internal 'Street E'
- Then at the north-eastern corner of the site (bounding the effectively unformed section of Kopa Street) would be a set of four residences termed the 'Park Villas'.

The Park Villas are a group of attached two storey villas, with two having rear sides facing towards the north-eastern side of the site and frontages of two facing Kopa Street to which the dwellings would connect through a driveway. The fencing closest to the Fernleigh Track along the rear of the villas would be black palisade fencing set in a landscaped area with tall shrubs to partially screen the building.

3.6 Landscape design

A detailed Landscape Plan and Landscape Design Report has been prepared for the proposed development to meet LMCC requirements.

The landscape design includes the following key elements:

- A 20m wide landscape and conservation zone alongside the Fernleigh Track boundary, with integrated water quality basins, a connecting pathway and substantial new native tree planting to extend the existing conservation zone along the corridor
- Creation of new car parking with street trees and 'Whitebridge Square', a public space, along the Dudley Road frontage
- Creation of an internal park with play equipment (for the residents)
- An urban scaled internal streetscape (through the use of small to medium street trees and relatively narrow roads) complete with paths and connections.

3.7 Lighting

A lighting plan would be prepared at the Construction Certificate stage to meet Council / Ausgrid requirements. It has been assumed that roads and paths will have

continuous illumination lighting would be as subdued as possible and designed to direct light towards ground surfaces in general and minimise upward light escape. Lighting has therefore not formed part of the visual impact assessment.

3.8 Height of the development

The height of development, with the exception of the Dudley Road frontage, is generally below the 10m guide in the DCP. The mixed use and residential buildings fronting Dudley Road exceed this 10m by approximately 3.5m, having a maximum height above the existing and future ground line of 13.394m.

3.9 Recommended design measures for development types from Guidelines

From the *Lake Macquarie Scenic Management Guidelines* the following development guidelines apply to the proposed development:

- Medium density development
- Residential flat buildings
- Commercial development.

The following is an evaluation of the proposed development against the most relevant of the recommended potential design and mitigation measures listed in the guidelines.

Medium density development

As recommended in the Guidelines, the medium density terrace-style townhouses along Kopa Street have been designed to address this street by orientating the dwellings towards it and having front gardens.

Residential flat buildings

The residential flat buildings along Dudley Road are subject to SEPP 65 and as such issues relating to the privacy, overlooking, general building design and open space provision have been considered in the SEPP 65 report.

The proposed landscape design addresses related visual issues identified in the Guidelines, through:

- Extensive landscape planting
- Landscape screening to minimise views from the Fernleigh Track
- Street trees (internal and external roads)
- Retaining those trees with visual value where possible (such as the large Eucalypt in north-eastern corner (Tree 15))
- Provides a small landscaped park
- Revegetation of the conservation corridor (as far as possible taking into account bushfire considerations).

Commercial development

The proposed commercial development along Dudley Road addresses related visual issues identified in the Guidelines, through:

- Increasing street trees and providing other streetscape improvements such as the new public open space of 'Whitebridge Square' with the opportunity for future outdoor dining
- Providing generous street footpaths, quality pavements and breaking-up the car parking with landscaping

- Linking the commercial development directly through to Kopa Street via pedestrian connections and landscaped streets
- A continuous low awning along the Dudley Road frontage.

Overall, the proposed development achieves the general intent of the specific guidelines for the three uses as described above. A more detailed assessment of the application of SEPP 65 has been appropriately covered by the SEPP 65 report.

4. Landscape and visual impact assessment

4.1 Assessment requirements of Guidelines

The Lake Macquarie Scenic Management Guidelines requires that both direct site impacts and impacts to surrounding viewpoints are assessed, as defined in the document:

- *Direct site impacts - magnitude of landscape and visual change to the site itself (referring to vegetation removal, landform change, scale of the development, change to the landscape character and visual contrast with surroundings).*
- *Surrounding viewpoints - magnitude of landscape and visual change to surrounding viewpoints considering the viewpoint's characteristics (i.e. the type of viewer and whether the change would affect transient and/or permanent viewers) and consider night lighting effects where relevant.*

In accordance with the LMCC Scenic Management Guidelines, the following terminology is also required to assess likely visual impacts the site and surrounding viewpoints, as well as being used to provide an overall level of impact assessment:

- *None – No part of the proposal, or work or activity associated with it, is discernible.*
- *Negligible – Only a very small part of the proposal is discernible and/or is at such a distance that it is scarcely appreciated. Consequently, it would have very little effect on the scene.*
- *Minor – The proposal constitutes only a minor component of the wider view, which might be missed by the casual observer or receptor. Awareness of the proposal would not have a marked effect on the overall quality of the scene.*
- *Moderate – The proposal may form a visible and recognisable new element within the overall scene that affects and changes its overall character.*
- *Severe – The proposal forms a significant and immediately apparent part of the scene that affects and changes its overall character.*
- *Devastating – The proposal becomes the dominant feature of the scene to which other elements become subordinate, and significantly affects and changes the character.*

4.2 Height reference points

There are a number of elements along the Dudley Road frontage which can be used to interpret the height of the proposed buildings along that edge. The highest point of the new buildings would be of a height close to the existing power poles on the opposite side of Dudley Road (estimated to be approximately 12m high) and the new buildings would also be an estimated 3m higher than the existing two storey shops also on the opposite side of Dudley Road.

The existing Whitebridge Cellars building is approximately 6m high, which at the time of this report had a number of flags attached to the roofline of approximately 2.5m, giving an overall height to the top of the flagpoles of 8.5m. That height is approximately 5m less than that of the highest point of the new buildings, which would

be immediately next to Whitebridge Cellars. The upper storey of the apartment building on the south-eastern end would be approximately 2m higher than the height of the existing Camphor Laurel tree.

The implications of the exceedance of the 10m height plane in a number of places of the buildings along the Dudley Road frontage are discussed both under direct site impacts (**Section 4.3** below) and the assessment of impacts to surrounding viewpoints (**Section 4.4**, in particular **Section 4.4.1** – Dudley Road viewpoints).

4.3 Assessment of direct site impacts

The existing site has few trees and is vacant, with a landscape character that is generally of low scenic value. A number of the existing site trees would be removed, including the existing Camphor Laurel along Dudley Road, that although having some visual value would be removed due to the incompatibility with such a species near native bushland.

A large Eucalypt near the north-eastern corner of the site is to be retained which is an attractive, healthy tree (identified as Tree 15) and would perform a role in partially screening views to the site from the Fernleigh Track and the corner of Station and Hudson Streets. There would be some minor earthworks, including some filling towards the centre of the site, but largely the dominant landform would remain.

The new development would transform the existing site into a mostly new medium-density residential precinct, with new three to four storey buildings (above the ground line) along Dudley Road which would be mostly residential with some new ground floor shops to complement the existing local shopping strip. The development overall would represent a substantial visual change to this part of Whitebridge, yet one that is generally consistent with the future planned land use for the area. The Dudley Road buildings would be some 5m above the existing tallest buildings within this local shopping centre and therefore not significantly out of scale in terms of height. The break in the buildings, and the varied height and set-back of the upper levels would also reduce the perceived height of the buildings from ground level and Dudley Road, as would the 35m width of space between the buildings on each side.

There would be a positive outcome with the new tree planting and other landscape planting, particularly the native tree planting along the conservation zone that would improve the existing vacant character of this part of the site and increase the tree cover alongside the corridor. The main potential for a negative impact on character is in the vicinity of the north-eastern corner of the site where it meets the less vegetated part of the Fernleigh Track, with the buildings on the site quite evident prior to the maturing of proposed landscape planting, leading to a far more built – up character over the site. This initial impact to, and contrast with, the current less developed character of the site would reduce over time as the proposed landscape plantings mature. An 'artist's impression' of the impact on the landscape character from this viewpoint is provided as **Figure 4-4**, in **Section 4.0**, and further discussed in that section.

Overall, it is considered that there would initially be a very noticeable transformation of the existing character of the site and its immediate surrounds from vacant to a new residential and commercial urban environment that is denser than the existing surrounding residential areas such as those to the east along Station Street. Although the magnitude of visual change would be quite high, it is considered that the character of the proposed development would integrate with the existing urban

environment over time, as well as contributing to enhancing the conservation land along the Fernleigh Track.

Assessed level of impact direct to site:

- Short term, before proposed new landscape works mature: moderate (takes into account present low scenic quality and vacant nature).
- Longer term: minor.

4.4 Assessment of impacts to surrounding viewpoints

The *Lake Macquarie Scenic Management Guidelines* requires that viewpoints are identified within the distance categories described below, that the visual-sensitivity of those viewpoints are identified, the magnitude of visual change described and potential visual impact level is identified.

Figure 4-1 identifies the location of the main viewpoints to the proposed development and summarises the visual analysis.

4.4.1 Close foreground viewpoints (less than 300m)

Dudley Road viewpoints

Dudley Road rises to the west of the site towards a highpoint at the roundabout with Lonus Avenue and Bulls Garden Road, and to the east towards Burwood Road and the ridgeline just to its east. From the section of Dudley Road between these two highpoints there would be potential views of the proposed development.

The highest point of the new buildings would be of a height close to the existing power poles on the opposite side of Dudley Road (estimated to be 12m high), an estimated 3m higher than the existing highest two storey shops on the opposite side of Dudley Road and some 7.5m taller than the existing neighbouring shop ('Whitebridge Cellars') which is approximately 6m high. The upper storey of the apartment building on the south-eastern end would be approximately 2m higher than the height of the existing Camphor Laurel tree.

The visual sensitivity of viewpoints along Dudley Road can be described as moderate, due to those viewpoints being located along a busy local road, the proximity to the local shopping area of Whitebridge and their public nature.

Two different viewpoints along Dudley Road have been assessed below.

Viewpoint 1 - Dudley Road near Whitebridge Shops

An 'artist's impression' of the likely changes to this viewpoint is shown in Figure 4-2.

Magnitude of visual change

The new buildings along Dudley Road would be a noticeable addition to the existing Whitebridge shopping strip, extending the built form along the northern side from approximately 50m to approximately an additional 75m. The most obvious change would be a three to four storey building along the northern side of Dudley Road immediately next to and opposite the existing Whitebridge shops. The more contemporary design of the buildings, particularly the geometric forms, would also be visually different from the older shops that dominate the strip.

The proposed maximum height of the buildings of approximately 13.5m should be considered in relation to the distance between the built forms on each side of Dudley Road, which is approximately 35m wide. That width is substantially wider than a

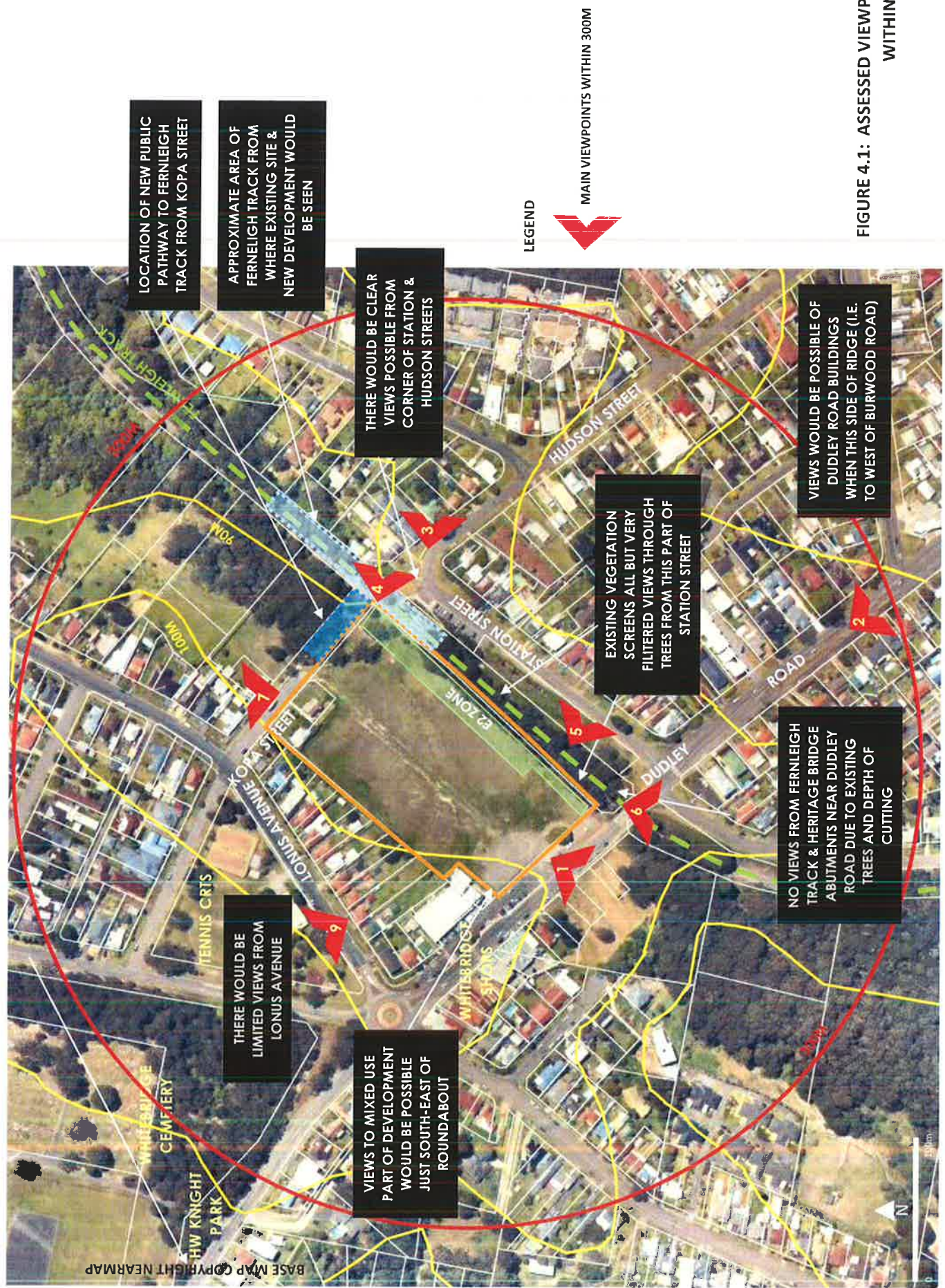


FIGURE 4.1: ASSESSED VIEWPOINTS WITHIN 300M



FIGURE 4.2a: VIEW FROM DUDLEY ROAD NEAR WHITEBRIDGE SHOPS (EXISTING VIEW).



FIGURE 4.2b: VIEW FROM DUDLEY ROAD NEAR WHITEBRIDGE SHOPS (PROPOSED LANDSCAPE PLANTING FADED).



FIGURE 4.2c: VIEW FROM DUDLEY ROAD NEAR WHITEBRIDGE SHOPS (WITH MATURE PROPOSED LANDSCAPE PLANTING).

normal street width due to the car park that would extend the existing car park along the street front. The added width would in effect lessen the buildings dominance on the street through such a wide setback from it.

Overtime the proposed street tree and other planting would soften the look of the building and visually integrate it into the shopping area when viewed from Dudley Road, as well as further visually reducing the perceived height through the breaking up of the overall view. As familiarity with the change increases, this magnitude of visual change would also be likely to lessen further for viewers.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature and viewer familiarity develops: severe
- Longer term, street trees and other landscape planting established: minor.

Viewpoint 2 - Dudley Road from east

An 'artist's impression' of the likely changes to this viewpoint is shown in Figure 4-3.

Magnitude of visual change

From further east along Dudley Road there would be views of the proposed development (when west of the existing ridge which is east of Burwood Road). From this viewpoint the three to four storey buildings (above ground) would be seen along the Dudley Road frontage as a new part of the Whitebridge shops.

The side of the apartment building facing the Fernleigh Track (which would be viewed as four storeys from this side) would be seen partially behind the existing vegetation along the Fernleigh Track. The extent of trees along that side and along Dudley Road would also further increase over time as the new landscape planting matures.

The magnitude of visual change seen from this viewpoint in the short term (before proposed new landscape works mature) is assessed as being moderate, with the view of the four storey high apartment building (south-eastern corner) closest, and the four storey high mixed use building further along Dudley Road. The magnitude of visual change would lessen over time with familiarity and the growth of trees and other vegetation.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature and viewer familiarity develops: moderate
- Longer term, street trees and other landscape planting established: minor.

Viewpoint 3 – Corner of Hudson Street and Station Street

An 'artist's impression' of the likely changes to this viewpoint is shown in Figure 4-4.

The visual sensitivity of this viewpoint can be described as high, due to it being a local road with low traffic, yet it also includes the car park and a public access to the Fernleigh Track from 'Whitebridge Station'. The 'Whitebridge Station' area that provides access from Station Street to the Fernleigh Track has been landscaped with mostly low shrubs, and therefore from this viewpoint clear views are possible of the immediate track as well as the partially vegetated unformed Kopa Street road reservation and over the currently vacant subject site.



FIGURE 4.3a: VIEW FROM EAST ALONG DUDLEY ROAD (EXISTING VIEW).



FIGURE 4.3b: VIEW FROM EAST ALONG DUDLEY ROAD (WITHOUT PROPOSED LANDSCAPE PLANTING).



FIGURE 4.3c: VIEW FROM EAST ALONG DUDLEY ROAD (WITH MATURE PROPOSED LANDSCAPE PLANTING).



FIGURE 4.4a: VIEW FROM CORNER OF STATION AND HUDSON STREETS (EXISTING VIEW).



FIGURE 4.4b: VIEW FROM CORNER OF STATION AND HUDSON STREETS (WITHOUT MATURE TREES).



FIGURE 4.4c: VIEW FROM CORNER OF STATION AND HUDSON STREETS (WITH MATURE PROPOSED LANDSCAPE PLANTING).

Magnitude of visual change

From this viewpoint there would be views of the proposed development, in particular of the south-eastern side of the two storey 'Park Villas' near the site corner and the more distant terrace style two-storey houses on upper Kopa Street. South of the Park Villas would be seen the nearest of the two to three storey townhouses, and behind the villas would be seen the roofs and upper sections of various new dwellings up to three storeys in height. Views of any buildings further towards Dudley Road, including the three to four storey buildings, would be obscured by existing large trees along the Fernleigh Track.

The buildings would be more evident in the shorter term, with the magnitude of visual change considered moderate. Views would become more filtered and obscured by new trees and other vegetation in the longer term with the magnitude of visual change becoming minor.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature and viewer familiarity develops: severe
- Longer term, street trees and other landscape planting established: minor.

Viewpoint 4 - Fernleigh Track: near Whitebridge 'Station'

Figure 4-1 indicates the approximate area of the Fernleigh Track from where the proposed development would be seen. At this location the track is some 1-2m below the surrounding area, and the closest part of the subject site and the unformed Kopa Road reservation is relatively clear of vegetation, thereby allowing for quite clear views of the site (refer **Figure 4-5**) and **Figure 4-4** for a similar view from the corner of Station and Hudson Streets.

The visual sensitivity of this viewpoint can be described as high, due to its high recreational use, public nature and heritage and environmental values.



Figure 4-5: View looking towards site from nearest part of Fernleigh Track where open views are possible

Magnitude of visual change

The magnitude of visual change to this viewpoint, and the view that would be seen (albeit from a lower level) would be similar to that described above for Viewpoint 3. Viewers would be lower and hence have a slightly closer view of the nearest park Villas and the two to three storey townhouses next to these buildings, and there would be less of an elevated view over the remainder of the development.

Prior to landscape plants maturing there would be clear views of the proposed development when first constructed. The closest building, the set of four 'Park Villas' which are two storeys high would be approximately 28m away, with a private fenced garden along that same edge. To address the open nature of these views alongside the Fernleigh Track extensive landscape planting is proposed in this area, and over time large native trees and other screening vegetation would establish and substantially soften the views and integrate the development into the future landscape.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: severe.
- Longer term: minor.

Viewpoint 5 - Station Street

The existing site can be partially seen from Station Street and the housing along it, with filtered views through the existing vegetation that lines the Fernleigh Track (refer **Figure 4-6**). The visual sensitivity of this viewpoint can be described as low, due to it being a local road with low traffic.



Figure 4-6: View looking in direction of site from Station Street

Magnitude of visual change

Prior to the proposed new vegetation maturing, from this viewpoint there would be views of the new buildings through the trees, and at the Dudley Road end of the street the upper parts of the nearest apartment building would be evident. As these views are in the context of the wider urban environment, and the buildings would be partially obscured at construction, and further screened as the planned landscape

works mature, the magnitude of visual change is considered moderate, reducing to minor in longer term.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: moderate.
- Longer term: minor.

Viewpoint 6 - Fernleigh Track: near Dudley Road

The Fernleigh Track is in a cutting where it travels under Dudley Road, reaching approximately 11m deep near the old bridge pylons. Due to the depth of the cutting and steepness of the embankment, there would be no views of the proposed development from this potential viewpoint (refer **Figures 4-7** and **4- 8**).

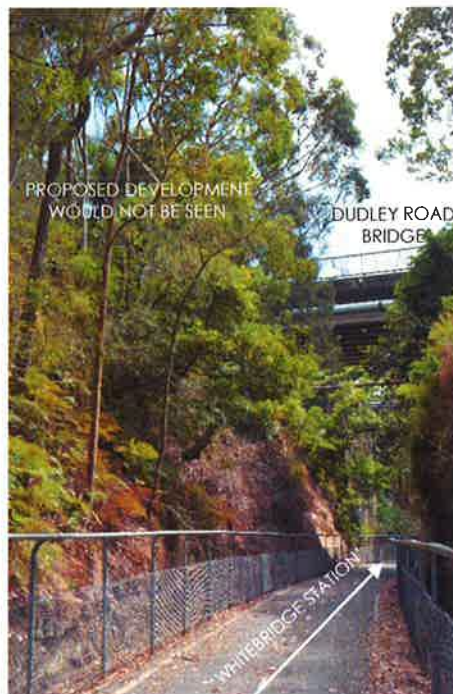


Figure 4-8: View looking towards site from Fernleigh Track just south of Dudley Road (proposed development site not seen)



Figure 4-7: View looking towards site from Fernleigh Track near historic bridge abutmen (proposed development not seen)

Viewpoint 7 - Kopa Street

Kopa Street currently terminates near the boundary of the subject site, with part of the remaining road reservation to be constructed to support the proposed development, and the lower section used for a new public pathway to connect with the Fernleigh Track. The previous pathway was removed due to encroachment on the subject site (refer **Figure 4-9**).

The visual sensitivity of this viewpoint can be described as moderate, due to the connection and relationship to the Fernleigh Track.

Magnitude of visual change

From the existing and new road sections of Kopa Street, as well as the new public pathway, there would be views of the proposed development. A row of terrace-style two storey houses would be constructed facing Kopa Street, which would be of a

similar scale to other surrounding housing. Although representing a change, it would be one that is generally compatible with the existing streetscape.

The 'Park Villas' two-storey building, as described above, would be evident in the lower north-eastern corner of the site, and accessed via a 4m driveway from the end of Kopa Street. The scale of this building would also be consistent with the planned urban environment and not out of character in terms of the wider urban setting. Although essentially being one structure it is visually broken into four dwellings, with gardens, fencing and façade treatments creating a relatively small-scale residential look.



Figure 4-9: View looking down Kopa Street with new path under construction (site to right)

Magnitude of visual change

From the existing and new road sections of Kopa Street, as well as the new public pathway, there would be views of the proposed development. A row of terrace-style two storey houses are to be constructed facing Kopa Street, which would be of a similar scale to other surrounding housing and consistent with the planned medium density housing in the general location. Although representing a change, it would be one that is compatible with the existing streetscape.

The 'Park Villas' two-storey building, as described above, would be evident in the lower north-east corner of the site, and accessed via a 4m driveway from the end of Kopa Street. The scale of this building would also be consistent with the planned urban environment and not out of character in terms of the wider urban setting. Although essentially being one structure it is visually broken into four dwellings, with gardens, fencing and façade treatments creating a relatively small-scale residential look.

The new pathway along Kopa Street to the Fernleigh Track is aligned on the far (north-eastern) side of the road reservation when opposite the driveway to the Park Villas, and then below the driveway the pathway curves around closer to the other side of the road reservation, being approximately 27m away from the nearest part of the building. Along the north-eastern and south-eastern sides of the building a dense line of 1.5m shrubs is proposed as well as a number of medium-sized deciduous trees. On the other side of the driveway (furthest from building) some large native trees are proposed within the road reserve.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: moderate.
- Longer term: minor.

Viewpoint 8 – Upper Hudson Street

Currently looking down the street towards the site there are views of the Kopa Street road reservation (which lines up with Hudson Street) and the north-eastern edge of the site, including a large Eucalypt that is to be retained (refer **Figure 4-10**).

The visual sensitivity of this viewpoint can be described as low, due to it being local road with low traffic.

Magnitude of visual change

The proposed development would be partially seen when viewed from Hudson Street (further above the corner with Station Street), from where there would be views of the nearest sides of the two storey 'Park Villas' near the site corner and the more distant terrace style two-storey houses on upper Kopa Street, and possibly some parts of the upper areas of the central buildings. The buildings would be more evident in the shorter term, with views becoming more obscured by new trees and other vegetation in the longer term.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: minor
- Longer term: negligible.



Figure 4-10: View towards site at lower end of Hudson Street

Viewpoint 9 – Lonus Avenue

Lonus Avenue is a local road to the north-west of the site which has one to two storey housing facing towards it that back onto the subject site. The visual sensitivity of this viewpoint can be described as low, due to it being local road with relatively low traffic.

Magnitude of visual change

There would be some views of the proposed development from Lonus Avenue where there are breaks between the existing houses, although these would be unlikely to be noticed by most passers-by, particularly in the long term as the new development becomes an established part of the urban fabric (refer **Figure 4-11**).

The very highest part of the four storey building closest to the nearest shops (i.e. beside the Whitebridge Cellars' may be seen from some angles, yet if seen through the houses and vegetation along Lonus Avenue would remain in the foreground. As the building is only some 7.5m above the neighbouring shop it would not visually dominate any viewpoint along Lonus Avenue. The split level dwellings backing onto the Lonus Avenue properties would prevent views from this viewpoint over the remainder of the development. The new two storey dwellings that would share a boundary with these Lonus Avenue properties would be separated by 4m landscaped courtyards and be consistent with the general scale of the existing two storey housing, albeit at a higher density.



Figure 4-11: View towards site of proposed taller buildings from Lonus Avenue

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: minor
- Longer term: negligible.

4.4.2 Foreground viewpoints (300m to 1km)

Viewpoint 10 - Kahibah Oval

Kahibah Oval, at the corner of Bula Street and James Street, Kahibah, is some 750m away. The small grandstand/change room facility at this oval is the highest point within the larger recreation area that also includes Andy Bird Field and St John Oval. The ground level of the oval's single storey building has an approximate height of 90m AHD.

Between this potential viewpoint and the highest point of the proposed development (i.e. 113.4m), there is an intervening ridge of some 100m AHD, as well as trees on the nearest side of that ridge to a height of at least 15m. The trees are contained within conservation land that is public open space.

The proposed development would therefore not be seen from this viewpoint nor any nearby potential viewpoints such as central Charlestown Leagues Club or Charlestown East Public School, both along Bula Street.

Assessed level of impact to viewpoint: none.

Viewpoint 11 - Burwood Road

Burwood Road follows a local ridgeline that visually separates the residential area of Dudley to the east. The highest point along that road is at its southern end between

Dudley Road and Kahibah Street, where the road is at approximately 110m AHD. Along the road on the western side, that is between the site of the proposed development, is low density housing up to two storeys high (i.e. approximately 10m high) which also includes trees in gardens up to 15m high. There are no breaks between the housing where there are views towards the site from Burwood Road. The proposed development would generally therefore not be seen from any public viewpoints along Burwood Road.

Assessed level of impact to viewpoint: none.

Viewpoint 12 - Houses to east of Station Street

The visual-sensitivity of viewpoints from houses east of station Street, in areas of Burwood Road and Norley Street, is assessed as low due to the low residential land use and their private nature.

Magnitude of visual change

From the rear of some houses along the western side of Burwood Road, near the highpoint around Kahibah Street, there would be some views of the proposed development above the tree-line that bounds the Fernleigh Track. For most residents such potential views are largely obscured by neighbouring houses and intervening trees, yet for a limited number there could be views of the upper part of the apartment building at the closest part of Dudley Road (i.e. nearest to the Fernleigh Track).

At this location the existing trees along the Fernleigh Track are estimated to be a minimum of approximately 7m above the ground level along the site boundary. The nearest potential houses are approximately 150m away upslope from Station Street and any views of the development would have a mix of houses and trees in the foreground, including the trees along the Fernleigh Track. Depending on the location of the house, it is estimated that up to half of the nearest building may be seen over the top of the existing trees, with the potential for such views lessening for properties that are downslope.

The magnitude of visual change to this viewpoint in the short term (before proposed new landscape works mature) is assessed as being low, with an even lower change when the proposed trees mature.

Assessed level of impact to viewpoint:

- Short term, before proposed new landscape works mature: minor
- Longer term: negligible.

4.4.3 Foreground viewpoints (300m to 1km)

Due to the existing topography, vegetation and pattern of land use there have been no potential viewpoints identified that are more than 1km away of any concern.

4.5 Assessment of impacts to site and viewpoints following mitigation

The following Section, **Section 5.0**, describes the main proposed design and other mitigation measures to minimise any direct impacts on the site and surrounding viewpoints identified in this section.

Section 6.0 then provides a summary of the likely impact levels both before and after proposed landscape works mature, as well as listing the relevant mitigation measures.

5. Proposed design and other mitigation measures

5.1 Positive visual attributes of proposed development

The proposed landscape screening is a major and essential component for mitigating against potential visual impacts, and to a substantial degree would mitigate visual impact over time as maximum plant growth is achieved.

Other design measures employed during the design development process have also mitigated the potential for visual impact, including the following attributes designed to enhance the visual outcome:

- Dudley Road frontage - The absence of vehicular access to the site from Dudley Road means that there are no vehicular crossings that interfere with the street frontage and the associated public open space. Basement parking minimises the impact of garaging on the streetscape and improves opportunities for street trees.
- Kopa Street frontage – the proposed terrace-style small lot homes fronting Kopa Street means that the traditional streetscape of Kopa Street would be continued.
- Lonus Avenue boundary – the low height of the split-level semi-detached dwellings alongside the rear of properties facing Lonus Avenue would minimise overlooking and visual impact to those properties.
- Fernleigh Track boundary – the establishment of a high number of large trees along the 20m wide conservation corridor would increase the environmental and screening value of this corridor to the Fernleigh Track.

5.2 Impacts requiring mitigation

Table 5-1 summarises the assessed visual impact levels of the viewpoints surrounding the site (both before and after proposed landscape plantings mature) as described in **Section 4.0**, and proposed mitigation measures described later in this Section.

There are four viewpoints where the impact has been assessed as severe prior to the maturing of landscape works, with three of those relating to views of the north-eastern corner of the development, those being:

- The corner of Station and Hudson Streets
- The Fernleigh Track near 'Whitebridge Station'
- Views for pedestrians and cyclists travelling along Kopa Street as it links to the Fernleigh Track.

As a result of preliminary feedback given to the proponent during preparation of this report, the following additional design measures have since been integrated into the design to address the quite open and close views of the medium density development from these locations, which essentially relate to views from the Kopa Street frontage and the side facing the Fernleigh track:

- An increase in landscape screening (both with taller shrubs and more native trees) along the outside facing boundaries of the 'Park Villas', both along the driveway access to Kopa Street and the side facing the Fernleigh Track.

- An increase in the number of native trees in the north-eastern corner of the site and within the conservation zone alongside the Fernleigh Track to the maximum number considered possible in light of bushfire considerations.

The revised Landscape Plans that reflect these changes are provided in **Appendix A** (i.e. 'Ecological Corridor Landscape' (DA – EC-01), and 'Fernleigh Area Typical Landscape Plan' (DA-LP-05, Issue C), both dated 15 December 2014). As a result of these proposed measures it is considered that the level of visual impact would reduce to minor for all three viewpoints over time.

Table 5-1: Summary of visual impacts to surrounding viewpoints				
	Visual sensitivity to change	Impact prior to landscape screening maturing	Proposed mitigation measures	Impact after landscape screening matures
Close foreground viewpoints within 300m				
1 - Dudley Road near Whitebridge shops	moderate	severe	consider reducing visual contrast and dominance of the proposed masonry projections of RFB facing sth-east	minor
2 - Dudley Road east of site	moderate	moderate	none required	minor
3 - Corner of Hudson & Station Streets	high	severe	maximise landscape screening of Park Villas and tree planting in conservation zone and ensure muted building colours	minor
4 Fernleigh Track: near 'Whitebridge Station'	high	severe	maximise landscape screening of Park Villas and tree planting in conservation zone and ensure muted building colours	minor
5 - Station Street	low	moderate	none required	minor
6 - Fernleigh Track: near Dudley Road	no views	not applicable	none required	not applicable
7 - Kopa Street	moderate	moderate	maximise landscape screening of Park Villas from Kopa Street	minor
8 - Upper Hudson Street	low	minor	none required	negligible
9 - Lonus Avenue	low	minor	none required	negligible
Foreground viewpoints (300m – 1km away)				
10 - Kahibah Oval	no views	not applicable	not applicable	not applicable
V11 - Burwood Road	no views	not applicable	not applicable	not applicable
V12 - Houses to east of Station Street	low	minor	consider reducing visual contrast and dominance of the proposed masonry projections of RFB facing sth-east	negligible
Over 1km viewpoints – no identified views of concern				

5.3 Further recommendations

The fourth viewpoint where the potential impact level was assessed as severe is from Dudley Road near the Whitebridge shops, where the main impact would relate to the extent and scale of the new building, particularly when viewed from the eastern side. This impact would largely reduce with increased familiarity by viewers and the maturing of street trees along Dudley Road. To further reduce potential impact, it is suggested that consideration be given to reducing the visual contrast and dominance of the proposed architectural projections on the south-eastern facing side of the nearest residential flat building along the Dudley Road frontage.

It is also recommended that the sides of the Park Villas facing Kopa Street and the Fernleigh Track comprise predominantly muted colours, with any lighter highlighting colours kept very minimal, so as to further blend the building with the future landscape.

6. Conclusion

6.1 Impact on landscape character

Overall, it is considered that initially there would be a very noticeable transformation of the existing landscape character of the site and its immediate surrounds from vacant to a new residential and commercial urban environment that is denser than the existing surrounding residential areas such as those to the east along Station Street and Lonus Avenue.

Although the magnitude of visual change would be quite high, it is considered that the character of the proposed development would integrate with the existing urban environment over time, as well as contributing to enhancing the conservation land along the Fernleigh Track.

It is considered that in the short term, before proposed new landscape works mature there would be a moderate impact to the site (taking into account present low scenic quality and vacant nature), reducing to minor in the longer term and resulting in potentially a positive urban outcome that visually and socially enlivens the Whitebridge shops and surrounding area.

6.2 Impacts to viewpoints

Table 5-1 (Section 5.0) summarises the assessed visual impact levels of the viewpoints surrounding the site (both before and after proposed landscape plantings mature) and the proposed mitigation measures.

There are four viewpoints where the impact has been assessed as severe (defined as: *The proposal forms a significant and immediately apparent part of the scene that affects and changes its overall character*), prior to the maturing of landscape works:

- The corner of Station and Hudson Streets
- The Fernleigh Track near 'Whitebridge Station'
- Views for pedestrians and cyclist travelling along Kopa Street where it links to the Fernleigh Track
- Dudley Road near Whitebridge Shops.

For all four of these viewpoints, it is considered that the proposed mitigation measures (predominantly additional landscape planting along the north-eastern and south-eastern edge, muted building colours for the Park Villas and reducing the visual contrast and dominance of the proposed architectural projections on the south-eastern facing side of the residential flat building facing the Fernleigh Track), would reduce the impact level to minor over time.

There would be a moderate impact to views from two public viewpoints (further east along Dudley Road and Station Street). Suggested mitigation measures would also address impacts to these viewpoints (increased landscape screening and tree planting, colour selection of materials) and reduce the impact level to minor over time.

6.3 Overall level of impact

Based on the definitions provided in **Section 4.1**, it is assessed that there would be an overall average level of impact that would be **moderate in the short term** (before landscape works mature), lessening to **minor in the longer term** (when landscape works mature).

There would be some negative impacts to nearby viewpoints, yet overall the level of impact seems acceptable considering the urban nature of the surrounding area and context of planned increased densities. That such a relatively large vacant site is rare in this area means that the new development would be initially more visually obvious, becoming less contrasting over time as viewers become more familiar with it, trees mature and other development continues to occur. The proposed landscape screening is a critical component in ensuring a high quality future urban area that integrates with and visually activates this part of Whitebridge.

7. References

Lake Macquarie City Council, 2004. *Lake Macquarie Local Environmental Plan (LEP) 2004*.

Lake Macquarie City Council. *Lake Macquarie Development Control Plan (DCP)*.

Lake Macquarie City Council, 2013. *Lake Macquarie Scenic Management Guidelines*.

Appendix A: Illustrative Masterplan, Elevations and Revised Landscape Plans

- Recently revised architectural plans, Smith & Tzannes - Document Issue, 12 December 2013
- Illustrative Masterplan
- Elevations
- Revised Landscape Plans - 'Ecological Corridor Landscape' (DA – EC-01) and 'Fernleigh Area Typical Landscape Plan' (DA-LP-05, Issue C), both dated 15 December 2014

DOCUMENT ISSUE

14_026 DUDLEY ROAD WHITEBRIDGE

12 Dec 2014

Issue No: 13

Issued By: **Peter Smith**

Notes: Amended plans for submission to Council

DRAWINGS

Drawing No.	Title	Revision	Renditions	Issue Reason
DA-A-010	SITE PLAN	E	pdf	Amendments made
DA-A-011	SUBDIVISION PLAN	E	pdf	Amendments made
DA-A-012	ILLUSTRATIVE MASTERPLAN	D	pdf	Amendments made
DA-A-014	KOPA STREET SITE PLAN	D	pdf	Amendments made
DA-A-050	STAGING PLAN	B	pdf	Amendments made
DA-A-100	LOT 1 - L-C1 & L0 PLAN	C	pdf	Amendments made
DA-A-101	LOT 1 - L1 & L2 PLAN	C	pdf	Amendments made
DA-A-102	LOT 1 - L3 & ROOF PLAN	D	pdf	Amendments made
DA-A-106	LOT 2 - LEVEL C1 PLAN	C	pdf	Amendments made
DA-A-111	LOT 3 - LEVEL C1 PLAN	C	pdf	Amendments made
DA-A-116	LOT 4 - LEVEL C1 PLAN	C	pdf	Amendments made
DA-A-128	LOT 21-24 - LEVEL 0 PLAN	C	pdf	Amendments made
DA-A-150	ADAPTABLE DWELLINGS	B	pdf	Amendments made
DA-A-200	FULL SITE SECTIONS	B	pdf	Amendments made
DA-A-201	FULL SITE SECTIONS	B	pdf	Amendments made
DA-A-214	LOT 21 - 24 ELEVATIONS	D	pdf	Amendments made
DA-A-600	Details	B	pdf	Amendments made

RECIPIENTS

Recipient Name	Role	Media	Copies
Wade Morris (SNL Building Constructions	Client	By Download	0



1. SITE PLAN
2. DIRECTOR'S NAME
3. DIRECTOR'S NAME
4. DIRECTOR'S NAME
5. DIRECTOR'S NAME
6. DIRECTOR'S NAME
7. DIRECTOR'S NAME
8. DIRECTOR'S NAME
9. DIRECTOR'S NAME
10. DIRECTOR'S NAME
11. DIRECTOR'S NAME
12. DIRECTOR'S NAME
13. DIRECTOR'S NAME
14. DIRECTOR'S NAME
15. DIRECTOR'S NAME
16. DIRECTOR'S NAME
17. DIRECTOR'S NAME
18. DIRECTOR'S NAME
19. DIRECTOR'S NAME
20. DIRECTOR'S NAME
21. DIRECTOR'S NAME
22. DIRECTOR'S NAME
23. DIRECTOR'S NAME
24. DIRECTOR'S NAME
25. DIRECTOR'S NAME
26. DIRECTOR'S NAME
27. DIRECTOR'S NAME
28. DIRECTOR'S NAME
29. DIRECTOR'S NAME
30. DIRECTOR'S NAME
31. DIRECTOR'S NAME
32. DIRECTOR'S NAME
33. DIRECTOR'S NAME
34. DIRECTOR'S NAME
35. DIRECTOR'S NAME
36. DIRECTOR'S NAME
37. DIRECTOR'S NAME
38. DIRECTOR'S NAME
39. DIRECTOR'S NAME
40. DIRECTOR'S NAME
41. DIRECTOR'S NAME
42. DIRECTOR'S NAME
43. DIRECTOR'S NAME
44. DIRECTOR'S NAME
45. DIRECTOR'S NAME
46. DIRECTOR'S NAME
47. DIRECTOR'S NAME
48. DIRECTOR'S NAME
49. DIRECTOR'S NAME
50. DIRECTOR'S NAME
51. DIRECTOR'S NAME
52. DIRECTOR'S NAME
53. DIRECTOR'S NAME
54. DIRECTOR'S NAME
55. DIRECTOR'S NAME
56. DIRECTOR'S NAME
57. DIRECTOR'S NAME
58. DIRECTOR'S NAME
59. DIRECTOR'S NAME
60. DIRECTOR'S NAME
61. DIRECTOR'S NAME
62. DIRECTOR'S NAME
63. DIRECTOR'S NAME
64. DIRECTOR'S NAME
65. DIRECTOR'S NAME
66. DIRECTOR'S NAME
67. DIRECTOR'S NAME
68. DIRECTOR'S NAME
69. DIRECTOR'S NAME
70. DIRECTOR'S NAME
71. DIRECTOR'S NAME
72. DIRECTOR'S NAME
73. DIRECTOR'S NAME
74. DIRECTOR'S NAME
75. DIRECTOR'S NAME
76. DIRECTOR'S NAME
77. DIRECTOR'S NAME
78. DIRECTOR'S NAME
79. DIRECTOR'S NAME
80. DIRECTOR'S NAME
81. DIRECTOR'S NAME
82. DIRECTOR'S NAME
83. DIRECTOR'S NAME
84. DIRECTOR'S NAME
85. DIRECTOR'S NAME
86. DIRECTOR'S NAME
87. DIRECTOR'S NAME
88. DIRECTOR'S NAME
89. DIRECTOR'S NAME
90. DIRECTOR'S NAME
91. DIRECTOR'S NAME
92. DIRECTOR'S NAME
93. DIRECTOR'S NAME
94. DIRECTOR'S NAME
95. DIRECTOR'S NAME
96. DIRECTOR'S NAME
97. DIRECTOR'S NAME
98. DIRECTOR'S NAME
99. DIRECTOR'S NAME
100. DIRECTOR'S NAME

ILLUSTRATIVE MASTERPLAN
FOR DA
DEVELOPMENT APPLICATION

PROJECT: DUDLEY ROAD WHITEBRIDGE
 142-146 DUDLEY ROAD & 2-4 KOPA
 STREET WHITEBRIDGE

CLIENT: KIM O'NEILL
 22 WOODSIDE ROAD, LONDON, NSW 2006
 PH: 02 9550 1234 & 02 9550 1235

STATUS: FOR DA

DATE: 01-12-2014

SCALE: 1:1000

LANDSCAPE ARCHITECTURE
 KIM O'NEILL
 22 WOODSIDE ROAD, LONDON, NSW 2006
 PH: 02 9550 1234 & 02 9550 1235

ARCHITECTURE, URBAN PLANNING
 KIM O'NEILL
 22 WOODSIDE ROAD, LONDON, NSW 2006
 PH: 02 9550 1234 & 02 9550 1235

SMITH & TANNES
 22 WOODSIDE ROAD, LONDON, NSW 2006
 PH: 02 9550 1234 & 02 9550 1235

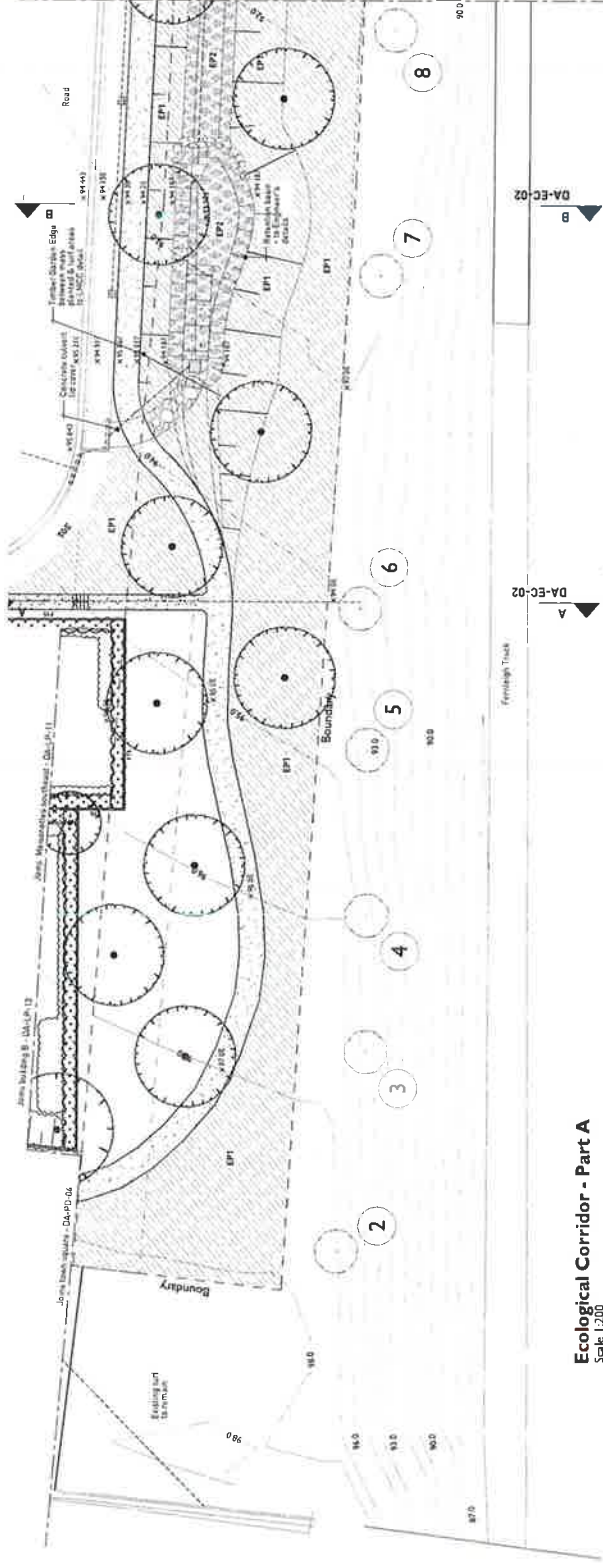
Ecological Zone Planting Schedule

Spn	Botanical Name	Common Name	Min. Hgt.	Stock Size
1r	Syzygium 'Casual'	Laguna	1.5m	100mm
2r	Callistemon citrinus	Cornia Bush	2.5m	100mm
3r	Callistemon citrinus	Pruning Tree	2.5m	100mm

Ecological Zone Planting Schedule

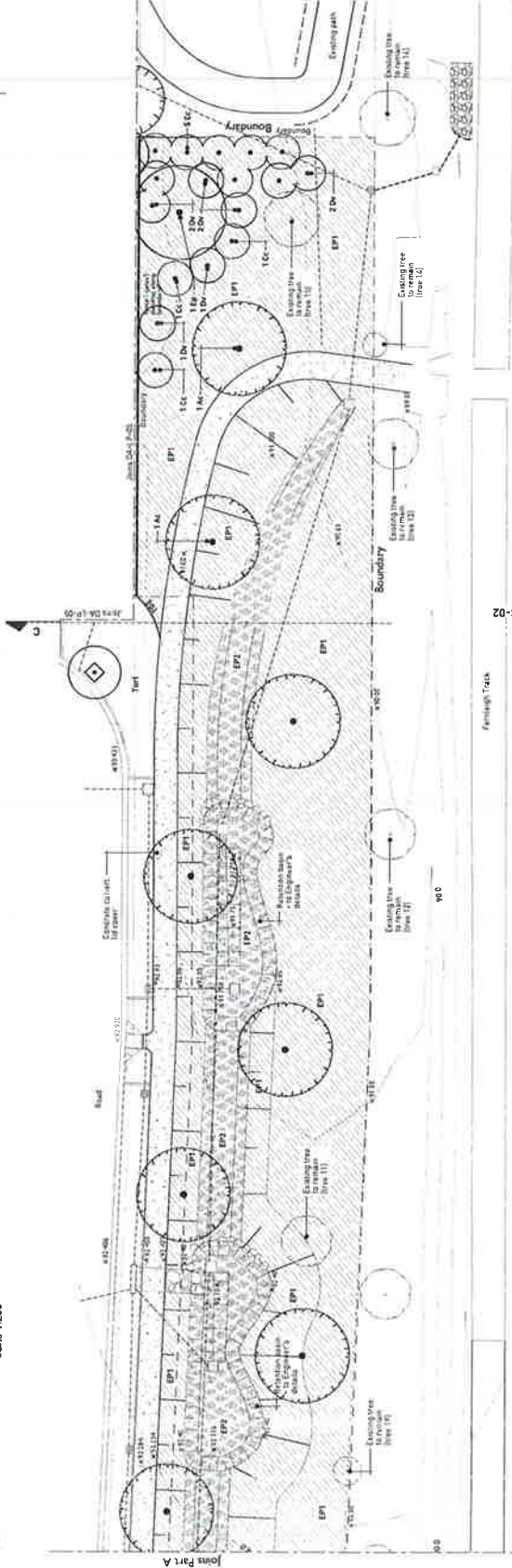
Spn	Botanical Name	Common Name	Min. Hgt.	Stock Size
4r	Albizia leonensis	Forest Oak	10.0m	100mm
5r	Albizia leonensis	Forest Oak	10.0m	100mm
6r	Albizia leonensis	Forest Oak	10.0m	100mm
7r	Albizia leonensis	Forest Oak	10.0m	100mm
8r	Albizia leonensis	Forest Oak	10.0m	100mm

Refer to Detail 2 for planting detail



Ecological Corridor - Part A

Scale 1:200



Ecological Corridor - Part B

Scale 1:200

Whitebridge Residential Development

DA-EC-02

DA-EC-02

DA-EC-01

DA-EC-01

MANFIELD URBAN

Ecological Corridor Landscaping
Lots 1, 2, 3 & 4 DP 435503, Lots 1, 2, 3 & 4 DP 463765,
and Lots 2 & 3 DP 26079, Dudley Road & Kopa Street, Whitebridge

DA-EC-01

DA-EC-02

DA-EC-01

DA-EC-02

DA-EC-01

DA-EC-02

Shrubs and Hedges

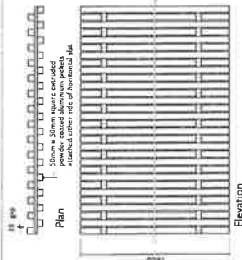
Common Name	Mat. Hgt.	Stack Size
<i>Cynodora</i>	1.0m	200mm
<i>Phlox</i>	1.0m	200mm
<i>Phlox</i>	2.5m	200mm
<i>Cynodora</i>	1.0m	200mm

Sym	Botanical
-----	-----------

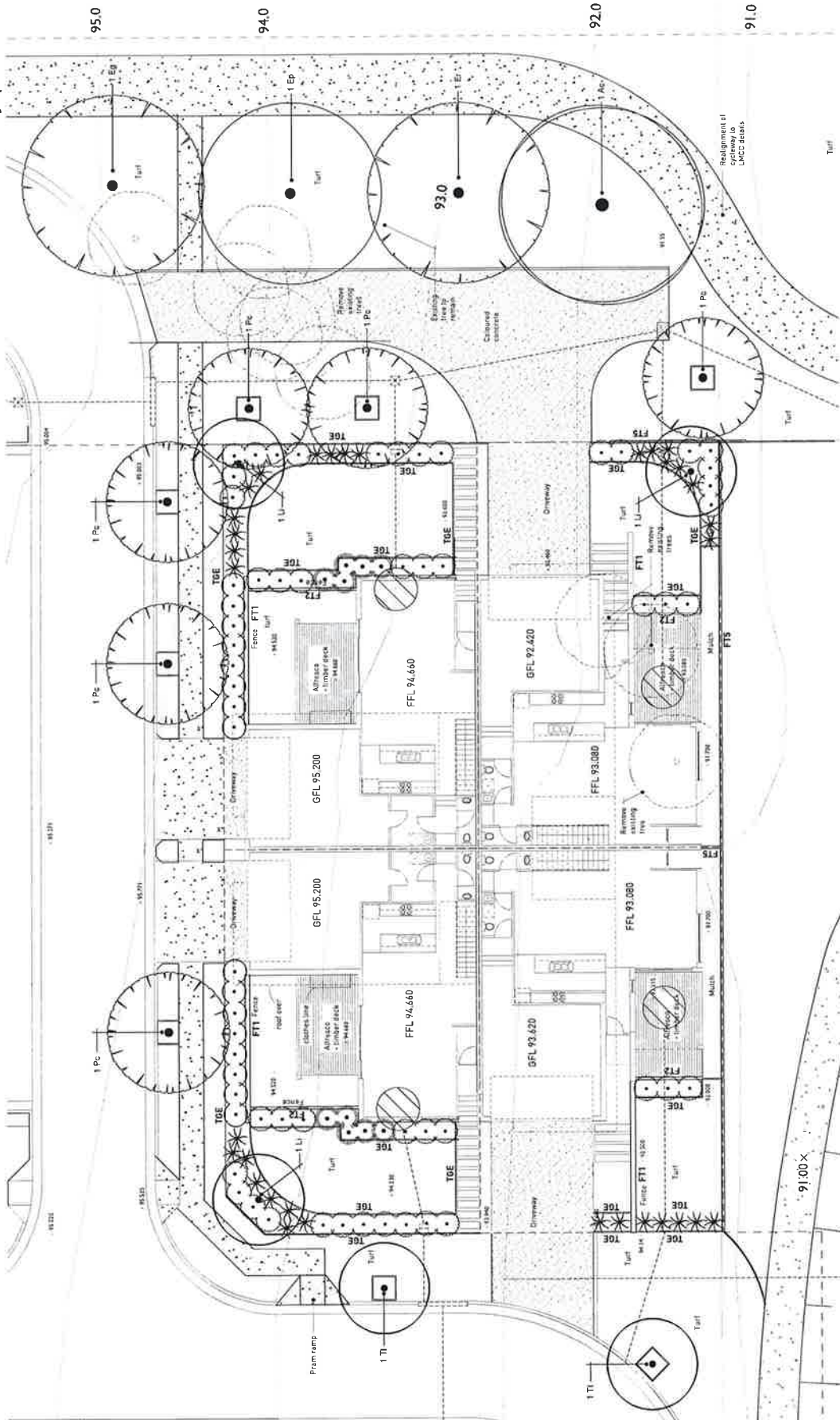
PC	<i>Pyrus calleryana</i> 'Chandless'	Gallery Pear	11.0m	100 litres
TL	<i>Tristanopsis laurina</i> 'Lucious'	Water Gum	8.0m	105 litres

Sym	Def
-----	-----

Ac	<i>Angophora costata</i>	Smoked-Like Apple	10.0m	25 litre
Eg	<i>Eucalyptus globuloides</i>	White Sausyspark	20.0m	25 litre
Ep	<i>Eucalyptus alparita</i>	Sydney Peppermint	20.0m	25 litre
Ei	<i>Eucalyptus racemosa</i>	Scribbly Gum	20.0m	25 litre
Li	<i>Lagerstroemia indica</i>	Crape Myrtle	6.0m	25 litre



resale 120



4

[illegible]

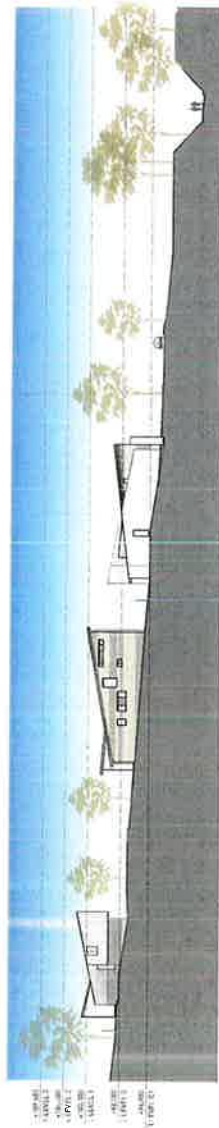
Existing tree to be removed

Coloured concrete in precast form

Portland gray brown finish
concrete is driveway easement
and supports in the public
domain to LMCC standard detail

Turf

pebble mulch



1. NOTED each of 12 drawings used "spurred" discussion only
2. Forth all shared information and/or experiences with 4 people
3. All responses to be in the written
4. Unwritten notes, the accepted words and general feeling. These notes help with drawing examples. Set out to be made (made by the workshop) on this "group drawing" and a set of prepared notes to be required or necessary
5. All work to be carried out in accordance with the Building Code of Australia
6. Everybody is encouraged to "play" with. Documents should not be used
7. Quantity is the point at the moment and whether a participant has to finish
8. 7 Learning

DOCUMENT
FULL SITE SECTIONS
 STAIRS
 FOR DA
 REVISION 8 22-10-2014
 11/10/14
DEVELOPMENT APPLICATION

PROJECT
DUDLEY ROAD WHITEBRIDGE
142-146 OUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE

CLIENT
SIN BUILDING CONSTRUCTIONS PTY LTD
22 Penrith Road Cardiff NSW 2285
p 02 956 8856 e info@sinbuilding.com.au



LANDSCAPE ARCHITECTURE
 1000 S. 10th St., Suite 200, Hoboken, NJ 07030
 Tel: 201.470.2582
 E: mail@manfieldurban.com, us

MANFIELD URBAN

1000 S. 10th St., Suite 200
 Hoboken, NJ 07030
 Tel: 201.470.2582
 E: mail@manfieldurban.com, us

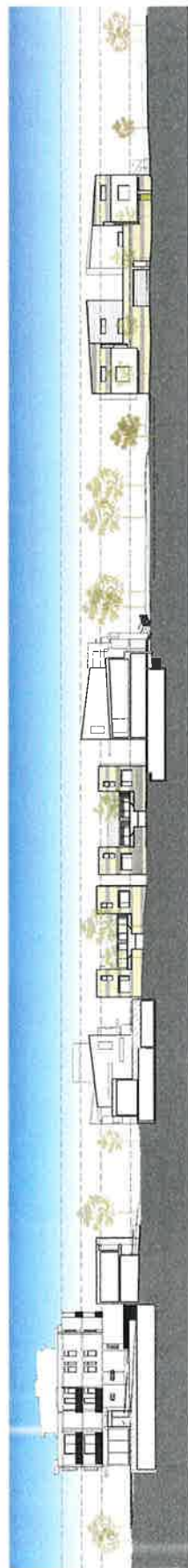
BUILDING DESIGN
 1000 S. 10th St., Suite 200
 Hoboken, NJ 07030
 Tel: 201.470.2582
 E: mail@manfieldurban.com, us

KIM CHOI PARTNERS LLP
 PO Box 287, Kerr Ranch, 7227
 E. 10th St., Suite 100, Aurora, CO 80015
 Tel: 303.471.1577
 E: kimchoi@kimchoi.com

WILL GOTTSHALL

1000 S. 10th St., Suite 200
 Hoboken, NJ 07030
 Tel: 201.470.2582
 E: mail@manfieldurban.com, us

[illegible]

[illegible]

FULL SITE SECTIONS

FOR DA

THE

1

DEVELOPMENT APPLICATION

DUDLEY ROAD WHITEBRIDGE
142-146 DUDLEY ROAD & 2-4 KOPA

STREET WHITEBRIDGE

CLIENT

ENL BUILDING CONSTRUCTIONS PTY LTD
22 Pennington Road, Cardiff NSW 2285

newworldbuilding.com 9988 7567 704

100

LANDSCAPE ARCHITECTURE
MANFIELD URBAN P/LD
Swan Street, Helson NSW 2271
02 4210 2892

888-822-6727
Email: Demetrius@adrian.com ad

© 2004 Blackwell Publishing Ltd *Journal of Internal Medicine* 255: 105–112

Kim Gorrish
KIM GORRISH CONSULTING DESIGN LTD.
PO BOX 2000, VANCOUVER, BC V6X 2T2
604.681.2272

Call 1-877-747-8288 or www.gm.com

SECRET

CS9 020 271 96 NTH

© 2022 E. coli. All rights reserved. www.e.coli.com

Nomineed Architect Peter Smith (Reg 7024)

[illegible]

----- 10M HEIGHT PLANE



STREET & ELEVATION

General Notes

1. NLRB's *Guidelines* are required documents only. Verily did not mention on site or in its communications or report documents to the architect.

2. Documents will be available to all parties and general public. Please do not mark any confidential information on documents. Verily will not be responsible for any information that is not properly marked as confidential.

3. Documents will be subject to the project owner's requirements for use, storage, and distribution. Documents will be subject to the following terms of use, storage, and distribution:

4. Documents were submitted to Copyright Clearance Center and should not be used contrary to the purpose of the work without written permission from South Atlantic.

DOCUMENT
DUDLEY RD - MAISONNETTE ELEVS

STATUS FOR DA

REVISION 7 (8-2008-2012)

STAGE 3 DEVELOPMENT APPLICATION

PROJECT
MIXED USE DEVELOPMENT
142-146 DUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE

CLIENT
SML BUILDING CONSTRUCTIONS PTY LTD
312 Glenfield Avenue, Glenfield, Auckland 1011, New Zealand

22400
02 4924 8866 E wsguidentifieding.com.2017

LANDSCAPE ARCHITECTURE
MANSFIELD URBAN PTY LTD
3 Swan Street, Henley NSW 2211
P 02 4300 5882
E info@mansfieldurban.com.au

BUILDING DESIGN
KIM GERRISH BUILDING DESIGN PTY LTD
PO BOX 10114
MELBOURNE VIC 3000
AUSTRALIA
TEL: 03 9594 0000
WWW.KIMGERRISH.COM

PO BOX 316 KATHAMPT, NSW 2323
 P 02 427 1129 E karnidagodes@gmail.com.au

ST
SMITH & TZANNE

[illegible]

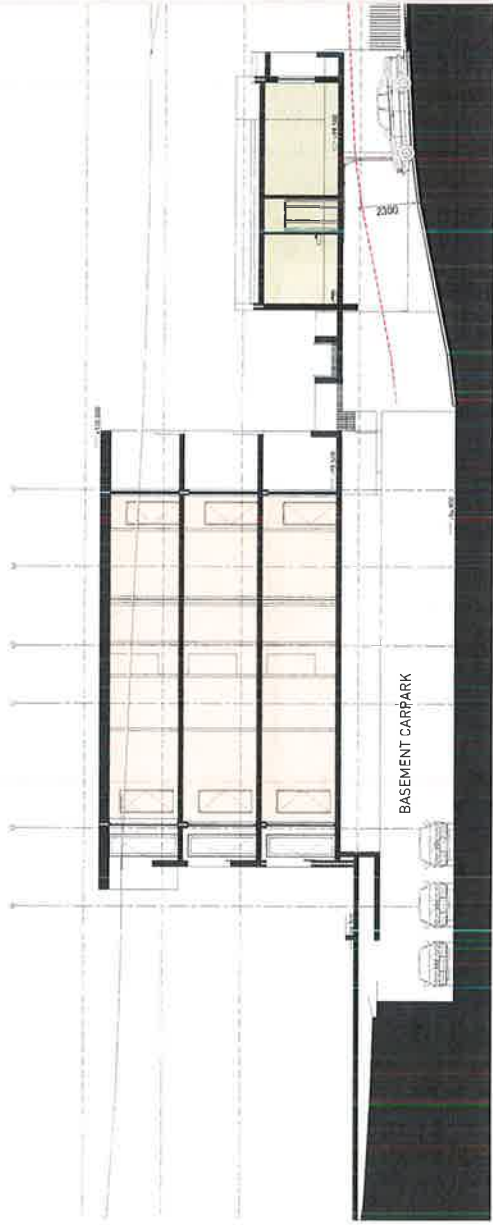
FOR DA
11-06-2014

MIXED USE DEVELOPMENT
142-146 DUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE

LAUNDRY & SERVICE CENTER
MASSFIELD URBAN PT.
 55 Essex St., 2nd Fl.,
 5 S. Essex St., 2nd Fl.,
 P.O. Box 5867
 55 Essex St., 2nd Fl.,
 5 S. Essex St., 2nd Fl.,
 P.O. Box 5867



1 SECTION 1



2 SECTION 2

1. All drawings are to be submitted to the Council for approval.
2. All drawings are to be submitted to the Council for approval.
3. All drawings are to be submitted to the Council for approval.
4. All drawings are to be submitted to the Council for approval.
5. All drawings are to be submitted to the Council for approval.
6. All drawings are to be submitted to the Council for approval.
7. All drawings are to be submitted to the Council for approval.
8. All drawings are to be submitted to the Council for approval.
9. All drawings are to be submitted to the Council for approval.
10. All drawings are to be submitted to the Council for approval.

DOCUMENT
DUDLEY RD - SECTIONS
FOR DA
DEVELOPMENT APPLICATION

PROJECT
MIXED USE DEVELOPMENT
142-146 DUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE
CLIENT
S&L BUILDING CONSTRUCTION PTY LTD
142-146 DUDLEY ROAD, WHITEBRIDGE, QUEENSLAND 4008

LANDSCAPE ARCHITECTURE
MANSFIELD URBAN
LANDSCAPE ARCHITECTURE
MANSFIELD URBAN PTY LTD
142-146 DUDLEY ROAD, WHITEBRIDGE, QUEENSLAND 4008
07 5555 1234
www.mansfieldurban.com.au

ARCHITECTURE
SMITH & TANNER
ARCHITECTURE
SMITH & TANNER PTY LTD
142-146 DUDLEY ROAD, WHITEBRIDGE, QUEENSLAND 4008
07 5555 1234
www.smithandtanner.com.au

41	ALPHABETICALLY BY NAME	42	ALPHABETICALLY BY NAME
43	ALPHABETICALLY BY NAME	44	ALPHABETICALLY BY NAME
45	ALPHABETICALLY BY NAME	46	ALPHABETICALLY BY NAME
47	ALPHABETICALLY BY NAME	48	ALPHABETICALLY BY NAME
49	ALPHABETICALLY BY NAME	50	ALPHABETICALLY BY NAME
51	ALPHABETICALLY BY NAME	52	ALPHABETICALLY BY NAME
53	ALPHABETICALLY BY NAME	54	ALPHABETICALLY BY NAME
55	ALPHABETICALLY BY NAME	56	ALPHABETICALLY BY NAME
57	ALPHABETICALLY BY NAME	58	ALPHABETICALLY BY NAME
59	ALPHABETICALLY BY NAME	60	ALPHABETICALLY BY NAME
61	ALPHABETICALLY BY NAME	62	ALPHABETICALLY BY NAME
63	ALPHABETICALLY BY NAME	64	ALPHABETICALLY BY NAME
65	ALPHABETICALLY BY NAME	66	ALPHABETICALLY BY NAME
67	ALPHABETICALLY BY NAME	68	ALPHABETICALLY BY NAME
69	ALPHABETICALLY BY NAME	70	ALPHABETICALLY BY NAME
71	ALPHABETICALLY BY NAME	72	ALPHABETICALLY BY NAME
73	ALPHABETICALLY BY NAME	74	ALPHABETICALLY BY NAME
75	ALPHABETICALLY BY NAME	76	ALPHABETICALLY BY NAME
77	ALPHABETICALLY BY NAME	78	ALPHABETICALLY BY NAME
79	ALPHABETICALLY BY NAME	80	ALPHABETICALLY BY NAME
81	ALPHABETICALLY BY NAME	82	ALPHABETICALLY BY NAME
83	ALPHABETICALLY BY NAME	84	ALPHABETICALLY BY NAME
85	ALPHABETICALLY BY NAME	86	ALPHABETICALLY BY NAME
87	ALPHABETICALLY BY NAME	88	ALPHABETICALLY BY NAME
89	ALPHABETICALLY BY NAME	90	ALPHABETICALLY BY NAME
91	ALPHABETICALLY BY NAME	92	ALPHABETICALLY BY NAME
93	ALPHABETICALLY BY NAME	94	ALPHABETICALLY BY NAME
95	ALPHABETICALLY BY NAME	96	ALPHABETICALLY BY NAME
97	ALPHABETICALLY BY NAME	98	ALPHABETICALLY BY NAME
99	ALPHABETICALLY BY NAME	100	ALPHABETICALLY BY NAME



REQUIREMENT
LOT 2 - ELEVATIONS
1547.0
FOR DA
OFFICIAL: A 10-08-2014
15429
DEVELOPMENT APPLICATION

CLIFFNT
SIN BUILDING CONSTRUCTIONS PTY LTD
27 Parkside Road, Cnr N/150 7295
P 02 4754 1866 E enquiries@sinbuilding.com.au

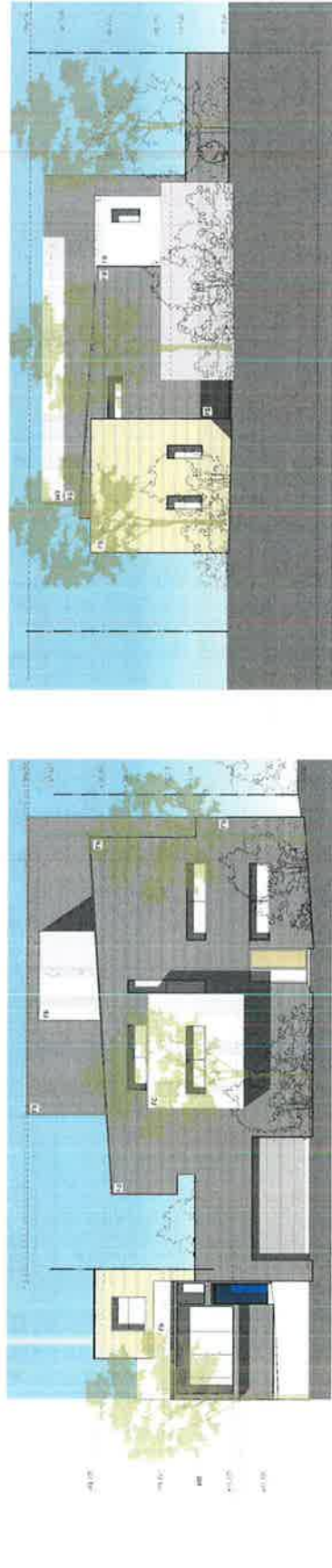
MANHFIELD URBAN
 100% **RENEWABLE**
 100% **RECYCLED**
 100% **PAINTED**
 100% **PROUDLY PRINTED**

Kim Gorrieh
 100% **RENEWABLE**
 100% **RECYCLED**
 100% **PAINTED**
 100% **PROUDLY PRINTED**

LANDSCAPE ARCHITECTURE
 5 Swan Street, URBAN PTY LTD
 P 02 9202 5807
 E enquiries@urban.com.au

BUILDING DESIGN
 KIM GORRIEH BUILDING DESIGN PTY LTD
 PO BOX 2681, MARRI PARK NSW 2207
 P 02 9202 1229 E info@kimgorrieh.com.au

SMITH & TZANNES
ARCHITECTURE URBAN PLANNING
AR 96 127 220 692
MUTUAL MELLORAY ASSOCIATES INC. 2015
P 22 795 1622 E-MAIL: SMITH@STZANNES.COM
WWW.STZANNES.COM
New York City Architect Peter Smith (Pig 7024)



4 LOT 3 - SOUTH-EAST ELEVATION

- SELECTIONS LEGEND**
- 40X150 TS SELECTING SCHEDULE FOR MORE DETAIL
 - AS ALUMINUM FINISHES
 - 9 BELLOTTI FINISHES
 - 10 BELLOTTI FINISHES
 - 11 BELLOTTI FINISHES
 - 12 BELLOTTI FINISHES
 - 13 BELLOTTI FINISHES
 - 14 BELLOTTI FINISHES
 - 15 BELLOTTI FINISHES
 - 16 BELLOTTI FINISHES
 - 17 BELLOTTI FINISHES
 - 18 BELLOTTI FINISHES
 - 19 BELLOTTI FINISHES
 - 20 BELLOTTI FINISHES
 - 21 BELLOTTI FINISHES
 - 22 BELLOTTI FINISHES
 - 23 BELLOTTI FINISHES
 - 24 BELLOTTI FINISHES
 - 25 BELLOTTI FINISHES
 - 26 BELLOTTI FINISHES
 - 27 BELLOTTI FINISHES
 - 28 BELLOTTI FINISHES
 - 29 BELLOTTI FINISHES
 - 30 BELLOTTI FINISHES
 - 31 BELLOTTI FINISHES
 - 32 BELLOTTI FINISHES
 - 33 BELLOTTI FINISHES
 - 34 BELLOTTI FINISHES
 - 35 BELLOTTI FINISHES
 - 36 BELLOTTI FINISHES
 - 37 BELLOTTI FINISHES
 - 38 BELLOTTI FINISHES
 - 39 BELLOTTI FINISHES
 - 40 BELLOTTI FINISHES
 - 41 BELLOTTI FINISHES
 - 42 BELLOTTI FINISHES
 - 43 BELLOTTI FINISHES
 - 44 BELLOTTI FINISHES
 - 45 BELLOTTI FINISHES
 - 46 BELLOTTI FINISHES
 - 47 BELLOTTI FINISHES
 - 48 BELLOTTI FINISHES
 - 49 BELLOTTI FINISHES
 - 50 BELLOTTI FINISHES
 - 51 BELLOTTI FINISHES
 - 52 BELLOTTI FINISHES
 - 53 BELLOTTI FINISHES
 - 54 BELLOTTI FINISHES
 - 55 BELLOTTI FINISHES
 - 56 BELLOTTI FINISHES
 - 57 BELLOTTI FINISHES
 - 58 BELLOTTI FINISHES
 - 59 BELLOTTI FINISHES
 - 60 BELLOTTI FINISHES
 - 61 BELLOTTI FINISHES
 - 62 BELLOTTI FINISHES
 - 63 BELLOTTI FINISHES
 - 64 BELLOTTI FINISHES
 - 65 BELLOTTI FINISHES
 - 66 BELLOTTI FINISHES
 - 67 BELLOTTI FINISHES
 - 68 BELLOTTI FINISHES
 - 69 BELLOTTI FINISHES
 - 70 BELLOTTI FINISHES
 - 71 BELLOTTI FINISHES
 - 72 BELLOTTI FINISHES
 - 73 BELLOTTI FINISHES
 - 74 BELLOTTI FINISHES
 - 75 BELLOTTI FINISHES
 - 76 BELLOTTI FINISHES
 - 77 BELLOTTI FINISHES
 - 78 BELLOTTI FINISHES
 - 79 BELLOTTI FINISHES
 - 80 BELLOTTI FINISHES
 - 81 BELLOTTI FINISHES
 - 82 BELLOTTI FINISHES
 - 83 BELLOTTI FINISHES
 - 84 BELLOTTI FINISHES
 - 85 BELLOTTI FINISHES
 - 86 BELLOTTI FINISHES
 - 87 BELLOTTI FINISHES
 - 88 BELLOTTI FINISHES
 - 89 BELLOTTI FINISHES
 - 90 BELLOTTI FINISHES
 - 91 BELLOTTI FINISHES
 - 92 BELLOTTI FINISHES
 - 93 BELLOTTI FINISHES
 - 94 BELLOTTI FINISHES
 - 95 BELLOTTI FINISHES
 - 96 BELLOTTI FINISHES
 - 97 BELLOTTI FINISHES
 - 98 BELLOTTI FINISHES
 - 99 BELLOTTI FINISHES
 - 100 BELLOTTI FINISHES

LOT 3 - ELEVATIONS
MIXED USE DEVELOPMENT
142-146 DUDLEY ROAD & 2-4 KOFA STREET WHITEBRIDGE
FOR DA
DEVELOPMENT APPLICATION

CLIENT: **SMITH & TANNES**
 277 WILSON ROAD, SUITE 201, WHITEBRIDGE, QLD 4018
 P 07 5561 8888 E info@smithandtannes.com.au

ARCHITECT: **SMITH & TANNES**
 277 WILSON ROAD, SUITE 201, WHITEBRIDGE, QLD 4018
 P 07 5561 8888 E info@smithandtannes.com.au

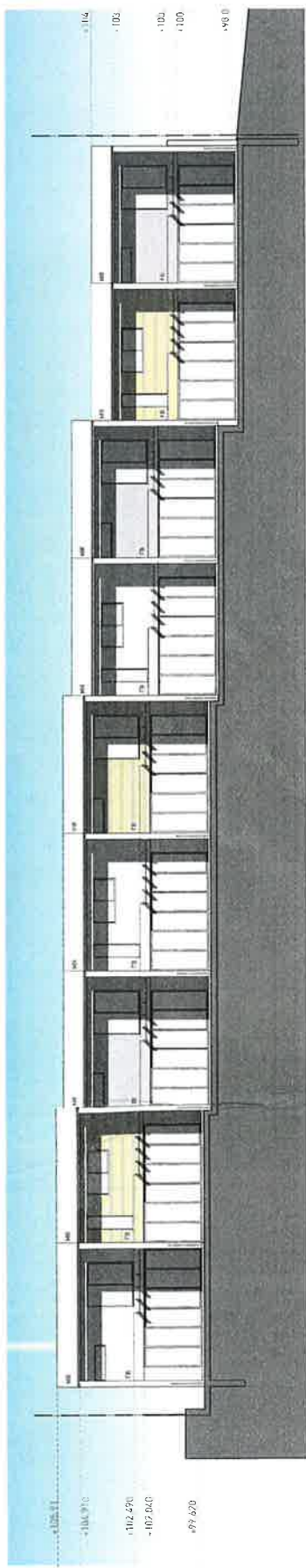
LANDSCAPE ARCHITECT: **MANFIELD URBAN**
 MANFIELD URBAN PTY LTD
 1/100 DUDLEY ROAD, SUITE 201, WHITEBRIDGE, QLD 4018
 P 07 5561 8888 E info@manfieldurban.com.au

BUILDING DESIGN: **MANFIELD URBAN PTY LTD**
 1/100 DUDLEY ROAD, SUITE 201, WHITEBRIDGE, QLD 4018
 P 07 5561 8888 E info@manfieldurban.com.au

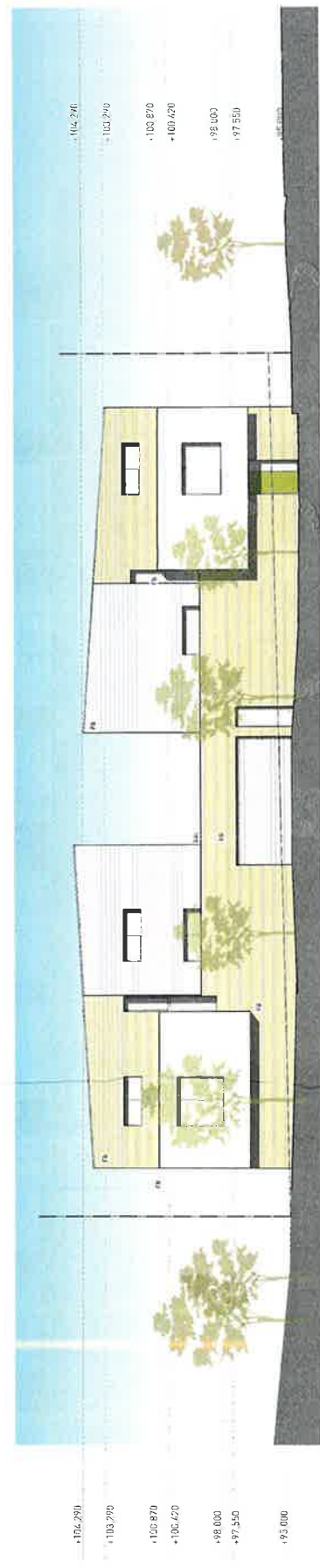
ARCHITECTURE: **SMITH & TANNES**
 277 WILSON ROAD, SUITE 201, WHITEBRIDGE, QLD 4018
 P 07 5561 8888 E info@smithandtannes.com.au



1 NORTHEAST ELEVATION



2 S-W INTERNAL ELEVATION



3 SOUTH-EAST ELEVATION

- SELECTIONS LEGEND**
- REFER TO SELECTIONS SCHEDULE FOR MORE DETAILS
- AL ALUMINUM FRAMED DOOR
 - BL BLACK
 - BR BRICK
 - CL CLADDING
 - GL GLASS
 - GR GRASS
 - HA HARDWARE
 - LA LAUNDRY
 - LI LINEN
 - LO LIVING
 - MA MAINTENANCE
 - ME MECHANICAL
 - MT METAL
 - PA PAINT
 - PL PLASTER
 - PO POOL
 - PR PRINTER
 - RE REFRIGERATOR
 - ST STAIRS
 - TE TELEVISION
 - TR TRAILER
 - WA WALL
 - WC WASHROOM
 - WD WOOD
 - WH WHOLESALE
 - WI WINDOW
 - WO WOODWORK
 - WV WALL
 - WY WYLL
 - WZ WZ

Green & White
1. Verify all dimensions and materials for the building.
2. Drawing is for the building and is not to be used for any other purpose.
3. Drawing is for the building and is not to be used for any other purpose.
4. Drawing is for the building and is not to be used for any other purpose.
5. Drawing is for the building and is not to be used for any other purpose.
6. Drawing is for the building and is not to be used for any other purpose.

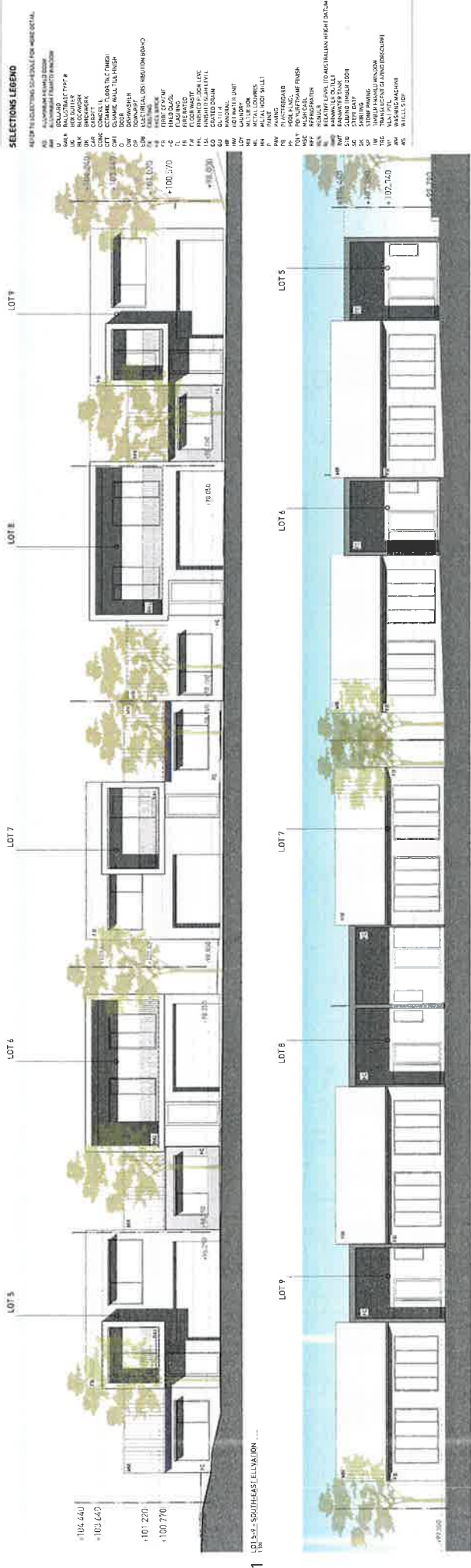
LOT 4 - ELEVATIONS - SHEET 1
FOR DA
REF: 14-026 DA-A-208
15-04-2014
DEVELOPMENT APPLICATION

MIXED USE DEVELOPMENT
142-144 DUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE
ELEVATION
27-04-2014
14-026 DA-A-208

LANDSCAPE ARCHITECTURE
14-026 DA-A-208
15-04-2014
14-026 DA-A-208

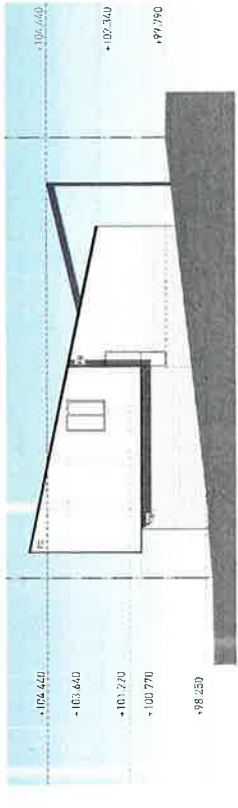
ARCHITECTURE
14-026 DA-A-208
15-04-2014
14-026 DA-A-208

SMITH & TANNERS

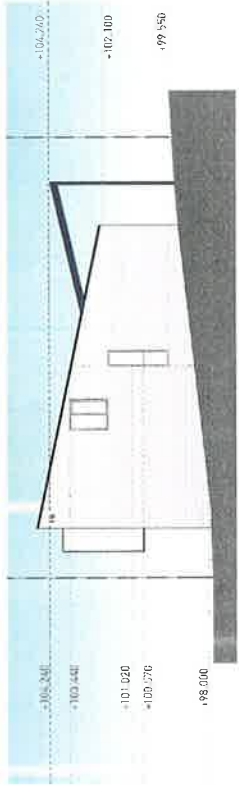


1 LOT 5 - SOUTH-EAST ELEVATION

2 LOT 6 - NORTH-EAST ELEVATION



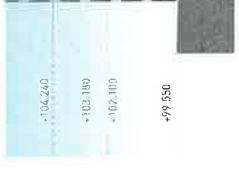
3 LOT 6 - NORTH-EAST ELEVATION



5 LOT 7 - NORTH-EAST ELEVATION



4 LOT 5 - SOUTH-WEST ELEVATION



6 LOT 7 - SOUTH-WEST ELEVATION

General Notes

1. All drawings are to be read in conjunction with the following:
2. The site plan and the site plan notes.
3. The site plan and the site plan notes.
4. The site plan and the site plan notes.
5. The site plan and the site plan notes.
6. The site plan and the site plan notes.
7. The site plan and the site plan notes.
8. The site plan and the site plan notes.
9. The site plan and the site plan notes.
10. The site plan and the site plan notes.

LOT 5, 6, 7, 8 & 9 ELEVATIONS

FOR DA

DEVELOPMENT APPLICATION

MIXED USE DEVELOPMENT

142-146 DUDLEY ROAD & 2-4 KOPA STREET WHITEBRIDGE

CITY OF WHITEBRIDGE

2777777777

2777777777

2777777777

LANDSCAPE ARCHITECTURE

142-146 DUDLEY ROAD & 2-4 KOPA STREET WHITEBRIDGE

2777777777

2777777777

2777777777

SMITH & TANNES

142-146 DUDLEY ROAD & 2-4 KOPA STREET WHITEBRIDGE

2777777777

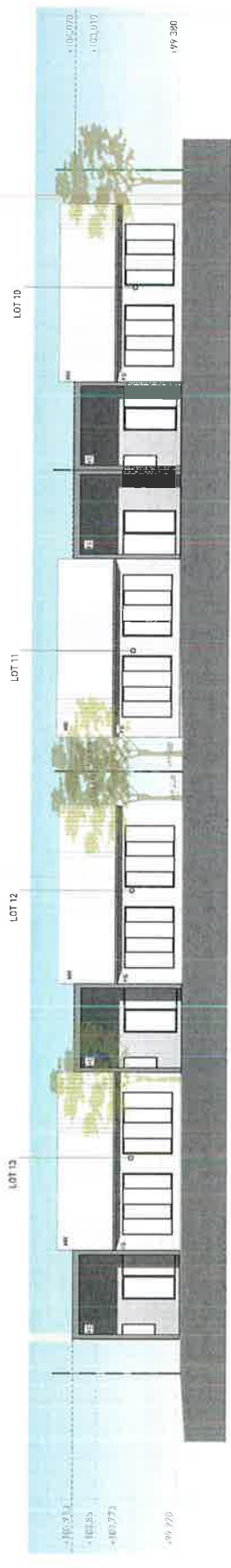
2777777777

2777777777

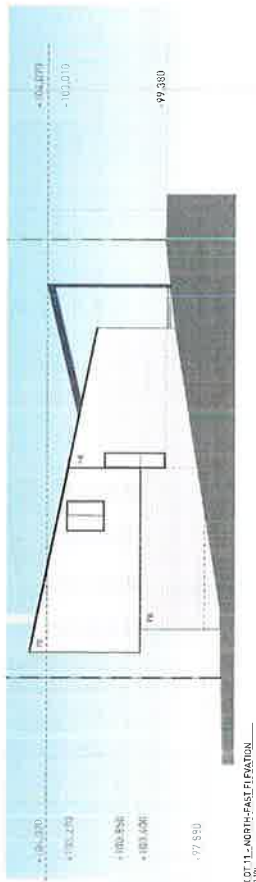
SELECTIONS LEGEND

[illegible]

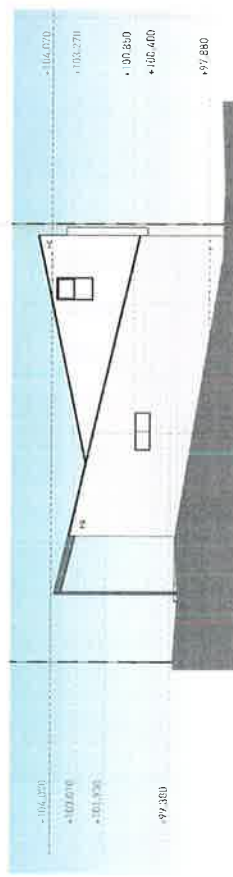
LOI 10-13 - SOUTH-EAST ILLINOIS™



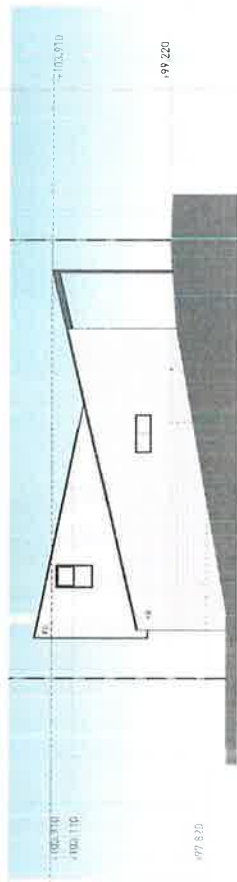
LOT 10-13 - NORTH-WEST ELEVATION



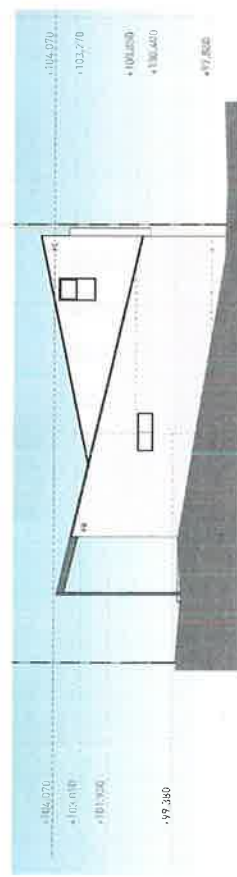
LOT 11 - NORTH-FAST FILVATION



DOT 12 - SOUTH-WEST FLORIDA



LOT 13 - NORTH-EAST ELEVATION



LOT 10 - SOUTH-WEST ELEVATION

General Notes

1. ALLUM scale all drawings and figures from 1:1000 only.
2. For all all measurements refer to the following intervals: 100m
3. Requests to be accepted
4. Drawing to be approved and general set out. These drawings are not to be drawn for out to be undertaken by surveyor on site. Since drawings are to be prepared where required is necessary.
5. All works to be carried out in accordance with the Building Code of Australia.
6. Copyright to be retained. Documents should not be used for any other purpose of the building, therefore, retained from Smith

DOCUMENT#
LOT 10 - 13 ELEVATIONS

FOR DA

1000

176

PROJECT
MIXED USE DEVELOPMENT
142-146 DUDLEY ROAD & 2-4 KOPA
STREET WHITEBRIDGE

CLIENT
SNL BUILDING CONSTRUCTIONS PTY LTD
22 Pendlebury Road, Camell NSW 2285

DEVELOPMENT APPLICATION

LANDSCAPE ARCHITECTURE
MANSFIELD URBAN PTY LTD

Sydney Street, London NSW 2221
 + 61 2 4920 5882
 i.mun@munshoolar.com.au

BUILDING DESIGN
 MICHELE GERINICH BUILDING DESIGN
 PO Box 286 Kurni Kurni NSW 2232

002 6937 1529 E kinshasa@bde.org

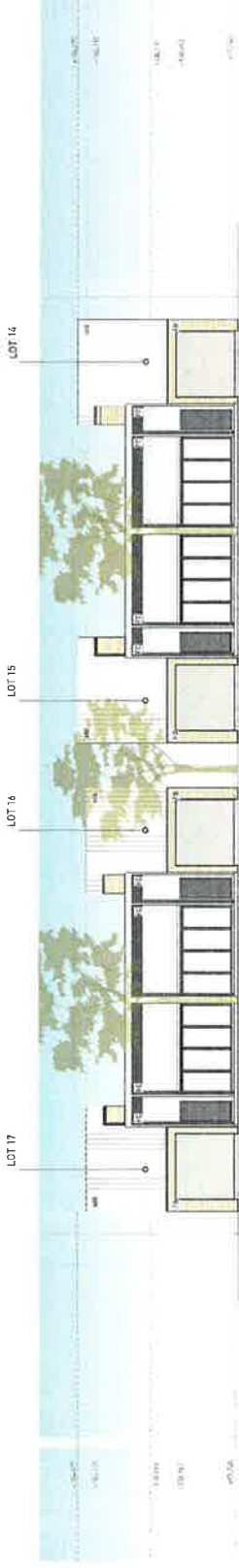
1000

STZ
ARCHITECTURE URBAN PLANNING
1000 15th St NW
N.W. 15 147 220-1111
1510 15th NW, Suite 1100
202-638-1000 Fax 202-638-1005
http://www.stz.com

SELECTIONS LEGEND

REFER SELECTIONS TO - CONCRETE FINISHES

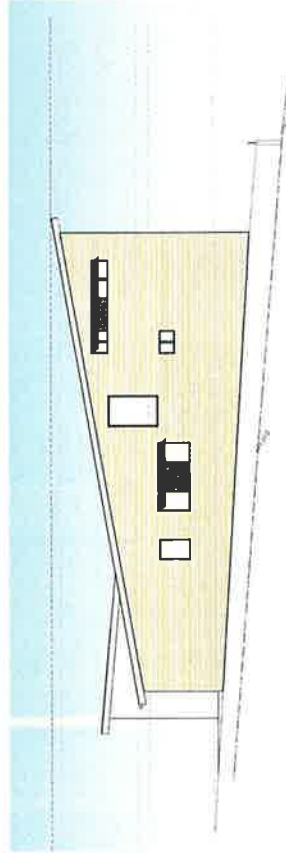
100	ALUMINIUM FRAME WINDOW
101	ALUMINIUM FRAME WINDOW
102	ALUMINIUM FRAME WINDOW
103	ALUMINIUM FRAME WINDOW
104	ALUMINIUM FRAME WINDOW
105	ALUMINIUM FRAME WINDOW
106	ALUMINIUM FRAME WINDOW
107	ALUMINIUM FRAME WINDOW
108	ALUMINIUM FRAME WINDOW
109	ALUMINIUM FRAME WINDOW
110	ALUMINIUM FRAME WINDOW
111	ALUMINIUM FRAME WINDOW
112	ALUMINIUM FRAME WINDOW
113	ALUMINIUM FRAME WINDOW
114	ALUMINIUM FRAME WINDOW
115	ALUMINIUM FRAME WINDOW
116	ALUMINIUM FRAME WINDOW
117	ALUMINIUM FRAME WINDOW
118	ALUMINIUM FRAME WINDOW
119	ALUMINIUM FRAME WINDOW
120	ALUMINIUM FRAME WINDOW
121	ALUMINIUM FRAME WINDOW
122	ALUMINIUM FRAME WINDOW
123	ALUMINIUM FRAME WINDOW
124	ALUMINIUM FRAME WINDOW
125	ALUMINIUM FRAME WINDOW
126	ALUMINIUM FRAME WINDOW
127	ALUMINIUM FRAME WINDOW
128	ALUMINIUM FRAME WINDOW
129	ALUMINIUM FRAME WINDOW
130	ALUMINIUM FRAME WINDOW
131	ALUMINIUM FRAME WINDOW
132	ALUMINIUM FRAME WINDOW
133	ALUMINIUM FRAME WINDOW
134	ALUMINIUM FRAME WINDOW
135	ALUMINIUM FRAME WINDOW
136	ALUMINIUM FRAME WINDOW
137	ALUMINIUM FRAME WINDOW
138	ALUMINIUM FRAME WINDOW
139	ALUMINIUM FRAME WINDOW
140	ALUMINIUM FRAME WINDOW
141	ALUMINIUM FRAME WINDOW
142	ALUMINIUM FRAME WINDOW
143	ALUMINIUM FRAME WINDOW
144	ALUMINIUM FRAME WINDOW
145	ALUMINIUM FRAME WINDOW
146	ALUMINIUM FRAME WINDOW
147	ALUMINIUM FRAME WINDOW
148	ALUMINIUM FRAME WINDOW
149	ALUMINIUM FRAME WINDOW
150	ALUMINIUM FRAME WINDOW
151	ALUMINIUM FRAME WINDOW
152	ALUMINIUM FRAME WINDOW
153	ALUMINIUM FRAME WINDOW
154	ALUMINIUM FRAME WINDOW
155	ALUMINIUM FRAME WINDOW
156	ALUMINIUM FRAME WINDOW
157	ALUMINIUM FRAME WINDOW
158	ALUMINIUM FRAME WINDOW
159	ALUMINIUM FRAME WINDOW
160	ALUMINIUM FRAME WINDOW
161	ALUMINIUM FRAME WINDOW
162	ALUMINIUM FRAME WINDOW
163	ALUMINIUM FRAME WINDOW
164	ALUMINIUM FRAME WINDOW
165	ALUMINIUM FRAME WINDOW
166	ALUMINIUM FRAME WINDOW
167	ALUMINIUM FRAME WINDOW
168	ALUMINIUM FRAME WINDOW
169	ALUMINIUM FRAME WINDOW
170	ALUMINIUM FRAME WINDOW
171	ALUMINIUM FRAME WINDOW
172	ALUMINIUM FRAME WINDOW
173	ALUMINIUM FRAME WINDOW
174	ALUMINIUM FRAME WINDOW
175	ALUMINIUM FRAME WINDOW
176	ALUMINIUM FRAME WINDOW
177	ALUMINIUM FRAME WINDOW
178	ALUMINIUM FRAME WINDOW
179	ALUMINIUM FRAME WINDOW
180	ALUMINIUM FRAME WINDOW
181	ALUMINIUM FRAME WINDOW
182	ALUMINIUM FRAME WINDOW
183	ALUMINIUM FRAME WINDOW
184	ALUMINIUM FRAME WINDOW
185	ALUMINIUM FRAME WINDOW
186	ALUMINIUM FRAME WINDOW
187	ALUMINIUM FRAME WINDOW
188	ALUMINIUM FRAME WINDOW
189	ALUMINIUM FRAME WINDOW
190	ALUMINIUM FRAME WINDOW
191	ALUMINIUM FRAME WINDOW
192	ALUMINIUM FRAME WINDOW
193	ALUMINIUM FRAME WINDOW
194	ALUMINIUM FRAME WINDOW
195	ALUMINIUM FRAME WINDOW
196	ALUMINIUM FRAME WINDOW
197	ALUMINIUM FRAME WINDOW
198	ALUMINIUM FRAME WINDOW
199	ALUMINIUM FRAME WINDOW
200	ALUMINIUM FRAME WINDOW



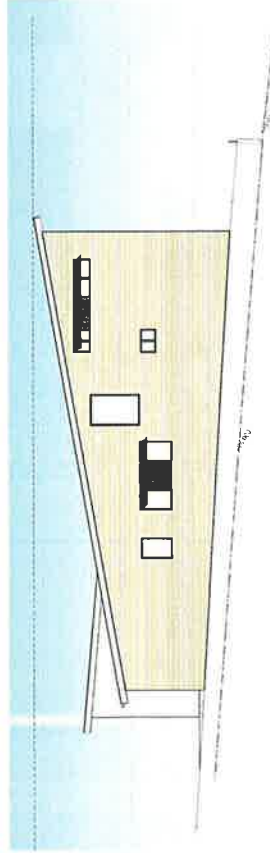
1 LOT 14-17 - NORTHWEST ELEVATION



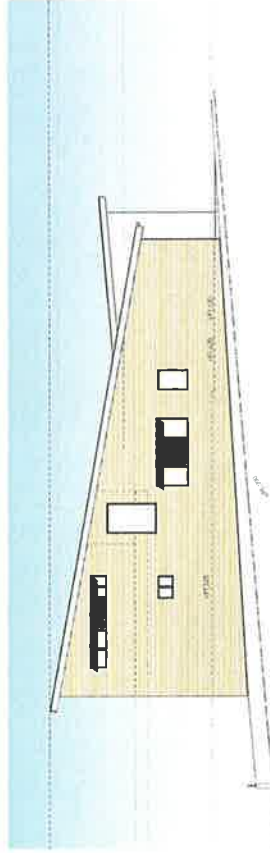
2 LOT 14-17 - SOUTHEAST ELEVATION



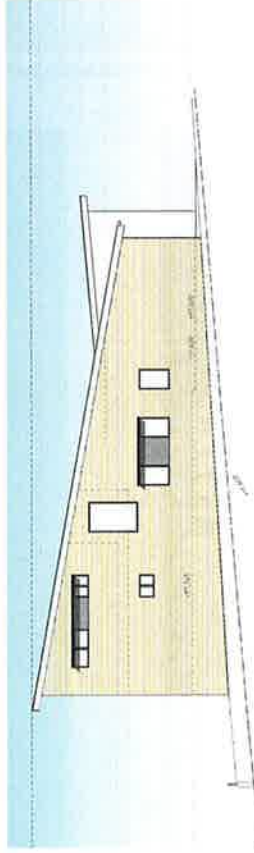
3 LOT 14 - SOUTHWEST ELEVATION



5 LOT 14 - SOUTHWEST ELEVATION



4 LOT 15 - SOUTH-EAST ELEVATION



6 LOT 17 - SOUTH-EAST ELEVATION

1. Verify all dimensions, materials, and finishes are correct.
2. Verify all dimensions, materials, and finishes are correct.
3. Verify all dimensions, materials, and finishes are correct.
4. Verify all dimensions, materials, and finishes are correct.
5. Verify all dimensions, materials, and finishes are correct.
6. Verify all dimensions, materials, and finishes are correct.

PROJECT
MIXED USE DEVELOPMENT
 142-146 DUDLEY ROAD & 2-4 KOPA
 STREET WHITEBRIDGE
 21 DUDLEY ROAD, COORANG VIC 3218
 344 BUILDING CONSTRUCTING PTY LTD
 21 DUDLEY ROAD, COORANG VIC 3218
 03 9471 1111 | 03 9471 1111

FOR DA
 15/04/2024
 15/04/2024

DEVELOPMENT APPLICATION

MANFIELD URBAN
 LANDSCAPE ARCHITECTS
 100-102 Main Street, Manfield VIC 3221
 03 5461 1111 | 03 5461 1111

SMITH & TOWNES
 ARCHITECTS URBAN PLANNING
 100-102 Main Street, Manfield VIC 3221
 03 5461 1111 | 03 5461 1111

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



FOR DA

ACTUATION: 11/12/2014

MANFIELD URBAN

LANDSCAPE ARCHITECTURE
MANFIELD URBAN P/LD
505 Sturt Street, Melbourne VIC 3007
P 08 9202 3682
E mail@manfieldurban.com.au

BUILDING DESIGN
KIM HIRSHI BUILDING CITY LTD
PO Box 306 Mount North NSW 2237
T 02 2397 1525 E kym@kimbh.com.au

ARCHITECTURE URBAN PLANNING
AUG 9 10 2 020 093
M1717 McFoy St Adelaide NSW 5011
P 02 9516 2022 E enquiries@architects.com.au
www.architects.com.au
Barnard Architects Pty Ltd [Reg]



