BUILT FORM & URBAN DESIGN REPORT

KOLOTEX & LABELCRAFT SITE
22, 30-40 GEORGE STREET, LEICHHARDT

PREPARED FOR CATYLIS PROPERTIES PTY LTD
ON BEHALF OF KGS (VIC) PTY LTD

catylis properties
intelligent solutions

28 May 2013

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THIS REPORT HAS BEEN COMPILED BY THE FOLLOWING REID CAMPBELL PERSONNEL:
Director Geoff Shaw

REFERENCE DOCUMENTS:
Urbis Planning Proposal dated 18th January 2012 (Urbis Report)
Urbis Open Space Study dated November 2012 (Open Space Report)
McLaren Traffic Engineering Transport, Traffic and Parking Impact Assessment dated October 2012 (Traffic Report)
VIPAC Masterplan - Environmental Noise Impact Assessment dated 12th June 2010 (Acoustic Report)

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executive summary

Reid Campbell were appointed by Catylis Properties Pty Ltd on behalf of KGS (VIC) Pty Ltd to develop a Built Form and Urban Design Report for the proposed redevelopment of the Kolotex and Labelcraft sites ('the site'), at 22, 30-40 George Street, Leichhardt.

This report establishes a set of design parameters to outline the objectives, performance benchmarks and minimum standards for the future development of the site, and includes a review of the opportunities and constraints associated with the development of the site in consideration of the surrounding precinct.

The ratification of the principles proposed within this report will lead to the formation of a site specific Local Environment Plan (LEP) and Development Control Plan (DCP), defining the structure of any future development.

Following an Urban Design Presentation delivered to the Department of Planning and Infrastructure (DoPI) on Thursday 16th August 2012, Reid Campbell have prepared this report to respond specifically to the "Scope of Technical Studies" issued by the DoPI on 27 August 2012 with regard to the site, in that the Built Form and Urban Design Report:

1. *Identifies and justifies the most appropriate mix and distribution of land uses, built form controls and areas of public domain to inform future development on the site. This is to be Informed by an analysis of the constraints and opportunities of the site and surrounding area including:*
   - *Density and proposed floor space ratios;*
   - *Building envelopes;*
   - *Heights;*
   - *Design quality;*
   - *Streetscapes;*
   - *Accessibility within the site and to surrounding areas including integration with public transport;*
   - *Connections to existing social infrastructure, including an assessment of the adequacy of existing local services and infrastructure to support the proposed land uses and density controls;*
   - *Solar access and shadow impacts;*
   - *Acoustic and visual privacy;*
   - *View loss; and*
   - *Measures to minimise or manage potential impacts of the development on adjoining properties / land uses.*

2. *Provides visual analysis of the proposed built form, including photomontages and proposed land use diagrams;*

3. *Review existing and proposed open space in the surrounding area, and provides an analysis of proposed open space provisions required for the sites redevelopment.*

The Design Principles identified in this Report seek to justify a 2:1 FSR, a 32m maximum height above natural ground level or flood planning level and building envelopes developed through analysis of site constraints, visual impacts, shadow impacts, optimal open space, and site connections. To this end, the planning controls proposed for the site are stated in Table 1:

Table 1: Proposed Planning Controls	
Density (FSR)	2:1
Heights	Maximum Building Height 32m (Refer to Figure 18)
Setbacks	3m (min) at street boundaries 6m (min) at North and South boundaries (Refer to Figure 19)

The site currently contains existing industrial buildings that have, over time, become redundant. The majority of the buildings are dilapidated with no architectural merit or visual contribution to the neighbourhood. These factories (when in use) create commercial traffic in narrow streets, and the building facades are devoid of activity and dominate the existing streetscape.

Rezoning and redevelopment of the site will call for the removal of these redundant buildings, replacing them with demand supported residential dwellings suitable for the locality as part of an urban renewal. Through an increase in density and height, the proposal will enable a transformation of the site into a vibrant mixed-use development that is responsive to the demand for a quality residential product whilst creating and activating employment opportunities that are better suited to the location. The proposal will provide controlled traffic, upgraded public domain, useful through site connections and shared open space.

The proposal consists of the following land uses:

Residential Zone

Residential buildings will be located at the Northern part of the site adjacent to the existing residential area and will extend South across the majority of the site. The total GFA of medium density residential development will be approximately 18,000m² and will likely yield around 220 apartments, including the following key elements:

- Perimeter buildings on George Street and Upward Street (ranging from 16m to 32m at the North and South ends respectively) with ground floor apartments having direct access to the street; and

- Central North facing buildings (ranging in height up to 32m).

Mixed Use Zone

The mixed use zone will include a combination of medium density residential and employment related development to be located towards the South of the site adjoining the existing light Industrial uses as shown on the land use plan (Figure 2). The total GFA will be approximately 11,300m² including the following key elements:

- Employment related development of approximately 1300m² on the Ground floor with access to on-site parking and basement loading; and

- Residential use of approximately 10,000m² (ranging in height up to 32m with street setbacks and rooftop plant) and will likely yield around 130 apartments.

An indicative area analysis consistent with the zoning descriptions above is provided at Table 7 (Page 43) - Proposed Zone Areas.

The introduction of additional housing supply resulting from the rezoning of the site will provide opportunity for a range of relevant and modern living spaces in line with the changed demographic of the Leichhardt LGA and demand to live closer to Sydney CBD. The increase in supply will offer opportunities for purchasers from within the Leichhardt LGA and surrounding suburbs as well as new entrants to the home owner market.

The rezoning and proposed density will allow residential development that can be provided within a price range which will be within the financial capacity of a broad range of potential purchasers. The future development will also offer relevant employment spaces and convenient access to the surrounding amenity identified in this Built Form and Urban Design Report.

The proposal incorporates best practice environmentally sustainable design initiatives, including water sensitive urban design, water storage and re-use, as well as a range of passive and active measures employed in the design of buildings compliant with SEPP 65.

Supporting documentation which should be read in conjunction with this report is provided at Appendix F - '*Urbis Planning Proposal, Kolotex and Labelcraft sites - George Street Leichhardt dated 18th January 2012' (Urbis Report),* and Appendix G - *'McLaren Traffic Engineering Transport, Traffic and Parking Impact Assessment dated October 2012' (Traffic Report)*.

Appendix F details the results of consultation with Leichhardt Council, DoPI and the community. The Built Form and Urban Design Report responds to these items discussed during consultation, including but not limited to visual impact, overshadowing, and open space of the development.

Schedules showing consistency of the proposal with the current Leichhardt DCP 2000, LEP 2000, SEPP 65 (Residential Flat Design Code) are also provided as appendices to this report.

Figure 1 outlines the relationship between Strategic Needs, Urban Outcomes and Urban Design Principles detailed within this report. The urban design outcome has been driven by NSW Strategy targets, Inner West Sub-regional strategy targets, Local Government Strategy, site constraints and opportunites to deliver the best urban design outcome for 22, 30-40 George Street, Leichhardt.

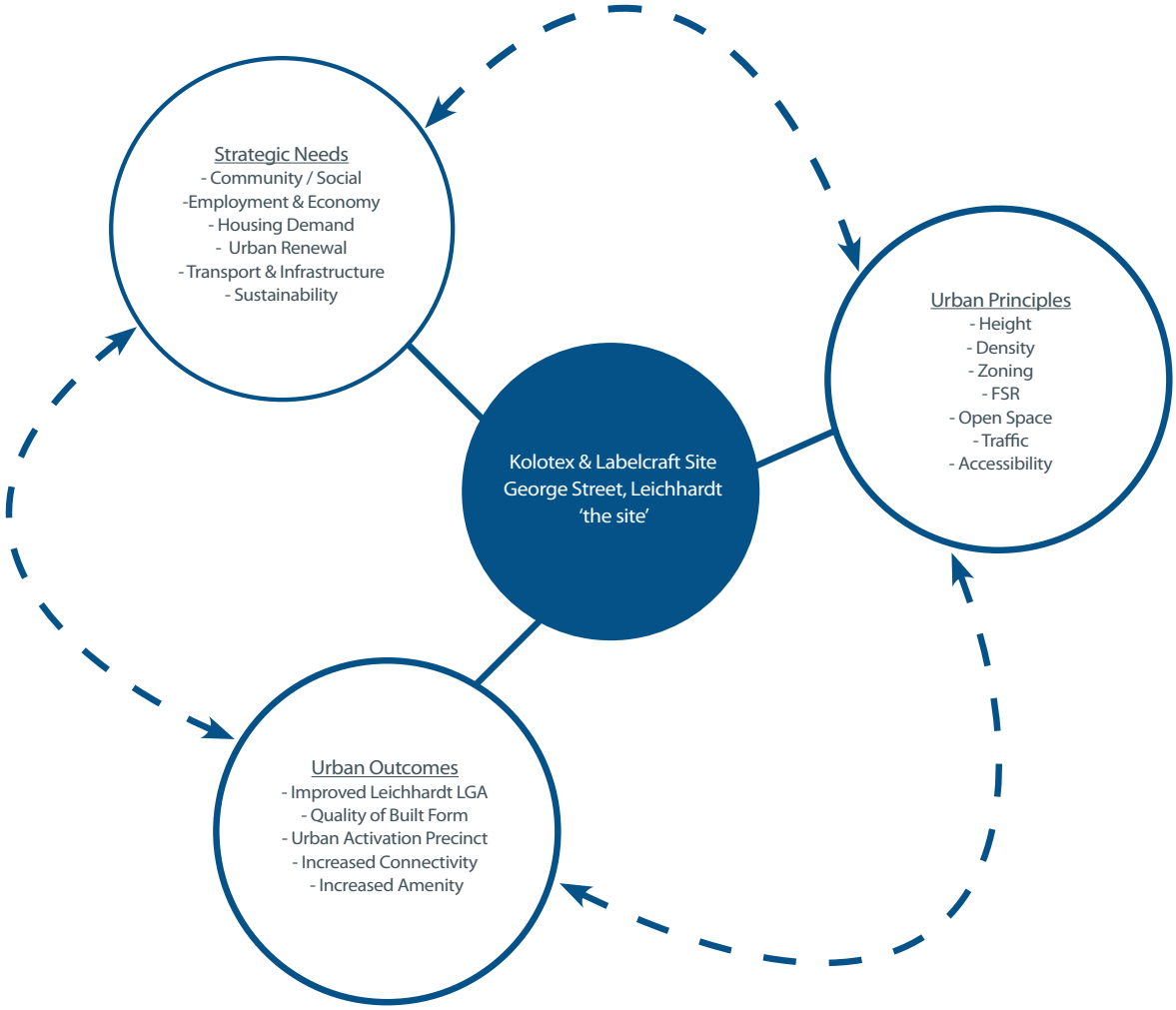

Figure 1 - Strategic Relationship

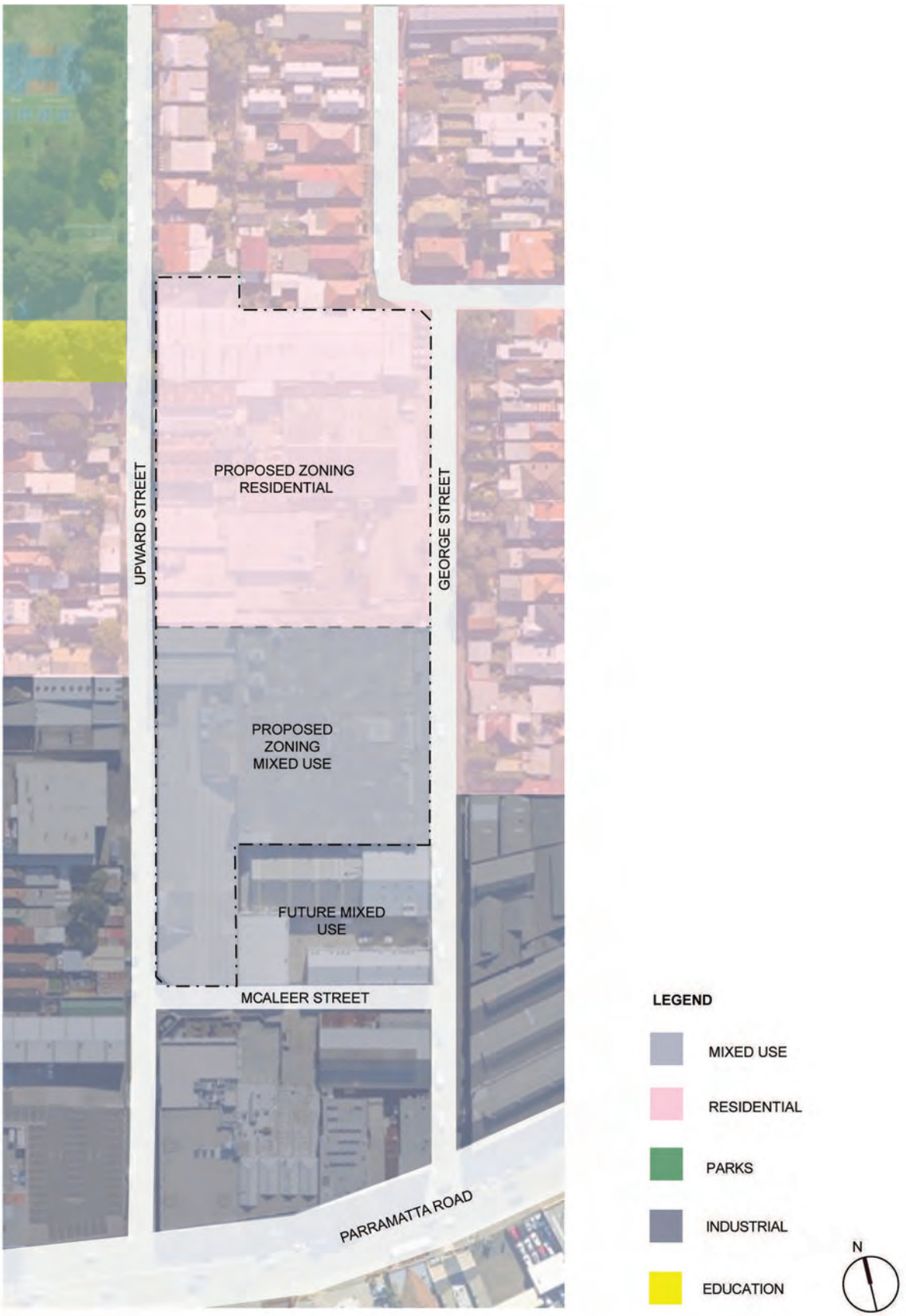

Figure 2 - Proposed Land Use Plan

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01 introduction

01.1 background

KGS (VIC) Pty Ltd intend for the site to be appropriately rezoned to allow for the redevelopment of aging industrial buildings into a mixed use development consisting of residential and commercial uses in a village setting.

The evolution of this project has been complex and protracted since its inception in 2004. The purpose of this document is not to outline the project history and associated detail but rather leverage on the context and information, to date, contained within the '*Urbis Planning Proposal - Kolotex and Labelcraft sites - George Street Leichhardt dated 18th January 2012' (Urbis Report) - Appendix F*.

The framework for this Urban Design Report relates to the planning objectives and criteria outlined within the *Urbis Report*, and makes recommendations in support of the identified core development principles including:

- An increase in the Floor Space Ratio (FSR) permissible to 2:1;
- An increase in permissible height to satisfy the proposed FSR, whilst appropriately addressing issues of open space, public and private domain, vehicular and pedestrian connectivity;
- Employment creation of approximately 363 direct and indirect ongoing jobs, and a further 1,782 direct and indirect construction jobs;
- An indicative residential yield of 350 apartments; and
- Propose the most appropriate land use zoning for the site.

The *Urbis Planning Report* states that the site should be developed to accommodate three distinct zones consisting of Residential, Mixed Use and Employment (Table 2 & Figure 3). Through detailed analysis and exploration of the preferred Urban Design outcome, contained within this report, a variation to two zones is proposed.

The retention of the current industrial zone at the Southern end of the site, termed as 'Employment Zone, does not take into consideration the overall development opportunities. The intention of employment is not disputed, the zoning of employment only is to be more integrated with the residential component. Through several massing / design alternatives it seems more appropriate to replace the Employment Zone with Mixed Use, to provide an integrated solution across the entire Southern portion of the site (Table 3 & Figure 2).

Advantages for changing the Employment Zone to Mixed Use over the Southern portion of the site include;
- Integrated residential and employment opportunities;
- Increased height and density within appropriate location;
- Distribute FSR more evenly over the site to reduce overall development height;
- Increased separation between built forms increasing amenity;
- Provide a preferred layout for employment offerings and future neighbouring development;
- Consolidate built form towards Parramatta Road.

Table 2: Urbis Planning Report - Zoning	
Employment Zone	The retention of the current industrial zone at the Southern end of the site, termed as 'Employment Zone';
Mixed Use Zone	The creation of a 'Mixed Use Zone' at the Southern end of the site incorporating 20% of the GFA within this zone for small-scale retail and commercial uses (approx. 1,200m² GFA), as well as high density housing; and
Residential Zone	The creation of a 'Residential Zone' for the predominant portion of the site (to the North) allowing for medium density housing.

Table 3: Proposed Zoning	
Mixed Use Zone	The creation of a 'Mixed Use Zone' at the Southern end of the site incorporating 10% of the GFA within this zone for small-scale retail and commercial uses (approx. 1130m² GFA), as well as high density housing; and
Residential Zone	The creation of a 'Residential Zone' for the predominant portion of the site (to the North) allowing for medium density housing.

It should be noted that the modification from three 'zones' to two 'zones' consisting of Medium Density and Mixed Use has been discussed with DoPI with no objection and full understanding of the overall urban design benefits.

This Urban Design Report has addressed the planning objectives outlined within the *Urbis Planning Report* and provides a comprehensive outline of the proposed development. The Urban Design response defines key spatial and built form components that will inform the Development Control Plan for a staged development of the site. It should be noted that the zones outlined above are consistent with the current Leichhardt LEP (2000) and should reflect all zones dictated within the Draft Leichhardt LEP (2012).

The urban response has been structured to assess the existing character of the site, mitigate visual impact, enhance visual quality and maximise the function, visual character and public benefit of the development.

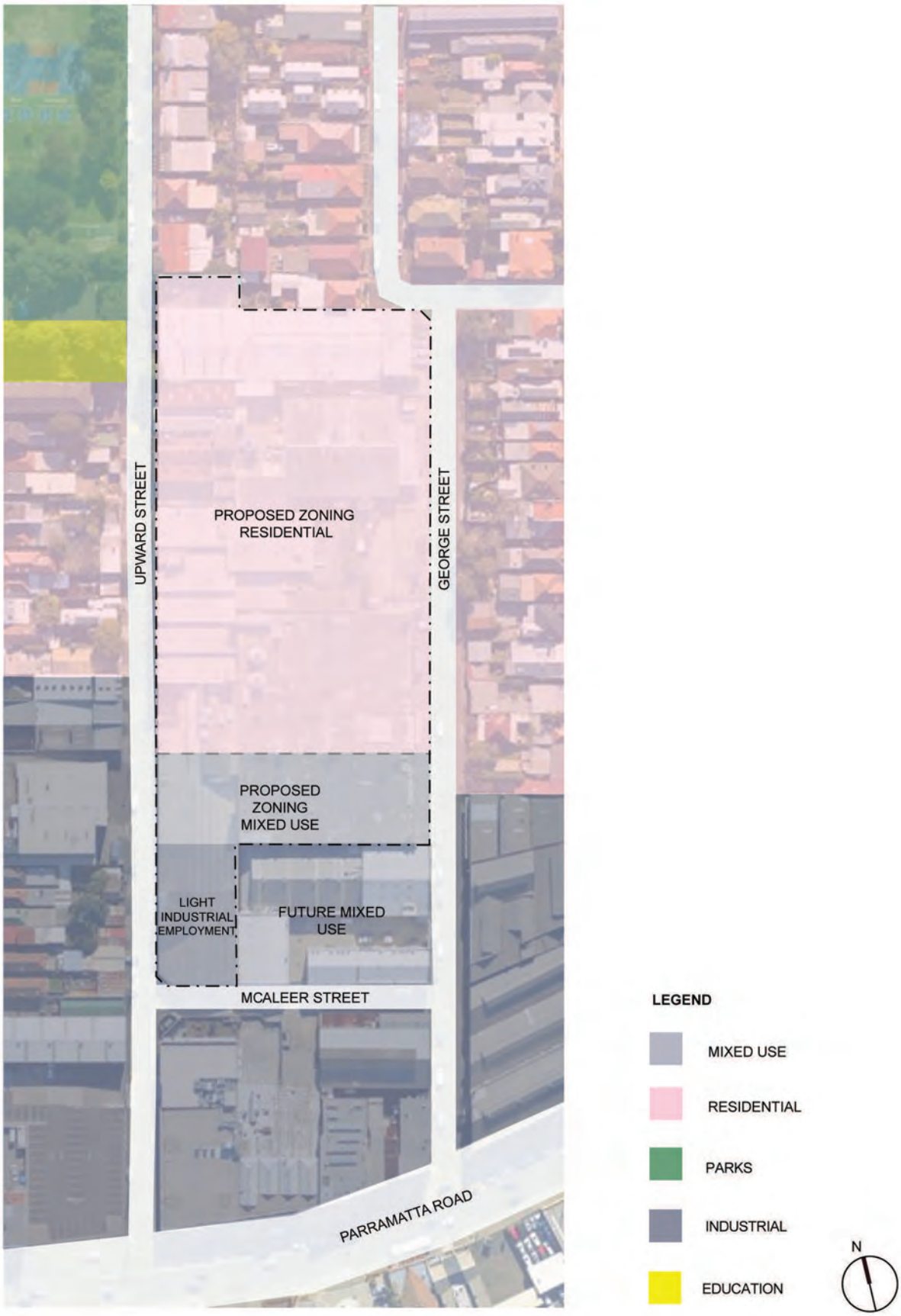

Figure 3 - Urbis Planning Report Proposed Land Use Plan

01.2 purpose and aims

The purpose of this report is to determine the optimum Urban Design outcome that addresses the 'Scope of Technical Studies' issued by the DoPI. It achieves this through:

- Investigation and analysis of the site, including existing characteristics, locality and constraints to inform development potential and create a framework for the urban design response;

- Development of a series of Urban Design Objectives and Principles, based on investigations and specific reports, to guide the overall site wide design. The purpose of the design principles are to:

    i. Facilitate an economic development scenario for the purpose of re-invigorating a declining industrial area;
    ii. Provide housing variety and employment generating development whilst maintaining high standards of urban design across each of the development components;
    iii. Deliver strategic objectives consistent with the *Inner West Sub-region Metropolitan Plan*. Specifically, increasing accommodation provisions within proximity of key employment centres;
    iv. Ensure a positive visual, environmental and long term management relationship with adjoining lands, existing developments and potential future developments;
    v. Provide a framework that ensures high standards of built form and landscape design are employed to allow for adequate amenity and interface with public domain areas as the precinct evolves;
    vi. Provide an efficient, safe and secure internal traffic network between the key development components and appropriate connections to arterial roads;
    vii. Provide pedestrian links through the site assisting connections to local public transport corridors; and
    viii. Ensure that the development is of a suitably high quality that where possible, utilises appropriate sustainable technologies and infrastructure, whilst addressing the requirements of SEPP 65 and the future needs of the local area.

- Providing an urban design that responds to the existing context and urban fabric and provides amenity to the future occupants of the site and surrounding community; and

- Determination of Urban Design criteria that will enable the efficient and concise development of a site specific DCP.

02 project need and strategic justification

The development parameters (land use mix proposed and development yield) have been informed through an analysis of the development potential. This analysis has been developed inconjunction with State and Local Government policy and discussions. The project need and strategic justification make a strong case for a high density mixed use and residential scheme in this location.

This section provides a strategic assessment of the proposal against specific NSW Planning instruments. A detailed Environmental Assessment will form part of the future development approval process however key strategy considerations have been detailed to ensure NSW State and Local Government development targets are achieved.

Key Strategic Planning documents explained within this report, to be detailed further in a future Environmental Assessment include;

NSW Strategic Planning Policies

- NSW State Plan 2012: A Plan to Make NSW Number 1
- Metropolitan Plan for Sydney 2036
- Draft Inner West Subregional Strategy
- Development near Rail corridors and busy roads - Interim Guideline
- NSW Bike Plan (NSW Government 2010)
- Planning Guidelines for Walking and Cycling (NSW Department of Infrastructure, Planning and Natural Resources, roads and Traffic Authority 2004)
- Integrating Land Use and Transport Policy Package (Department of Urban Affairs and Planning, Transport NSW 2001)
- State Infrastructure Strategy - Infrastructure NSW 2012
- WestConnex - Sydney's next motorway priority October 2012
- NSW Long Term Transport Masterplan 2012

State Environmental Planning Policies

- SEPP55 Remediation of Land
- SEPP65 Design Quality of Residential Flat Development and Residential Flat Design Code
- SEPP32 Urban Consolidation (Redevelopment of Urban Land)
- SEPP (Infrastructure) 2007
- SEPP (Building Sustainability Index: BASIX) 2004
- SEPP (Major Development) 2005

Leichhardt Local Government

- Leichhardt LEP & DCP (2000)
- Leichhardt DRAFT LEP (2012)

02.1 parramatta road corridor renewal opportunity

Over the last 10 years the NSW State Government has identified the Parramatta to City Corridor (Parramatta Road) as an important renewal corridor capable of accommodating homes and jobs to support the growing needs of the state. The Parramatta Road Taskforce established by the NSW government in May 2004 identified the potential to accommodate around 63,000 new homes and over 50,000 new jobs by 2030. Both the Parramatta Road Strategic Plan (2002) and the NSW Metropolitan Strategy 2036 has outlined an emphasis for transport friendly development along the Parramatta Road corridor with the opportunity to accommodate a large portion of Sydney's future growth in a highly accessible location.

In July 2011, Infrastructure NSW was tasked with preparing a 20 year Strategy that assesses the current state of infrastructure and identifies strategic priorities. The Strategy looks across a broad range of sectors and identifies specific projects and programs for priority consideration.
Within the State Infrastructure Strategy 2012, released on 3rd October 2012, were key findings relating to current housing provisions, urban renewal opportunities, investment areas adjacent existing infrastructure and Parramatta Road corridor accessibility which directly relate to the redevelopment of 22, 30-40 George Street, Leichhardt.
Some of the key commentary is provided below:

Table 4: Infrastructure NSW - State Infrastructure Strategy	
Housing	
1	The market evidence suggests that people are willing to live in more dense suburbs closer to the CBD, trading off space for lifestyle and access to jobs. Two-thirds of existing CBD workers live in the inner suburbs around global Sydney, which is reflected in housing prices;
2	Infrastructure NSW is supportive of more intensive residential land use within Sydney based on these market and community preferences;
3	Infrastructure NSW has considered options where investment in enabling transport infrastructure can support urban renewal and housing growth in areas readily accessible to global Sydney. These include along Parramatta Road and in Southern Eastern suburbs.
4	New high density communities have provided more housing options within easy reach of the CBD, particularly along a regenerated Parramatta Road and in the South Eastern Suburbs. Regeneration of the Parramatta Road corridor and public transport improvements are integral parts of the scheme.

The Kolotex and Labelcraft site is positioned alongside the Parramatta renewal corridor within the Leichhardt LGA and is surrounded by a variety of existing infrastructure enabling the site to make significant development contributions to the NSW State Plan and associated subregional strategies. It has long been considered that the Parramatta Road corridor renewal should consist of redeveloping existing structures directly along Parramatta Road to heights between 4-6 stories and allowing for greater height and density, up to 12 stories, for mixed use development behind shielding residents from potential noise and pollution. The following two diagrams reflect the development potential according to the Draft Parramatta Road Strategy (2002) and newly proposed NSW WestConnex motorway.

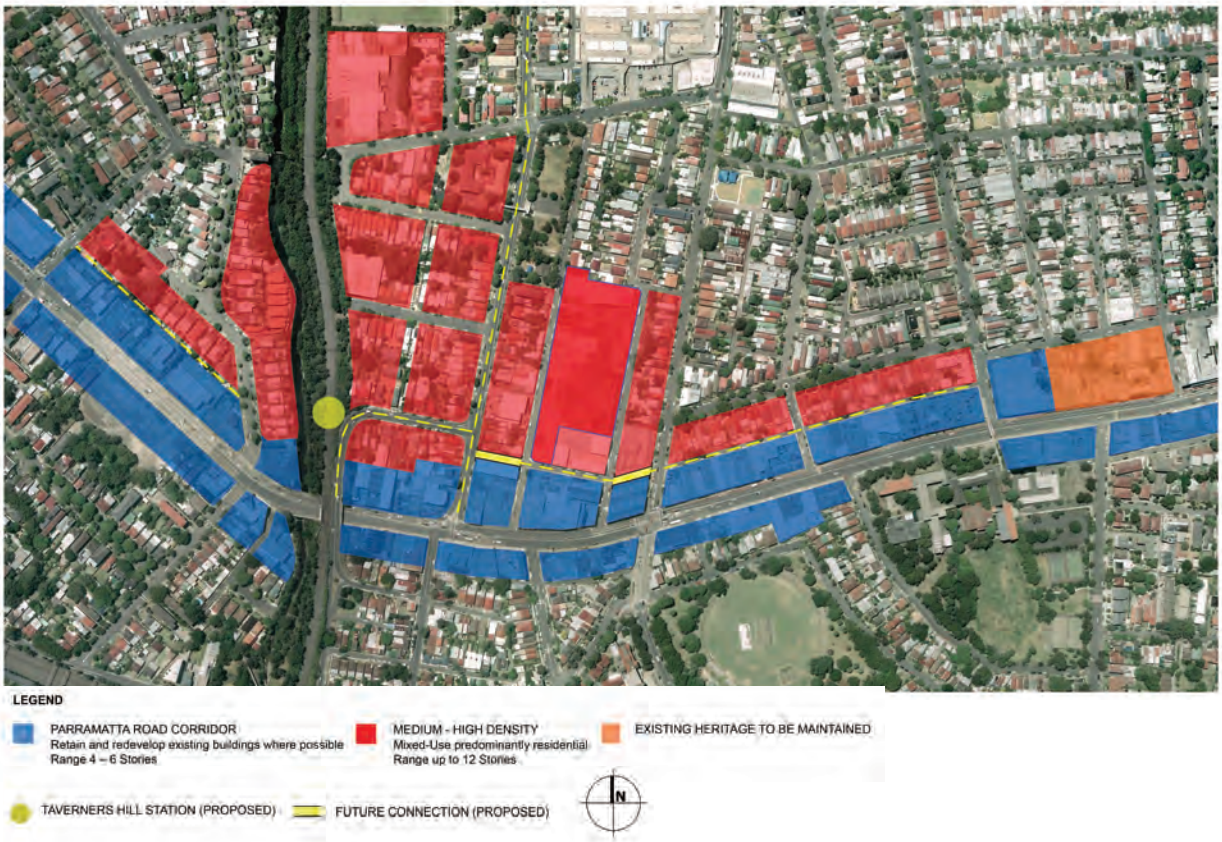

Figure 4 - Parramatta Road Corridor Future Concept Development Plan

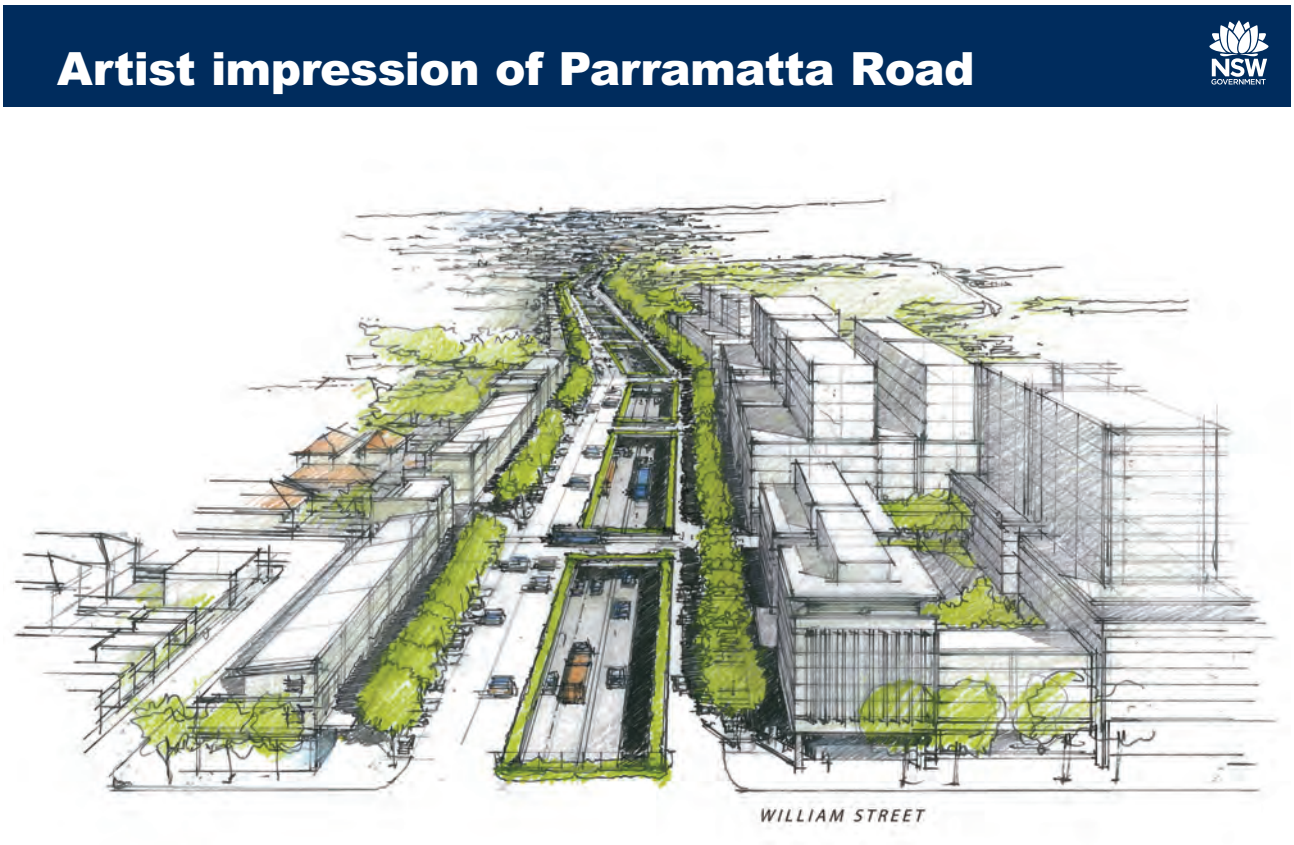

Figure 5 - NSW Government WestConnex Proposal 2012

02.2 contribution to subregional dwelling targets

The Sydney Metropolitan Strategy plans for an additional 35,000 dwellings in the Inner West subregion by 2036, with 2,000 of these dwellings to be located within the Leichhardt LGA. This represents only 6 per cent of the housing target for the subregion and is in part a reflection of the developed nature of this area.

In Leichhardt, residential development is generally restricted to low density single dwellings. Few opportunities exist for higher density schemes to occur within the locality.
Leichhardt Council's Leichhardt Residential Development Strategy Stage 1 developed to inform the preparation of the draft Local Environmental Plan identifies 5 major sites (with the capacity for more than 50 dwellings) across the LGA. These sites are expected to accommodate approximately 31 per cent of the LGA's housing target, with the remainder of the target being satisfied through infill development. The majority of these sites are currently zoned Industrial.
In short, there is an extremely limited supply of housing sites within the Leichhardt LGA capable of delivering housing at a level that would make a contribution to the LGA's targets. Of the sites mentioned:

Table 5: Major sites identified by the Leichhardt Residential Development Strategy Stage 1

Site	Proposed Zoning (Draft LLEP)	Expected Dwelling Yield
Balmain Leagues Club - Victoria Road, Rozelle	B2 - Local Centre	130
Roche Site - 469-483 Balmain Road, Lilyfield	IN2 - Light Industrial	50
Carrier Site - 120 Terry Street, Rozelle	IN2 - Light Industrial	300
Kolotex Site - 14-28 George Street, Leichhardt	IN2 - Light Industrial	100
Robert Street Precinct - 32-52 Robert Street, Rozelle	Sydney Regional Environmental Plan 26	52

The project has been driven by the recognition that the Kolotex site, now combined with the adjacent Labelcraft site, is among the last remaining sites within the Leichhardt LGA that could make a meaningful contribution to the LGA's housing and employment targets. Redevelopment of the site presents an ideal opportunity to satisfy the dwelling targets for the subregion.

This proposal will provide an increase from the estimated 100 dwellings to approximately 350 dwellings, representing 16 per cent of the dwelling requirement for the LGA and as such has the potential to make a significant and sustainable component of the future development of the Inner West subregion.

The Residential Development Strategy identifies that the overwhelming majority of new dwellings will probably be located in mixed use areas adjacent Parramatta Road, Market Place and Norton Street. This strategy inconjunction with the principles outlined within the Draft Parramatta Road Strategy outline the hugely important rezoning, redevelopment and renewal opportunity. This site will provide the catalyst for future redevelopment and growth within this defined urban activation precinct.

02.3 contribution to subregional employment targets

The draft Inner West Subregional Strategy has an employment capacity target of 12,500 additional jobs by 2031, representing an increase of 15% compared to 2001. This represents an increase of 500 additional jobs from 21,500 to 22,000. Leichhardt Employment capacity targets stated in the draft Subregional Strategies reflect the core policy directions of the Metropolitan Strategy and NSW State Plan to provide jobs closers to home and to increase employment Strategic Centres.

As a result of the increased population forecast for Sydney in the Metropolitan Plan for Sydney 2036, the overall dwelling targets for the Inner West Subregion have changed from those contained in the 2005 Sydney Metropolitan Strategy as follows:

- Employment growth target increased from 12,500 by 2031 to 25,000 by 2036.

These revisions represent a substantial increase in the amount of new jobs which will need to be accommodated within the subregion, and it is expected that this increase will be reflected in the targets for the Leichhardt LGA.

Leichhardt council completed and endorsed their Employment Lands Study in January 2011. We note that in endorsing this study on 22 February 2011, council considered the following comments within the accompanying Officers Report:

> *The Study also confirms that Council meet the State Government's long term employment target for the Leichhardt Local Government Area (LGA). That target is currently 500 new jobs to be created between 2004 and 2031 although it is expected to increase to approximately 1,500 additional jobs (based on more recent 2009 Transport Data Centre forecasts). The Study has factored in these new forecasts and confirms that Council can accommodate potential future growth across a range of employment types and rezone a number of sites currently zoned Industrial –including Terry Street and George Street sites.*

The reference to the 'George Street site' above refers to the Kolotex/Labelcraft site - this confirms these sites can be zoned for non-industrial land uses, while still allowing Leichhardt Council's long-term employment targets to be met.

In addition to the Local and State Government policy targets the proponent commissioned Urbis to conduct two Employment Studies (2008 & 2011) on the Leichhardt LGA, full details can be found within the *Urbis Planning Report* at Appendix F. The study concluded that industrial activities did not represent an optimal use for the site, given the changing business and demographic landscape of Leichhardt LGA, and indeed the George Street precinct specifically. Furthermore, the study found that residential and commercial activities would be better suited to the site and would generate greater economic benefits.

As outlined there is no Local or State Government requirement to provide employment on the site however the proponent feels that the inclusion of some employment across the site would provide a benefit to the site and surrounding neighbourhood by increasing employment opportunities directly associated with new housing stock.

The estimated employment yield from the *Urbis Planning Report* more than doubles the existing levels (when measured by the number of direct and indirect jobs). In this respect the estimated 363 direct/indirect jobs (up from 174) provides a significant contribution to Leichhardt's share of the employment target within the Draft Inner Western Sub-regional Strategy.

Furthermore the proposal allows for the type of employment opportunites more aligned to the demand in the area (being for retail/ commercial, rather than industrial) and in an area that is accessible to surrounding residential areas and transport.

02.4 development to enhance the site and local urban character

The existing buildings within the site are of limited architectural merit and none are heritage listed. In urban design terms these buildings coupled with the site's parking areas contribute little to the surrounding streetscape, particularly when viewed from the residential streetscape of George and Upward street.

The industrial appearance of the site has a negative impact on the visual amenity of the area. Architecturally and functionally, existing built development within the site does not reflect or capitalise on its prominent location. The existing appearance and use of the site are incompatible with aspirations for the site, which support its development for residential and employment opportunities coupled with good quality design.

Redevelopment of the site will result in the creation of a distinctive and memorable development which will contribute to the visual appearance of the site and comfortably sit within the neighbourhood.

At present, the site does not offer local amenities, homes or community benefit and has a poor physical appearance. The local community and the wider Leichhardt LGA benefits of redevelopment on the site are substantial and include:

- Provision of dedicated connections across and through the site connecting existing and proposed transport links, commercial and retail hubs and existing open space;
- Provision of improved streetscape with deep soil planting and upgraded footpaths;
- Provide a quality development with considered building density, height, articulation and materials;
- Significantly reduced traffic volumes around the site through rezoning from industrial to residential;
- Provision of quality open space for the future residents of the development; and
- Social and economic benefit

02.5 catalyst for regeneration

Previously industrial in character, the Inner West area has experienced strong population growth supported by its attractive residential streets and vibrant commercial centres which are complemented by good public transport infrastructure and proximity to Sydney CBD. Redevelopment activity across Sydney's Inner Western suburbs is clearly visible but has been slow and piecemeal and has not resulted in significant improvements to the quality of built form or to the range of facilities available within the area.

The proposal has significant potential to create beneficial impacts on the areas in the general vicinity of the site in strategic terms, by encouraging investor confidence in this location, and in practical terms, by providing the scope for employment opportunities for local people.

The proposed development will contribute to the regeneration of an under-utilised and largely derelict site which currently detracts from the appearance of the area. The site is located at a point where it can instigate significant regeneration and change. Development of the site has a key role to play in helping to create a positive visual impression for the area.
The design quality of the proposed development and its proposed uses will encourage investment in the wider area.

02.6 increased opportunites for sustainable initiatives

The scale of the project allows opportunities for sustainability measures that would be unfeasible for smaller developments.
The key initiatives to be investigated include:

- Greywater and/or Blackwater systems;
- Cogeneration or Trigeneration plant to provide low-carbon on site electricity generation;
- Green walls and roof areas (including communal gardens at podium roof level);
- Introduction of solar initiatives including photovoltaic cells;
- Water harvesting systems; and
- Water sensitive landscaping.

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03 existing site character

03.1 location and context

The site is situated within the Leichhardt LGA, part of the Inner West Subregion. The site contains the former 'Kolotex' warehouse and 'Labelcraft' factories, with the main street address of 22 & 30-40 George Street, Leichhardt. The site being the subject of this Urban Design Report includes the following titles:

Kolotex Site		Labelcraft Site	
- Lots 6-9	DP 79950	- Lot 16	DP 69760
- Lot B	DP 327352	- Lot 7	DP 448755
- Lots 1-2	DP 102461	- Lot 5	DP 745976
- Lots 10-13	DP 83665	- Lot 6	DP 745976
- Lot 1	DP 104359	- Lot 1	DP 745978
- Lot 1	DP 1108695	- Lot 1	DP 920105
- Lot 5	DP 1080665	- Lot 1	DP 972151
- Lot 15	DP 1081840	- Lot 1	DP 745979
		- Lot 9	DP 666322

The site is roughly rectangular in shape with street frontages of 161m along George Street, and 214m along Upward Street, with an overall site area of approximately 14,662m².

The site is approximately 6.0 kilometers to the West of Sydney CBD, within the South Western 'Parramatta Road Precinct' of the Leichhardt Municipality, located between George St (along Eastern boundary), Upward St along Western boundary), and McAleer Street (along Southern boundary).

The site is located in walking distance to a number of local features and services (Figures 6 and 7), including:

Public Transport

The proposal involves the provision of housing and employment in close proximity to bus services along Parramatta Road and Marion Street and is within walking distance of three rail stations (Lewisham, Petersham and Summer Hill), as well as the planned Light Rail extension (Taverners Hill Station). The *Traffic Report* (Appendix G) details available transport and usage levels.

Open Space

The site is located within two blocks of Petersham Park (and its various recreational facilities) and is within close proximity to Hawthorne Canal (and its various open space functions) as well as various other 'pocket' parks within the area. The *Open Space Report* (Appendix H) details the amount and type of open space in the vicinity of the site.

Retail Facilities and Local Services

The site is within convenient walking distance of the Leichhardt Marketplace (a sub regional village providing key retail and commercial facilities), as well as other retail, commercial and eating/entertainment facilities along Norton Street and nearby sections of Parramatta Road.

Healthcare Services

The site is also within convenient distance of medical and associated professional consulting services located within Leichhardt Marketplace and along Norton Street and Parramatta Road. Direct connections to Parramatta Road provide access to Royal Prince Alfred Hospital and the various specialist medical facilities within the Missenden Road Precinct.

Education

The site is located within convenient walking distance to a number of local public and private schools ranging from infant childcare, primary and high schools, as well as a TAFE College. The University of Sydney and other educational institutions within the City and along the Inner West train line are easily accessed via public transport.

The site's size and excellent location make it a unique and significant Renewal Opportunity within the Inner West sub-region. With direct access to existing transport and infrastructure the proposed development aligns with the objectives of the *2036 Target - Inner West Subregion Metropolitan Plan*.

Figure 6 - Location and Context

Figure 7 - Local Proximity Diagram

03.2 existing road network and permeability

A detailed assessment of traffic issues pertaining to the site and surrounds is contained within the Traffic Report (Appendix G), which also details work journey census data showing 47% of people in Leichhardt drive or are driven to work while 20% catch the bus. Specific issues arising from the existing road network, hierarchy and site permeability that are deemed to impact on the proposed urban design are summarised in the following table:

Table 6: Existing Road Network and Permeability

Street Name	Description
Flood Street	- 12.1m wide to the East of the site - Facilitates a connection between regional roads (ie. Parramatta Road - 20m wide) and local main roads
Tebbutt Street	- 13m wide to the East of the site - Facilitates a connection between regional roads (ie. Parramatta Road - 20m wide) and local main roads
Upward Street	- 6.4m wide - On-street parking on the Western side only - Shallow footpath on the Eastern side - Accommodates SRV and MRV commercial vehicles - Access to Parramatta Road from the South is via left turn only with right turns into Upward Street prohibited - Access to Lords Road from the North - Congestion is common due to parking allowances, narrow road width, and useage by large commercial vehicles servicing industrial properties - Residential lots adjacent to the site access garage and parking areas off Upward Street, creating a 'laneway atmosphere' - Preliminary Traffic engineering advice suggests that loading and service vehicles access on Upward Street would be suitable
George Street	- 8m wide - Accommodates heavy vehicles and service trucks - Larger volume of vehicle movements than Upward Street - Access to Parramatta Road from the South is via a left turn only with right turns into George Street prohibited - Access to Treadgold Street from the North - Vehicle access from Lords Road is blocked - Congestion is common due to parking allowances, narrow road width, and useage by large commercial vehicles servicing industrial properties - Residential lots adjacent to the site access garage and parking areas off George Street, creating a 'laneway atmosphere' - Preliminary Traffic engineering advice suggests that primary vehicle entry/exit to the site is best suited to George Street
McAleer Street	- 6.5m wide - Primary connection between George Street and Upward Street - Allows two-way traffic - On-street parking on one side only

03.3 existing built character

The Leichhardt precinct, specifically the neighbourhood surrounding the site is characterised by a variety of built form with industrial premises adjacent Parramatta Road and residential houses forming the majority of other building types located North of Parramatta Road.

Industrial warehouse spaces are primarily located adjacent Parramatta Road and form a block edge to the residential area. There are a number of warehouse spaces that break the block edge and protrude further down Upward Street and George Street (Figure 6). The warehouse spaces, generally two to three stories, provide a variety of built form conditions from derelict, empty premises to renovated utilised commercial premises. Brick and painted concrete dominate the building treatments with a variety of roof configurations.

Residential developments located adjacent the site are generally a mix of 1 and 2 storey detached and semi-detached dwellings. The buildings are primarily late Victorian and Federation weatherboard cottages. There are visible contemporary renovations and new buildings scattered through the precinct, with the inclusion of several 1920's workers cottages (heritage) located adjacent the site to the North.

The residential dwellings adjacent the site to the East and West, generally have rear site vehicle access from George Street or Upward Street respectively with their primary street address in Flood Street and Tebbutt Street. Garage doors, roller shutters, driveways and boundary fences are a dominant feature of both George and Upward Street.

Landscaping and vegetation is sparse surrounding the site with some private lots having mature and visually significant trees, however there is minimal provision for landscaping along the street edges and general precinct streetscape. Small narrow footpaths are consistent with minimal consideration for pedestrian and bicycle movement corridors.

Figure 8B is a view along George Street looking towards Parramatta Road. Part of the Kolotex building is on the right hand side with garage / vehicle access to private residential lots on the left.

Figure 8C also looks towards Parramatta Road along George Street but highlights the narrow footpath adjacent the residential lots and clearly shows the minimal vegetation and street treatment along with the current parking provisions.

Figure 8D is viewed directly from the Kolotex site towards the residential lots. Mature vegetation can be seen in front of the two storey dwellings. This example outlines the rear of a property with vehicle access from George Street and primary street address being Flood Street further to the East.

Figure 8E depicts the Northern most Labelcraft industrial building.

Figure 8F is viewed along Upward Street looking toward Lords Road to the North. The few industrial / warehouse developments that are not located within the Parramatta Road block edge are shown on the left directly facing the site.

Figure 8G is viewed along Upward Street looking toward Parramatta Road and illustrates the existing warehouse vehicle access door located in the existing brick wall bound by the narrow footpath. One side vehicle parking along the street is also visible.

Figure 8H shows McAleer Street connecting George Street and Upward Street. A narrow street which allows parking on the left side of the image bounding the existing warehouse premises.

Figure 8A - Viewing Locations


Figure 8B - View #1: George Street (Kolotex site on left), view South toward Parramatta Road


Figure 8C - View #2:George Street (Kolotex site on left), view South toward Parramatta Road


Figure 8D - View #3: George Street (opposite Kolotex site), neighboring residential properties


Figure 8E - View #4: George Street (Labelcraft site), view looking North toward end of site


Figure 8F - View #5: Upward Street (Kolotex site on right), view North within industrial zone


Figure 8G - View #6: Upward Street (Kolotex site on left), view South toward Parramatta Road


Figure 8H - View #7: McAleer Street (Kolotex site on left), view toward George Street from Upward Street

03.4 existing land use and site character

The demographic and employment profile of Leichhardt has changed significantly over the past 20 years as the area has regenerated and moved away from its roots as a working class suburb. As such KGS (VIC) Pty Ltd has had difficulty in securing a long term tenant for the Kolotex site and interest in the property from potential buyers has been limited despite active marketing. As a result, the property is predominately vacant, and is partially used as storage. This has been defined and outlined further within the *Urbis Planning Report* at Appendix G.

Under the current Leichhardt LEP (2000) and Draft LEP (2011) the site is zoned IN2 - Light Industrial, and the surrounding land is zoned R1 - General Residential. Land adjacent to Parramatta Road is zoned IN2 - Light Industrial and shown in Figure 9. The current zoning changes to Residential along the length of the Kolotex and Labelcraft site.

There are multiple industrial warehouse buildings currently situated on the site. The first is the former Kolotex factory, which is mainly derelict and was vacated by Kolotex in 2004. The second is the Labelcraft factory, which remains occupied and operational by Labelcraft, a printer of industrial labels. Both sites are currently zoned IN2 - Light Industrial with the delineation between the two landholdings forming 'the site' shown in Figure 6.

There is no apparent soft landscaping or streetscape treatments on or around the site which make the harsh dominance of the existing industrial buildings visually unappealing in the context of a residential community. Further, there are no view corridors and very little building articulation across the site which increase the dominance of the existing industrial buildings.

Kolotex Facility

The former Kolotex facility can be generally described to include:

- a two level brick and concrete factory, including a concrete roof to the South;
- a three-storey rendered brick and steel office and factory facility to the North of the site. The main access to these structures is from George Street. Off-street parking associated with the Northern office building is contained within the site boundary adjacent George Street;
- a single level factory / warehouse facility on the corner of upward and McAleer Street;
- a two storey factory / warehouse fronting Upward Street; and
- two single level factories / warehouses fronting upward street to the North.

An active development consent exists for the entire Kolotex portion of the site permitting an increase from the current 2 storey's to a 6 storey development with a FSR of 2.4:1. Consent was granted in the 1970's for the construction of a large multi level industrial premises, which has substantially commenced (two storeys of the building were completed). Accordingly, the consent to complete the work on the property still applies as demonstrated in Figure 10 (page 34).

Labelcraft Facility

The Labelcraft facility can be generally described to include:

- a large two level brick and concrete factory with corrugated roofing located to the North of the site and extending between George Street and Upward Street;

- a large single level brick and concrete factory with a pitched corrugated roof located to the South of the site; and

- several small factories to the West of the Labelcraft site fronting Upward Street.

Figure 9 - Local Zoning Context

Figure 10A - Existing Site: First two levels of the approved envelope (parapet RL 21.30, building height 10-11m)

Figure 10B - Photomontage indicating permissible height of approved development consent (parapet RL 41.30, building height 30m)

Figure 10 - Comparison of Existing and Approved Development Envelope, Kolotex Site

03.5 primary site constraints

Flooding

The site falls to a low point on Upward Street (Figure 11). Consequently the South of the site is subject to flooding as identified in the Leichhardt DCP (2000), and *'Cardno Leichhardt flood Study'* (June 2010). Initial analysis of flood risk has set the Flood Planning Level at RL 12.00 across the Southern portion of the site which dictates development height and streetscape design. The DRAFT Leichhardt DCP Section A3a.0 ensures a freeboard zone of 500mm must be added to the Flood Planning Level to all proposed components of the development.

Current advice from the hydraulic engineers, Warren Smith & Partners, suggests upgrading of the existing storm water pipe is required with any new development within the Southern most pocket of the site, and additionally:

- Where existing infrastructure remains within an existing development footprint it would not require the developer to upgrade the pipeline or provide additional easements;
- Future capacity to upgrade the pipeline may be required including an easement (6m) over the pipe resulting in diminished development area;
- Redirecting stormwater pipe along Upward Street will be difficult due to several other existing services located here;
- Any future pipe upgrade will be a large financial burden (up to $2M); and

Without a further increase to the allowable FSR, it becomes uneconomical to construct a new building in this section of the site and as such minor works (such as refurbishment) may be the only alternative.

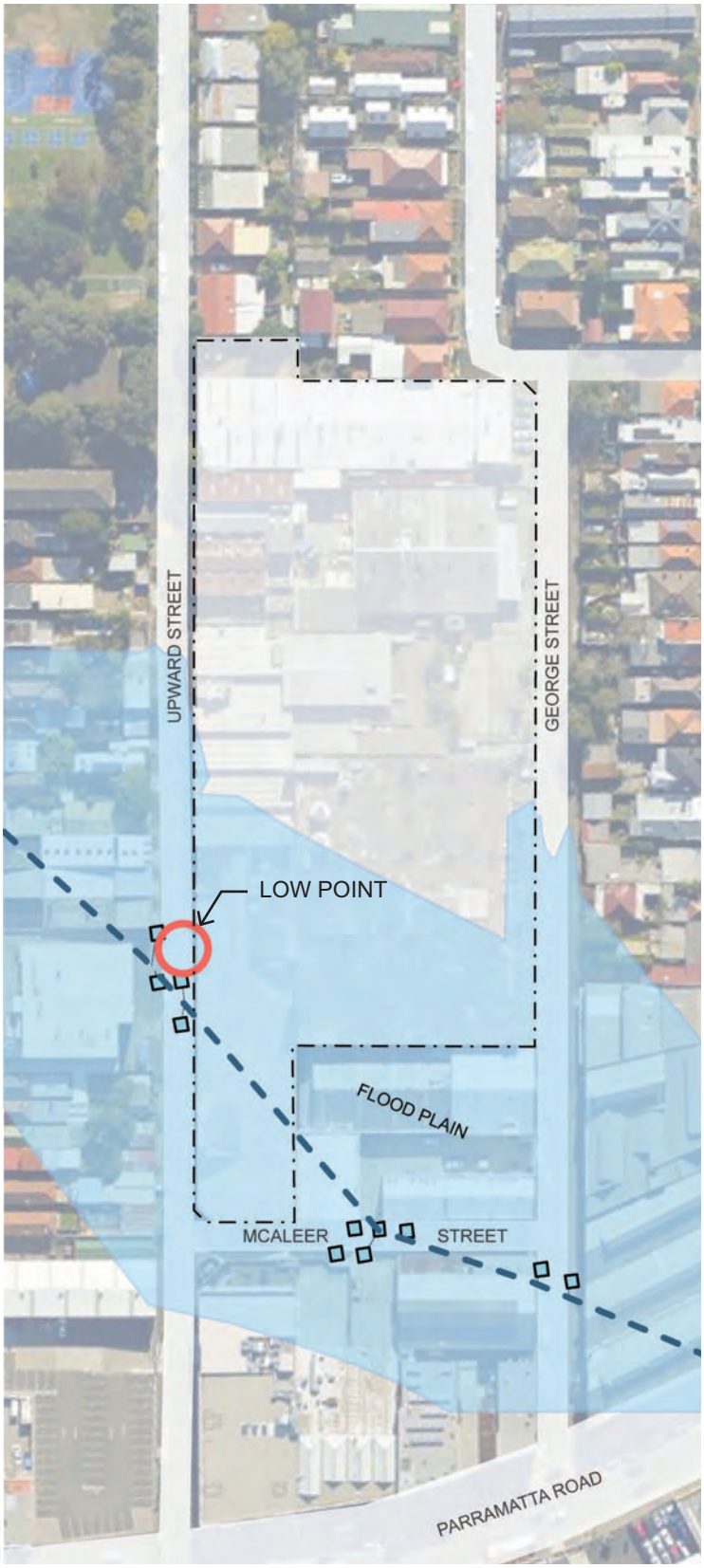
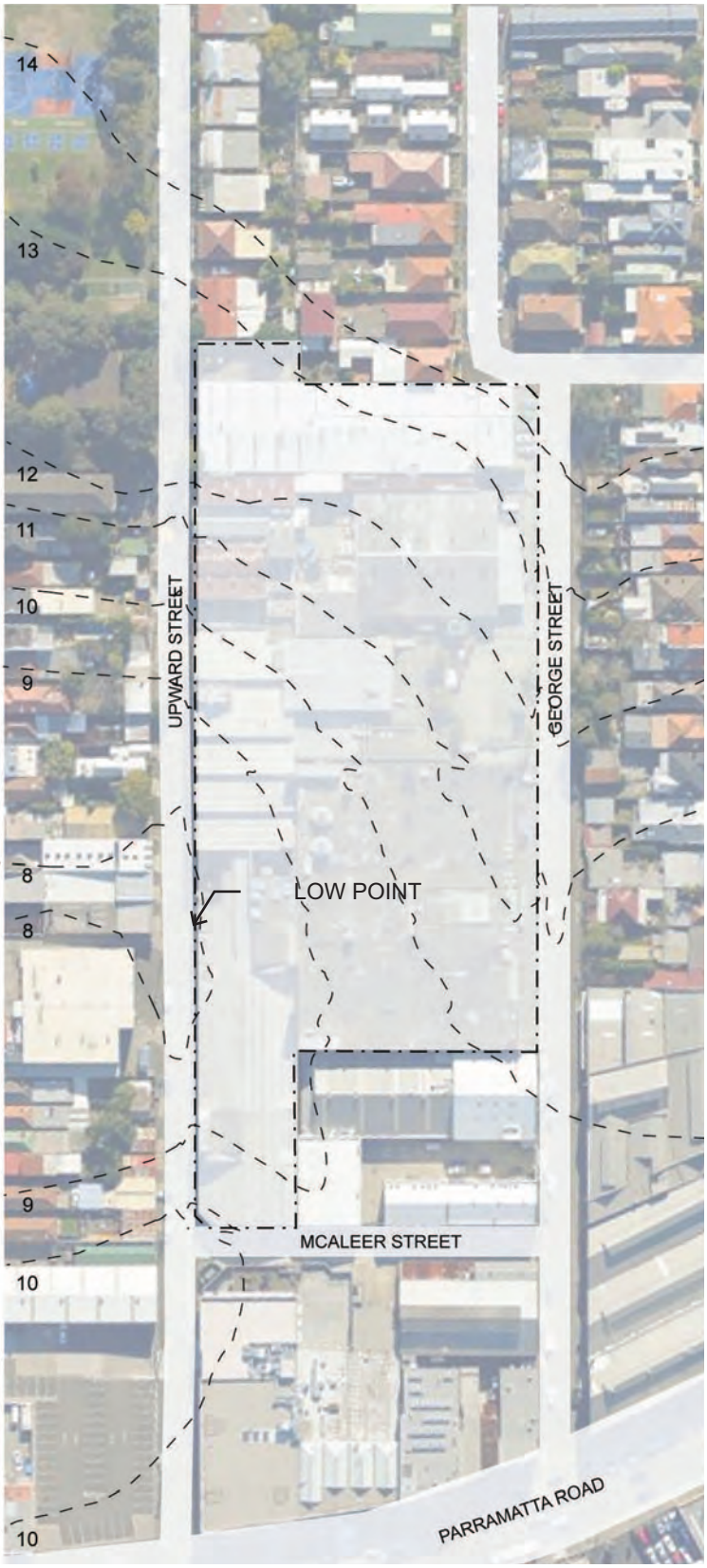


Figure 11 - 1:100 Year Flood Constraint



Site Contours

The site possess several additional design constraints based on existing conditions and levels, these can be briefly summarised to include (Figure 12):

- A range in RL's from 7.5 in the South-West to RL 14.0 in the North-East;
- George Street falls from North to South 4m across the length of the site. This fall will inform the treatment of the street frontages;
- Upward Street falls from North to South almost 5m and then begins to rise towards Parramatta Road;
- At the Northern boundary there is a 2m fall from East to West; and
- At the South boundary to the existing industrial buildings, there is a 2m fall from East to West.

Note:

The contours shown are largely hypothetical, the site has been excavated/filled and benched many decades ago.

Site Contamination

The site is contaminated which will be dealt with during the construction phase. However this contamination poses a significant financial burden that needs to be part of any feasability analysis.

Figure 12 - Site Contours

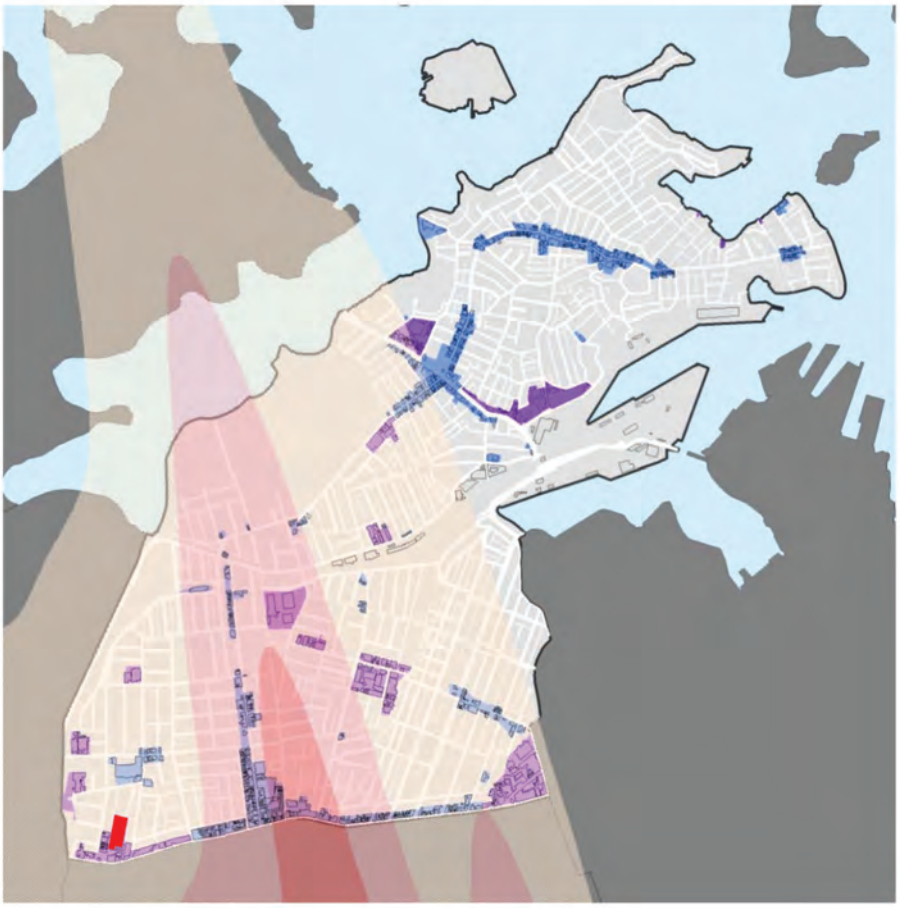


Figure 13 - Aircraft Noise Impact Map

Source SGS 2009

Aircraft Noise

Aircraft noise impacts affect most of the Southern part of the Leichhardt LGA. Higher aircraft noise impact areas affect most of Norton Street and Norton Street North. The site is marked within the overall Noise Impact Map shown below (Figure 13):

- The site is located outside of the high aircraft noise areas;
- The site is located within ANEF 20 which is 'acceptable' for residential development;
- Residential development is evaluated according to the following ANEF categories;

  ANEF 20 or less = Acceptable
  ANEF 20 to 25 = Conditional
  ANEF 25 or above = Unacceptable

04 development concept

04.1 concept overview

The proposal for the site involves the demolition of existing structures and the construction of new buildings across the site to achieve the following outcomes:

- **Density:** Floor Space Ratio (FSR) of 2:1 including indicative residential yield of 350 apartments.
- **Height:** Increase in permissible height to provide appropriate open space, public and private domain, vehicular and pedestrian connectivity;
- **Employment:** Creation of approximately 363 direct and indirect ongoing jobs, and a further 1,782 direct and indirect construction jobs; and

Considerations from the key directions of the *Inner West Subregional Strategy (draft 2008)* will shape the urban design outcome, specifically:

- Contribution of the proposal to the local context and Parramatta Road Enterprise Corridor;
- Plan for a housing mix near jobs, transport and services;
- Focus housing in and around existing strategic and local centres;
- Maximising the advantages of available Public Transport and Infrastructure;

The concept has been developed in accordance with, and in consideration of recommendations from specialist reports and the site constraints and opportunities investigated in Section 3 of this report, including:

- The preferred land uses for best urban design outcome based on framework set out in the *Urbis Planning Report*;
- Initial transport and traffic management consultation including considerations for parking, servicing, site access and through site connections as set out in the *Traffic Report;*
- Public open space considerations as set out in the *Urbis Open Space Study*;
- Consistency with the current Leichhardt DCP (2000), where applicable;
- Community consultation as described in the *Urbis Planning Report*, addressing amenity and impacts;
- Connection to Local Opportunities - Public Transport, Open Space, Retail, Services, Health Facilities and Education as in the *Urbis Planning Report*; and

- Management of Constraints - Narrow Streets, Laneway Character, existing buildings, heritage, natural slope across the site and flooding.

Through the consultation and concept massing process it became evident that the current Leichhardt DCP (2000) controls relating to Building Envelope, Streetscape, Setbacks and Building Heights were not appropriate to achieve the best outcome planning principles, including those of medium to high density residential and compliance with SEPP 65 (Appendix B). In response to this, a massing strategy was developed to address these items within the local context.

This detailed massing study took place to capture the strongest response to the planning principles.
This was conducted through a series of massing options (Appendix A) with the strongest response outlined in detail through out the following sections of the Urban Design Report.

04.2 urban design principles

The following design principles were formed to guide development of the most appropriate urban design outcome for the site. These principles take advantage of the existing site conditions, constraints and surrounding features discussed in the previous sections of this report. In conjunction with established best practice frameworks for Residential Apartment Design and ESD, these principles will inform the urban design response and future site specific DCP.

Appropriate use of land

In consideration of the findings of the *Urbis Planning Report,* develop and test land uses that are better suited to the area:

- Provide a Mixed Use component, in the Southern portion of the site, that promotes a range of complimentary employment and services for the proposed and existing residents.

- The Mixed Use component is to encourage a more appropriate range of employment opportunities in a setting that better suits residential uses as described in the *Urbis Report*; and

- Distribute land uses in the context of the existing surrounding land uses.

Useful Site Connections

Utilising the sites location to create important connections linking transport, services and recreation to assist in improving neighbourhood movement corridors, link ground floor commercial opportunites and assist future development connectivity in and around the site (Figure 14):

- Improve the existing connections between Parramatta Road and Leichhardt Market Place;

- Create a connection point across the site adjacent to the employment (mixed uses) on the site;

- Enable safe permeability across the site;

- Reinforce and improve access to local amenity through the site; and

- Encourage walking and use of bicycles in the area in conjunction with the NSW Bike Plan.

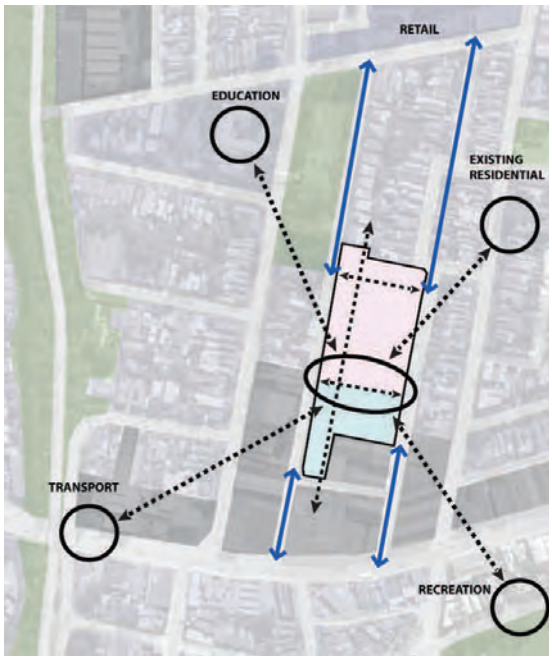


Figure 14 - Useful site connections

Concentration of Density

The key principle is to introduce land use density within precincts of existing infrastructure to revitalise local communities with access to public transport and a broad range of housing and employment options. (Figure 15):

- Concentrate height to the middle and the South of the site to limit overshadowing of the neighboring dwellings;
- Modulate height to create a relationship with the streetscape and the existing buildings in the vicinity;
- Balance and distribute density across the site to provide quality usable open space; and
- Create built form that responds to the site terrain and flood risks.

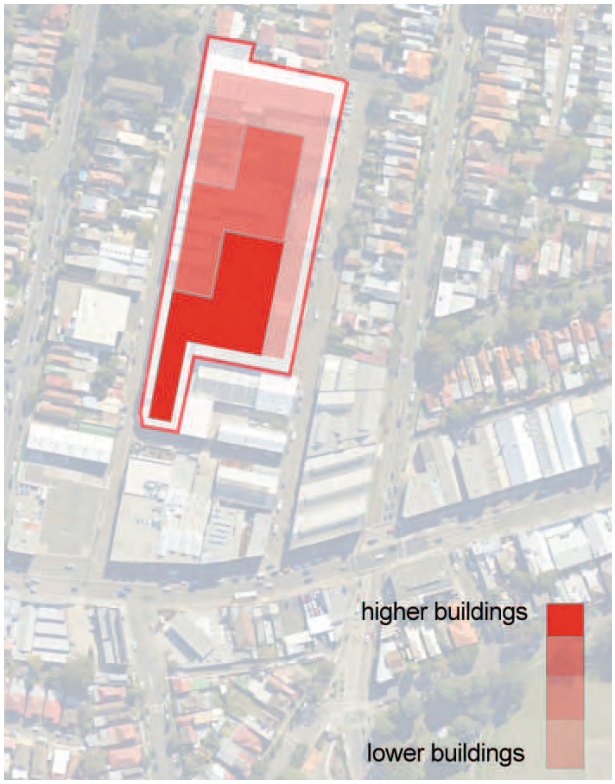


Figure 15 - Concentration of Density

Development Patterns

Respond to existing development patterns, where possible, and provide a development framework to assist all future precinct developments;

- Perimeter buildings will reinforce the street edge;
- Provide appropriate scale development adjacent the existing heritage cottages to the North and the existing industrial buildings to the South;
- Provide a new streetscape and pedestrian footpath zone to contribute to the area;
- Create internal open spaces with shared access ways to increase connectivity through the site.

05 urban design response

05.1 vision

A successful urban design response will create a vibrant community that is connected to its surrounds by social, economic, spatial, physical and environmental elements.

The design for the site will improve the existing urban fabric through the replacement of obsolete, derelict factory structures with an integrated, employment and residential zone providing increased safety, diversity and connectivity to the greater Leichhardt area.

The Urban Design Response is broken down to address specific opportunities and site constraints identified in Section 3 - Existing Character, and has been formed around a set of core values which can be summarised as:

Responsive: The design will be both responsive and sympathetic to the form and cultural character of the existing urban landscape.

Community: The development will include amenity which will be accessible by both the occupants and the public. This improved local amenity will incorporate landscaping, open and public spaces, integrated connections, environmental features, creating a 'sense of place' and conveying a feeling of community.

Considerate: Landscape and urban treatments will be considerate of the need to provide visual and acoustic shielding in the form of vegetation, levels and structures. A positive visual, environmental and management relationship with adjoining lands will be reinforced.

Connectivity: Around and through the site, connectivity and way-finding will be improved including well defined landscaping, entry statements, newly constructed levels and streetscape elements, signage, street furniture and other built elements.

Identity: The design form will express the character of the development and communicate a strong and unique identity that complements the surrounding land uses.

Adaptability: An urban design which is flexible in each key component, including the ability to suit the needs of future generations, for its stakeholders, occupants and the community.

Sustainability: Ecologically sustainable development principles are to be incorporated into all facets of the proposal where practical and possible. SEPP 65 design elements are to be integrated into the fabric of the development.

Movement: The urban design will support an internal vehicular and pedestrian traffic network that will be both safe and efficient, and will incorporate integrated pedestrian and cycle connections throughout the development and to surrounding areas.

Accessibility: The proposed urban design will support accessibility requirements and services to DDA compliance. Full integration across the site is expected to achieve safe, easy access for all individuals.

05.2 urban design response

A *Massing Study (Appendix A)* was conducted to review development possibilities through the analysis and management of site constraints and opportunities. The massing study resulted in the strongest response put forward in Sections 5 and 6 of this report.

The preferred proposal includes the two zones (below) and is illustrated in Figures 16 and 17 (page 45 & 47). An indicative area schedule is provided below to assist with area provided within each specific zone.

Table 7: Proposed Zone Areas	
Zone	**GFA**
Residential Zone	18,000m^2
Mixed Use Zone	11,300m^2
Total	**29,300m^2**
Site Area	14,662m^2
FSR 2:1	**29,324m^2**

All areas are indicative and may change through further detailed design.

Residential Zone

Residential buildings will be located at the Northern part of the site adjacent to the existing residential area and will extend South across the majority of the site. The total GFA of medium density residential development will be approximately 18,000m² and will likely yield around 220 apartments, including the following key elements:

- Perimeter buildings on George Street and Upward Street (ranging from 16 to 32 metres at the Northern and Southern ends respectively) with ground floor apartments having direct access to the street; and

- Central North facing buildings (ranging in height up to 32m).

Mixed Use Zone

The mixed use zone will include a combination of high density residential and employment related development to be located towards the South of the site adjoining the Light Industrial and the residential uses as shown on the land use plan (Figure 2). The total GFA will be approximately 11,300m² including the following key elements:

- Employment related development of approximately 1300m² on the Ground floor with access to on-site parking and basement loading; and

- Residential use of approximately 10,000m² (ranging in height up to 32m with street setbacks and rooftop plant) and will likely yield around 130 apartments.

Building Setbacks & Separation

New site setbacks to the street will provide increased public domain amenity and provide for future urban growth. Increased building separation will encourage the public use of open spaces and create a high quality outlook for the residents. An opportunity exists to further increase height and density within the Southern end of the site and adjacent employment sites.

Height within buildings directly behind the employment uses on Parramatta Road also provide the opportunity for views while mitigating adverse health and noise effects of residential apartments along the main arterial road.

Connections to Social Infrastructure & Transport

The site is located between the Parramatta Road Corridor and the Village Centre at Leichhardt Market Place. Useful connections to facilities, schools and transport in the area will have the benefit of activating the site, future employment provisions and increased connectivity / safety in and around the site.

Open Space and Public Domain

Quality open space and public domain will be provided both at the site edges and the through the site to create social opportunities and improve the outlook of the buildings on the site. The *Urbis Open Space Study* has been considered in the urban design response.

Accessibility

A well-defined ‘shared zone’ for pedestrians, bicycles and vehicles will allow for safe, comfortable movement whilst providing clear, equitable and legible connectivity across the site.

Landscaping

The addition of street trees and trees across the site will enhance the outlook both to and from the street. The landscaping will create clear entry markers, enhance vistas and improve safety in the shared zones. The landscape design will enhance the visual qualities of the development whilst providing shade and relief along main connection corridors.

Streetscape: Defined streetscape, public domian and urban elements that complement the existing character will enhance the sense of ‘place’ in and around the site.

Traffic

A change of use on the site and introduction of a basement car park will result in the reduction of commercial traffic. Basement parking for loading, residents, employees and visitors will be provided. The opportunity for car sharing and other initiatives have been detailed in the *Traffic Report*.

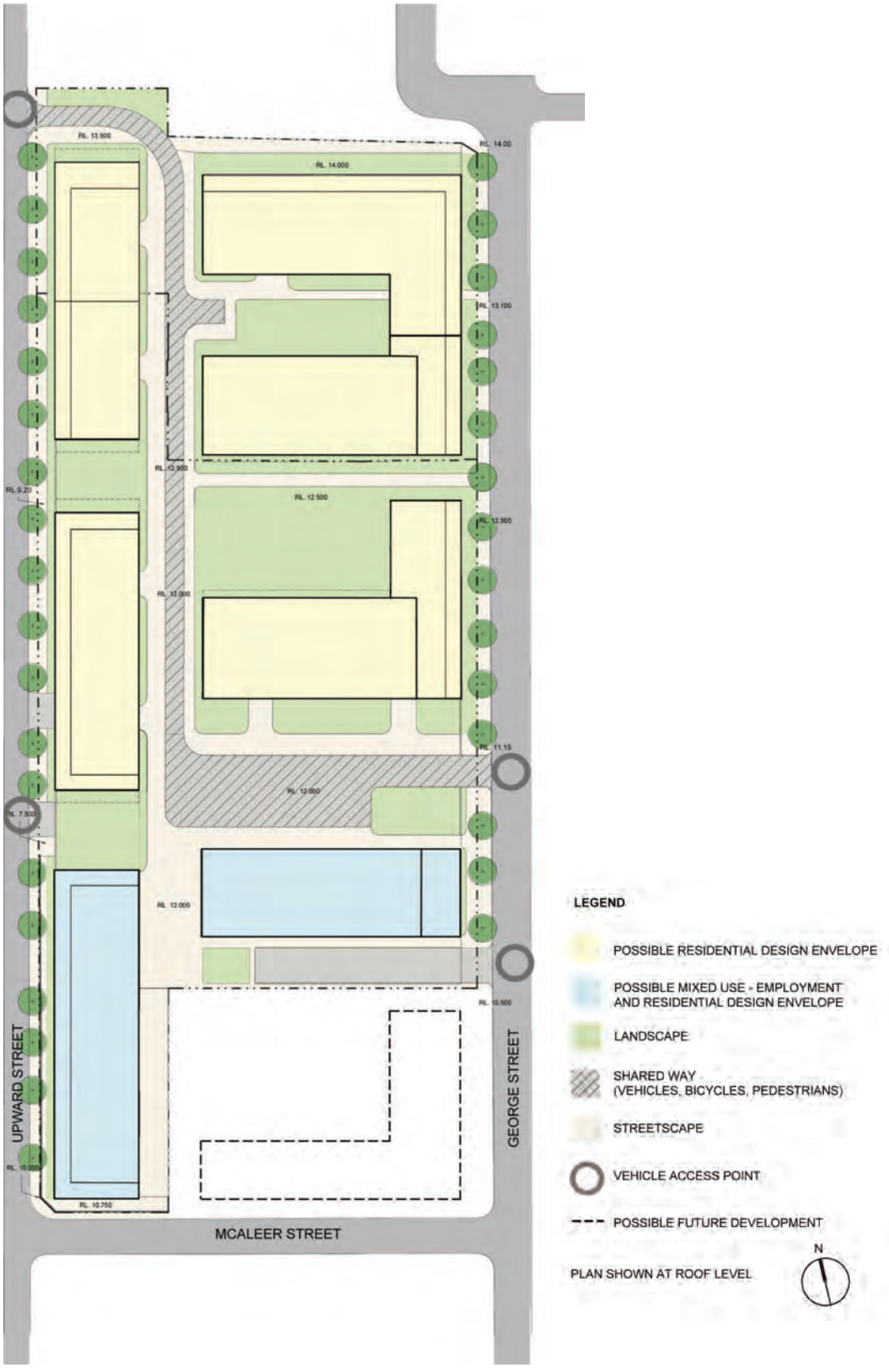


Figure 16 - Urban Design Response

Safety & Security

Safety and security at all times, to the site, its occupants, and the surrounding community will be important. The use of passive surveillance, specific lighting, controlled access points, provide clear visual corridors and minimising undesirable spaces are to incorporated in all aspects of the proposal.

Views and Visual Privacy

Effective distribution of the massing will allow views for residents while controlling overlooking across the site and neighboring properties. Building orientation will maximise views and minimise overlooking on neighbouring properties. This will address both amenity and safety considerations for the residents. The streetscape will also address views and visual privacy for all local residents.

Solar Access and Overshadowing

Solar access is maximised through appropriate height and setbacks that take advantage of the land uses. The major benefits of the proposed massing is the increase in amenity provided to the residents by provisions over and above that required under SEPP65.

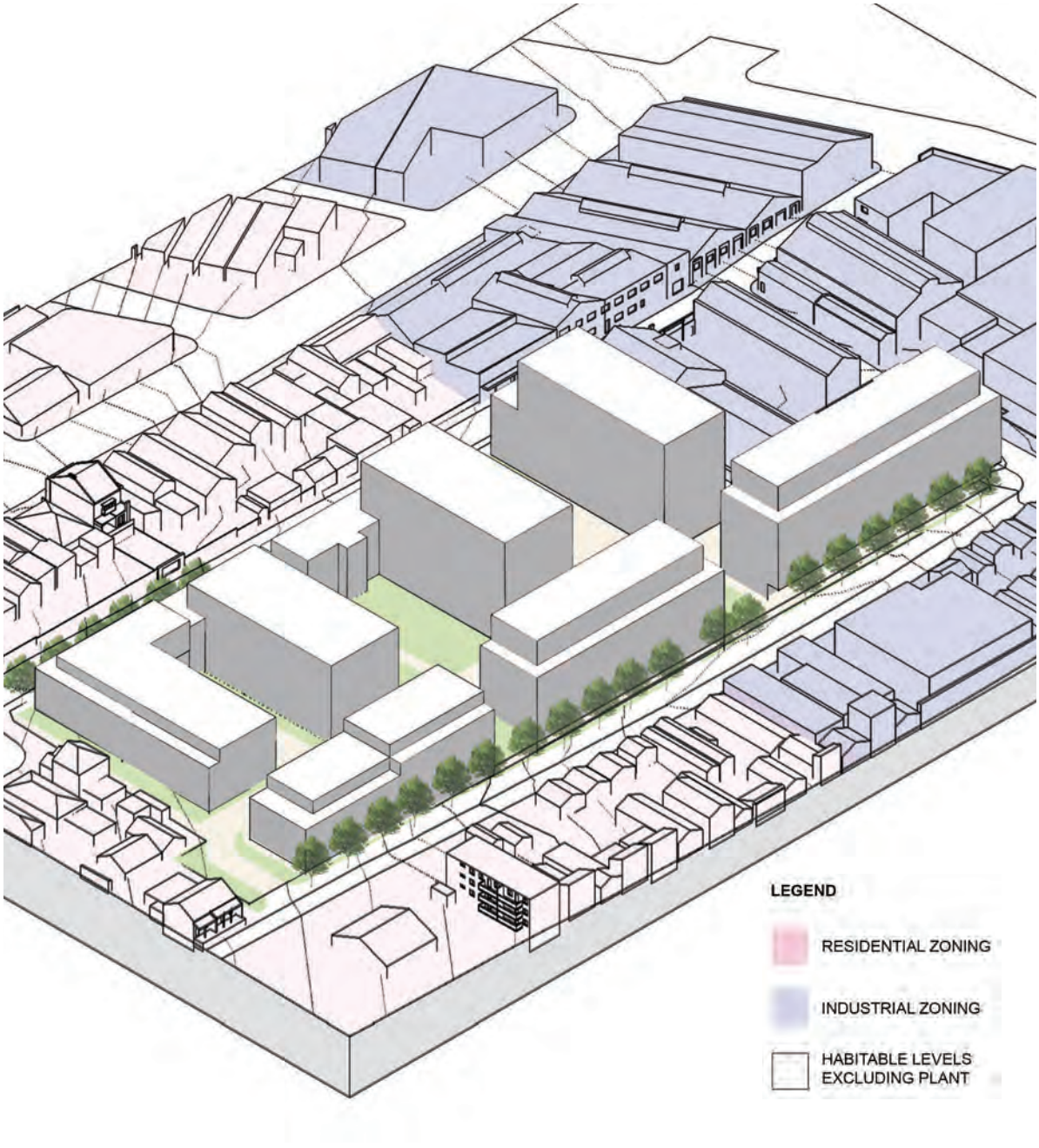


Figure 17 - Indicative Massing

05.3 building heights

Proposed building heights are to provide a balance between the required density and the quality of the urban space created for residents and wider community.

Objectives

- Achieve a Floor Space Ratio (FSR) of 2:1 across the site;
- Maximise the benefits of open space for residents;
- Create a framework to allow quality streetscape design;
- Create site connections across and through the site
- Comply with SEPP65

Principles (Figure 18)

- Building heights have been calculated as per DRAFT Leichhardt LEP 2012.
  (vertical distance between the ground level (existing) and the heighest point of the building including plant and lift overruns but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.)
- Buildings have been set above the flood planning level of RL 12.500 (Flood planning level of RL 12.00 plus 500mm freeboard);
- The lowest building on the site is 16m and located to the North of the site to integrate with existing residences (refer to 05.7 streetscape);
- The tallest building on the site is 32 metres. It is located in the South of the site to mitigate overshadowing of existing and proposed dwellings (refer to 05.11 shadow studies);
- The height steps up from 4 to 8 habitable storeys from North to South.
- The perimeter buildings on Upward Street are above the flood planning level (as shown in Figure 20D). This allows for entry to the loading dock under the building;
- Building setbacks have been implemented to mitigate visual impacts (refer to Section 05.4 building siting and setbacks); and
- Building heights have been developed inconjunction with building separation to provide quality ground floor open space, site connections and compliance with SEPP65.

These design principles have been implemented to effectively balance the height, open space and amenity to future and existing residents as demonstrated in Figure 18.

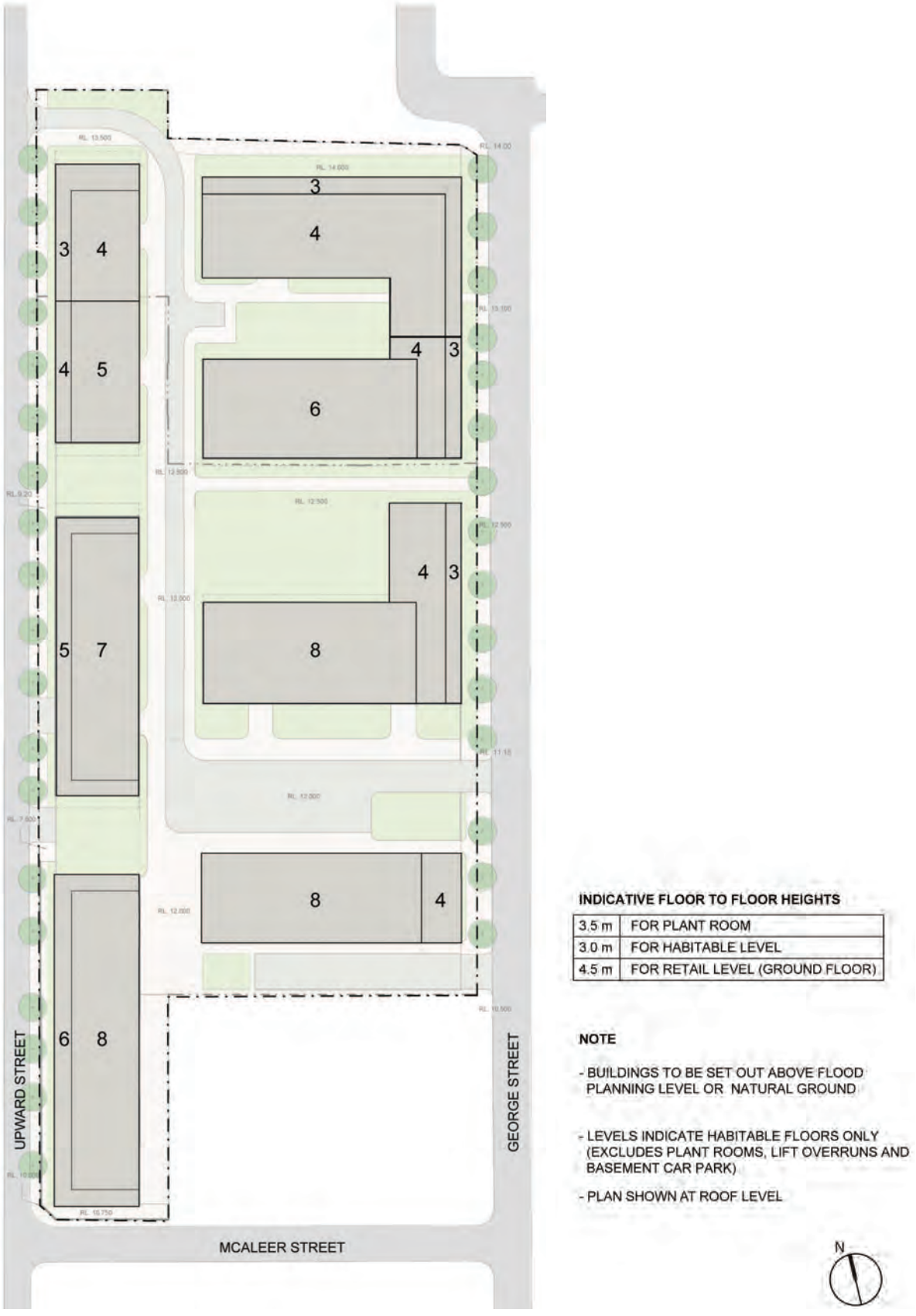


Figure 18 - Building Heights

05.4 building siting and setbacks

In accordance with the urban design principles (Section 04.2) and the Massing Studies (Appendix A), the design response sites buildings and creates setbacks as follows:

Objectives - Building Siting

- Create a relationship with the existing development patterns and open space;
- Provide permeability for pedestrians, bicycles and vehicles;
- Provide a sense of address for the residential uses;
- Encourage activation of the site at the pedestrian level;
- Maximise the benefits of open space for residents;
- Create equitable access to facilities and public transport; and
- Comply with SEPP 65 and provide an amenable outlook for residents.

Objectives - Setbacks

- Provide the opportunity for higher density development across the site;
- Provide increased building setbacks where possible to provide quality open space for residents;
- Create a relationship between building setbacks and street widths;
- Comply with SEPP 65 building separation controls;
- Ensure the streetscape relates to existing buildings; and
- Ensure setbacks at adjoining site boundaries;

Principles (Figure 19)

- Buildings oriented North are to have a minimum 18 metre separation between Mixed Use and Residential zones to allow pedestrian activation and on site parking at the ground level whilst also allowing quality solar access to North facing living areas;
- Buildings are to be sited to create perimeter blocks that address the street and North facing blocks to provide solar access and visual privacy;
- Provide a 6 metre internal pathway to allow for the passage of pedestrians and bicycles from the site to McAleer / Upward Street;
- A 6 metre buffer zone is to be created between any development and the existing dwellings to the North;
- 6 metre (minimum) setback (between buildings) is to be created for the service of the ground floor employment use and for separation to the rear of the residential apartments above;
- A setback on the same boundary of 6 metre (minimum) is to be implemented to allow for basement entry at ground floor, building articulation above and to accommodate any future adjoining site development;
- New buildings are to be setback 3 metres from the street boundaries to provide deep soil planting;

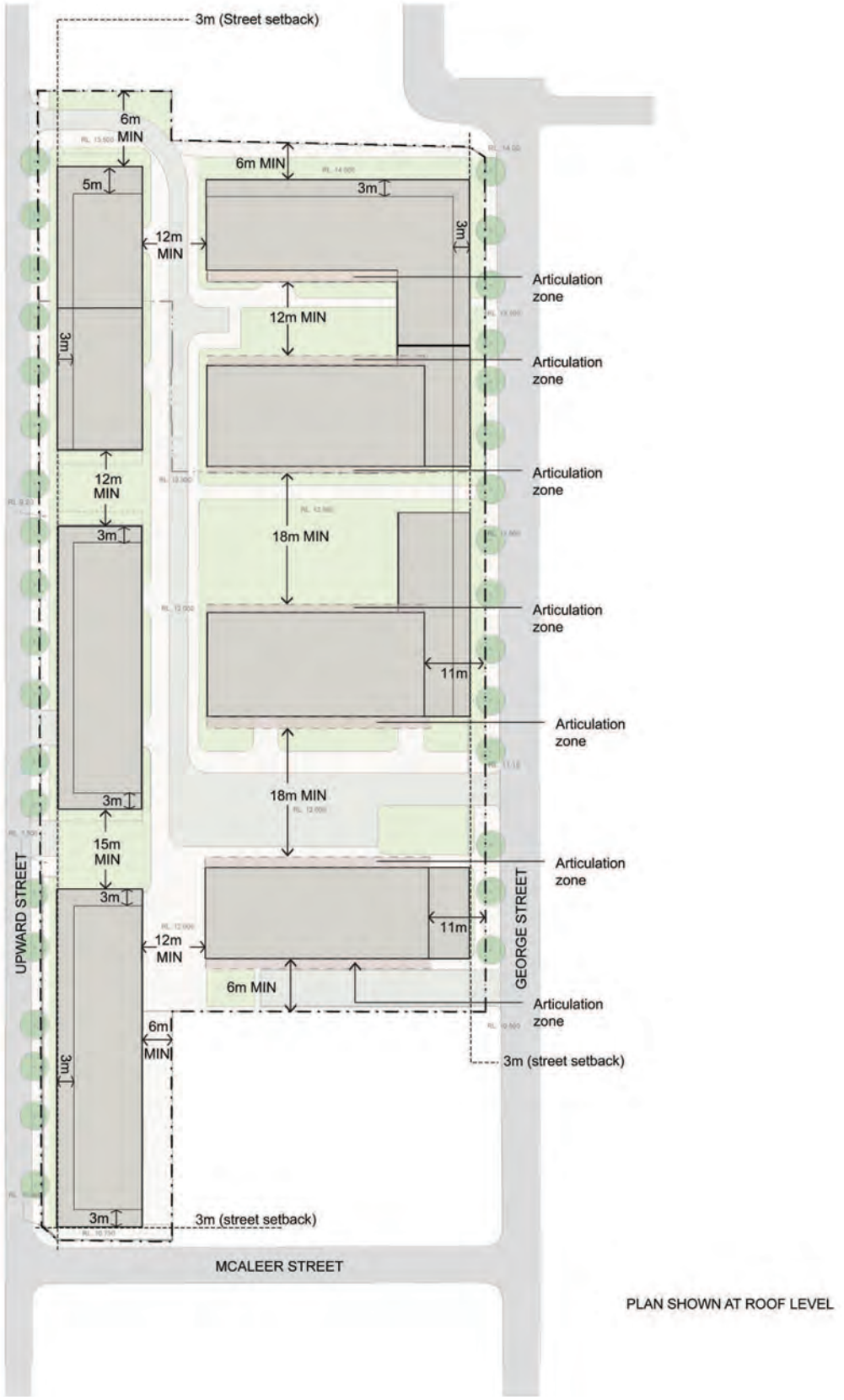


Figure 19 - Building Setbacks and Separation

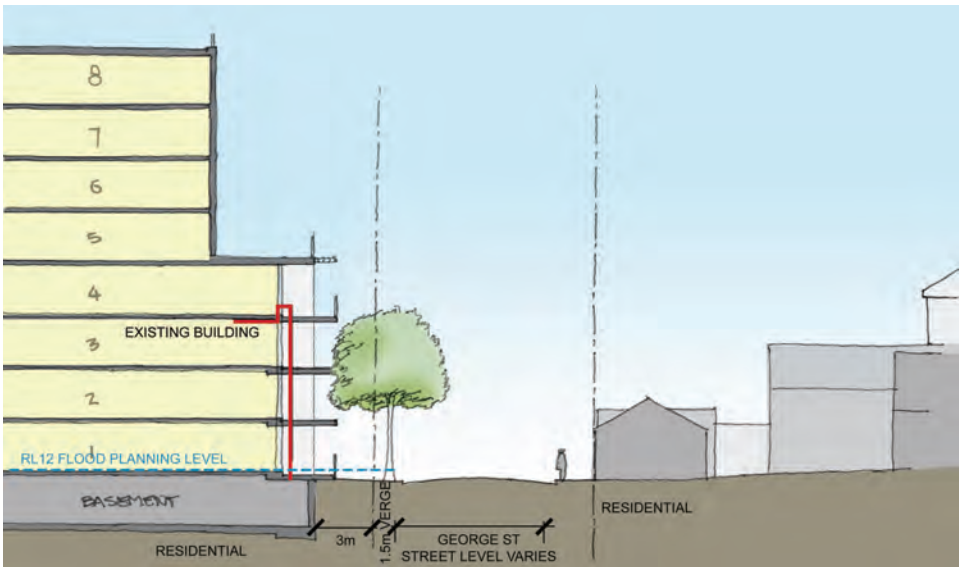


Figure 20A - Section A

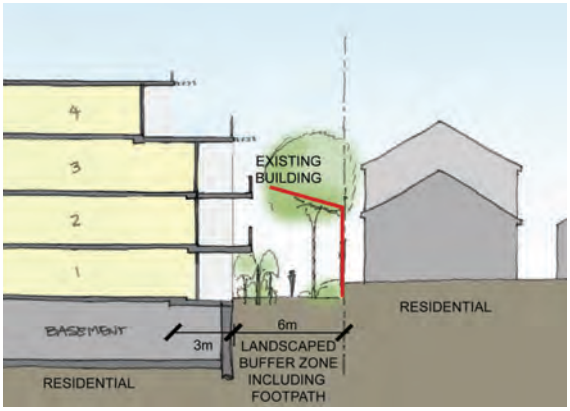


Figure 20B - Section B

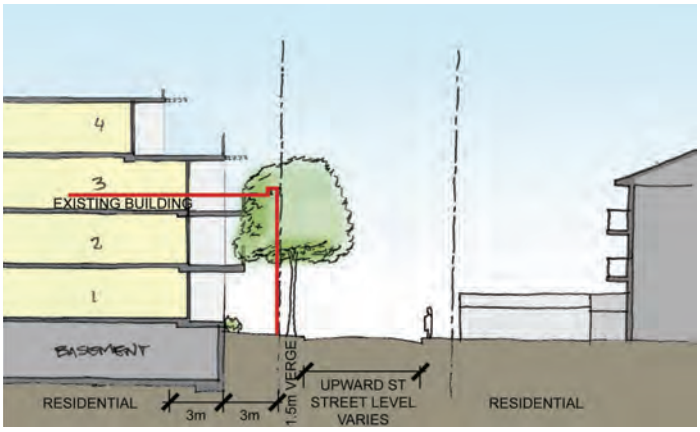


Figure 20C - Section C

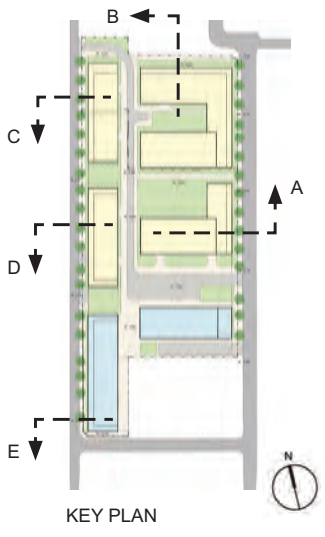


Figure 20 - Boundary Sections

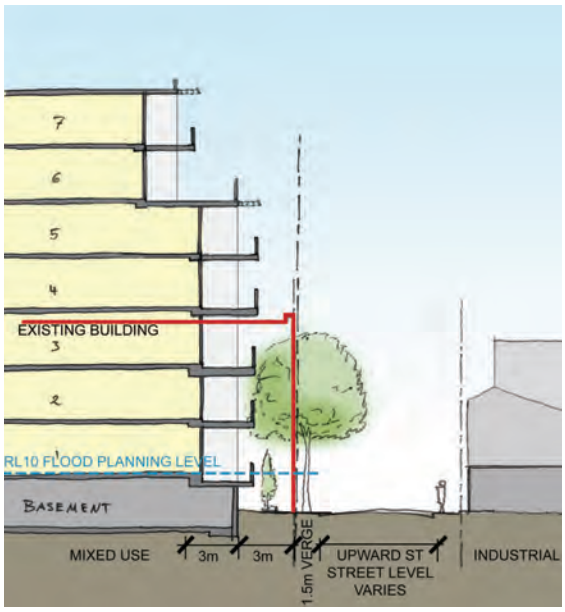


Figure 20D - Section D

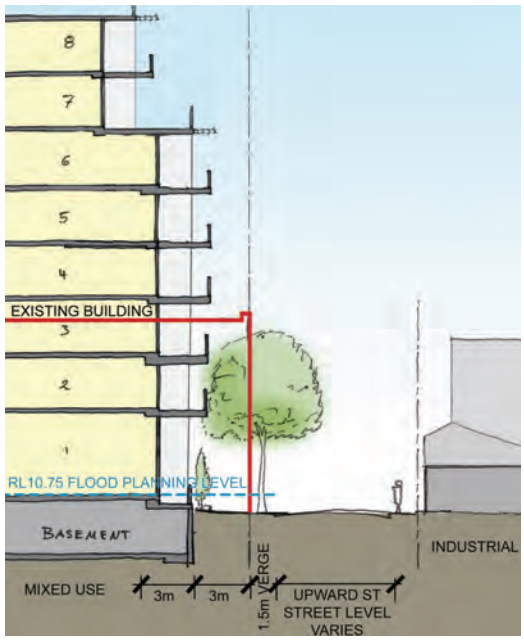
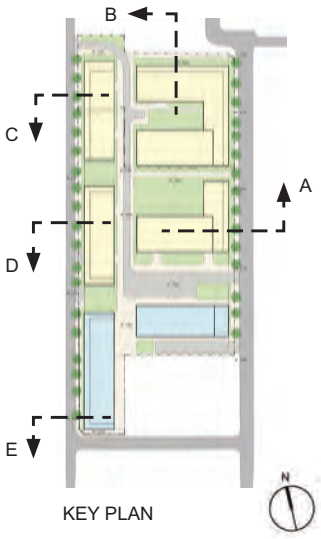


Figure 20E - Section E



05.5 site connections

The site is uniquely located in relation to public transport, schools and other important social infrastructure (Figure 6). The urban design principles employed create important links and connections:

Objectives

- Create a connection from North to South across the site to Parramatta Road
- Provide important links across the site towards the proposed Taverns Hill Light Rail Station;
- Create a connection through the site between George Street and Upward Street;
- Reinforce street connectivity to Leichhardt Market Place in the North;
- Provide useful Pedestrian & Bicycle Connections in both North/South and East/West directions;
- Provide controlled vehicle connections and on site parking;
- Ensure accessible connectivity over the entire site; and

Principles (Figure 21)

- Due to the level differences in the East/West direction the site connections have been developed to accessible transitions;
- Primary pedestrian and bicycle links through the site are to be located in the South between the mixed use and the residential use, and at the North of the site along the site boundary;
- Vehicle access beyond the Southern section of the site will be controlled and be a shared zone. This will be indicated by signage and will include paved surfaces and speed limiting devices;
- Pedestrians and Bicycles have access throughout the shared space. The proposed levels will have minimal falls to allow accessibility to all site users;
- Service (loading dock) access is to be provided from Upward Street with the main Carpark access to be from George Street (*Refer Traffic Report - Appendix G*).
- Setbacks will create wider footpaths along the streets to reinforce the North-South precinct links;
- At grade vehicle access for the public will be provided through an access point on George Street to the South. Parking will also be located within the basement, with access from George Street;
- Resident access across the site will be from George Street in the South with the ability to enter a controlled shared way for direct access to ground floor entry points. Residents will be directed back to George Street or Upward Street.
- Entries to the proposed Residential buildings will have direct access from the pedestrian and vehicular connections.

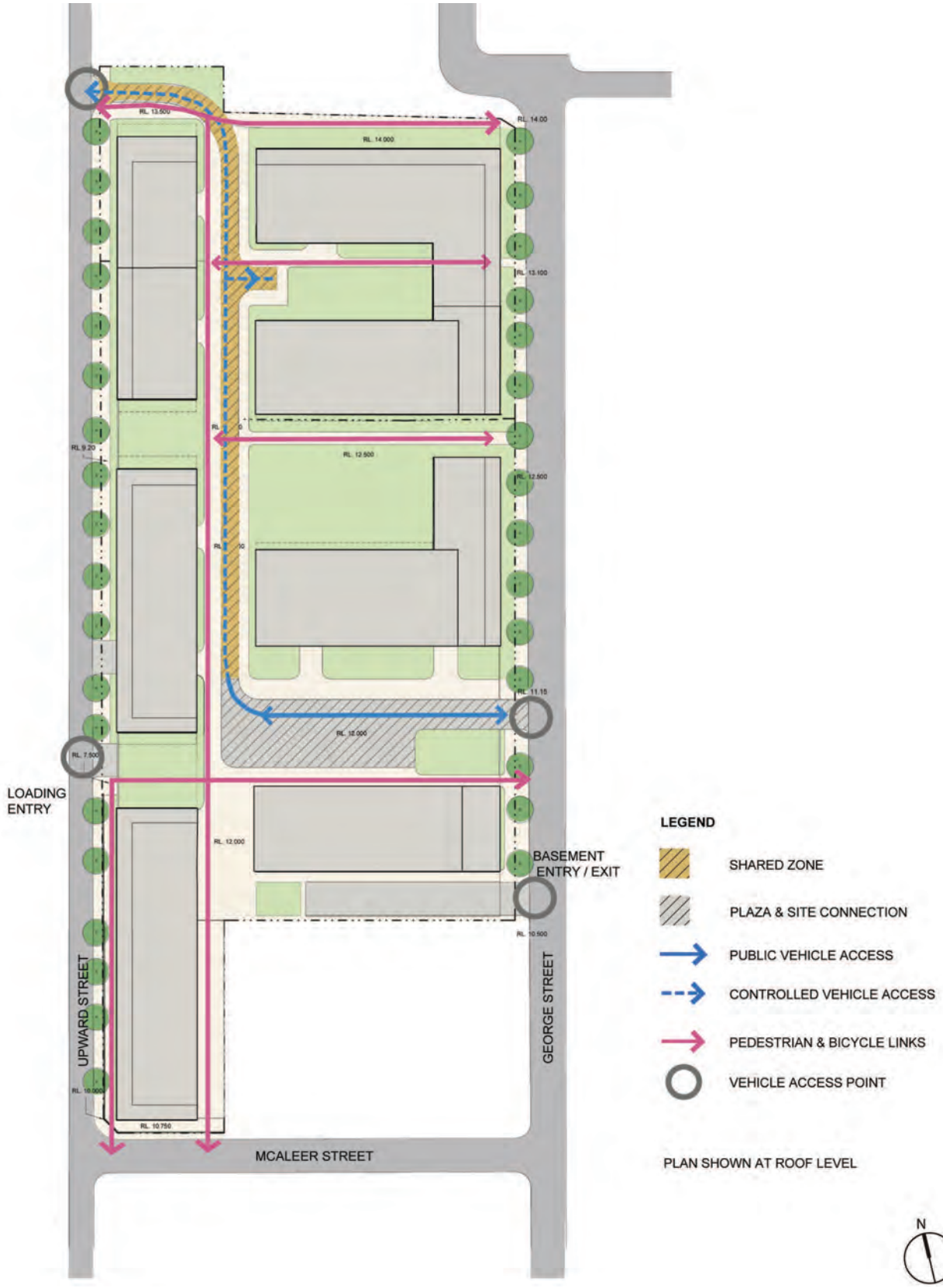


Figure 21 - Site Connections

05.6 open space

The objectives and design principles that follow respond to the outcomes of the *Urbis Open Space Report* and good urban design principles:

Objectives

- Enhance the character of the development for residents;
- Provide usable open spaces that integrate streetscape, site links and employment uses;
- Enable pedestrian, bicycle and vehicle access across the site through appropriate design of shared zones;
- Provide communal open space for residents that offers social opportunities and quality outlook from the apartments;
- Provide Landscaping that will support substantial trees as well as a diverse range of planting, including native species;
- Encourage water conscious urban design across the site;
- Integrate open space with accessibility requirements.
- Enhance the neighbourhood with tree lined streets; and
- Provide an appropriate level of active ground floor uses to increase safety, pedestrian activity and use of public domain areas
- Opportunity for community gardens, vegetable gardens and green roofs.

Principles (Figure 22)

- Redesign the street edge using proposed setbacks to widen the footpath allowing for the planting of substantial street trees (deep soil planting where possible) on both George Street and Upward Street;
- Design public domain and on site public space with a similar material pallet to create a continuous path of travel across the site through a plaza space in front of the ground floor retail and commercial uses (employment);
- Implement possible artwork / furniture as recommended in the Urbis *Open Space Study*;
- Approximately 50% of the site area is to be open space;
- Approximately 65% of the open space is to be hardstand including the area surrounding the commercial and shared zone located through the centre of the site;
- Approximately 35% of the open space is to be landscaping primarily in pockets across the site, with a large landscaped area in the middle of the site to form a communal open space for the residents. It is intended that approximately 40% of the landscaped open space will consist deep soil planting.
  The landscaping is to create respite areas, attractive outlook for the buildings and assist with the water management across the site. Some of the landscaping may be in raised planting which will substitute as additional “deep soil” and will be detailed in further design development of the site. The substantial trees will also tie the character of the open space to the existing character of the area; and
- The opportunity exists to introduce the use of ‘green walls’, ‘green roof’s’ and vegetable gardens within the development.

Figure 22 - Open Space Plan

05.7 streetscape

To create a cohesive sense of place there needs to be a balance between the new and existing elements of streetscape. Currently the character of the street is dominated by industrial buildings. A higher quality and more balanced streetscape will be created through the following initiatives:

Objectives

- Create a cohesive relationship between the existing buildings and the proposed development;
- Provide connections to the street in the form of residential entries and entry lobbies;
- Create an accessible pedestrian level that enforces through site connections;
- Encourage more people to use the footpaths and open spaces;
- Enhance the existing character of the streetscape and create a unified character for the shared zone through the site; and
- Create a streetscape that will be a benchmark for the future redevelopment of adjacent sites.

Principles

- Ensure that the height of buildings are reduced to the North to relate to the scale of the existing adjacent buildings (Figures 23 & 24);
- Use the basement to raise buildings above the 100 year flood level;
- Step George Street perimeter buildings with the gradient of the street to allow the ground floor apartments and building lobbies to open directly onto the street;
- Provide appropriate street setbacks to create a new public domain interface, increasing connectivity North / south;
- Provide upper level building setbacks and future building articulation to increase visual appearance of new buildings along the street edge;
- Separate the buildings at street level to create connectivity through the site.

Figure 23A - Upward Street Sketch looking South

Figure 23B - George Street Sketch looking North

Figure 23 - Street Level Sketches

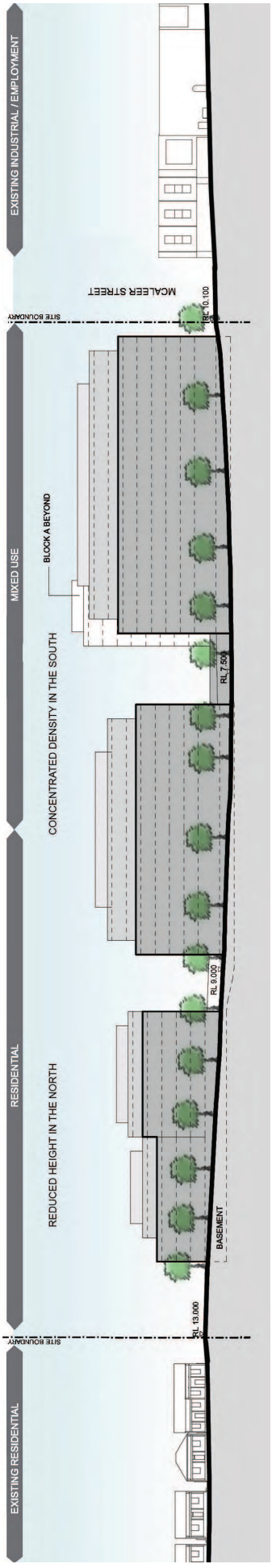


Figure 24A - Streetscape Elevation A - Upward Street

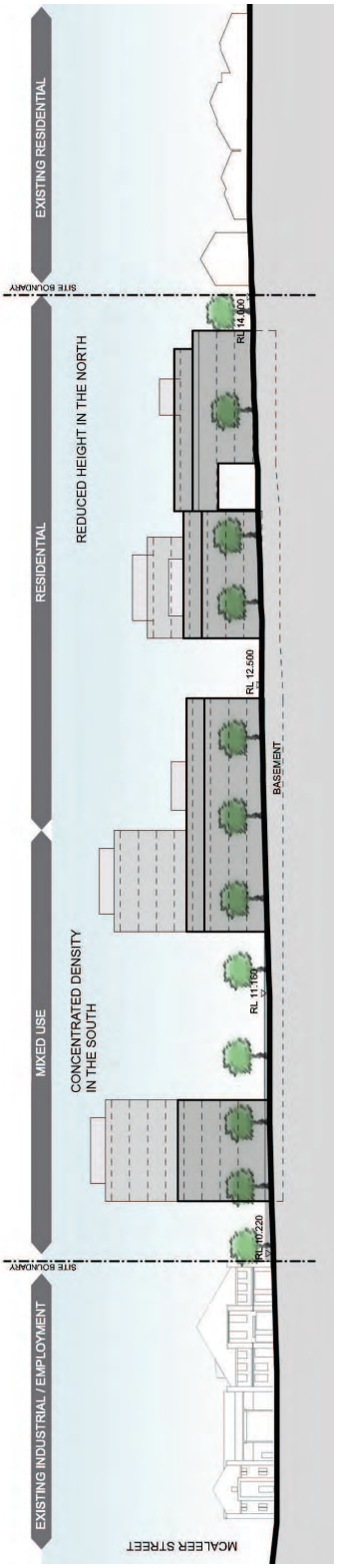


Figure 24B - Streetscape Elevation B - George Street

Figure 24 - Streetscape Elevations and Sections

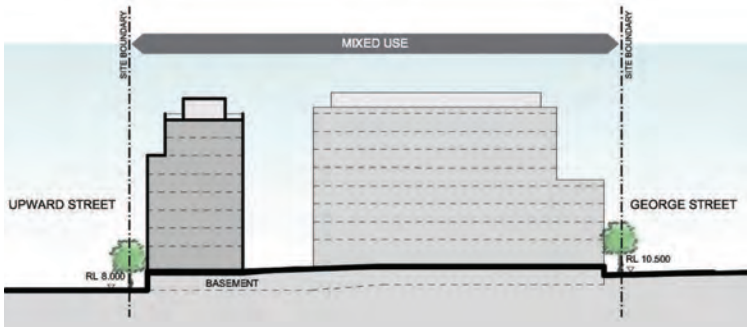


Figure 24C - Section C - Cross Section through site looking North

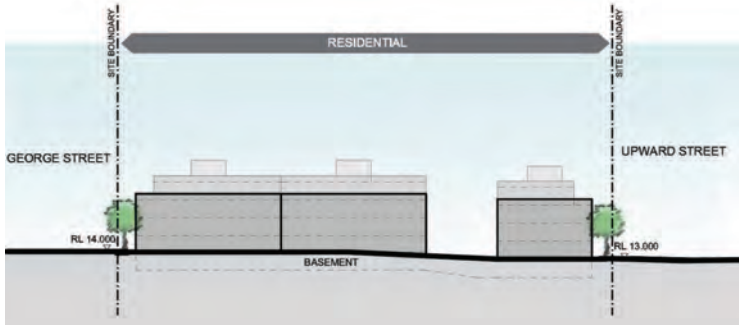
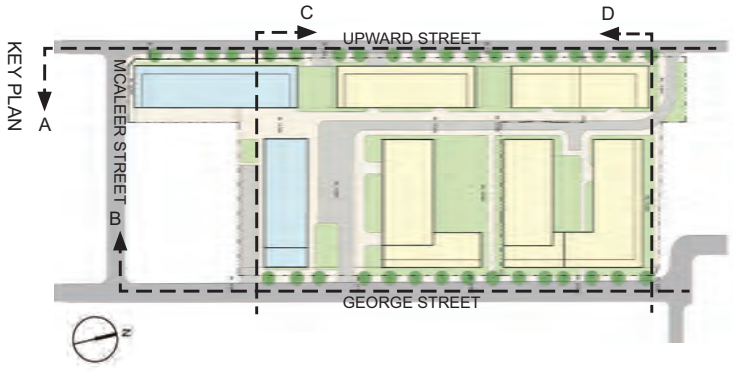


Figure 24D - Section D - Cross Section through Site looking South



05.8 transport, traffic and parking

The *Traffic Report* outlines detail transport, traffic and car parking initiatives and issues that have informed the urban design as follows:

Objectives

- Create useful connections to public transport. The *Traffic Report (Appendix G)* refers to census data showing that 20%
  of people in Leichhardt catch the bus to work with 26.4% working in the Sydney CBD and 17.6% in Leichhardt;
- Provide connectivity for cyclists and pedestrians. The Leichhardt bicycle strategy seeks to double the rate of (commuter and local) cycling in the next 5 years and provide cycle parking in public areas throughout the LGA for 500 bicycles in the next 5 years;
- Encourage links with Leichhardt Councils strategic bicycle links in Flood Street and Tebbutt Street.
- Minimise the number of cars on the site in line with current best practice but ensure no overflow parking onto surrounding streets;
- Minimise the potential for congestion around the site;
- Encourage the use of small vehicles and motorbikes/scooters;
- Ensure equitable access for all; and
- Ensure that traffic, transport and parking solutions are integrated within the development without diminishing the quality of level of amenity to occupants and neighbours.

Principles

- Car share spaces to be included in the development by providing dedicated spaces in adjacent streets (George St and McAleer St);
- Car park entries to contain flood mitigation measures if located in the flood zone;
- Car park entries to be integrated into the development facade;
- Provide for compliant accessible parking spaces in convenient locations;
- Car Entry/ Exit to George Street and Loading and Service entry to Upward Street;
- Carpark access points to be screened where possible to avoid impact on streetscape.

Estimated Parking Requirements

Based on the *Traffic Report (Appendix G)* the following table provides an outline for expected on site parking requirements:

Table 8: Estimated Parking Requirements

	Cars		Bicycles	
Use	**Staff / Residents**	**Visitors**	**Staff / Residents**	**Visitors**
Commercial	29	0	10	3
Residential	240-298	33	110	26
Total (est. by use)	269-327	33	120	29
Total (est. site wide)	**280-360**		**149**	

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05.9 safety, security and privacy

The following objectives and principles have been considered inconjunction with the Leichhardt DCP in the development of the urban design response:

Objectives

- Provide a safe environment for residents and community;
- Provide secure and visible entries to apartments, car parking and loading areas;
- Promote day time activity throughout the site and passive surveillance of all public and communal open spaces;
- Ensure visual privacy of residents from apartment to apartment and from the apartments to the surrounding dwellings and their private open spaces; and
- Provide built form that will achieve acoustic privacy for the residents of the site and surrounding dwellings.

Principles - Safety

- Create clearly defined entry points for vehicles and other users;
- Install speed humps and changes in paving finish to control the speed of vehicles throughout the shared zones;
- Ensure that corners have clear line of sight to minimise potential for collisions in the shared open spaces;
- Implement one way traffic for cars in the shared zone; and
- Install safety signage and lighting throughout.

Principles – Security

- The massing has been oriented to provide a level of passive surveillance refer (Figure 25);
- Closed areas that cannot be seen either by residents or passing vehicles have been avoided;
- Potential for camera and/or CCTV surveillance to enclosed spaces;
- Building lobbies are located directly off main circulation routes to enable secure access;
- Loading area are separated from the main carpark;
- Carpark has a single secure main entry; and
- Visitors, Commercial and Residents parking is to be securely separated within the carpark.

Principles – Privacy

- Facades that face neighboring dwellings are to have views restricted through the use of design fixtures such as vision panels or locating windows at high levels;
- The Vipac *Acoustic Report* - Appendix I concluded that ‘building of this nature in this location is not expected to negatively effect any noise sensitive receivers’. In addition the report concludes that acoustic glazing will be required to minimise local traffic and aircraft noise to the development.

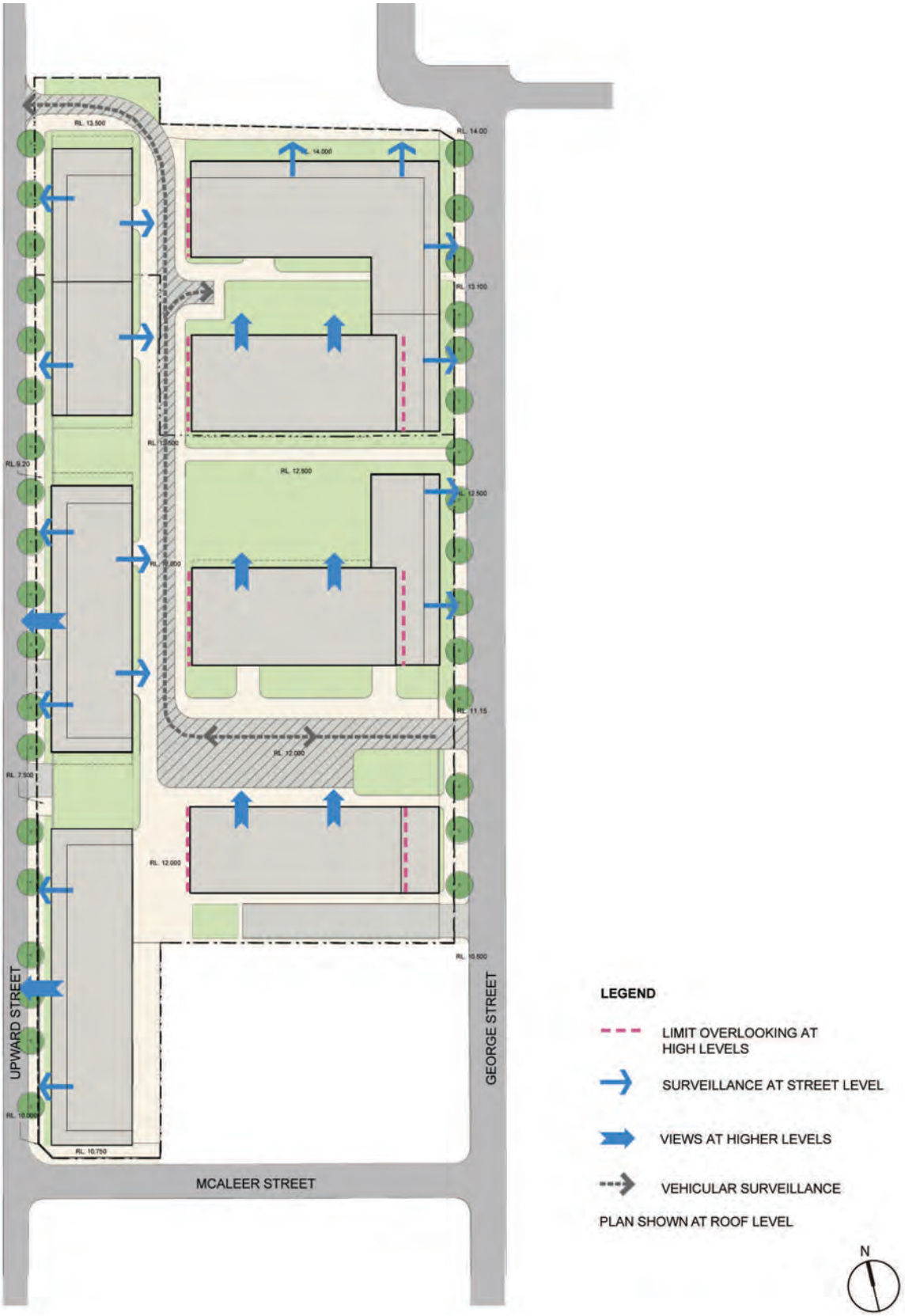

Figure 25 - Views and Visual Privacy

05.10 views and visual impact

The proposal addresses the visual amenity and views for the residents. Variation in heights and setbacks are designed to limit the visual impact of the proposal. Architectural articulation and treatments are to be used to enhance the massing.

Views from the site

The taller buildings on the site will enjoy both district and CBD views. At lower levels the landscaping, district views and streetscape will provide a pleasant outlook.

Views to the site

The site is at a low point in the terrain of the area which will assist in limiting the visual impact of the proposal. Notwithstanding this, buildings of the proposed height will be seen from some locations in the surrounding precinct.

Visual Impacts Analysis

To determine the likely impact of the proposed massing, a Visual Impact Study was carried out as a pre-cursor to a more detailed visual impact analysis (which shall utilise ArcGIS or similar software as an accepted industry standard) and design concept development, which will likely include:

- Detailed photomontages which may be required to be submitted at Development Application Stage;
- Architectural detail to be developed for the façade treatment of the buildings; and
- Blank facades are to be avoided, facades are to be articulated to create visual interest.

Methodology for Visual Impact Study

The Visual Impact study is to give a graphic indication of the impact of the proposed massing and associated 2:1 FSR on the site. In carrying out the Visual Impact study, efforts have been made to generate graphics that are representative of the design intent. In doing so, the following general methodology has been followed:

- In taking photos, the Coordinates and heights were measured with a GPS Camera;
- In REVIT 3D Architectural software, model cameras were placed at the corresponding coordinates and heights;
- The target of image was acquired by modelling reference items (Buildings in view of the Photo) using aerial mapping; and
- The modelled perspective was placed in the photo, resized by ratio such that the reference points match the photo. The image was then cut to graphically sit beyond the foreground parts of the photo.

The Visual Impact study is shown at Figure 26.

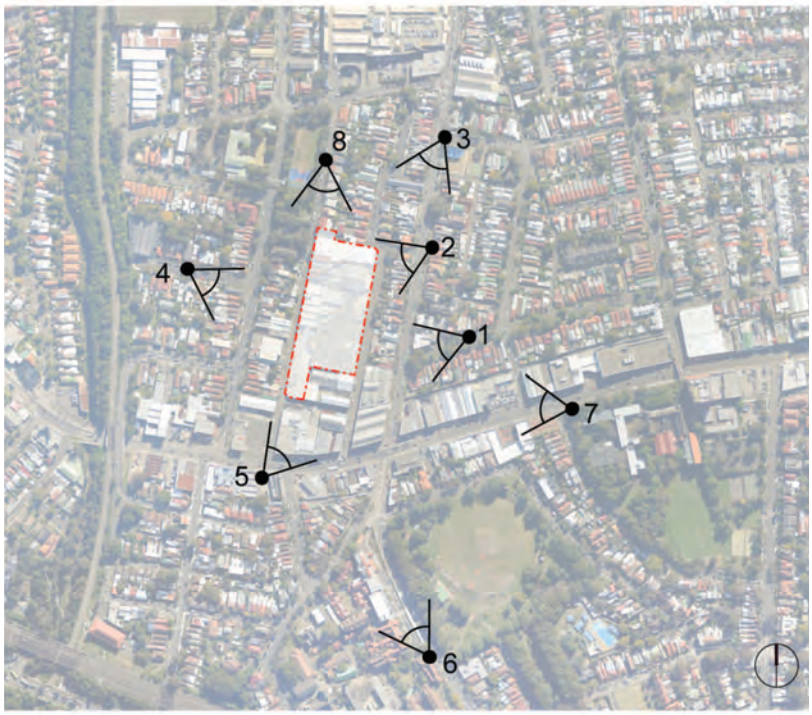

Figure 26A - Visual Impact Study: Selected View Points

Figure 26B - View Point #1: View from Albert Street, approx 121m to the East of the site

Figure 26 - Visual Impact Study

Figure 26C - View Point #2: View from Flood Street, approx 92m to the North of the site

Figure 26D - View Point #3: View from Flood Street, approx 163m to the North of the site

Figure 26 - Visual Impact Study

Figure 26E - View Point #4: View from Beeson Street, approx 144m to the West of the site

Figure 26F - View Point #5: View from Parramatta Road (cnr Upward Street), approx 100m to the South of the site

Figure 26 - Visual Impact Study

Figure 26G - View Point #6: View from West Street (adjacent Petersham Park), approx 270m to the South-East of the site

Figure 26H - View Point #7: View from Parramatta Road (near Fort St High school), approx 275m to the East of the site

Figure 26I - View Point #8: View from Upward Street, approx 96m to the North of the site

Figure 26 - Visual Impact Study

05.11 shadow studies

Shadow studies of the proposed height and density were carried out to investigate the impacts of the proposed development on the neighboring properties, and to compare the proposed development envelope against both the DA approved Kolotex industrial development envelope and the current site conditions.

The blue shadow outlines the additional shadow provided by the proposed development over the existing site and neighbourhood conditions.

A study of the shadows cast by the massing yielded the following results:

- Of all the neighboring properties only 4 (No. 40 Upward Street, 2 Apartments from 59 Tebbutt Street and 15 George Street) directly face Upward or George Street (adjacent the site) all other properties have rear yards or garages adjacent the site.

- Due to the orientation of the existing neighboring buildings, the adjacent properties will receive both morning and afternoon sun to the habitable rooms (achieving minimum 4 hours required in the DCP).

- The existing properties to the East will be in shadow between 2 and 3pm (winter solstice). The proposal maintains sun to 50% of the private open space for the minimum 3 hours (two existing Southern properties) and 4 hours to the other properties.

- The existing properties to the West will be in shadow between 9 and 10am (winter solstice). The proposal does not create further impact to the Southern most properties and maintains sun to 50% of the private open space for 4 hours to the Northern properties.

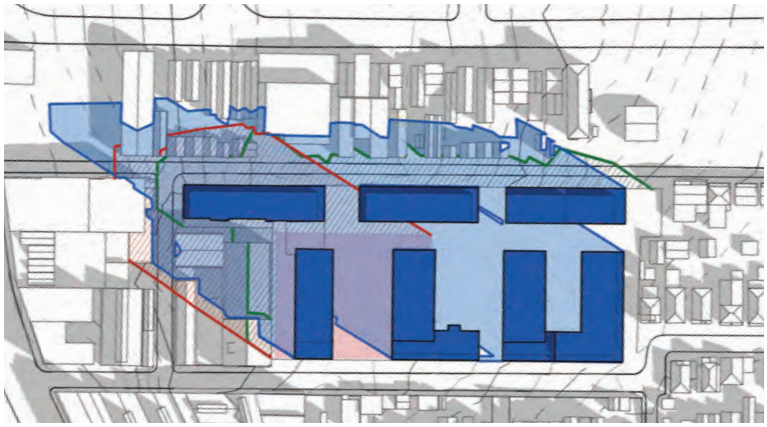

Figure 27A - Winter Solstice, 22 June, 9am

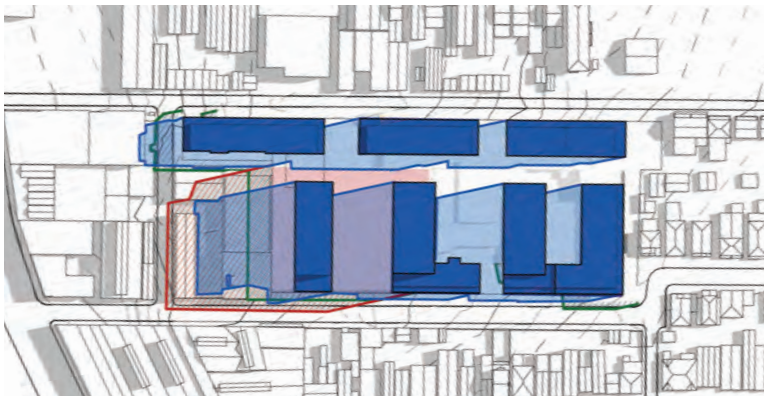

Figure 27B - Winter Solstice, 22 June, 12pm

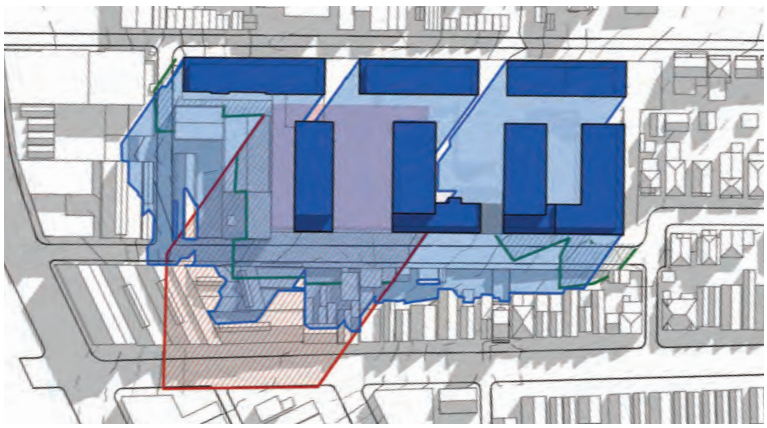

Figure 27C - Winter Solstice, 22 June, 3pm

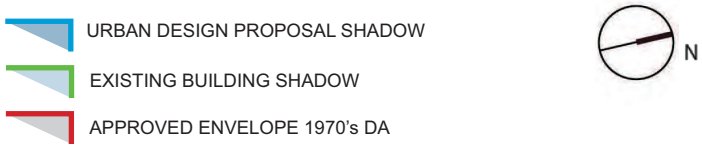

Figure 27 - Shadow Study: Winter Solstice

- It is evident that the summer solstice is a much more positive result in terms of solar access. The degree of sun shown in the adjacent diagrams illustrates the importance of landscaping for shading to open spaces.

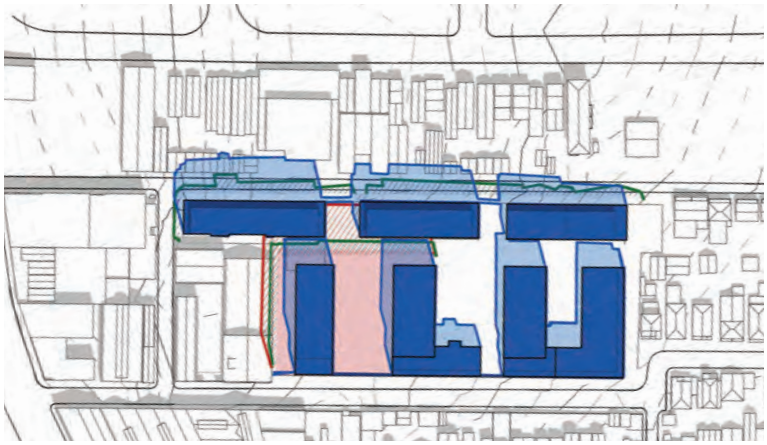

Figure 28A - Summer Solstice, 22 December, 9am

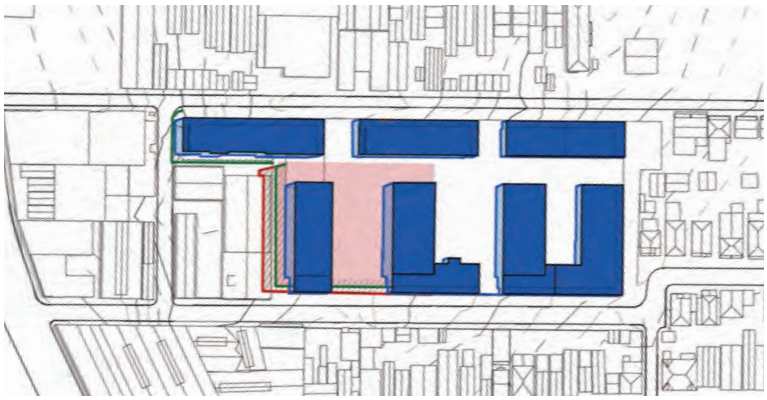

Figure 28B - Summer Solstice, 22 December, 12pm

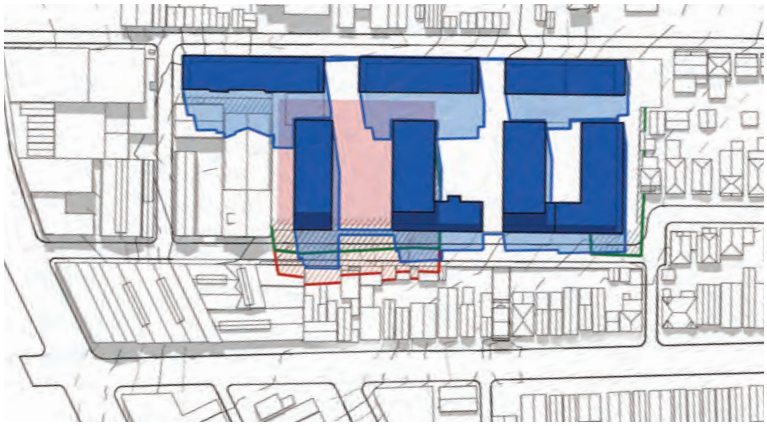

Figure 28C - Summer Solstice, 22 December, 3pm

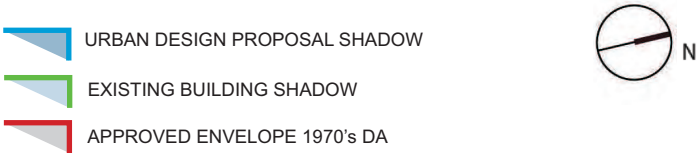

Figure 28 - Shadow Study: Summer Solstice

05.12 solar access

A solar access study has been undertaken to investigate the likely solar access and impact within the proposed development and to surrounding existing developments.

The results have influenced the distribution of buildings across the site and the development of indicative layouts, which in turn have determined the yield of the site.

Detailed design development is required to finalise the performance of the proposed buildings. It is anticipated the urban design response will achieve compliance with SEPP65 however it is intended to increase this where possible:

- 70 - 75% of the apartments receive 3 or more hours of sun to their primary living space and open space between 9am and 3pm on the winter solstice (SEPP65 requires 70%); and

- 60 - 65% of the apartments in the urban design are cross ventilated (SEPP 65 requires 60%). It is anticipated that this percentage may be increased through the design development stages.

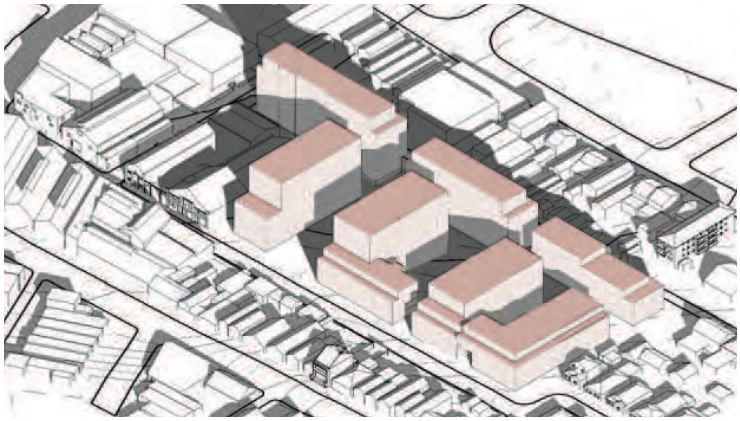

Figure 29A - Winter Solstice, 22 June, 9am

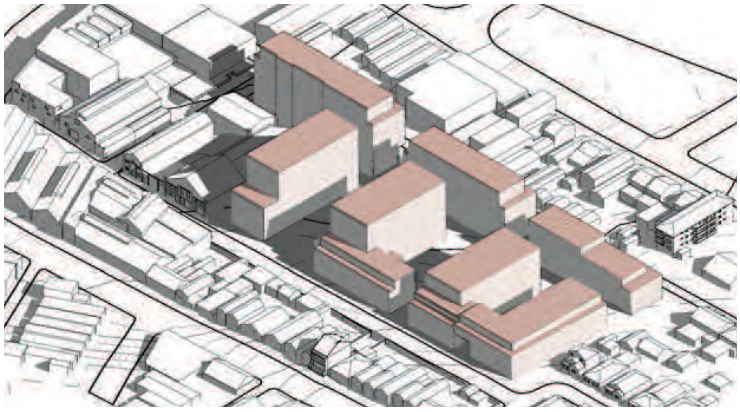

Figure 29B - Winter Solstice, 22 June, 12pm

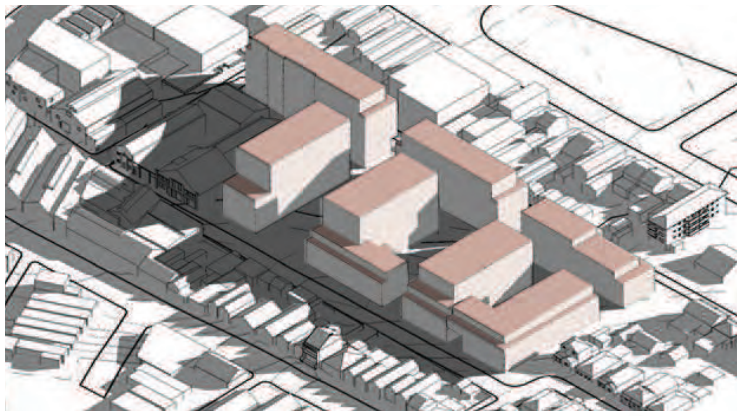

Figure 29C - Winter Solstice, 22 June, 3pm

Figure 29 - Solar Access Study: Winter Solstice

- It is evident that the summer solstice is a much more positive result in terms of solar access. The degree of sun shown in the adjacent diagrams illustrates the importance of landscaping for shading to open spaces.

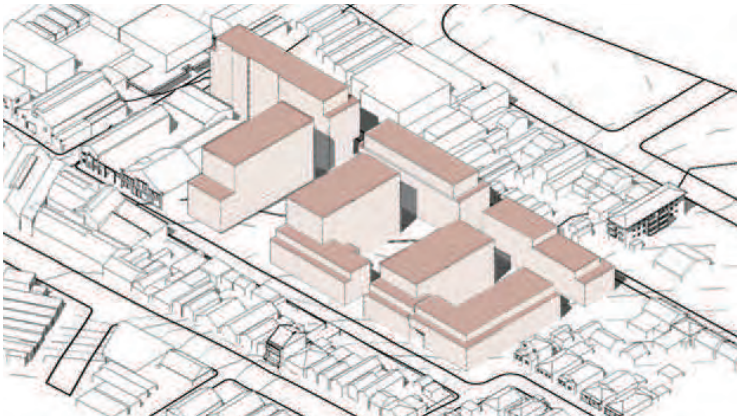

Figure 30A - Summer Solstice, 22 December, 9am

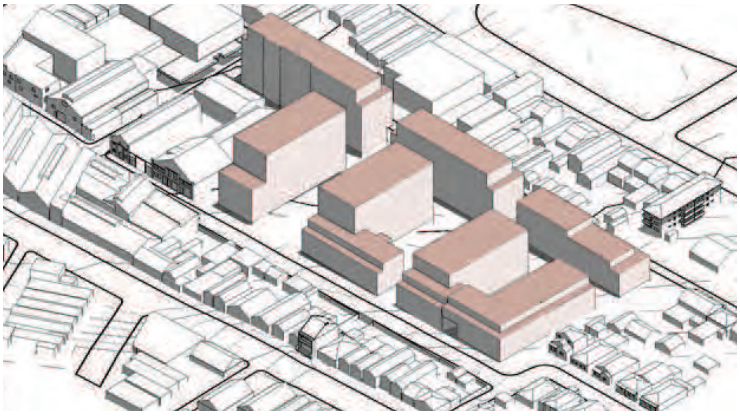

Figure 30B - Summer Solstice, 22 December, 12pm

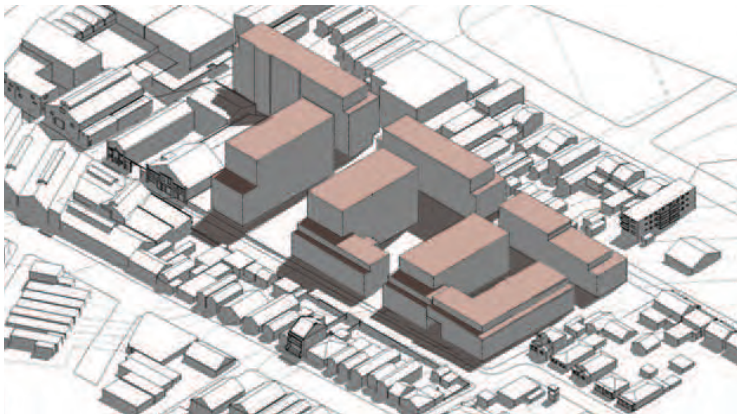

Figure 30C - Summer Solstice, 22 December, 3pm

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Figure 30 - Solar Access Study - Summer Solstice

06 built form design principles

06.1 built form and quality

Built form is yet to be developed in detail at this stage. Further development of the built form is to employ quality architectural expression that is considered and innovative with reference to the following:

Objectives

- Enhance the character of the area with quality built form and architectural detail that is complimentary with the surrounding residential and industrial developments;
- Reinforce the consistency of the current development patterns in the neighbourhood;
- Maintain scale and proportions in relation to surrounding development through articulation of building elements;
- Provide built form that enhances use of the open space;
- Create a consistent character at street level that will provide a sense of 'place' and vibrancy in the community;
- Ensure that the fronts, backs, sides and tops of buildings have quality appearance and have regard to the character of the surrounding area;
- Provide internal layouts that maximise the advantages of the urban design principles; and
- Provide a pallet of materials that complements the character of the location.

Principles

Indicative imagery has been provided (Figure 31) to visually support the following broad built form design principles that are intended for the development:

- Perimeter apartments are to be articulated to create visual interest and attraction to the built form;
- Buildings are to have distinguishing characteristics but should also contain elements that are complementary to unify the proposal and promote a sense of community;
- Use articulation to break up the bulk of larger buildings and to create proportional relationships with the surrounding buildings;
- Avoid expansive sections of blank façade and integrate roof equipment into building articulation;
- Building and landscape materials are to be fit for purpose and reflect the character, climatic conditions and be of a suitably high specification to ensure long term quality and sustainability of the development; and
- Buildings are to be designed in accordance with *State Environmental Planning Policy 65* and to address the *Residential Flat Design Code*.

Figure 31 - Indicative Built Form Imagery

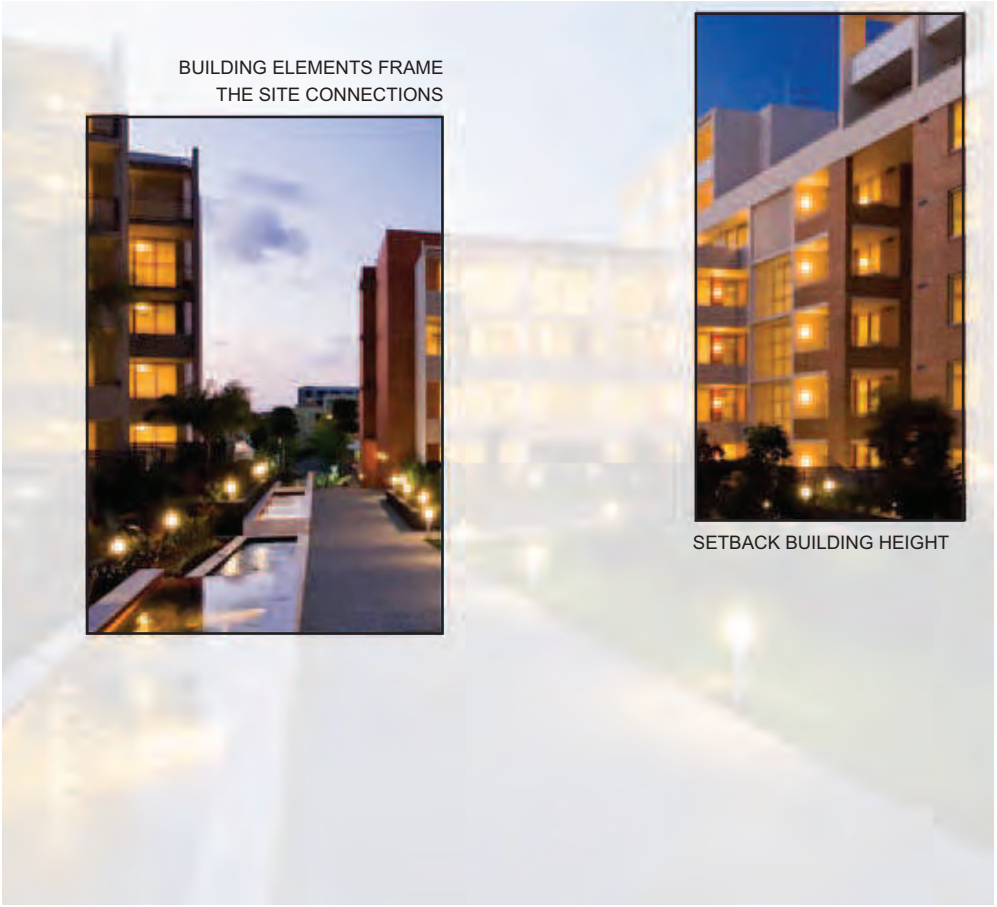

Figure 31 - Indicative Built Form Imagery

Figure 31 - Indicative Built Form Imagery

07 conclusion

The existing Kolotex site consists of several industrial warehouses with a redundant industrial-employment use and the Labelcraft site which is still in operation but with old buildings at the end of their economic life *(Urbis Report - Appendix F)*. Both sites, when in full use, generate significant commercial traffic in narrow streets *(Traffic Report - Appendix G)*. The existing building facades are devoid of activity, articulation and dominate the streetscape.

The proposed rezoning and redevelopment of the site will remove the redundant buildings and replace them with demand supported residential dwellings suitable for the renewal of the site. Increased density and height will enable a transformative, more vibrant development with a village feel and a responsive residential use. The proposal will create employment opportunities that are better suited to the demographic of the area, and will provide controlled traffic, attractive public domain, an increase in useful connections, and provide open and social spaces.

In seeking the most suitable form for the site the Urban Design Report responds to the framework set in the *Metropolitan Plan for Sydney 2036; Inner West Subregional Strategy (draft 2008); the Leichhardt DCP (2000)* with regard to Envelope, Streetscape, Setbacks and Height; SEPP65 as a benchmark; the *Urbis Planning Report;* the *Traffic Report and;* the *Urbis Open Space Study*.

The outcomes of the Built Form and Urban Design Report are:

- Improved local character through land uses that are better suited to the locality, and will integrate effectively with future proposals in the area;

- A density that will reinvigorate the area, embracing principles to limit negative social and environmental impacts, and create architecture that enhances the areas visual character;

- Creation of relevant residential and employment opportunities to the area through well placed built form and composition of uses on the site;

- Improved streetscape through building location, setbacks, active facades and tree lined public domain;

- Connections to local infrastructure, activation of retail and commercial uses, and opportunity for social interaction through meaningful open spaces.

The Urban Design response demonstrates that an FSR of 2:1 over the site can be appropriately distributed in two land use zones to achieve the above through the following urban measures:

Connections to Social Infrastructure & Transport
The site is ideally located within walking distance to local facilities, multiple schools and alternative transport options which provide a key support driver to the redevelopment of this site into residential.

Open Space, Landscaping and Public Domain

Open space in the form of shared zone will integrate with the landscaping (soft and deep soil planting) through the site to create a more unified resident precinct within the development. Landscaping will provide screening, shade and outlook for residents whilst creating the opportunity for community use and art installations.
Tree lined streets and new connections across the site (associated with open space design) will create a more defined public domain for residents and the greater community.

Accessibility

A well-defined 'shared zone' for pedestrians, bicycles and vehicles will allow for safe, comfortable movement whilst providing beneficial connectivity across the site. The proposed urban design will support accessibility requirements and services to DDA compliance.

Transport and Traffic

The site is located in the heart of several public transport nodes making it perfectly suited for redevelopment. The strong connections to buses, light and heavy rail and major vehicle routes provide great support for future residents in addition to the sites change in use which reduces vehicular traffic around the site for the existing community. A reduction in traffic flow around the site allows for increased cycling and pedestrian activity. Better management of parking and service access to the site will be provided when compared to the existing industrial uses.

Safety & Security

Change of use between light industrial to residential will improve passive surveillance of the neighbourhood creating a safer and more secure environment. Through site links will also assist the greater precinct improve safety and security.

Views and Visual Privacy

Building orientation to control overlooking. Although the proposed buildings will have a presence on the local skyline, the proposed principles for built form and articulation will allow the buildings to enhance the character of the area and provide a benchmark for future development within this area.

Solar Access and Overshadowing

The urban design proposal retains solar access to the neighboring properties in excess of the minimums defined in the Leichhardt DCP. Solar access to the proposed dwellings is also in excess of the SEPP 65 minimum requirements. These outcomes justify the development as having minimum impact on the existing surroundings and support this redevelopment opportunity.

The breadth of site investigation justify the Urban Design proposal and the approach to mix and distribution of land uses, built form and open space across the site.

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appendices

appendix A
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appendix B
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leichhardt development control plan (2000) consistency

appendix F
urbis planning proposal dated 18th january 2012

appendix G
mclaren traffic engineering report dated october 2012

appendix H
urbis open space study dated november 2012

appendix I
vipac masterplan - environmental noise impact assessment dated 12th june 2010

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appendix A

massing studies

02.1 massing studies

A detailed massing study and iterative concept design process was conducted exploring multiple built form arrangements available for the site.

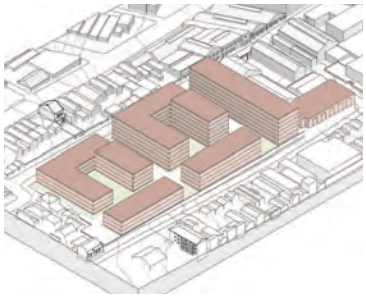
Each concept developed as part of the study was based around the proposed FSR of 2:1 and proportionate land use as described within the *Urbis Planning Report.* Consideration was given to density, height, open space, separation, access and amenity, with regard to compliance with the criteria of SEPP 65 and general conditions within Leichhardt DCP *(2000)*.

The following design criteria has been adopted in the exploration of the massing options:

- Increased height / density toward the Southern end of the site within the mixed use zone, allowing optimum orientation and new shadows to be cast over existing industrial land rather than over residential dwellings;
- Reduced height / density toward the Northern end of the site to be sympathetic to existing residential urban fabric;
- Strong defined street edge alignments along George Street and Upward Street with adequate setbacks;
- Connections and circulation through the site (pedestrian and vehicular);
- A variety of open space options / alternatives and;
- Orientation to comply with SEPP 65 increasing visual amenity and safety.

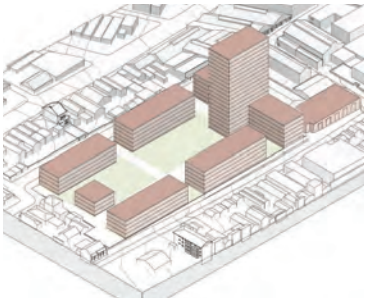
The following summary provides an overview of the iterative study process undertaken and a description of selection of the preferred option:

option 1 - courtyard hybrid



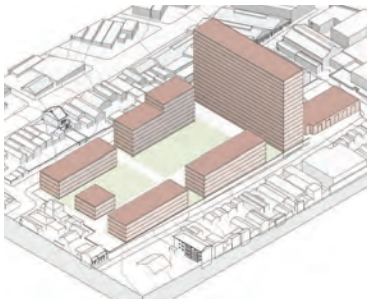
This option was developed to respond to the local context and the Leichhardt DCP (2000). The masses were too dense to allow for appropriate solar access and outlooks. The open spaces were limited in size and the building separation made narrow connections through the site which would limit the amenity, safety and security as use for public thoroughfare. It would not comply with SEPP 65 and could potentially provide additional environmental problems.

option 2 - internal open space



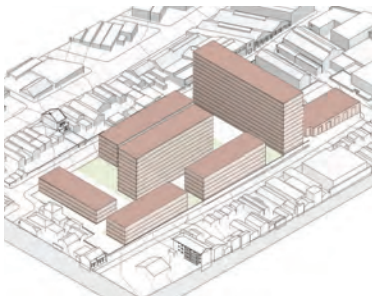
Focusing on a large open space outcome for the site, a perimeter / courtyard style arrangement was massed. The result was a considerably higher building at the South of the site. This positively and clearly defined the physical edge of the residential use. However the 19 storey mass closed the line of site across the mixed use section at its base weakening the legibility of this connection.

option 3 - internal open space and connections



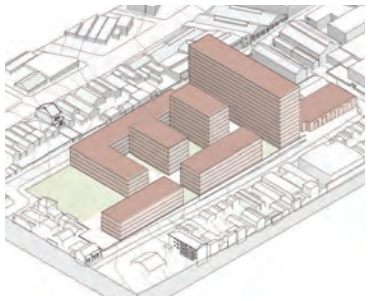
The tower in Option 2 was replaced with a longer building across the Southern end of the site. This maintained the density close to the employment zones and transport on Parramatta Road and created a clear open space. Further investigation into balancing of the open space and height was needed to provide a stronger level of amenity.

option 4 - North / South orientation



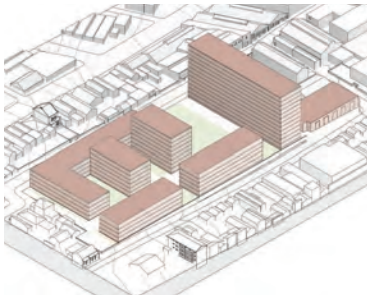
To reduce the height of the Southern tower in Option 3, another mass in the middle of the site was added with a North/South orientation. This option achieved a maximum of 12 floors and generated the agreed FSR while providing SEPP 65 compliance. The open space in this option created useful connections but the relationships of the buildings to the open spaces needed to be further optimised to provide better amenity.

option 5 - courtyard hybrid with open space



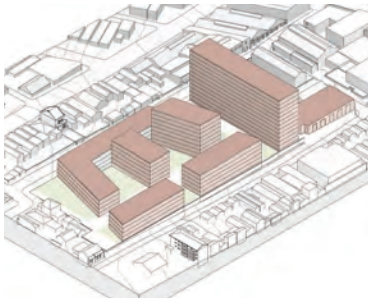
To improve the relationship with open space and the existing surrounding residences a courtyard hybrid was massed. The study showed that a 12 story maximum height provided an optimum balance of height to open space. It has enough density at a lower perimeter to relate to the streetscape whilst modulating height in the middle of the site. The open space provides for retail and social activation at the South of the site.

option 6 - open space adjacent employment use



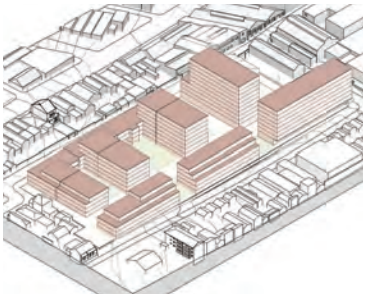
The open space was moved adjacent to the mixed use zone. This approach both strengthens and widens the connection through the site towards the proposed light rail station and Parramatta Road, creating more inviting public access. The connection can be serviced by the employment use proposed at the ground floor of the mixed use area. The connection and the surrounding apartments would benefit form the amenity of a quality open space. However the minimal separation between other elements remained a weakness.

option 7



To improve solar access in the other open areas, the masses were shifted and angled to be non-perpendicular. It was found that the angles fashioned awkward junctions between circulation, open space and masses. Hence, straightening the masses at wider settings was the obvious way to maximise amenity to all of the spaces.

option 8 - stepped courtyard



This was the preferred option; however the overall height of the buildings was decreased to meet the Department requirements. The current proposal was created as a modified response from this option. In this approach the masses were developed to create a balance between the height, open space and amenity. To reduce the impact of the buildings and to improve the relationship with the existing surroundings, the height steps down collectively from South to North along the Northern boundary.

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appendix B

state environmental planning policy 65 consistency

SEPP 65 - Design quality	Consistency	Proposal
Context		
Good design responds to its local context. Context is everything that has and impact on an area: its key natural and built feature. Context includes social, economic and environmental factors as well as the physical form of the area and its surrounds. Understanding context means understanding how the interrelationships between all these factors, and between the local area and the region, will have an impact on the area in the future. Responding to the local context involves identifying the desirable elements of current character or the key aspects of character that are important to the future.	✓	The site is located at 22,30-40 George street Leichhardt. The site area is 14662m^2. The site is bound by light industrial (employment) development along its southern boundary on McAleer Street and significant portions of the southern parts of Upward Street to the west and George Street to the East. The remaining northern portions of Upward Street and George Street are low rise detached dwellings. The proposal addresses the existing social and economic context by maintaining approx.1400m^2 of employment floor space on the southern portion of the site closest to the existing industrial and commercial activity along the Parramatta Road corridor. It is proposed that residential zoning is located adjacent established residential areas.
Amalgamation + Subdivision		
Amalgamation and subdivision are important planning and redevelopment tools for restructuring and area undergoing change. Site amalgamation and subdivision can have a significant effect on the streetscape by changing the characteristic rhythm or pattern of typical lots and building along a street and in a block. When changing the subdivision pattern of an area, new public domain elements – streets, pedestrian walkways and open space – rather than private elements – shared driveways – need to be considered in relation to the proposed development type and scale, the desired street layout and the desired open space network.	✓	The proposal amalgamates and rezones two industrial properties into residential and mixed use and addresses councils mandated increased housing density requirements. The proposal reinforced the residential context north of the proposed site, and creates public domain elements, a new street and pedestrian network currently not available with the current industrial use.

Building Envelopes		
The building envelope defines the extent of the overall building zone in plan and section within which a future building can be located. Building envelopes set the appropriate scale of future development in terms of bulk and the height in relation to the street layout and block and lot sizes in a particular location	✓	The proposals building envelopes are approximately 10% greater than the achievable floor area as recommended in the SEPP 65 Residential Flat Design Code.
Building Heights		
Height is important control because it has a major impact on the physical and visual amenity of a place. It can also reinforce an areas existing character or relate to an areas desired character. Height controls can be further refined by decisions about daylight access, roofs, residential amenity, setting and topography and heritage context. Objectives: • To ensure future development responds to the desired scale and character of the street and local area • To allow reasonable daylight access to all developments and the public domain	✓	The highest buildings masses are located to the central and southern end of the site designed to minimise overshadowing on residential properties by allowing shadowing over existing industrial properties. The heights step down to the northern side of the site where the perimeter building are lower to preserve the suburban character of the area and provide a soft transition to the adjacent residential dwelling houses.
Building Depth		
Control over building depth is important as the depth of a building will have significant impact on residential amenity of the occupant. In general narrow cross section buildings have the potential for dual aspect apartments with natural ventilation and optimal daylight access to internal spaces Objectives • To ensure that the bulk of the development is in scale with the existing or desired future character • To provide adequate amenity for	✓	The building depths are less than 18m to provide the opportunity of dual aspect apartments and maximise the access and natural ventilation.

building occupants in terms of sun access and natural ventilations • To provide dual aspect apartments		
Building Separation		
Building separation relates to urban form because it has to do with the legible scale of the area. Buildings which are too close together also create amenity problems inside the building, for the space between and for neighbouring buildings. Objectives • To ensure that new development is called to support the desired area character with appropriate massing and spaces between buildings. • To provide visual and acoustic privacy for existing and new residents • To control overshadowing of adjacent properties and private or shared open space • To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants	✓	The proposed development envelope allows for a variety of building configurations that all will comply with the separation controls as shown within the SEPP 65 Residential Flat Design Code.
Site Setbacks		
Controls over street setbacks create the proportions of the street and can contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can be also used to enhance the setting for the building. They provide for landscape larges, entries to ground floor apartments and deep soil zones. Objectives • To establish the desired spatial proportions of the street and define the street edge • To create a clear threshold by providing a transition between public and private space • To assist in the visual privacy to apartment from the street • To allow an outlook to and surveillance of the street • To allow for landscape character	✓	The front and side setbacks have been carefully considered to provide adequate privacy to the apartments facing the street and the surrounding residential dwellings without compromising the significance of passive surveillance of the street. Deep soil planting within the setbacks will screen the parts of the basement being exposed on Upward Street due to the flood plain design constraints. The side setbacks create strong visual connections through the site and open up multiple opportunities for pedestrian links.

Scale		
Good design provided an appropriate scale in terms of bulk Heights that suits the scale of the street and surrounding buildings. Establishing an appropriate scale in precincts undergoing transition, the proposed bulk and height needs to achieve the desired future character of the area.	✓	The bulk, height and scale have been carefully considered addressing the surrounding buildings. The development consists of several building blocks. All blocks are set back from the street. In addition the blocks along George Street are at a much lower scale than the blocks to the centre of the site as they are located along a residential street with low rise dwellings on the opposite side of the street.
Built Form		
Good design achieves an appropriate built form for a site and the buildings purpose, in terms of building alignments, proportions, building types and manipulation of the building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and park, including views and vistas, and provided internal amenity and outlook.	✓	The main internal road forms a north south spine which reinforces the existing street network. The heights of the blocks facing George Street and towards the North of the site are kept to a lower scale providing a soft transition to the nearby low rise dwellings. Due to the constraints of the flood planning level the exposed parts of the basement on Upward street will be screened by deep soil planting within the street set back.
Density		
Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents) Appropriate densities are sustainable and consistent with the existing density in the areas or, in precincts undergoing transition, are consistent with the stated desired density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.	✓	The proposed density enables a variety of building heights and scale allowing for a diverse mix of buildings. The density addresses current housing challenges and improves broadly the quality and value of its current status and its surrounds.

Resource, Energy and Water Efficiency		
Good design makes efficient use of natural resources, energy, and water throughout its full life cycle, including construction	✓	The development is proposed to embrace ESD principles. The massing and orientation of the blocks is designed to optimise the solar access into the primary living spaces, external living areas and courtyards in excess of the SEPP 65 requirements. The use of appropriate building forms maximises the cross ventilation potential in excess of the 60% SEPP 65 requirement. Energy efficient appliances and water devices will be specified to minimise power and water consumption. This development has the potential for many "Green Initiatives" to be incorporated within future stages.
Landscape		
Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both residents and for the public domain	✓	There are many layers of open space providing a hierarchy that enables a variety of different activities to occur on the site. The generous common areas offer private outdoor amenity for the residents as well as a good outlook from the apartments. The community will have the benefit of enjoying newly landscaped public areas that currently can't be accessed.
Amenity		
Good Design provides amenity through the physical, spatial and environmental quality of development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy storage, indoor and outdoor space, efficient layouts outlook and ease of access for all age groups and degrees of mobility	✓	Apartments will be an appropriate mix of unit typologies, providing high degrees of cross ventilation with dual aspect. A minimum of 60% of apartments are targeted to be cross-ventilated in each apartment building. The layout will concentrate on allowing a maximum of units to face North. The apartments will be designed to maximise the solar access into the living room, exceeding the SEPP 65 requirements.

Safety & Security		
Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of the public and communal spaces whist maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing good quality public spaces that cater for desired recreational uses, proving lighting appropriate to the location and desired activities , and clear definition between public and private open spaces	✓	The main internal road brings activation into the heart of the development and connects George Street and Upward Street. Passive surveillance is guaranteed by the windows and balconies at the higher levels of each block. Safe access is achieved through wide open and clearly identifiable pedestrian routes within the site. There will be appropriate lighting to all external areas.
Social Dimension		
Good design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities.	✓	The site is close to all necessary facilities such as public transport childcare facilities, schools health care and leisure facilities. With Lewisham station close by and Parramatta Road virtually on its door step, heavy rail and bus services are within walking distance. The development is also within walking distance of Leichhardt Marketplace and three public and secular schools.
Aesthetics		
Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development.	✓	The aesthetics of the proposal do not form part of this submission; they will be addressed in detail in a subsequent stage 2 DA submission. The buildings are typified by open balconies, in a continuous manner to the North and along the George and Upward Street façades. Facades with high sun exposure may include louvers to reduce cooling loads.

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appendix C

residential flat design code
rules of thumb

Residential Flat Design Code Rules of Thumb			
Page	**Recommendation**	**Consistency**	**Comment**
7	Relating to local context	✓	The surrounding context is both commercial to the South and residential to the North. The development proposes to reduce height within the northern part of the site and towards the East to create a soft transition to the existing residential dwellings nearby. The higher development envelope to the South creates a buffer to the industrial zone along Parramatta Road.
27	In general a depth of 10 - 18m (glass to glass) wide is appropriate.	✓	The indicative envelopes achieve these distances.
28	Distance between buildings	✓	All buildings achieve the required distances in all in instances, often exceeding them.
44	Minimum of 25% open space to be deep soil planting	✓	The urban design allocation is consistent with this requirement. A specific landscape design will be submitted as part of the DA.
49	Communal open space to be 25-30% of the site area	✓	The urban design allocation is consistent with this requirement. A detailed plan will be submitted as part of the DA.
49	Minimum recommended area for private open space at ground level or on a structure such as a podium or car park is 25sqm; minimum preferred dimension in one direction is 4m	✓	The urban design allocation is consistent with this requirement. A detailed plan will be submitted as part of the DA.
50-51	Site configuration - orientation	✓	The relevant section of the RFDC relates to aligning with streets and maximising the number of units facing North; this proposal reflects both of these requirements.
56-57	Site amenity - safety	✓	The RFDC requires secure ground level access, passive surveillance, reinforcing the building boundary, orienting entrances to streets, providing adequate illumination. The proposal responds positively to all of these requirements.

58-59	Site amenity - Visual privacy	✓	The buildings are orientated such that all units have no proximity issues with other windows and balconies.
69	8m to rear of kitchen from glass	✓	The indicative envelopes achieve these distances. To be confirmed at DA stage.
69	Minimum unit sizes Studio: not stated 1 bed: 50sqm 2 bed: 70sqm 3 bed:95sqm	✓	The specific unit sizes for each building will be detailed in future DA submissions.
72	2m minimum balcony width, unless furniture layout can be demonstrated	✓	All balconies shall have a minimum of 2m depth.
74	2.7m minimum ceiling height in habitable areas	✓	The floor-to-floor heights of the proposal are consistent with 2.7m ceiling heights.
74	2.25 - 2.4m ceiling heights in non-habitable rooms	✓	2.25-2.4m ceiling heights in non-habitable rooms will be achievable.
78	Optimise number of ground level units with separate entries	✓	The design of the buildings for this stage is indicatively only however it is intended that all blocks facing George Street will have separate entries from the street and all units at ground floor also have the potential for separate entries off the internal roads.
79	In general, maximum of 8 apartments off a double loaded common area (except where amenity provided through cross over, dual aspect apartments).	✓	The current layout allows for less than eight apartments off most corridors. This will be detailed at a further at DA stage.
82	Storage provisions; 1 bed unit: 6m³ 2 bed unit: 8m³ 3 bed unit: 10m³ Minimum 50% within unit.	✓	To be confirmed at DA stage.
85	70% of units to receive 3 hours of directs sunlight to winter to living rooms and private open spaces	✓	The design of the buildings for this stage is indicatively only. The scheme achieves 70% of units receiving the 3 hours of direct sunlight to all living spaces in winter.
87	60% of unit to be cross ventilated	✓	The design of the buildings for this stage is indicatively only. The scheme achieves a minimum of 60% of the units being cross ventilated

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appendix D

leichhardt local environment plan (2000)
consistency

Leichhardt LEP	Consistency	Comment
Part 2 **Vision, General Objectives And Planning Principles**		
12 Vision of the Plan The vision of the Plan is to conserve and enhance the quality and diversity (social and physical) of the natural, living, working and leisure environments of the local government area of Leichhardt. The protection of the *amenity* of residents should be pre-eminent.	✓	The proposed development aims to comply with Part 2, 12.
13.1 Ecologically sustainable development (a) provide for the preservation of natural resources to ensure their availability for the benefit of future generations, and (b) minimise negative impacts of urban development on the natural, social, physical and historical environment, and (c) maintain and enhance the quality of life, both now and for the future	✓	The proposed development aims to comply with Part 2, 13.1 by enhancing the street character and opening up the site to the community providing through site links, open space and comprehensive landscaping.
13.2 Built and natural environment and amenity (a) protect and enhance the area's natural features, character and appearance, and (b) protect, conserve and enhance the area's heritage, and (c) provide an environment meeting the principles of good urban design, and (d) maintain amenity and contribute to a sense of place and community, and (e) provide an environment which is visually stimulating, while being easy to manage and maintain, and (f) provide adequate access and linkages to public open space, and (g) accommodate the existing and future needs of the locality concerned, and (h) protect and conserve ecologically sensitive land, particularly that which is visually exposed to the waters of Sydney Harbour and the Parramatta River and of natural or aesthetic significance at the water's edge.	**Partial**	The current planning aims to comply with the items set out under Part 2, 13.2. The proposed change from light industrial to mixed use and residential zoning will change the built character of the site but applying the principles of good urban design will mitigate negative effects and is regarded as being a huge improvement to the current perception of the site.
13.3 Transport and access (a) reduce the need for car travel and subsequent pressure on the existing road networks, and (b) maximise utilisation of existing and future public transport facilities, and (c) maximise the opportunity for pedestrian and cycle links, and (d) identify and ameliorate adverse impacts of all transport modes on the environment, and	✓	The planning includes enhancements to the existing streetscapes for pedestrians and the provision of through site links encouraging pedestrian and cyclist movement. The provision of adequate onsite parking seeks to negate the potential of additional parking on the existing nearby road infrastructure. A detailed traffic report has been prepared to

Leichhardt LEP	Consistency	Comment
(e) improve road safety for all users, particularly pedestrians and cyclists		demonstrate the above.
14. Omitted from the LEP	**N/A**	
Part 3 Heritage Conservation		
15. Objectives (a) to protect, conserve and enhance the cultural heritage and the evidence of cultural heritage, including places, buildings, works, relics, townscapes, landscapes, trees, potential archaeological sites and conservation areas, and provide measures for their conservation, (b) to protect, conserve and enhance the character and identity of the suburbs, places and landscapes of Leichhardt, including the natural, scenic and cultural attributes of the Sydney Harbour foreshore and its creeks and waterways, surface rock, remnant bushland, ridgelines and skylines, (c) to prevent undesirable incremental change, including demolition, which reduces the heritage significance of places, conservation areas or heritage items, (d) to allow compatible and viable adaptation and re-use of the fabric of heritage significance, (e) to ensure the protection of relics and places of Aboriginal cultural significance in liaison with the Aboriginal community.	✓	There are no heritage items on the site. Setbacks, height controls and the proposed quality of design aim to respect the cultural significance of the heritage items, located adjacent to the site to the North, and to protect their character.
16.1 – 16.6 Heritage Items	**N/A**	There are no heritage items on the site.
16.7 Development in the vicinity of a heritage item	✓	A statement of heritage impacts will be developed for assessment with a DA.
16.8 Conservation Areas	**N/A**	The site is not in a Conservation Area.
Part 4 Housing		
17. Objectives (a) to provide development standards to ensure that the density and landscaped areas of new housing are complimentary to and compatible with the style, orientation and pattern of surrounding buildings, works and landscaping and to take into account the suite of controls in *Leichhardt Development Control Plan 2000* to achieve the desired future character, (b) to provide landscaped areas that are suitable for substantial tree planting and of a size and	**Partial**	The proposed development has made every effort to comply with the current Leichhardt LEP, however the nature and size of the site dictates a site specific solution to be developed. Part 4, 17 is one area in which a departure from the standard Leichhardt LEP is required. Sections of the Urban Design report respond directly to the proposed

Leichhardt LEP	Consistency	Comment
location suitable for the use and enjoyment of residents, (c) to provide for a minimum residential allotment size in order to protect the area's diverse subdivision pattern and to ensure the orderly and economic use and development of residential land, (d) to provide a diverse range of housing in terms of size, type, form, layout, location, affordability, and adaptability to accommodate the varied needs of the community, including persons with special needs, (e) to improve opportunities to work from home.		setbacks and controls anticipated under a site specific DCP.
18. Development Control Table: Residential Zone	✓	The proposed development is consistent with the items that are allowed with Development Consent.
19. General Provisions for the Development of Land **19.1 Floor space and landscaped area controls** ***Density area*** means land shown as a *density area* by heavy black edging on the *density map*. **19.2 Except where the development is carried out in accordance with clause 23 (1), consent must not be granted to** the carrying out of *residential development* on land within a *density area* if it will result in the *floor space ratio* exceeding the ratio of 0.5:1	**Partial**	The proposed development has made every effort to comply with the current Leichhardt LEP, however the nature and size of the site dictates a site specific solution to be developed. Part 4, 19 is one area is which a departure from the standard Leichhardt LEP is required. Sections of the Urban Design report respond directly to the proposed setbacks and controls anticipated under a site specific DCP.
19.3 Except where the development is carried out in accordance with clause 23 (1): (a) the minimum landscaped area for residential development is 40% of the site area, and (b) 25% of the landscaped area required under paragraph (a): I. is to be on natural or unpaved ground that is not overhung by or on top of any structure, and II. is to be permeable, and III. is to be appropriate for substantial deep planting.	✓	The current planning meets the controls relating to landscaped area.
19.4 Subdivision control Consent shall not be granted to the subdivision of land within the Residential Zone that would create a single allotment of land with a site area of less than 200 square metres.	✓	The current planning meets the requirements set out under 4, 19.4

<table>
<tr><th>Leichhardt LEP</th><th>Consistency</th><th>Comment</th></tr>
<tr><td><u>19.5 Building conversion and adaptation</u></td><td>N/A</td><td></td></tr>
<tr><td><u>19.6 Diverse housing</u>

Consent must not be granted for development that will provide 4 or more dwellings, unless it provides a mix of dwelling types in accordance with the following table, to the nearest whole number of dwellings:

<table><tr><th>Dwelling Type</th><th>Percentage to be provided</th></tr><tr><td>Bedsitter or one bedroom dwelling</td><td>Minimum 25%</td></tr><tr><td>Three or more bedroom dwelling</td><td>Maximum 30%</td></tr></table></td><td>✓</td><td>The detailed design for the proposal will be prepared at a later stage, however the proposal seeks to meet the requirements set out under 4, 19.6</td></tr>
<tr><td><u>19.7 Adaptable housing</u>

Consent must not be granted for development that will provide 4 or more dwellings, unless it provides a mix of dwelling types in accordance with the following table, to the nearest whole number of dwellings:

<table><tr><th>Number Of Dwellings</th><th>Number Of Adaptable Housing Units</th></tr><tr><td>10-15</td><td>1</td></tr><tr><td>16-24</td><td>2</td></tr><tr><td>25-34</td><td>3</td></tr><tr><td>35 or more</td><td>10% of the total number of dwellings</td></tr></table></td><td>✓</td><td>The detailed design for the proposal will be prepared at a later stage, however the proposal seeks to meet the requirements set out under 4, 19.7</td></tr>
<tr><td>Part 5
Employment</td><td></td><td></td></tr>
<tr><td><u>20. Objectives</u>

The objectives of the Plan in relation to employment are as follows:
(a) to ensure the sustainable growth of Leichhardt's economy by retaining existing employment uses and fostering a range of new industrial and business uses to meet the needs of the community,
(b) to reinforce and enhance the role, function and identity of established business centres by encouraging appropriate development and to ensure that surrounding development does not detract from the function of these centres,
(c) to integrate residential and business development in business centres,
(d) to ensure that buildings to be used for employment are appropriately located and designed to minimise the generation of noise,</td><td>✓</td><td>The proposed rezoning is based on the data in the Urbis employment report that states the need for light industry (current zoning) is now obsolete in this location and the demand for housing (residential zoning) is required close to employment centres i.e. Sydney CBD.

In addition a mixed use zone will cater for small business/retail needs.</td></tr>
</table>

Leichhardt LEP	Consistency	Comment
traffic, car parking, waste, pollution and other adverse impacts, to maintain the amenity of surrounding land uses, and avoid harm to the environment, (e) to ensure the continuation of commercial port uses and railway uses, (f) to allow a range of water-based commercial and recreational facilities in waterfront areas in order to retain the visual diversity and maritime character of the area, (g) to ensure non-residential development in residential zones does not detract from the function of the established business centres.		
21. Development Control Table: Business Zone	✓	The proposed development is consistent with the items of the table that are allowed with Development Consent.
22. Development Control Table: Industrial Zone	**N/A**	
23. General Provisions for the Development of Land **23.1 Commercial Floor space control** (a) Consent must not be granted to the carrying out of non-residential development on land within any zone if it will result in the *floor space ratio* of a building on the land exceeding 1:1. (b) Consent may be granted to the carrying out of mixed residential and other *development* on land within the Business Zone which results in a *floor space ratio* of a building on the land up to 1.5:1, but only if all *Floor* space at the ground *floor* or street level is used for non residential purposes (except for any floor space used for service and access purposes required for the residential component of the building in the floors above). (c) *Residential development* on land within the Business Zone is only allowed in accordance with paragraph (b).	**Partial**	The proposed development has made every effort to comply with the current Leichhardt LEP, however the nature and size of the site dictates a site specific solution to be developed. Part 5, 23 is one area in which a departure from the standard Leichhardt LEP is required. Sections of the Urban Design report respond directly to the proposed setbacks and controls anticipated under a site specific DCP.
23.2 Industrial floor space control Consent must not be granted to the carrying out of *development* on land within the Industrial Zone if it will result in a *floor space ratio* of a building on the land exceeding 1:1.	**N/A**	
23.3 Development for Purposes of Bulky Goods Retailing	**N/A**	
23.4 Development for purposes of backpackers	**N/A**	

Leichhardt LEP	Consistency	Comment
hostels and serviced apartments **23.5 Development for the purpose of brothels or sex shops** **23.6 Commercial use of non-residential buildings in the Residential Zone** **23.7 Non Residential Building in Residential Zone for other uses** **23.8 Refreshment rooms in non-residential buildings in Residential Zone**	**N/A** **N/A** **N/A** **N/A**	
Part 6 **Open Space, Recreation And Leisure**		
24 Objectives The objectives of the Plan in relation to open space are as follows: (a) to maximise the provision of open space in order to provide a diverse range of settings and recreational opportunities to meet the needs of the community, (b) to ensure the equitable distribution of, and access to, open space and recreation facilities, (c) to retain, protect and promote public access to foreshore areas and provide links to existing open space, (d) to ensure development is compatible with any Parks Plans of Management, Landscape Plans and Bicycle Plan adopted by the Council, (e) to conserve and enhance the ecological role of open space, including flora and fauna diversity (including the genetic, species and ecosystem diversity of flora and fauna), habitat corridors and the potential of open space to cleanse air, water and soils, (f) to provide opportunities in open space for public art.	✓	There is sufficient open space in the vicinity of the site. The proposal currently includes a range of pocket parks and landscaped areas to meet the needs of the community.
25. Development Control Table: Open Space Zone	**N/A**	
26. General Provisions for the Development of Land	**N/A**	
Part 7 **Community Uses**		
27. Objectives	**N/A**	
28. Development Control Table: Public Purpose Zone	**N/A**	
29. Development of land within the Public Purpose Zone	**N/A**	

Leichhardt LEP	Consistency	Comment
Part 8 **Special Provisions**		
30. Subdivision of Land	**Partial**	The development provides an appropriate setting but the urban form will be subject to a site specific DCP.
31. Temporary Use of Land	**N/A**	
32. Land Reserved for Roads	**N/A**	
33. Foreshore Building Line	**N/A**	
34. Foreshore Access	**N/A**	
35. Suspension of Covenants, Agreements and Instruments	**N/A**	
36. Additional Uses and Controls for Certain Land	**N/A**	
37. Classification and Reclassification of Public Land and Operational Land	**N/A**	
38 Development of Public Roads	**Yes**	

The table above is indicative only based on the current urban design expectations. Verification of all compliance items will be determined under the Site specific DCP prior to Development Application.

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appendix E

leichhardt development control plan (2000)
consistency

Leichhardt DCP – Part B	Consistency	Comment
B1.1 Demolition, Site Layout, Subdivision and Design • Maintain a grid pattern consistent with the locality, and avoid winding cul-de-sacs on large sites where new roads are proposed. • Subject to the minimum lot size of 200m2, future lot subdivision should be consistent with the prevailing subdivision pattern and shape of the surrounding development as described in the Distinctive Neighbourhoods. • Design the layout of open space in accordance with the Open Space Strategy. • Where buildings front streets or back on to streets in the locality, new streets should be designed to ensure that this characteristic is respected. • Development should have an east west orientated street pattern to achieve greater energy efficiency. • The layout of new housing development should respect the pattern, orientation and shape of allotments in the area. • When determining the siting of buildings and the area and dimensions of allotments, enable the provision of private open space, vehicle access and parking to the standards required by this plan. • Orientate buildings to address streets and public spaces. • Ensure that adequate arrangements are made for the provision of water, sewerage and drainage services. • Where development coincides with a major knoll or significant ridgeline design to reinforce these features • Locate dwellings with ease of access to local services and facilities. • Ensure streets and footpaths are well lit at night and avoid right angles and 'blind corners' in footpath layout to improve safety and security. • Council will generally require a Development Application for subdivision to include an application for the buildings to be erected on the new lots in a subdivision (or re subdivision). • Council will generally require a Development Application for demolition of all, or a substantial part of, residential buildings on a site to include an application for the replacement buildings on the site.	✓	The proposed development aims to comply with the items listed within B1.1. Appropriate building siting, orientation, street frontages and access points have been carefully considered to ensure appropriate amenity, safety and security. Energy and environmental performance plays an important role in this development with orientation, access to existing services and future site treatment / facilities considered for inclusion. A detailed report responding to specific site items will be developed at future stages.

B1.2 Building Form, Envelope and Siting **Siting** • Siting for new development in streets with an established siting pattern must be oriented in accordance with the Siting and Orientation Guidelines. **Building Location Zone** • All new development is to be located within the boundaries set by the Building Location Zone. Any departure from this control must be clearly justified in accordance with the Building Location Zone (BLZ) Guidelines. **Building Envelope** • All new development must fit within the relevant Building Envelope, as set by the relevant Suburb Profile. - Building wall height must be measured from ground level and applied at the front building elevation. - Any departure from this control must be in accordance with the Building Envelope Guidelines. • The ridge height of a development shall not exceed the ridge heights of adjoining development. The development needs to respect the adjoining and local roof form. • Except where a higher building wall height is permissible, Neighbourhood shops or buildings originally designed for non-residential use may use a maximum building wall height of 7.2m in order to incorporate a parapet wall. **Side Setbacks** • Side setbacks for new development are to be of sufficient width, and designed such that the following issues are properly addressed to the satisfaction of Council: - The requirements of the Suburb Profiles; - Ensure that the development is sympathetic to and respects the rhythm of the streetscape created by the lot width and side setbacks of adjoining development; - Amenity concerns of adjoining properties, in particular solar access, visual privacy, noise transmission and air circulation; - Existing external access to the rear of the property with a minimum width of 900mm is to be retained; and - The retention and enhancement of views to significant and local landmarks and vistas from a public place through gaps created by existing side building setbacks. Minimum setbacks from the side boundaries shall be determined according to the graph included within the DCP.	**Partial**	The proposed development has made every effort to comply with the current Leichhardt DCP, however the nature and size of the site dictates a site specific DCP to be developed. B1.2 is one area in which a departure from the standard Leichhardt DCP is required. Sections of the Urban Design report respond directly to the proposed setbacks and controls anticipated under the site specific DCP. The site is located within a Light Industrial and General Residential Zone, relating to different setback criteria. The flood zone across a large portion of the southern end of the site dictates a specific flood planning level which must correspond to amended building envelope controls and site setbacks.

Council may allow buildings to side boundaries where: - The pattern of development is not compromised; - Higher portions of buildings are setback in accordance with the above control; - The bulk and scale of development is minimised by reduced floor to ceiling heights; - The potential impacts on amenity of adjoining properties, in terms of sunlight and privacy and bulk and scale, are minimised; - Reasonable access is retained for necessary maintenance of adjoining properties.		
B1.3 Car Parking Car parking layout and design is to comply with numerical standards set out in DCP Part-A 8.0. • Integrate the design of car parking into the overall site and building design. • Where rear lane access is achievable, design car parking to be accessed from the rear lane only. • Where only front access is available, provide car parking areas (such as garages and carports) behind the main building alignment, (the front wall of the dwelling). • Where any dwelling is remote from a public street, access for service, emergency or delivery vehicles should be provided. • No on-site parking is allowed for single dwellings on one allotment where vehicular crossings disrupt the continuity of the footpath and verges and reduce on-street parking capacity. • Where garaging access forms part of the main front wall of a dwelling it must be; 1) less than half the width of the building; and 2) subordinate to the main elevation detail. • Integrate into the streetscape the design of any paved area. This may best be achieved by either open paved areas, preferably porous or open block paving. Additional Controls for underground parking • Design access driveways for underground car parking to: – minimise the visual impact of the entrance to the street; – maximise pedestrian safety; and maintain pedestrian access and access for people with special needs.	✓	The proposed development is generally compliant with items outlined within B1.3. A single level of basement car parking with access form George Street is to be included. A discrete loading / servicing area is proposed along Upward Street. Limited grade parking within the development is to encourage safety and security, whilst ensuring emergency and delivery vehicles and vehicles for people with disabilities have access to and through the site. Further analysis and detailed design will be required in future stages in conjunction with a qualified Traffic consultant. Car parking entries will be located and designed to be a discrete.

•Design parking levels to be kept as low as possible with a maximum of 500mm above ground level. Minimise protrusion of end walls above ground level where end walls are situated on or close to property boundaries/street frontages. • Where landscaped areas are located above parking areas provide; – 600mm soil depth for trees/ shrub planting, and 300mm for ground cover planting. – Car parking spaces and access ways should not be provided directly outside dwelling doors or windows to habitable rooms		
B1.4 Site Drainage and Stormwater Control • Use Urban Framework Plans to determine relevant contours, valleys and ridgelines in relation to the site. • Use on-site detention, preferably on unpaved or grass surfaces to trap and remove contaminants from stormwater and increase infiltration into the ground • Incorporate detention or retention basins. • Where possible use open space for stormwater control and site drainage, where integrated as part of a large development.	✓	Appropriate drainage and stormwater control is anticipated over the site. This will also address existing flood constraints and be developed in conjunction with a qualified engineer.
B1.5 Elevation and Materials • Where new buildings are proposed, elevation design shall respect the size, location and proportions of windows and doors of neighbouring buildings. • When designing extensions or buildings next to heritage items, ensure the modelling and relief is respected. • Provide articulated elevations to new building where the streetscape dictates and where wide frontages are proposed. • Ensure elevations which front a public space are not dominated by windows or doors to non-habitable rooms. • Development should take reference from and complement the existing character of the streetscape in terms of scale, architectural style and materials. Alternatives may be considered at the discretion of Council. • Preferred roof forms are hipped and gabled with a pitch between 30deg and 45deg. Other roof forms may be appropriate and these will be considered at the discretion of Council.	✓	The proposed development aims to comply with specific items addressed in B1.5. The development will be designed to an appropriate scale and design to add to the character of the locality. Appropriate streetscape height has been included within the proposed controls. Appropriate articulation, building stepping in and relief across the building facades will be addressed in future stages. Services are to be concealed and plant rooms screened or set back from parapet areas. Car parking entries will be located and designed so as not to dominate the overall appearance of the façade.

• New townhouse and multi-unit developments shall submit a sample board with the proposal.		
B1.6 Front Gardens and Dwelling Entries • Ensure the dwelling entries are clearly visible and easily identifiable from streets, public areas and internal driveways. • Design dwelling entries to provide a sense of personal address and incorporate a transitional space around the entry. • Incorporate shelter at main dwelling entries without compromising elevation detail and the character of the streetscape. • Public or shared paths should not abut any dwelling wall. A minimum 1 m strip should be allowed for planting of flowers and climbers. Substantial bushes should not be planted closer than 1m and decorative trees no nearer than 2m. • Where the front garden functions as the main private open space for the dwelling, use trees to act both as street trees and also shade trees for the garden. Ensure the space is designed to meet user requirements for solar access and private open space.	✓	The development proposes to comply with B1.6. All ground floor units will aim to provide individual entries with courtyards or specific entry points increasing sense of personal address. Further detailed design is required at future stages.
B1.7 Fences • Fencing shall complement any original fencing relating to the architectural style of the dwelling or found on adjoining properties and in the wider streetscape in terms of style, height and materials; • Where side fences project in front of the building line ensure that they complement the scale of the adjoining front fence and function of the front yard; • The height limit for front fences is 1.2 metres, measured from the finished footpath level at any point adjacent to the fence to the top of the main part of the fence. This does not include supporting posts or mailboxes; • Where there is a change in ground level along the street boundary, the higher of the two levels will be taken when measuring fence heights, however a fence in this circumstance should not exceed 1.8m in height; • Fencing over 1.2m in height shall be 50% transparent; • Where there is dual street frontage, consideration may be given for the allowance of a higher side fence to ensure privacy;	✓	The development proposes to comply with B1.7. Further detailed design is required at future stages.

• All controls are subject to the provision of adequate sight lines for emerging vehicles to enable surveillance of pedestrians; • Integrate the design of fences, with the location of mail boxes, nameplates and street numbering.		
B1.8 Site Facilities • Provide adequate internal storage space, of at least 6 cubic metres per dwelling. • Provide useable externally accessed storage space for the accommodation of bicycles and large goods which may be incorporated as part of a carport • Ensure garbage storage and waste recycling areas, especially glass recycling bins are not located adjacent to habitable rooms. • Mailboxes big enough to cope with large envelopes and newspapers should be provided and located for convenient access. Provide a mailbox for body corporate correspondence where applicable. • Refer to DCP No. 38 – Waste, Avoid, Reuse and Recycle for further controls relating to the design and provision of waste facilities.	✓	The development proposes to comply with B1.8 Further detailed design is required at future stages.
B1.9 Corner Site Controls • These controls apply to development on corner sites in residential and business zones. 1) Development extending to two distinct streetscapes should maintain the existing pre dominant character and adjoining building scale on each frontage. 2) A higher building scale on the frontage with the lower scale may be permitted where the following applies: a) Where a variation in scale is permitted under the Town Plan DCP and: b) The variation in scale will not adversely impact on the streetscape, surrounding properties or areas of public domain by virtue of: • Amenity; • Solar access; • Views; • Privacy; and • Urban Design. • Any variation in scale must include a transitional area to enable the development proposal to blend with the existing scale within the street frontage. • Where awnings or balconies are incorporated into the design of a corner building, they are to reflect the controls in Design Element 7 – Protective Structures in the public Domain.	✓	The development proposes to comply with B1.9. It is generally considered that the only corner site area of the development will involve minor modifications to the existing structure. Further detailed design is required at future stages.

B2.0 Ecologically Sustainable Residential		
B2.1 Thermal Mass & Materials • Use materials that have a higher 'thermal mass' value, such as bricks, concrete and stone, where they can benefit thermal comfort and energy efficiency. • To be most effective, locate materials with a higher thermal mass: – inside the house; – in north-facing rooms, where they can benefit from winter heat gain, and where they are shaded from direct summer sun. • In the construction of housing, specify plantation or regrowth timbers, timbers grown on Australian farms or state forest plantations or recycled timbers.	✓	The development proposes to comply with B2.1. SEPP 65 design principles will apply to the development. Further detailed design is required at future stages.
B2.2 Solar Control • Provide for external shading to a dwelling's north, east and west facing windows. • For north facing windows use horizontal shading devices (adjustable or fixed) that maximise winter sun penetration and reduce summer sun penetration. • For east and west facing windows, use vertical shading devices to block the low rays of the rising and setting summer sun. • Use landscaping to reduce summer heat gain, by controlling sun penetration and shading the house and outdoor spaces, without reducing solar access in winter.	✓	The development proposes to comply with B2.2. SEPP 65 design principles will apply to the development. Further detailed design is required at future stages.
B2.3 Insulation • Insulate to achieve greater energy efficiency in the home. • Use bulk insulation and reflective insulation to walls, ceilings and roofs. Construct housing to achieve a combined 'R' value for insulation to the following standards: • R3.0 for roofs and ceilings • R1.5 for walls	✓	The development proposes to comply with B2.3. Further detailed design is required at future stages.
B2.4 Natural Ventilation • Designing buildings with a maximum internal dimension between openings of 14m to maximise natural ventilation without compromising other design elements.	✓	The development proposes to comply with B2.4. SEPP 65 design principles will apply to the development. Further detailed design is required at future stages.

• Ensure ventilation of residential buildings can be achieved by permanent openings, windows, doors or other devices, which have an aggregate opening or openable size of not less than 5% of the floor area of the room.		
B2.5 Heating and Cooling • Designing buildings with a maximum internal dimension between openings of 14m to maximise natural ventilation without compromising other design elements. • Ensure ventilation of residential buildings can be achieved by permanent openings, windows, doors or other devices, which have an aggregate opening or openable size of not less than 5% of the floor area of the room.	✓	The development proposes to comply with B2.5. SEPP 65 will apply to the development. Further detailed design is required at future stages.
B2.6 Using Solar Energy Actively **New Residential Development – Residential Flat Buildings** • For new multi-unit type development (residential flat buildings / apartments), Council requires the installation of centralised or in-sequence close-coupled solar water heater systems with gas boosting, or centralised heat-pump water heating with gas boosting (if boosting is required). - Where solar water heater systems are installed a minimum of 50% of the annual hot water demand is be derived from solar energy input. - The non-solar portion is to be provided by heat pump or high efficiency gas hot water services of adequate capacity. - Separate metering is required for each dwelling. - Where heat pump technology is to be installed Council encourages 'dual-use' technology whereby (i) air cooling is achieved for some space within the building as a by-product of water-heating and/or (ii) return (waste) air from air conditioning is captured and used for water heating.	✓	The development proposes to comply with B2.6. Further detailed design is required at future stages.
B2.7 Water Conservation and Management • For new single dwelling houses (and major renovations to existing dwellings) and multi-unit development, install rainwater tanks for outdoor usage, such as watering gardens, car washing and general cleaning • Ensure the rainwater tank meets the requirements of the above guidelines.	✓	The development proposes to comply with B2.7. Further detailed design is required at future stages with.

• Install hot water systems with water saving shower roses or shower flow restrictors, with a water conservation rating of 'AA' or better. Install: • dual flush toilets • low flow tap roses • drip-irrigation for the watering of landscaped areas		
B2.8 Landscaping • Ensure that 85% of plantings in new development are native species from the Sydney locale. • Ensure one tree of at least 4m mature height is planted for each dwelling with ground level access. • Design areas of open space suitable for trees taller than 1m in height when mature. • A landscape plan shall be submitted showing planting, paving and other details of external areas of the site. Where appropriate, streets and parks, vegetation, species type and numbers, together with size and location are to be specified in the plan along with details of all external finishes and colours. • 25% of the landscaped area is to be on natural or un-paved ground that is not overhung by or on top of any structure and is permeable and appropriate for substantial planting. • Street trees must be retained where possible. • Natural rocky outcrops shall be preserved in their existing form and integrated into site landscaping.	✓	The development proposes to comply with B2.8. An open space study has been conducted. The outcomes of this report and associated landscaping provisions have been addressed within this report. Currently the provision of small pocket parks, deep soil planting and landscaping to street edges / building property lines planting has been integrated.
B3.0 Residential Amenity		
B3.1 Solar Access • Prepare a shadow diagram in plan and elevation (showing impact on habitable rooms) with all Development Applications for new built development, and major alterations and additions to existing dwellings. • Design to ensure solar access for a minimum of 3 hours between 9.00 a.m. and 3.00 p.m. at the winter solstice, to the living areas of new dwellings. • Maintain solar access to existing housing • Where an existing adjacent building has an east - west orientation: – Maintain solar access to the habitable side rooms for a minimum period of 2 hours between 9.00 a.m. and 3.00 p.m. at the winter solstice. – Where less than 2 hours solar access is currently	✓	The development proposes to comply with B3.1. It is anticipated that compliance with SEPP 65 controls will be achieved throughout this development. Current preliminary shadow diagrams have been included within this report. Further detailed design is required at future stages.

available to the habitable side rooms of existing dwellings, no additional overshadowing shall be permitted. • Where an existing adjacent building has a north - south orientation: – Maintain solar access to the front and rear habitable rooms for a minimum period of 4 hours between 9.00 a.m. and 3.00 p.m. at the winter solstice. • Where solar access already exists to the private open space of adjacent dwellings, ensure it is maintained over a minimum of 50% of the private open space for a minimum period of 3 hours between 9.00 a.m. and 3.00 p.m. at the winter solstice. *Solar water heaters* • Maintain solar access to existing solar water heaters throughout the day at all times of the year. • Maintain solar access to the north facing roofs of existing dwellings (45°West to 45°East variation is possible) to a fixed minimum area of 10 sqm, capable of accommodating solar water heater panels.		
B3.2 Private Open Space • Private open space which connects directly to dwellings at ground level shall: - have a minimum area of 16 m^2 with direct access to the principal indoor living areas; - have a minimum dimension of 3 metres: - not be steeper in gradient than 1 in 20 (5%). • Where there is no direct access to ground level open space, above ground level private open space, designed as a balcony or deck, should have: - a minimum area of 8m^2, and - a minimum dimension of 2 metres with direct access to the principle living areas of the dwelling. • Roof top spaces should have a minimum area of 10 m^2 and a minimum width of 2m which has safe and convenient access. • Design above ground private open space to ensure privacy of the occupants of adjacent buildings, and the new occupants within the proposed development.	✓	The development proposes to comply with B3.2. The full design of units is not complete, however it is anticipated that the design will comply with expectations of Clause B3.2.
B3.3 Visual Privacy • Ensure habitable room windows of one dwelling are not located opposite the windows of another dwelling within 15m unless direct views are restricted or they are separated by a street.	✓	The development proposes to comply with B3.3. The full design of units is not complete, however it is anticipated that the design will comply with expectations of clause B3.3.

• Restrict views in this situation by: – staggering the location of windows so that viewing is – oblique rather than direct; or – providing sill heights of 1.6m above floor level; or – glazing in any window pane below 1.6m above floor level. • Obscure outlook by providing screening if habitable room windows or private open space is overlooked: – within 15m, – within an angle of 45°, measured perpendicular to t he face of the opening from a height of 1.6m above floor or deck level. • Screening is not required where: windows are to bathrooms, toilets, laundries, storage rooms or other non-habitable rooms; • windows are to habitable room which face a property boundary where there is a visual barrier at least 1.8m high and the floor level of the room is less than 0.5m above ground level at the boundary. • Screening devices should be 75% obscure, permanently fixed and made of durable materials. Use screening devices such as obscure glazing, timber lattice screens, external ventilation blinds, canvas blinds, window hoods and shutters. • Provide landscape screening either by using existing dense vegetation or new planting that can achieve a 75% screening effectiveness within three years. Specify mature height to provide effective screening, while retaining access for light, sunlight and views. Deciduous planting may be used to screen outdoor living areas, decks, etc, which are less likely to be used in winter.		
B3.4 Access to Views • Where views are currently enjoyed from existing buildings or public places, new development is to be designed such that any obstruction of these views is minimised. • Development should maximise access to views both from within the development and from existing buildings and public places in the area thus sharing the benefits.	✓	The development proposes to comply with B3.4. The full design of units is not complete, however it is anticipated that the design will comply with expectations of Clause B3.4. The current massing form addresses Clause B3.4.
B3.5 Acoustic Privacy • Use Urban Framework Plans to establish potential noise producing sources such as rail and road in the vicinity of the site. • Ensure living rooms, activity areas, parking and service equipment are located away from bedroom windows of adjacent dwellings. • Construct dividing walls and floors between dwellings, to limit noise transmission to 40-45 dBa.	✓	The development proposes to comply with B3.5. Further detailed design is required at future stages.

• Ensure electrical, mechanical or hydraulic equipment or plant does not generate a noise level greater than 5dBa above background sound level at the boundaries of any development • Ensure internal habitable rooms of dwellings affected by high levels of external noise are designed to alleviate internal noise levels in accordance with Australian Standard 2107 – Recommended Design Sound Levels and Reverberation Times for Building Interiors. • Separate and contain the plumbing for each dwelling to prevent the transmission of noise between dwellings using appropriate noise resistant wall, ceiling and floor treatments.		
B3.6 Dorma Windows	**N/A**	**N/A**
B4.0 Development Types		
B4.1 Alterations and Additions to Existing Dwelling Houses	**N/A**	**N/A**
B4.2 Conservation of Small Detached Houses	**N/A**	**N/A**
B4.3 Laneway Development	**N/A**	**N/A**
B4.4 Foreshore development	**N/A**	**N/A**
B4.5 Conversion of existing non-residential buildings	**N/A**	**N/A**
B4.6 Residential Development in Business Areas • Ensure separate and clearly defined dwelling entries where mixed use development is proposed. • Innovative design solutions such as central light wells / atria and articulated facades should be incorporated to maximise solar access. • No car parking should be provided. • Design new development to allow conversion to other uses. • Noise insulation measures should be incorporated into all development with particular attention to shared ceiling / floors and walls and mixed use development. • Residential development should be integrated with business development and not developed as separate 'enclaves' within a business zone.	**Partial**	The proposed development should integrate into the existing business zone and adhere to most items within B4.6. Clearly defined separate entries will be included. Innovative design and articulated facades will form part of the future design. Car Parking is to be included within this proposal. This departs from the objectives outlined within clause B4.6.

B4.7 Diverse and Affordable Housing • Ensure adaptable housing is designed in accordance with Council's DCP No. 32 - Design for Equity of Access and Australian Standard 4299 (1995). • Ensure housing meets the requirements of Clause 19(6) Diverse Housing and Clause 19(7) Adaptable Housing in Leichhardt LEP 2000.	✓	The development proposes to comply with B4.7 where possible. Further detailed design is required at future stages.

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appendix F

Urbis Planning Proposal dated
18th January 2012 (Urbis Report)

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appendix G

McLaren Traffic Engineering Transport, Traffic and Parking Impact Assessment dated October 2012 (Traffic Report)

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appendix H

Urbis Open Space Study dated
November 2012 (Open Space Report)

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appendix I

VIPAC Masterplan -
Environmental Noise Impact
Assessment dated 12th june 2010

REIDCAMPBELL