SJB Urban

Carramar Urban Design Study
Fairfield Centres Study

Prepared for
Fairfield City Council

Issued
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At SJB we believe that the future of the city is in generating a rich urban experience through the delivery of density and activity, facilitated by land uses, at various scales, designed for everyone.

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V09 Final Draft for Public exhibition	28.08.2020

Contents

Executive Summary

This Urban Design Study (the Study) is part of Council's Accelerated LEP Review Project that includes the preparation of Council's Local Strategic Planning Statement (LSPS), the review of the Fairfield Local Environmental Plan (LEP) and a Development Control Plan (DCP) for the study area. It is one of a number of projects that will inform future planning proposals and these studies, strategies and plans:

- Local Housing Strategy (including Affordable Housing Strategy)
- Open Space Strategy
- Transport Strategy
- Public Domain Plans, and
- Development Contributions Plans.

Other studies, reviews and investigations include:

- Community and Open Space Needs Study
- Heritage Study
- Biodiversity Strategy
- Urban Services Land Review
- Business Lands Review, and
- Rural Lands Urban Investigation Area.

The study area's place in the region, district and local area has been considered, along with strategies and policies that guide future growth. This study's design-led process seeks to achieve a broad set of urban design outcomes to maximise the unique characteristics, opportunities, amenity and vibrancy that the study area can offer. It will also inform the mechanisms that deliver identified community benefits such as Developer Contributions Planning and Planning Agreements.

Recommended changes to development standards has the potential for:

- an additional 3,200 -3,500 additional dwellings (depending on take up) in the form of attached dwellings, multi dwelling housing, apartments, and shop-top housing, being a 75% increase in population over the long term.
- 2,200m^2 additional non-residential / commercial / community / Gross Floor Area (GFA)
- a new 4,600m^2 neighbourhood park to the north of the railway line,
- an increase in the size of Carrawood Park
- a new 2,300m^2 open space of connecting Heiden Park and Oakdene Park
- A direct pedestrian link from the railway station, along Carramar Avenue, along the green corridor adjoining the railway line and through an acquired property to create access to the new neighbourhood park, Tomski Street and to the Health Service Precinct on Mitchell Street

Stakeholder engagement

Prior to commencing work, a range of targeted stakeholders were consulted to provide a snapshot of community needs and landowner aspirations prior to formulating opportunities to realise a desirable future Carramar reflecting locational strengths and quality urban design within an accessible and safe public domain.

Study Structure

This study is structured into five chapters:

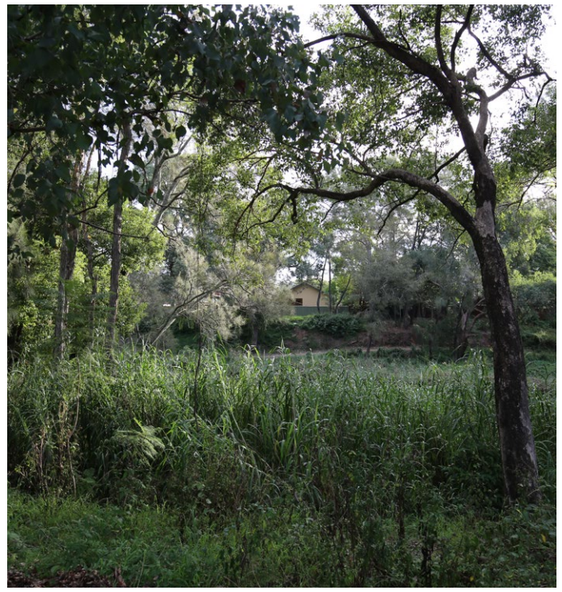
Chapter One: Introduction
- provides the strategic context for the study

Chapter Two: Foundation of Place Knowledge
- presents a detailed analysis of the study area that describes existing urban form and pattern, its history and place in Fairfield City and the broader region inclusive of any significant influences outside of the study area.

Chapter Three: Place-Based Land Use Planning Framework
- establishes the principles and objectives that any changes to the planning framework (LEP/DCP) should seek to achieve and outlines a series of recommended actions.

Chapter Four: Illustrative Concept
- provides an illustration of the possible built form that could result from the recommended changes to the development controls.

Chapter Five: Recommended amendments to development controls
- outlines a series of more technical plans and drawings that may be included in future revisions of the development controls for the area.



Photos of Carramar illustrating the abundance of trees and character of the centre

Carramar Urban Design Study

The Carramar study area, being approximately 71.8 hectares in area, is located upon the traditional lands of the Cabrogal people of the Darug Nation. Carramar means “shade of trees”. The Cabrogal ate native vegetables, grubs and animals and made bark canoes for fishing and transportation. In the mid-1880s the land was used mainly for timber logging, farming and vineyards. Carramar owes its development to the extension of the railway line from Regents Park to Cabramatta in 1924 with a station at Carramar. Expectations of a development boom did not happen as a consequence of the depression of 1929.

The story of Carramar, as an extension of neighbouring Cabramatta and Canley Vale, is one of refugee settlement, significantly after World War II and then again after the conclusion of the Vietnam War in 1975. Sydney’s growing population and urban expansion once again influences a new and emerging character for Carramar. Carramar is a community of approximately 3,550 people (2016 ABS) projected to grow to 4,230 people by 2036. Half of the residents in Carramar were born overseas including Vietnam, China, Iraq, New Zealand and Lebanon.

There are 1,362 dwellings in the suburb of Carramar, including 511 separate houses, 347 villas and townhouses and 491 apartments (2016 census). Characteristics of the broader Carramar community point to future housing needs. Current dwelling type broadly reflect household types. Out of every ten households living in the suburb of Carramar, being 104 hectares north and south of the railway line, approximately::

- 3 are a couple with children
- 3 are a person living alone
- 7 live in a separate house, 2 live in medium density and 1 lives an apartment
- 3 have an income less than $650 a week
- 6 work full time, 3 work part time and 1 is unemployed
- 4 are renting.

Figure 01: Aerial view of the rail corridor that runs through Carramar. Of note are the abundance of trees and Prospect Creek which endow the area with a sense of natural beauty and tranquillity

In gaining place knowledge, the following constraints for the Carramar Study Area were identified:

- Mainstream flood risks associated with Prospect Creek
- Overland flowpaths through parts of the study area
- A high concentration of strata properties closest to the railway station that makes it challenging to assemble land for redevelopment
- Large and impervious urban blocks which restrict pedestrian movements throughout the neighbourhood
- The railway line and creeks as barriers to movement
- Large open spaces at the periphery of the study area lacking passive surveillance, creating perceptions of a safety risk for children, women and carers
- From the mid 2020's when the south west metro to Bankstown is completed, residents travelling from Carramar station can only travel to the CBD via Sydney Trains and Sydney Metro, changing trains at Bankstown; or by Sydney Trains only, changing at Lidcombe/Cabramatta.

Having considered the study area's characteristics, community needs, landowner aspirations, and site constraints, the following opportunities have been identified:

- Better accommodate different household characteristics, housing types and tenures for current and future populations
- Maximise the use of significant existing public transport infrastructure to create transit orientated development within the Carramar study area with high levels of walkability
- Retain and enhance the green, natural and open space qualities that exist in Carramar, removing barriers for community use
- Improve access to and the amenity of the Prospect Creek corridor which links to the extensive cycleway network and open space throughout the City
- Improve in the public domain around the neighbourhood centre to make it a more pedestrian friendly street.
- Realise in the longer term the vehicular underpass under the railway line and a new bridge over Prospect Creek at the end of Sandal Crescent.

Prompted by the opportunities presented by through small scale intensification in Fairfield a parallel study was undertaken during the course of this study that investigated potential changes to the development controls for development within the Medium Density Housing Zone (R3).

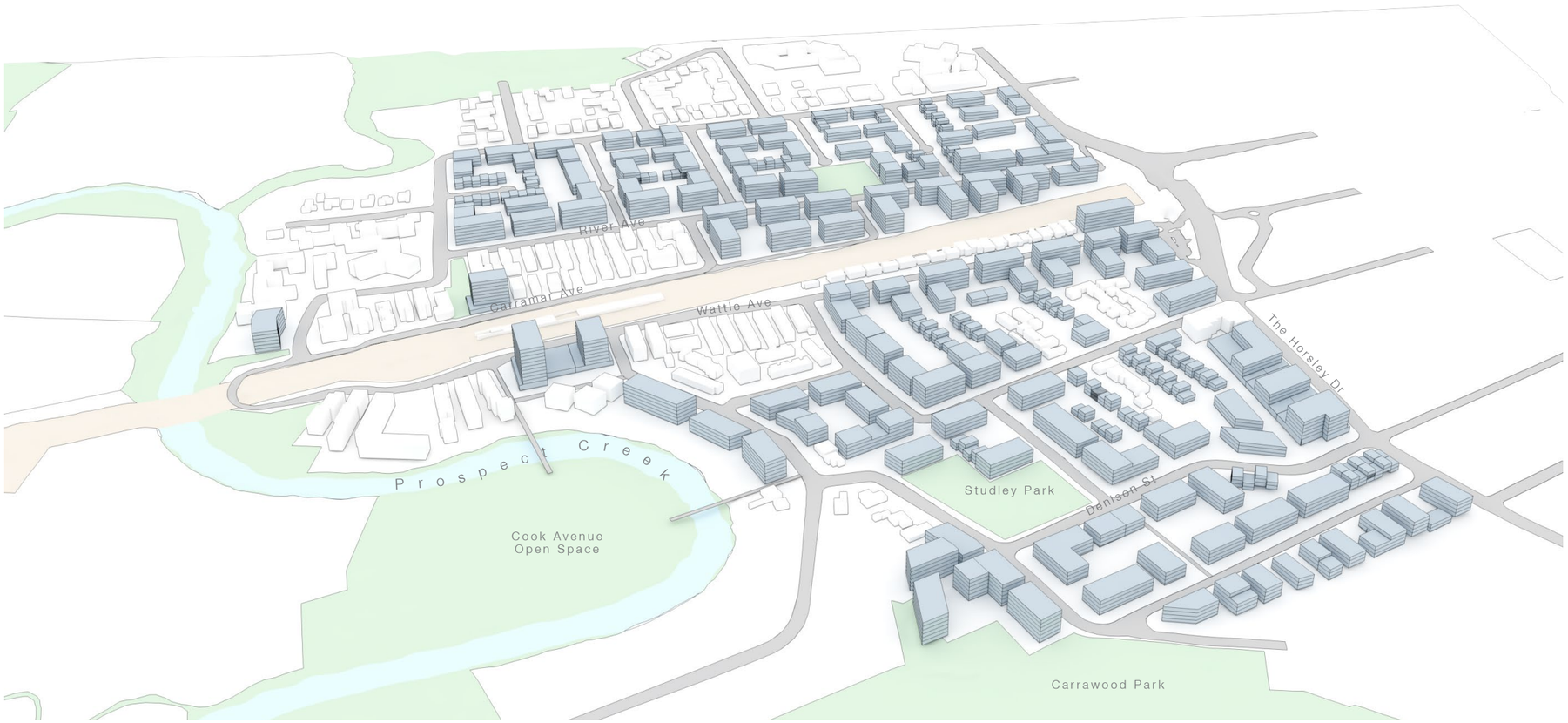


Figure 02: Massing model from above the Hume Highway looking northwards illustrating what built form might emerge should the changes to the development controls be adopted

Amongst a range of recommendations it is worth noting the following:

- An acknowledgement of the role of medium density housing as a transition are between from low to high density development. Controls for development within this zone should provide consistent built form controls and a broad package of uses that supports small to medium scale redevelopment and a greater intensity of land use.
- A recommended increase in Floor Space Ration (FSR) within those areas zoned for medium density housing based on the width of the lot and other incentives as indicated in the table below.

Lot width	Base FSR	With 3 Bed Mix (+0.1)	With Basement Carparking (+0.25)
7-22m	0.5:1	0.6:1	0.85:1
22-45m	0.65:1	0.75:1	1:1

- An increase in permissible height of building from 9-11m; and;
- Low Rise Residential Flat buildings as a permitted use within the zone.

The vision for Carramar is bold, whilst at the same time based on a deep appreciation of the qualities and possibilities that the centre holds. This study recommends significant uplift within the study area with the potential for up to 3,320 additional dwellings (south of Mitchell Street) in the form of attached dwellings, multi dwelling housing, apartments, and shop-top housing, representing up to 75% increase in population over the long term. An additional 2,200m² of non-residential / commercial / community / Gross Floor Area (GFA) is also proposed.

This new development would generate demand for infrastructure, inclusive of community facilities, open space (either new or embellishment of existing provision) pedestrian links, traffic and road network improvements.

The following infrastructure needs have been identified for the study area:

- affordable housing to meet current and future need
- a neighbourhood park of 4,600m^2 north of the railway line within 200 metres of existing and proposed apartments
- improved access to open space, specifically Prospect Creek
- pedestrian connections across Prospect Creek to Cook Avenue open space
- improved passive surveillance of large open space areas, specifically Carrawood Park
- an improved public domain around the train station that caters for a range of age groups

To retain the existing character of the study area and create space for growth this study has recommended :

LEP changes

- rezoning of a significant portion of the study area from Zone R2 Low Density Residential to Zone R3 Medium Density Residential to allow terraces and townhouses, and R4 High Density Residential to improve housing choice and diversity
- rezoning approximately 7,000m^2 of land to RE1 Public Recreation for a new neighbourhood park to the north of the railway line closest to existing and proposed apartments after investigation through Council's Open Space Strategy
- using Floor Space Ratio (FSR) as the key development standard governing development in the study area
- increasing the FSR within the centre to support more medium density development
- implementing the recommended amendments to LEP controls contained in the Medium Density Housing Study

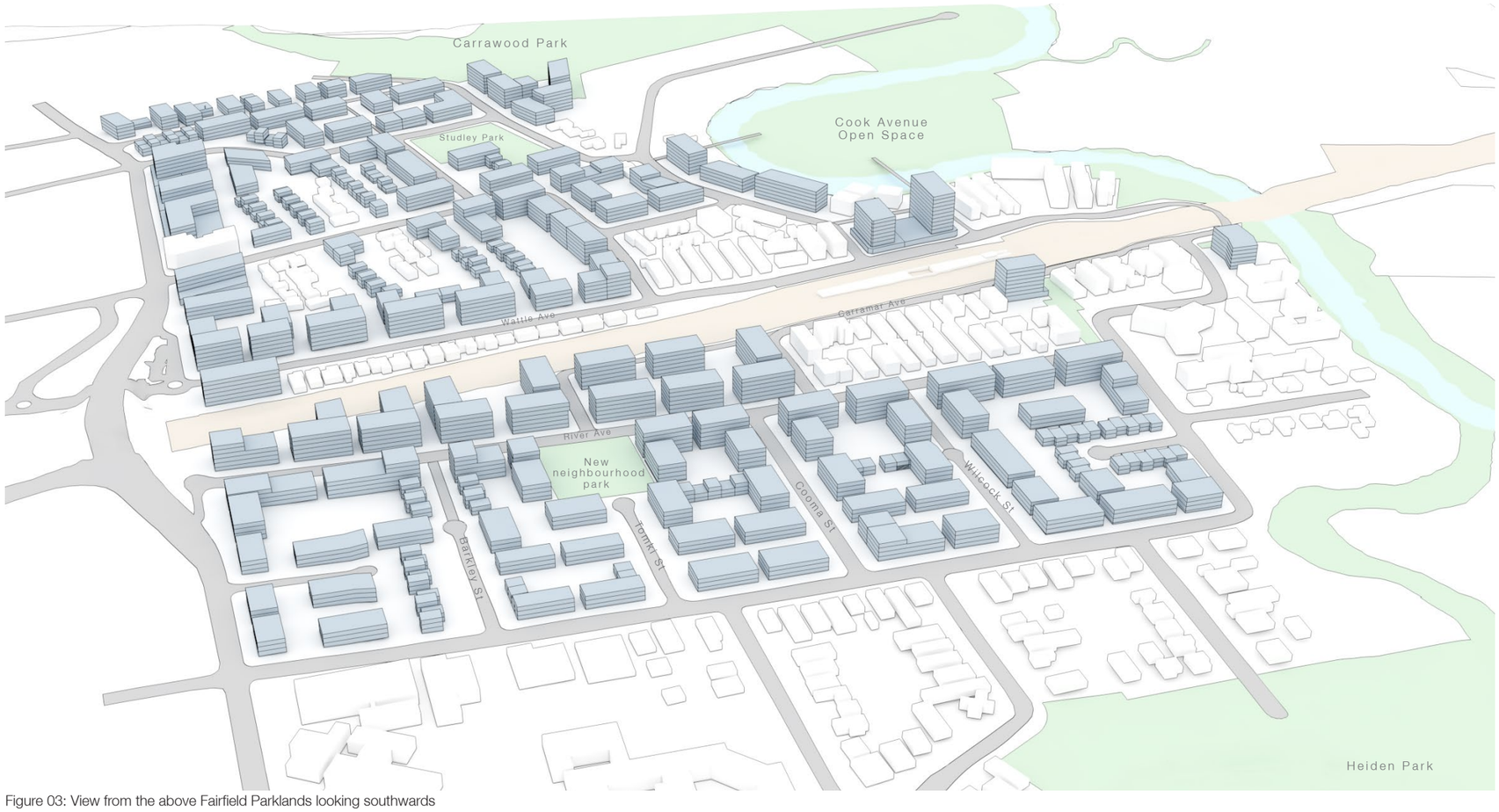


Figure 03: View from the above Fairfield Parklands looking southwards

DCP changes

- specifying a range of building heights from 3 to 12 storeys to allow for variation
- implementing the recommended amendments to DCP controls contained in the Medium Density Housing Study
- retaining the open character of the centre through generous setbacks from Prospect Creek, public streets and common boundaries.
- securing through site links to improve permeability and mitigate overland flood risk

As Carramar has limited opportunities for one landowner to provide benefits due to the fragmented land ownership an implementation strategy and contributions plan should be prepared and approved prior to the amendment of development controls. The implementation strategy will comprise a number of actions and funding strategies that will capture a fair proportion of the value uplift generated through changes to the development controls and complement these with public investments (grants and direct investments) to deliver the required benefits.

Such a strategy will provide a framework that will provide transparency and ensure that a fair price for land is paid. It will enable Council and State Government to purchase properties and invest in community infrastructure when the need arises or when landowners are ready to sell.

Introduction

1

This chapter explains the study purpose and process as background information followed by an overview of the study area and the key existing strategic and local policies for Fairfield local government area and Carramar

1.1 Background

Fairfield City Council (FCC) have a program to review the Local Environmental Plan (LEP) controls for a number of town and neighbourhood centres with the view of supporting appropriately scaled development that builds upon and reinforces the character of each centre and meets the community's desires and aspirations for current and future generations. In April 2019 FCC appointed SJB Architects to prepare masterplans for the three centres of Cabramatta, Canley Vale and Carramar. The urban design work that underpins the evolving masterplans with targeted landowner and community engagement will test certain assumptions and development scenarios in order to make recommendations for any future LEP amendments where required and inform future planning proposals.

This report deals specifically with the Carramar study area and is structured to follow two main project stages.

The first stage of the project called "Foundation of Place" provided an opportunity for the urban design team to develop a working knowledge of each centre. This involved getting an understanding of:

- the existing character of the centre through site visits
- the existing land use planning framework, development controls, as well as metropolitan, district, and local policies and strategies through desktop research
- exploration of key opportunity sites where development is most likely in the short to medium term
- where the centre sits in the hierarchy of metropolitan centres
- community needs through socio-economic profiles and a review of recent studies including the draft Fairfield Community and Open Space Needs Study (August 2019).
- the health of the development industry through a review of recent development applications
- stakeholder aspirations for the centre, neighbourhood and sites within the study area through interviews of landowners with significant land holdings as well as community based organisation such as local schools and community advocates.

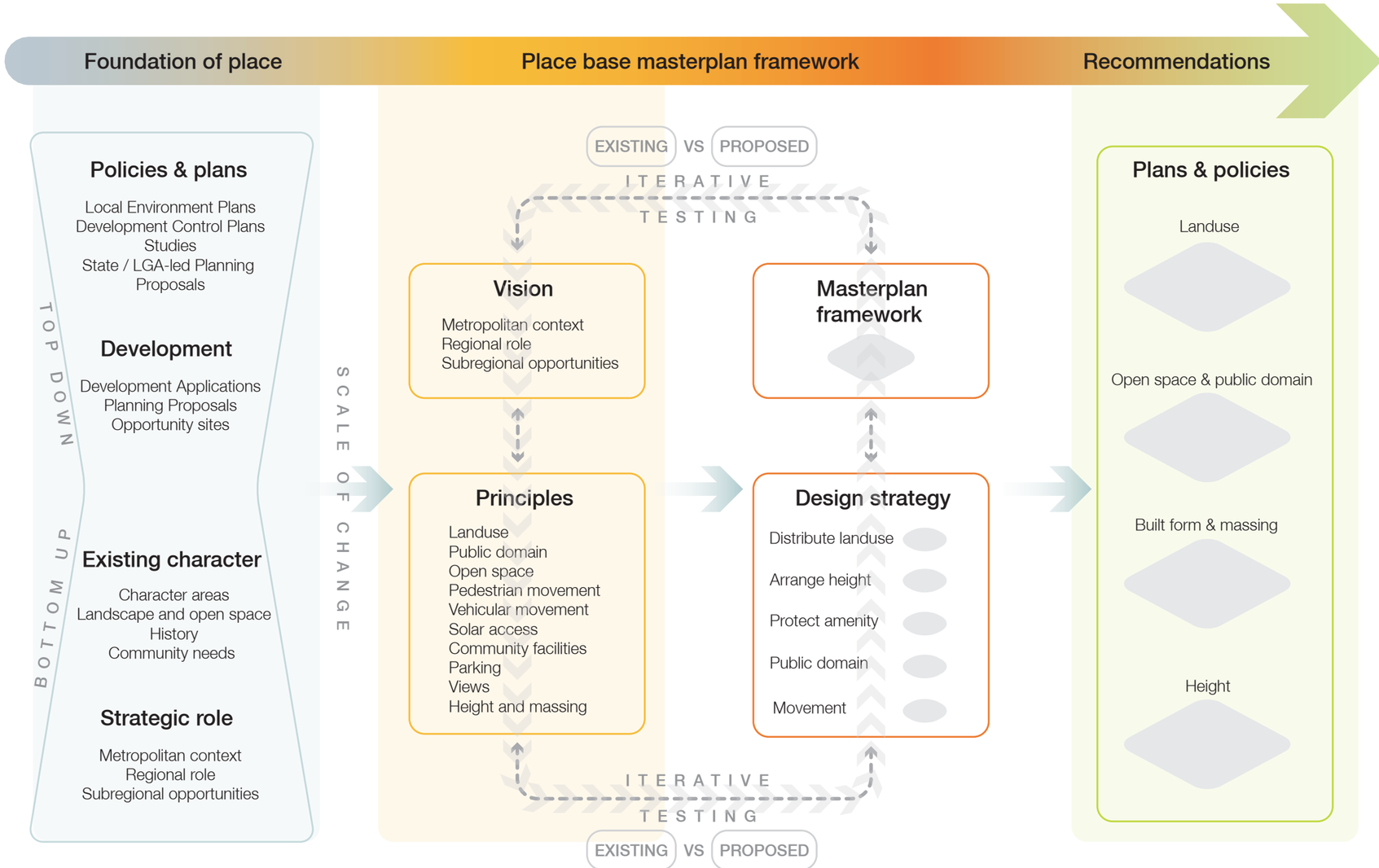


Figure 04: Design process diagram

Central to the foundational first stage is the definition of the non-negotiable/core qualities that will need to be retained and protected into the future. The combination of these findings leads to a set of potential opportunities and aspirations that are mediated though the spatial constraints (such as flood affected land, road network congestion etc) and opportunities for each study area . These will then be filtered through the lens of the principles outlined in the NSW Government Architect's Better Placed framework to identify the Future Desired Character of the study area and identifying key sites where changes to the LEP controls should be considered to better realised their true potential while protecting the amenity and enjoyment of the place.

The second stage of the project uses a Place Based Land Use Planning Framework where proposals for each opportunity site are tested and broad recommendations are made for the future development of the study area.

1.2 Study Purpose and Objectives

Urban Design Study Purpose

The Study is one of the actions of the Fairfield Local Strategic Planning Statement (LSPS) and is being funded as pat of the State Govements accelerated LEP Review Program. The purpose of this Study is to undertake an urban design review to guide future planning proposals and development applications that will maximise the unique characteristics, opportunities, amenity and vibrancy that the Carramar study area can offer.

This Study has been undertaken according to the principles set out in the NSW Government's Western City District Plan. In summary, it takes a design-led planning approach that requires urban design that focuses on people in order to create great places to meet, work, exercise and socialise.

This requires a focus on the whole picture: the streets, the neighbourhoods, the centres and suburbs that will be real, attractive places and provide a great way of life for new and existing residents.

This Study has been prepared in response to an identified need by Fairfield City Council to facilitate revitalisation in the Carramar neighbourhood centre and broader study area.

The Carramar Urban Design Study seeks to:

- reflect an analysis of current strengths, weaknesses, opportunities and threats determined through in-depth place knowledge built on site visits, literature review, and stakeholder consultation;
- outline a strategic approach to planning and development standards impacting upon built form;
- consider potential development outcomes based on appropriately managing amenity impacts (e.g. overshadowing levels of adjoining development);
- identify movement network and public domain improvements in the Carramar neighbourhood centre and broader study area to overcome existing weaknesses and cater for demand generated from future development; and
- recommend development standards within Fairfield Local Environmental Plan 2013 (FLEP 2013) and development controls within a new Carramar Development Control Plan.

This Study, and subsequent Social Infrastructure and Open Space Needs Study, and Public Domain Plans, are part of the planning process for a new Local Environmental Plan (LEP). As part of the process Council has prepared a Local Strategic Planning Statement (LSPS), which has been informed in part by the outcomes and recommendations of this study. The LSPS sets out the 20-year vision for land-use in the local area, the special character and values that are to be preserved and how change will be managed into the future.

Delivery of outcomes will be implemented by amendments to the Fairfield Local Environmental Plan 2013 (FLEP 2013) as well as updates to the Fairfield Development Control Plan 2013. Implementation will be further supported by Council's four year Delivery Plan and annual Operational Plan.

This Study identifies key urban design, built form and place making actions to improve the vitality and vibrancy of the Carramar neighbourhood centre as well as to enhance the liveability, accessibility and functionality of the broader study area.

This Study and its recommendations seek to put in place the foundations and opportunities to create a place that is attractive for people and capital investment as well as being inclusive and diverse. Above all, the Study's recommendations will be the means of catalysing and implementing a broader revitalisation of the Carramar neighbourhood centre and broader study area.

This Study investigates urban interrelationships across the Carramar neighbourhood centre and broader study area to identify potential mutual public and private benefits that can be achieved through development within the study area.

Urban Design Study Objectives

To support the functionality of the built form and the wellbeing of a growing residential community, Fairfield City Council seeks to develop a vision for the Carramar neighbourhood centre and broader study area that:

- Responds to local policy, planning framework, landowner aspirations and local community needs to build a solid foundation of place knowledge;
- Delivers on the objectives, planning priorities and actions of the Greater Sydney Region Plan – A Metropolis of Three Cities and Western City District Plan;
- Formulates development opportunities that reflect locational strengths and quality urban design outcomes within an accessible and safe public domain;
- Provides indicative estimates of potential residential yield and commercial/retail floor space with clear outline of assumptions for calculating these areas;
- Outlines achievable building envelopes and recommended proposed height and density controls as well as development controls to guide and manage impacts and maintain access to sunlight and adequate ventilation; and
- Identifies and recommends options for additional infrastructure including facilities, open space (either new or embellishment of existing), pedestrian links, car parking, traffic and road network improvements to meet anticipated future demand.

1.3 The study area

The Carramar study area is located in the Prospect Creek catchment and depicted on the adjacent map. It is bounded by:

- Heiden Park to the north;
- The Horsley Drive to the east;
- Denison Street to the south, and
- Prospect Creek to the west.

While the study area extends north to include Mitchell Street, a more detailed study should be undertaken to allow for :

- broader investigation of built form to increase density with apartments overlooking the Prospect Creek corridor and open space
- improve access to along the banks of the Prospect Creek green corridor
- investigate reopening Atkins Road to allow traffic to pass by the edges of open space including Heiden Park and thereby provide an increase is passive surveillance, including Police
- connecting Heiden Park and Oakdene Park with the acquisition of four properties over the long term, when owners are ready to sell.

Figure 05: Study area aerial plan

1.4 Metropolitan context

The centres in Fairfield are situated between Liverpool and Parramatta, both of which are experiencing significant planned growth and consolidation into major subregional city centres. This growth will be supported by public investments into infrastructure and through the relocation of key public institutions to these centres.

Bankstown is also a major hub in this regional network of centres and will benefit from the extension of metro services from Sydney CBD westwards. Metro services from Bankstown in the mid 2020's will extend the reach of public transport to the inner metropolitan area of Waterloo and onto the outer reaches of the north-west at Rouse Hill via the employment, health and education centres of the Sydney CBD, North Sydney and Macquarie University. Early proposals for the metro's route included an extension to Cabramatta and discussions on a possible extension toward Liverpool through the Bankstown Airport site and Chipping Norton.

It is understood that the Sydneham to Bankstown rail conversion to Metro will mean the end of direct services from Carramar to the City Circle. Customers travelling from Carramar Station could access the Sydney CBD Stations via Sydney Trains and Sydney Metro by changing at Bankstown or travelling Sydney Trains only by changing at Lidcombe/ Cabramatta.

Within the Fairfield City Council local government area, Fairfield is the most important centre relative to the strategic hierarchy and growth in south-west Sydney. In order of strategic significance, the three centres comprising this study are Cabramatta, Canley Vale and Carramar. All three centres will benefit significantly from the improving infrastructure of the Western City District.

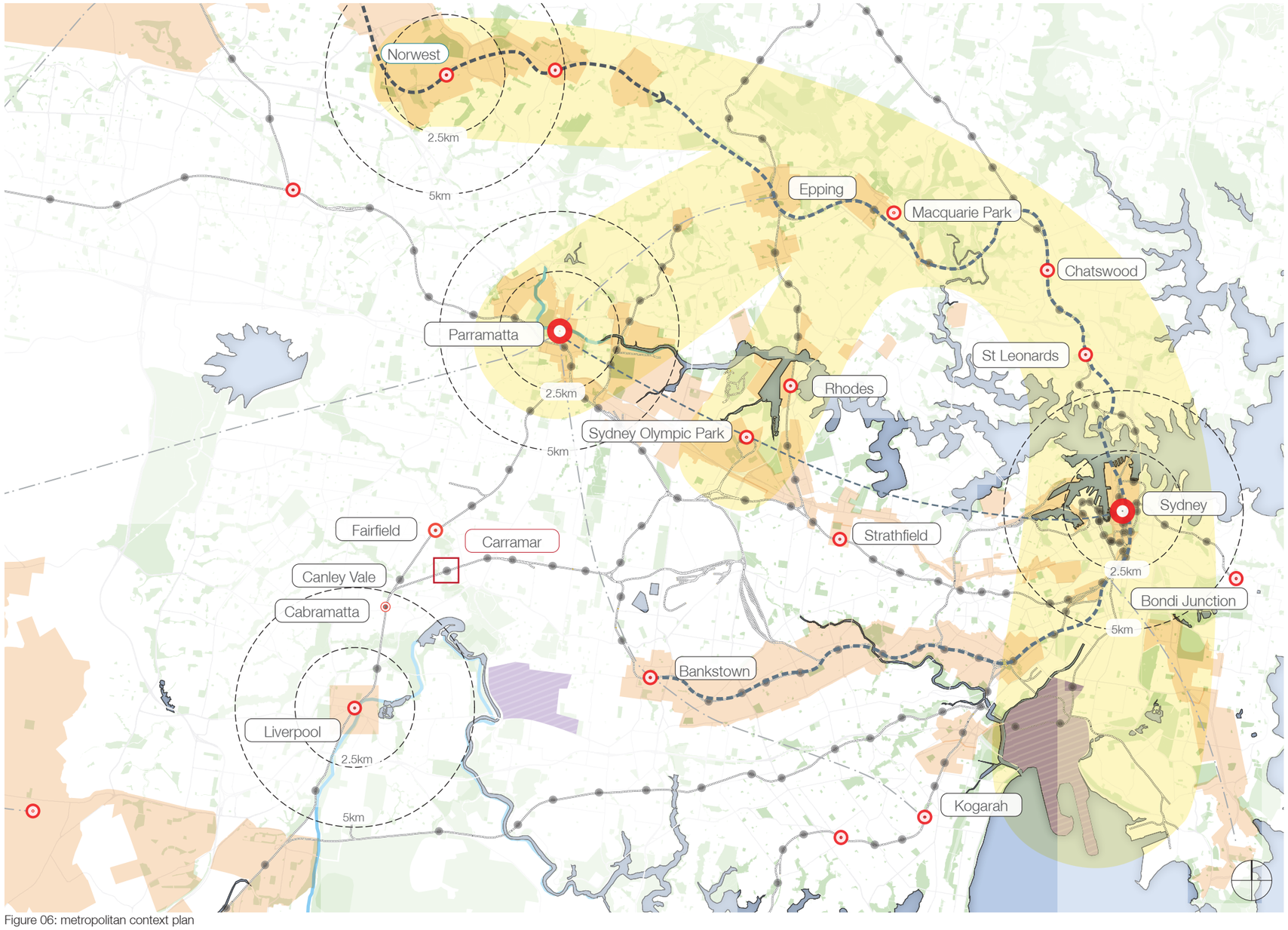
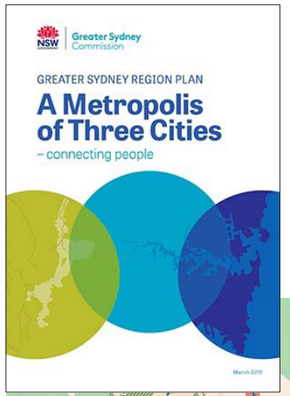


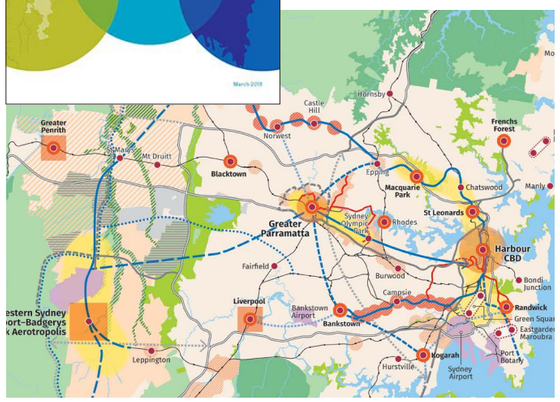
Figure 06: metropolitan context plan

1.5 Metropolitan and regional strategic planning

Greater Sydney Region Plan 2018

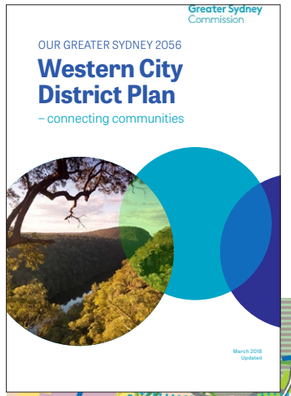
In March 2018, the Greater Sydney Commission (GSC) released the Greater Sydney Region Plan (GSRP), A Metropolis of Three Cities ('the Plan'). The Plan is built on a vision of three cities where most residents live within 30 minutes of their jobs, education, health facilities and services (see plan below). This vision seeks to bring together land use and transport patterns to boost Greater Sydney's liveability, productivity and sustainability by spreading the benefits of growth. The plan identifies Liverpool as a major metropolitan centre which is the closest to Carramar study area with links to the future Western Sydney Airport, but is largely silent on the three centres that are the subject of this study. The Carramar study area centre is located adjoining the Prospect Creek corridor.





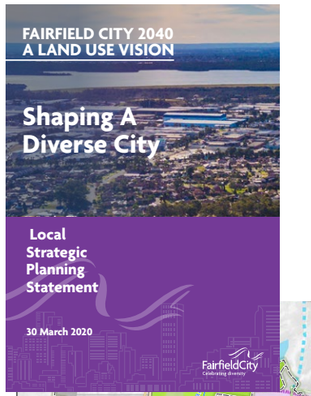
The Western City District Plan 2018

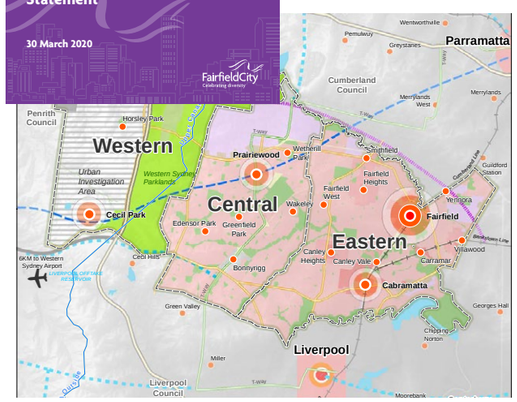
The Western City District Plan is one step down from the GSRP and provides guidance on the future of the western city district. Fairfield is one of five housing market demand areas. The housing target for Fairfield City is 3,050 in the short term (to 2021). The Western City District Plan characterises Cabramatta and Fairfield as diverse neighbourhoods and multicultural hubs and recognises the important role that migrants and refugees play in the social and economic landscape of the district. Greater emphasis is placed on Fairfield as a strategic centre and Cabramatta is designated as a local centre. Little detail is provided on the Carramar centre which is the subject of this study. The Plan proposes to expand existing parklands to create a continuous network of high quality parkland, with specific mention of Cabramatta Creek and Prospect Creek.



Fairfield City Local Strategic Planning Statement LSPS 2020 - Fairfield City 2040

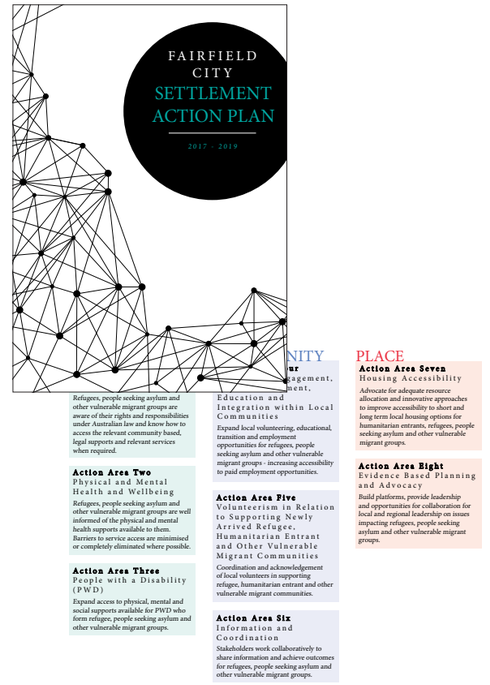
In March 2018 the State Government introduced new requirements for all Councils to prepare LSPSs that set out a 20 year vision for land use, special characteristics which contribute to local identity, shared community values to be maintained and enhanced and provide direction as to where growth will be accommodated. The LSPS was approved by Council in March 2020 and identities five themes (Community Wellbeing, Infrastructure and Places, Environmental Sustainability, Strong and Resilient Economy and Good Governance) and 16 Planning Priorities. Under Priority Action 4.1 Council undertook to undertake urban design studies for key centres that deliver attractive, healthy, accessible and safe places, inclusive of the Carramar study area.





The Fairfield City Settlement Action Plan 2017–2019

The story of Carramar, as an extension of neighbouring Cabramatta and Canley Vale, is one of refugee settlement, significantly after World War II and then again after the conclusion of the Vietnam War in 1975. The Fairfield City Settlement Action Plan 2017–2019 advocates for adequate resource allocation and innovative approaches to improve accessibility to short and long term housing options for humanitarian entrants, refugees, people seeking asylum and other vulnerable migrant groups. Of the 69,000 residents who have arrived between July 1991 and June 2018, 93% were refugees. Fairfield City settled more than 9,000 refugees in three years to 2018, being 50% of refugees settling in NSW The Fairfield City Settlement Action Plan contains three broad categories – PEOPLE, OPPORTUNITY and PLACE. These categories are further divided into 8 Action Areas that seek to address the strategic long term development of the communities.



1.6 The Fairfield City Centres Study and Policy 2015

The purpose of this study and accompanying policy is to describe the retail/commercial role of each of the types of centres in Fairfield City and provide consistent criteria against which planning proposals or development applications for retail/commercial proposals will be assessed.
(Note: The study is under review and will be completed later in 2020.)

The Fairfield City Centres Study identifies the four main commercial centres being:

- Fairfield City Centre
- Cabramatta Town Centre
- Prairiewood Town Centre
- Bonnyrigg Town Centre

Of these four main centres there are three distinct centre functions identified:

- Major Town Centre (Fairfield City Centre);
- Specialist Centre (Cabramatta Town Centre).
- Subregional Centres (Prairiewood and Bonnyrigg town centres)

The pre-eminent commercial centre within the Fairfield Local Government Area is Fairfield City Centre. This Centre has the largest concentration of commercial office and retail floor space and currently promotes the widest range of uses. The Cabramatta Town Centre provides the second largest concentration of commercial office and retail floor space and is designated as a Specialist Centre due to its unique cultural character. The centre is a thriving and vibrant hub of activity and attracts businesses and customers from a wide catchment and variety of ethnic backgrounds.

Local Centres are defined as sharing the following characteristics:

- Providing for the major weekly food shopping and convenience retail needs of the population of more than one suburb and providing a range of non-retail professional and personal services
- Including ancillary services such as a tavern, professional and health services, community facilities, post office and service station.

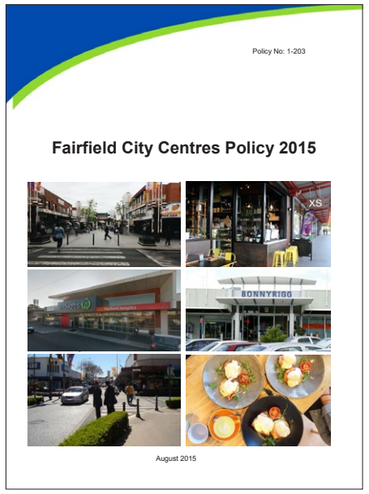
Despite Carramar being located on a major public transport network with its railway station, the neighbourhood centre has remained small with limited offering.

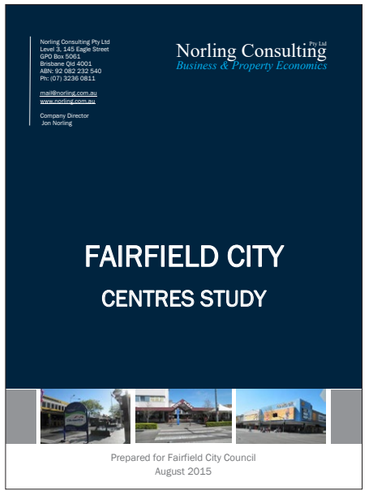
The Study notes that it would be desirable to focus and consolidate commercial growth within existing centres and to encourage rejuvenation and urban renewal within its main town centres.

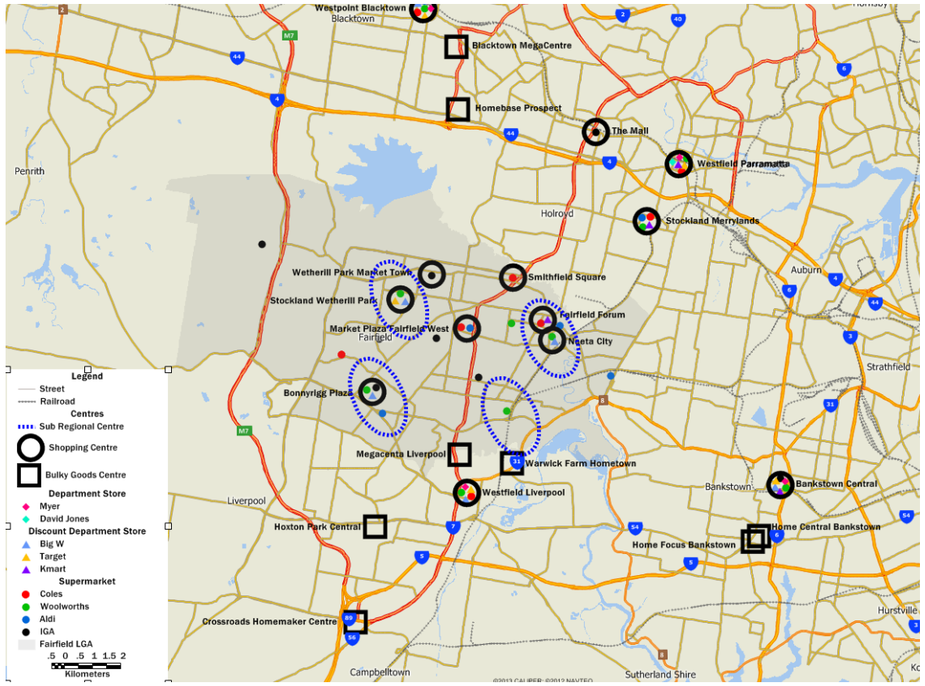
The scale and nature of activities means that additional growth should be located in the main town centre areas, in proximity to other services (including public transport) and facilities that either support or compliment the nature of activities associated with entertainment facilities and function centres.

Other relevant recommendations to this Study include:
- The centres strategy and the Fairfield Local Environmental Plan (LEP) which guides land use and development standards such as height of buildings and floor space ratios (FSR), should be enabling, facilitating and encouraging the rejuvenation of mature building structures and their uses to allow for the constantly evolving retail environment and expectations of residents
- Increased building heights should be given serious consideration for medium to high density residential precincts located in close proximity to centres and public transport systems, especially in Fairfield and Canley Vale.
- The LEP should incentivise site amalgamation within centres such as by offering greater height limits for larger allotments.
- Develop and implement a staged plan to improve public spaces within all major centres, particularly the Cabramatta Town Centre.

This study will consider amended building controls within the study area including changes in land use, building heights, and floor space ratio (FSR) with greater development potential within close proximity of the railway station and lower development potential within a 10 to 15 minute walking catchment of the railway station.







1.7 Current Local Environmental Plan controls under Fairfield LEP 2013

Land Use Zoning

A small cluster of properties south of Wattle Avenue between Nash Lane and Waterside Crescent, and east of The Horsley Drive between Laurel Street and Denison Street are zoned R2 Low Density Residential whilst properties close to the railway station and along a portion of the creekline are zoned R4 High Density Residential. There are two sites zoned B1 Neighbourhood Centre: one at the railway station south side, and the other at the study area's eastern periphery on The Horsley Drive.

Height of buildings

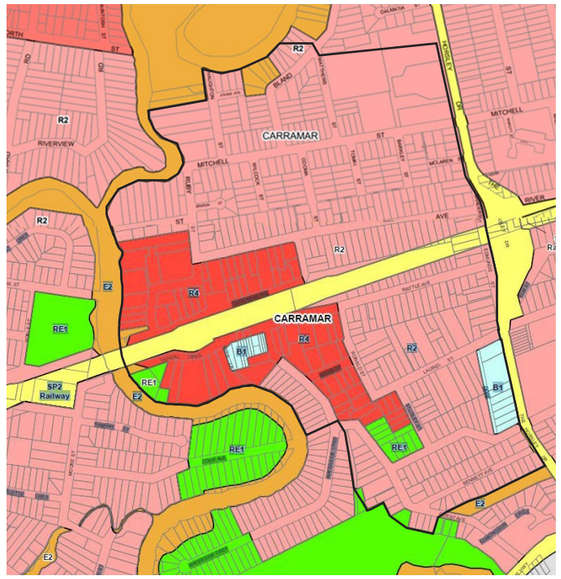
B1 Neighbourhood Centre zoned land along Wattle Street is limited to a building height limit of 10m (3 storeys), whilst a building height limit of 13m (4 storeys) is permitted in the B1 Neighbourhood Centre along The Horsley Drive. Land zoned R4 High Density Residential has a building height limit of 20m (6 storeys) whilst the remaining R2 Low Density Residential zoned land permits up to 9m (2 storeys).

Floor Space Ratio

The area around the Carramar neighbourhood centre is designated an FSR control of 0.45:1 for the R2 Low Density Residential zoned land and up to 2:1 for R4 High Density Residential zoned land. The two B1 zoned pockets have no FSR controls, with the scale of development controlled by the height of building development standard.

Heritage

There are no conservation areas in the study area, however there are a number of smaller listed heritage items that will need to be considered and integrated into any future proposals. Worthy of note, is the Bland Oak Tree (Quercus virginiana known as Live Oak in the USA) on Bland Street, planted by former convict, politician, farmer and inventor William Bland in 1842. It was the largest tree in Australia until it split in two parts after a storm. Its dissipated wood was assembled and carved into the Mayoral chair. The oak tree still remains and is listed on the National Register of Significant Trees.

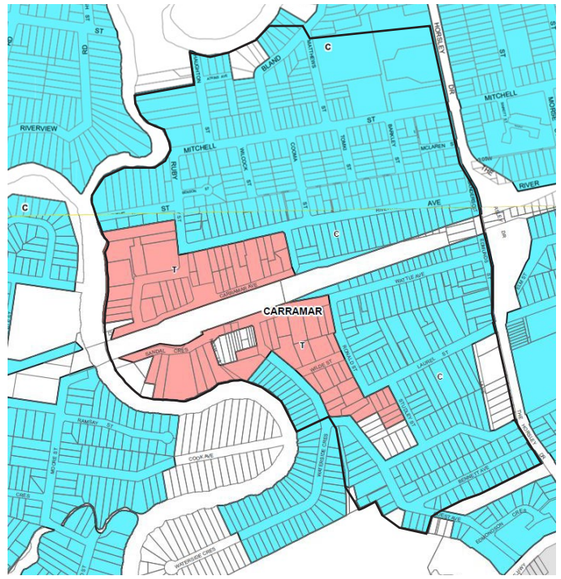


Land use LEP map 2013

B1 Neighbourhood Centre
B2 Local Centre
B3 Commercial Core
B4 Mixed Use
B5 Business Development
B6 Enterprise Corridor
E2 Environmental Conservation
E3 Environmental Management
IN1 General Industrial
IN2 Light Industrial
R1 General Residential
R2 Low Density Residential
R3 Medium Density Residential
R4 High Density Residential
RE1 Public Recreation
RE2 Private Recreation
RU1 Primary Production
RU2 Rural Landscape
RU4 Primary Production Small Lots
RU5 Village
SP1 Special Activities
SP2 Infrastructure
SP3 Tourist
W2 Recreational Waterways
MD SEPP (Major Development) 2005
WSP SEPP (Western Sydney Parklands
WSE SEPP (Western Sydney Employme
DM Deferred Matter
Cadastre
Cadastre 08/04/2015 © Fairfield City Cc

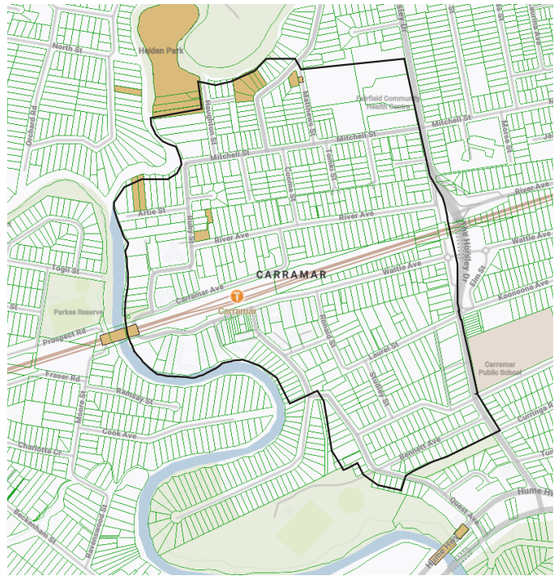
Height of buildings LEP map 2013

G 7
H 7.5
I 8
J 9
K 10
L 11
M 12
N1 13
N2 14
O1 15
O2 16
P1 17
P2 18
Q 20
R 21
S 23
T1 25
T2 26
T3 27
T4 29
U1 30
U2 33
V1 38
V2 39
W 42
AA 66
Cadastre
Cadastre 02/07/201



Floor space ratio LEP map 2013

A1 0.1
A2 0.33
C 0.45
D 0.5
E 0.57
J 0.8
N 1
R 1.45
S 1.5
T 2
U 2.5
V 3
W 3.5
X 4
Cadastre
Cadastre 26/03/2015 © Fairfield City Council



Heritage LEP map 2013

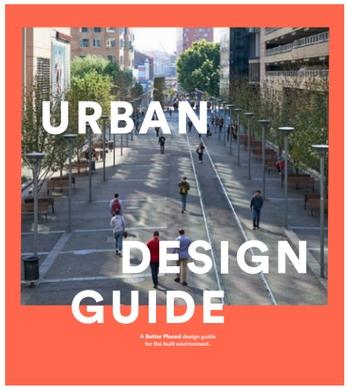
1.8 Design Guidelines

A suite of new strategies and frameworks has been created by the Government Architect New South Wales (GANSW) to promote good design. The genesis of this suite is Better Placed that approaches design from a 'place' based understanding, to ensure that development is integrated, contextual and beneficial to the existing local community. Better Placed "establishes a baseline of what is expected to achieve good design, across all projects in NSW. Good Design is a phrase that encapsulates the aspirations of Better Placed including its vision for NSW, its definition of good process, and its outline of objectives for the built environment." (Better Placed, 2017)

It is based on seven objectives, namely:

Better fit: contextual, local and of its place
Better performance: sustainable, adaptable and durable
Better for community: inclusive, diverse and connected
Better for people: safe, comfortable and liveable
Better working: functional, efficient and fit for purpose
Better value: creating and adding value
Better look and feel: engaging, inviting and attractive

The other document that is very relevant to Carramar is the Sydney Green Grid that places particular emphasis on improving connectivity and continuity along Sydney's existing network of riparian corridors and open spaces.



Foundation of place

2

This chapter presents an analysis of Carramar so as to obtain a better understand of the nature of change and development that is required. It culminates in a preferred amalgamation plan, opportunities plan and constraints plan which underpin frameworks in the following.

2.1 Regional context

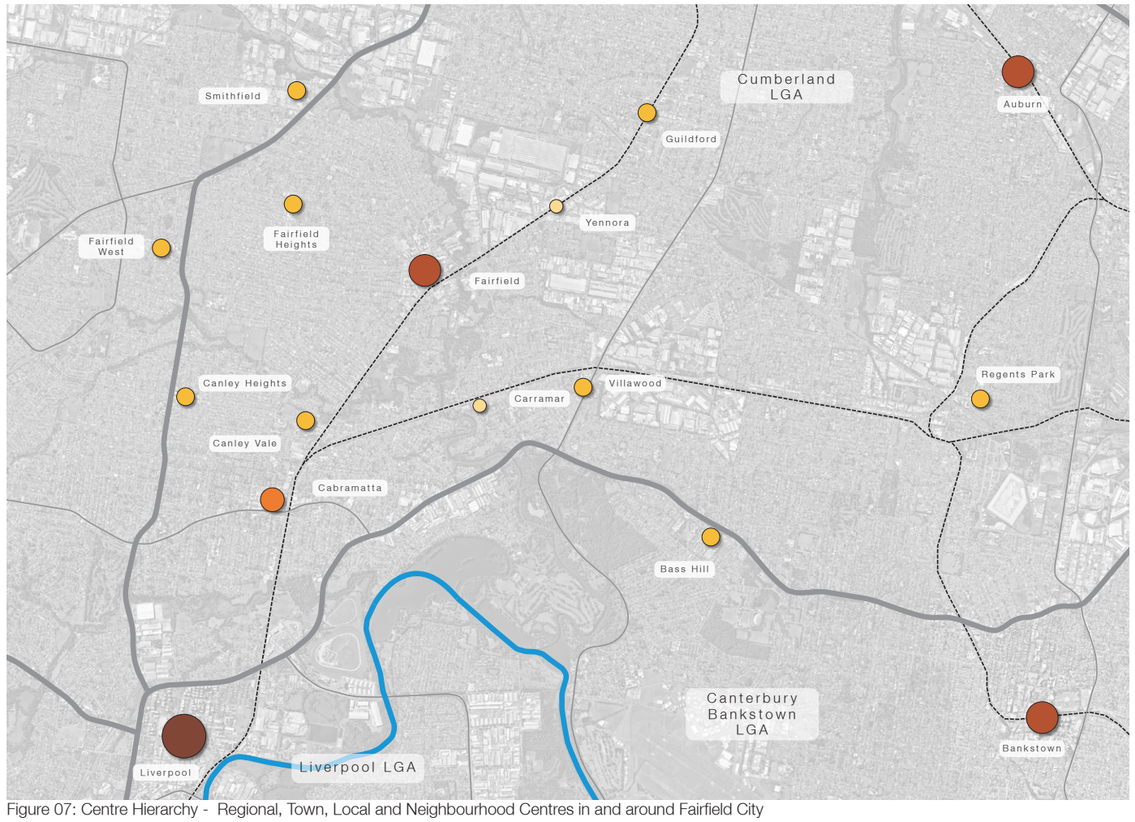


Figure 07: Centre Hierarchy - Regional, Town, Local and Neighbourhood Centres in and around Fairfield City

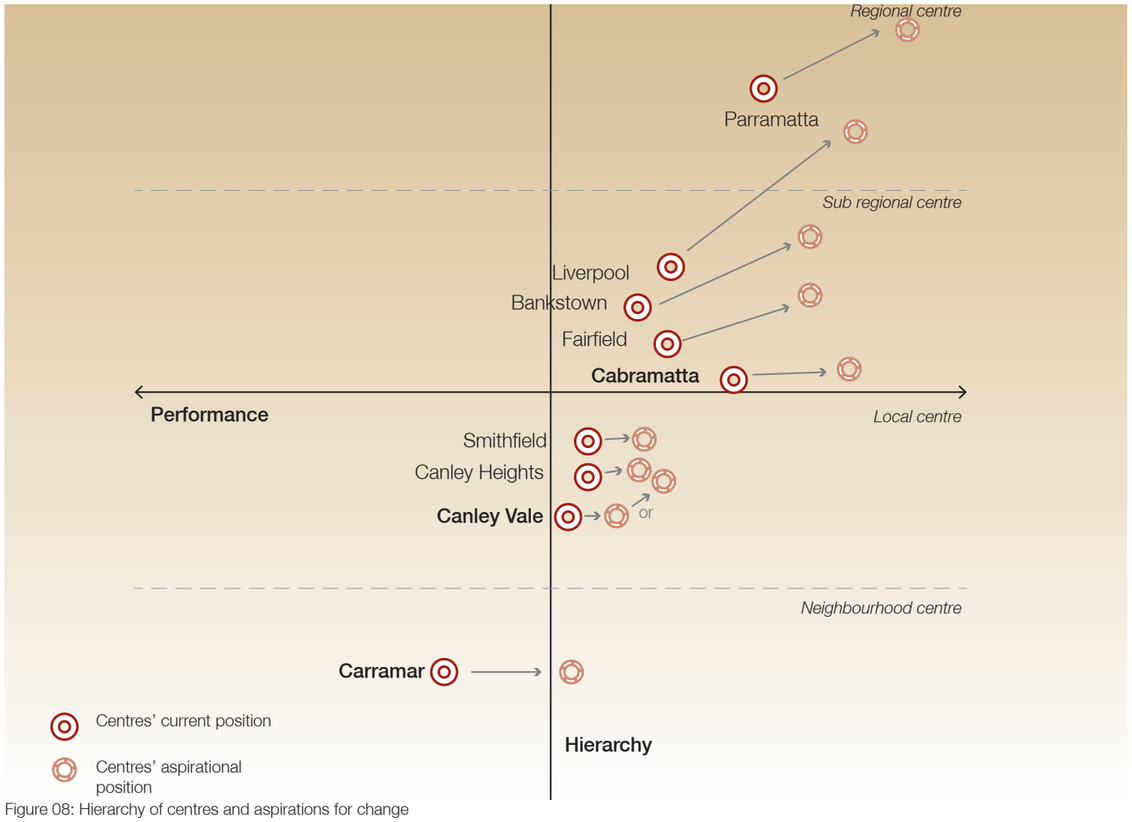


Figure 08: Hierarchy of centres and aspirations for change

The centres in Fairfield City function within a wider network of economic centres within the Western Sydney district and adjoining LGAs. There are a number of large centres that impact on and influence growth and development within Cabramatta. This includes development activities and land uses in the major centres of Liverpool and Parramatta as well as more local impacts of activities around Fairfield, Cabramatta, Villawood and Bankstown.

As already identified above and as confirmed by the Fairfield Centres Study, Fairfield City Centre exhibits the characteristics of a Major Centre through the presence of the Fairfield Courthouse and Local Area Command, and will be promoted as a subregional centre. Cabramatta Town Centre fills a niche market and has a distinct cultural identity drawing shoppers and tourists from far afield into the centre, particularly over the weekend for an authentic experience of Asian culture, fresh produce and cooked food.

In this context the future role and identity of Carramar study area is that it remains a neighbourhood centre with surrounding residential development of varying density. Investments into the public domain, specifically around the railway station and modest increases in densities will assist in overcoming economic thresholds and support an improved retail and service offering at the neighbourhood centre.

2.2 Subregional opportunities

Most key centres in the east of Fairfield City are oriented and serviced by railway stations which provide public transport connection to metropolitan Sydney. Local high streets generally stem perpendicular to the railway tracks and are the main focus of pedestrian activity. They support a diverse range of local businesses. Car parks are generally located around the periphery of each centre and perform an important function for shoppers and commuters.

Fairfield City, with an area of 100 km^2, is served by the Hume Highway to the south, The Horsley Drive (diagonally across the City), Cumberland Highway (linking employment zones to the north down to Liverpool in the south) and the M7 Motorway to the west, which are the key arterial routes through the area. Cabramatta Road is the main vehicular route to and from Hume Highway (A22) and provides direct connections to Liverpool, Parramatta, Penrith and the inner west. The Horsley Drive defines the eastern edged of Carramar and links the Hume Highway to Fairfield. Canley Vale and Canley Heights are focused on the spinal high street of Canley Vale Road.

Riparian corridors in an east-west direction knit together many of the public open spaces in Fairfield. They accommodate a range of parks, facilities, public functions, bicycle paths, and playgrounds. They also form significant barriers to movement and impact on access.

Development potential for Carramar study area is impacted by the Prospect Creek corridor and associated flood risk, and physical barriers (the railway line and The Horsley Drive state road) which creates a small catchment areas. Its proximity to the higher order centres of Fairfield and Villawood also impacts on higher order commercial and retail viability.

Development proposals need to accept these environmental, physical and locational constraints and looks to leverage the unique features of the study area - its intimacy, its waterfront conditions and its green and natural setting.

Figure 09: Main Street Centres with opportunities for planned growth

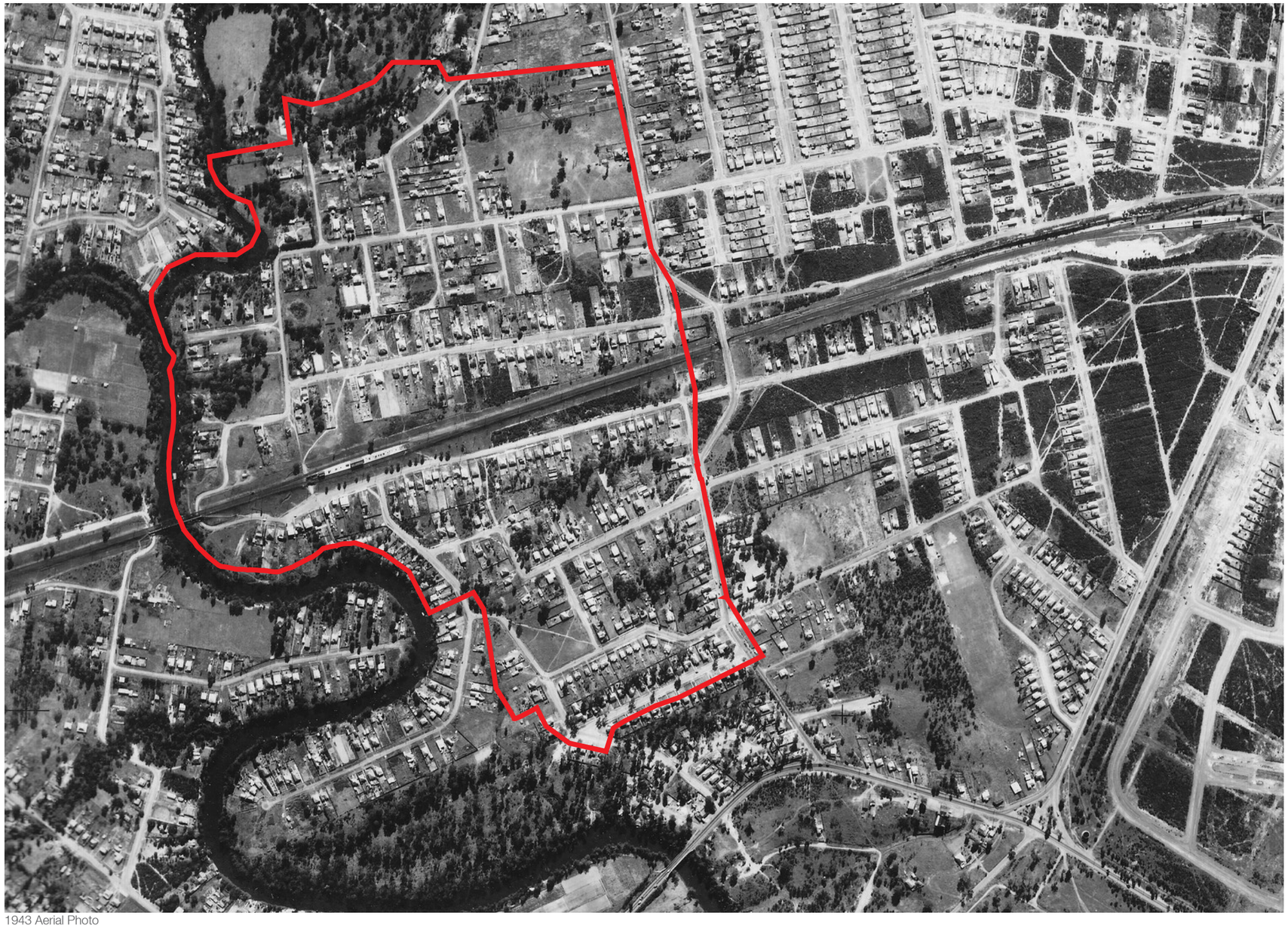
2.3 The historical development of Carramar

For 30,000 years before Europeans arrived, the area now known as Fairfield City was home to the Cabrogal, an Aboriginal clan of the Darug people, whose lands were around Cabramatta Creek. The Cabrogal ate native vegetables, grubs and animals and made bark canoes for fishing and transportation. Evidence of this period has been found in the form of scarred trees, stone tools and camp sites, largely around the creeks. Due to the rich soil of the flood plains, agriculture, farms and dairies quickly emerged. In the mid-1880s the land was used mainly for timber logging, farming and vineyards. Fairfield is named after the family estate of John Horsley – Fairfield Manor in Somerset, England, to honour the family.

Carramar owes its development to the extension of the railway line from Regents Park to Cabramatta. Carramar was initially called South Fairfield but its name was changed in 1926 to Carramar, an Aboriginal word meaning “shade of trees”. The area’s popularity fostered expectations of a development because of railway extensions in 1924 but the boom did not happen as a consequence of the depression of 1929 which saw the limited investment that there was directed to areas which were better connected. The Lansdowne Bridge area became a popular recreation spot and the Howard Family conducted refreshment rooms and hired out rowing boats.

Despite this, the suburb developed steadily as land was subdivided and developed with a variety of suburban housing typologies, with a concentration of residential flat buildings around the station, predominantly to the north of the railway line.

A call for the provision of a public hospital for Fairfield was made by the Mayor of Fairfield, Alderman Clifford Green in 1945. In 1949 the decision was made to build a district hospital on the corner of The Horsley Drive and Mitchell Street. On 15 September 1956 the Fairfield District Hospital, consisting of 100 general beds and 27 maternity beds in prefabricated buildings, was officially opened by the NSW Minister for Health, the Hon. W.F. Sheahan. On 22 November 1988, having outgrown the needs of an expanding city, the hospital closed its doors and was replaced by a new hospital at Prairiewood.



1943 Aerial Photo

Foundation of place

Fairfield Community Health Centre, the Fairfield Ambulance Station, Karitane (a health service specifically designed to support new parents around sleep and settling, establishing routines, feeding and nutrition, toddler behaviour and pre and postnatal anxiety, as well as support parents who are caring for young children), and STARTTS (the NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors) are now located on the former District Hospital site. STARTTS celebrated its 30th anniversary in 2019.

Studley Park is located in the southern part of the study area, and while it is generous in scale and provides amenity for local residents, those properties directly abutting the open space present high boundary fencing onto the park. Most of the adjoining houses turn their backs onto the creek and rather than being an environmental asset for the community and is perceived as being unsafe, because of lack of surveillance and entrapment spaces.

Connectivity has historically been a challenge for Carramar. Marooned by the meandering bends of Prospect Creek and transacted by the railway line, Carramar has limited pedestrian and vehicular connections to the surrounding neighbourhoods and centres. The rail service at Carramar is infrequent (every 30 minutes) with poor access to the platforms for those with mobility challenges. Connections north south and onto the strategic road network are limited due to The Horsley Drive which is vehicle dominant and provides access to the Hume Highway and Liverpool to the south. Wattle Avenue provides vehicular and pedestrian access under The Horsley Drive between Carramar and Villawood as well as providing safe access to Carramar public school.

Whilst it is desirable to overcome these barriers via bridges and new connections development uplift is unlikely to fully fund such investments and additional grant funding will be required.

New development on The Horsely Drive

Retail strip on Wattle Avenue to the south of the station

Railway underpass and station entrance


Variety of housing typologies within the neighbourhood


Residential flat buildings with car parking on ground floor

Carramar shopping centre to the north of the station


Larger housing along Prospect Creek contribute to the green character of the neighbourhood


Local cultural institutions located within the neighbourhood


Studley Park - an important recreational space for residents

2.4 Community needs

Key demographic characteristics

Carramar is a community of 3,551 people (2016 ABS) projected to grow to 4,227 people by 2036.

The key demographic indicators are:

Age Profile

- Carramar shares a similar age profile to Greater Sydney, however has an older population with 11.3% of the people who live in the suburb aged over 70 (9.5% in Greater Sydney). The newly constructed aged care facility with 90 residents, in part, explains this high ratio.

Household characteristics

- The main household types in Carramar are couples with children (28%) and lone person households (27.9%). This is significantly higher proportion than Greater Sydney. The median household size in Carramar is 2.74, slightly higher than the Greater Sydney median of 2.72 however significantly low for Fairfield LGA (3.23).
- 44% of households in Carramar are renting, significantly higher than Greater Sydney (32.6%), with 34.3% renting privately and 9.6% renting social housing.

Socio-economic disadvantage

- Carramar's SEIFA score is 813.6 – significantly more disadvantaged than Greater Sydney (1,108), and one of the most disadvantaged suburbs in Fairfield LGA.
- In 2016 the median household income in Carramar was $923, and 28.4% of households reported a household income of less than $650 a week, almost the double the proportion of households as Greater Sydney.
- Within Fairfield Place (Carramar, Fairfield, Fairfield East, Fairfield Heights, Fairfield West, Old Guildford, Villawood and Yennora) Carramar in 2016 had:
  - the highest proportion of lone person households at 27.9%
  - the second highest proportions of one parent households at 18.1%.
  - a higher proportion of households renting at 44.3%
  - a high proportion of people in need of assistance due to disability at 10.2% or 363 people
  - double the proportion of people looking for work compared to Greater Sydney (6%) at 13.2%
  - double the proportion of households with no internet access compared to Greater Sydney (11%) at 22.92%.
- According to the Australian Early Development Census (AEDC), children living within Fairfield are more likely to be 'developmentally vulnerable' than children in NSW. Children in Carramar however score generally lower across the board
- It is worth noting that the lower median income and significantly high proportion of low income households would be impacted by the aged care facility. Its relative housing affordability makes it an entry point for low income families and new migrants into Australia
- Combined with low household incomes, and low SEIFA scores this stresses the importance of maintaining relative housing affordability as the area continues to grow so that residents are able to able to stay in area and within relative proximity to public transport.

Cultural diversity

- 53.8% of people were born overseas. The main places of birth are Vietnam (14.5%), China (3.8%) and Iraq (3.1%). The Iraqi population increased by 100 people over the last 5 years (from 0.7% in 2011 to 3.1% in 2016), corresponding with the increase of refugees and new migrants from Syria and Iraq who have been making Fairfield LGA their home over the same period.
- 66.4% of residents speak a language other than English at home higher than Greater Sydney (35.8%).
- 10.7% of Carramar's total population have arrived to Australia within the last five years, a higher proportion than Greater Sydney (7.9%)

A City of New Settlement

Fairfield City Council has adopted the Fairfield City Settlement Action Plan new which seeks to facilitate the settlement of refugee communities into Sydney. The need for affordable housing to accommodate larger families is required now and into the future. Development opportunities could provide potential community benefits to meet this demand, and assist in assimilating and settling vulnerable families with secure housing tenure.

	Physical This domain measures children's physical readiness for the school day, physical independence, and gross and fine motor skills	**Social** This domain measures children's overall social competence, responsibility and respect approaches to learning and readiness to explore new things	**Emotional** This domain measures children's prosocial and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.	**Language** The domain measures children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy	**Communication** This domain measures children's communication skills and general knowledge	**Vulnerable** on 1 + Domain	**Vulnerable** on 2 + Domain
NSW	8.5	8.7	6.8	4.8	8.1	20.2	9.6
Fairfield City	11.5	11.8	7.0	7.5	15.8	27.6	13.9
Carramar	8.5	2.1	2.1	4.3	2.1	17.0	2.1

Measure of Developmental Vulnerability (Source: Australian Early Development Census (AEDC) 2020),

Social infrastructure

Fairfield City Council's draft Fairfield Place Community Facilities and Open Space Needs Study August 2019 (the Needs Study) provides the evidence base to inform Council's future planning for community facilities and open space in the suburbs of Carramar, Fairfield, Fairfield East, Fairfield Heights, Fairfield West, Old Guildford, Villawood and Yennora.

According to the study, neighbourhood level facilities serve local populations ranging from around 2,000 to 10,000 people. Carramar has a population of 3,551 persons, with 34.3 persons per hectare.

Neighbourhood level community facilities include: spaces for meeting and gathering, and spaces for local programs and activities such as playgroup, dance classes, etc. They are small scale buildings, are not usually staffed and are used mostly on a casual hire basis. Community halls are a typical neighbourhood level facility.

What social infrastructure currently exists?

- The Fairfield Community Health Centre is located at the intersection of The Horsely Drive and Mitchell Street. it provides a range of services including Child, Youth and Family Services, Fairfield & Liverpool Sexual Assault Service and a Aged Day Care Service.
- There are no council-owned community facilities in Carramar. The neighbouring suburb of Villawood to the north has a Council seniors and community centre facility on NSW Land and Housing Corporation (LAHC) land. Due to an increase in density through the redevelopment of the Villawood town centre and LAHC land, it is likely that a new community hub will be provided.
- There are a number of community based organisations and non-profits (such as Woodville Alliance and STARTTS) who are active in the area and provide support for families on low incomes and newly arrived refugees. Some of these services include trauma counselling, child care and domestic support.
- STARTTS, located at 152–168 The Horsley Drive Carramar, is the NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors. STARTTS is a specialist, non-profit organisation that for 30 years has provided culturally relevant psychological treatment and support, and community interventions, to help people and communities heal the scars of torture and refugee trauma and rebuild their lives in Australia. Located in the north-eastern corner of the study area, is a significant service for recently arrived refuges. Wayfinding by clients to the service from Carramar railway station is an important consideration.
- Fairfield City Council's free City Connect bus provides an opportunity for those members of the Carramar community with mobility challenges to access community facilities nearby in Villawood local centre and the Fairfield City Centre. The Carramar railway station also provides access to Cabramatta where a number of community facilities and services may be accessed, noting that the railway station is inaccessible due to stairs required to access the raised platforms. New lifts at the eastern end of the platform would significantly improve accessibility and extend the walking catchment east.

What is needed?

The Needs Study points to the following key needs to provide community facilities that:

- Support a socially cohesive community and communities of interest within a socially, culturally and economically diverse community
- Provides spaces (buildings and natural) outside of the home to participate in unstructured social, cultural and recreational activities
- Provides affordable office space for not for profit community organisations who will continue to need to operate in the area
- Facilitates educational and employment outcomes through access to technology, wifi, incubator and co-working spaces. This responds to current lower educational outcomes of children and young people, low Internet access in the home, and need for upskilling courses
- Is multipurpose, flexible and co-located which is more sustainable for Council and will enable resource sharing, collaboration and capacity building, and
- Supports community celebration, cultural and creative outcomes.

While a multipurpose community building may not be feasible in Carramar, there are opportunities to build social, outdoor meeting spaces that are appealing and safe in the neighbourhood centre as well as in open spaces along Prospect Creek and neighbourhood parks, both new and existing.

Outside of Carramar, the Needs Study recommends one multipurpose community centre in Villawood (1,000m^2), noting the need for free and accessible internet and computer in public space to address the higher proportion of households with no internet access in Carramar at 22.92% compared to 11% for Greater Sydney.

To allow residents to access facilities at Villawood and Cabramatta (library, community space, and community services) a key action is for Council to continue advocating to make Carramar and Villawood stations accessible.

2.5 Landscape, open space and recreation

What open space currently exists?

Prospect Creek is the single most significant open space system within the study area and forms part of Sydney's Green Grid promoted by the Government Architect. Historically the creek was a focus of recreation and socialisation for the community with walking trails and boating, but this has been transformed into the "back waters" as post WWII subdivision and development has privatised this valuable creek frontage with little direct visual and physical connection between the neighbourhood and the creek. The canopy cover range in Carramar 16 - 25 %, largely assisted by vegetation along the creekline.

Heiden Park (2.85 hectares and zoned E2 Environmental Conservation)to the north of the study area is on a headland surrounded by Prospect Creek, offers grassed and shaded areas along with a historic landmarks: the grain silo building and the Von Heiden garden. A partially isolated site it lacks and lacks passive surveillance from pedestrians, passing cars and adjoining residents.

Carrawood Park (10.6 hectares) while being of sufficient size to be classed as a district level park, is largely sports-focused and vibrant when in use. At other times the park has poor utilisation. Community advocates advised during consultations that the limited use by women and children was due to its lack of passive surveillance that makes the extensive space along the creek feel unsafe.

There are three neighbourhood parks within the study area.

Oakdene Park (4,600m2 and zoned E2) to the north of the study area is a gateway to Heilden Park (zoned E2) is embellished with play equipment yet because of its partially hidden location serves a very small catchment of adjoining residents in detached houses. The historic Bland Oak tree, listed on the National Register of Significant Trees, is located in this park.

Carramar Avenue Park (860m2 and zoned E2) is a small unembellished reserve located immediately north of the rail underpass, with 15 metres of creek frontage providing a visual connection to the creek corridor.

Sandal Crescent Park (4000m2) to the south of the railway line and with 100 metres of creek frontage provides limited passive open space with no play equipment for 279 apartment dwellers living in 170 apartments immediately to the east of the park.

Studley Park (6700m2) located in the centre of Carramar South has there street frontages and is embellished with play equipment. According to community advocates and residents met on site, the park is highly valued by the local community. Its functionality could be improved by a desired self-cleaning toilet for residents, including the 151 apartment dwellers living in the 40 apartments immediately north of the park.

Although Carramar seemingly has a high provision of open space per person (73.7m2 of open space per person) much of it is either inaccessible, far from residents or contains barriers to allow residents to feel safe to use particularly where isolated and lacking passive surveillance due to limited or insufficient street frontage, as well as little activity.

The meandering of the creek together with flooding constraints has resulted in headland parks along Prospect Creek. These are difficult to access and could be activated by improving access through new footpaths, providing crossing points, and improve passive surveillance achieved through the acquisition of key properties and new development overlooking the open space.

Access to existing open space

The GANSW recommends that where densities are increased residente have access to a quality open space within 400m of where they live. With this benchmark in mind there is inequality in open space access within the study area, due to the significant barriers of the railway line and creek. Figure 8 illustrates 200m walking catchment from existing open spaces. It shows a broad band along the railway line where there is a deficiency of access to open space. Opportunities to increase open space access north of Carramar station is critical, especially if the area is to support additional apartment style living.

- study area
- 200m ped-shed
- lots at 200m walking distance from an open space
- areas of shortfall of open space

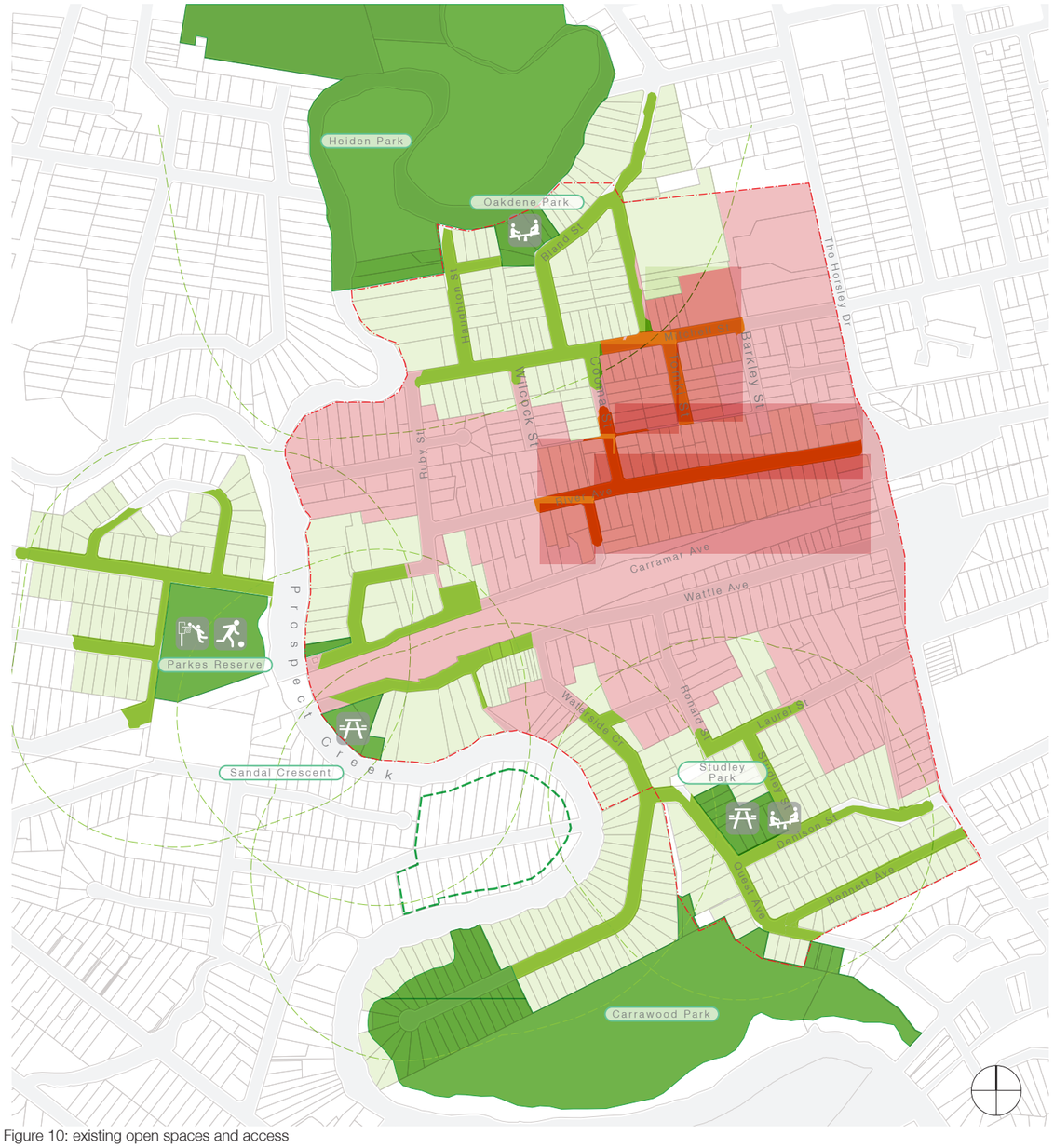


Figure 10: existing open spaces and access

What is needed?

Fairfield City Council's draft Fairfield Place Community Facilities and Open Space Needs Study August 2019 (the Needs Study) provides the evidence base to inform Council's future planning for community facilities and open space in the suburbs of Carramar, Fairfield, Fairfield East, Fairfield Heights, Fairfield West, Old Guildford, Villawood and Yennora.

The Needs Study points to the following key needs to provide open space that:

- Supports a socially cohesive community and communities of interest within a socially, culturally and economically diverse community
- Provides spaces outside of the home to participate in unstructured social, cultural and recreational activities
- Supports community celebration, cultural and creative outcomes
- Enables health and fitness improvements to respond to higher rates of childhood obesity and poorer local health outcomes, and
- Provides respite for the increasingly hot climate, particularly for those living in small apartments or unable to afford air-conditioning.

Specifically to the Carramar study area the following has been identified:

Riparian corridors and creek crossings

Additional creek crossings for pedestrians could also help improve connections to open spaces and reinforce open space and recreational corridors as identified in GANSW Green Grid Strategy.

Studley Park

Engagement with community members and local service providers has indicated the desire for facilities that support informal and social uses of the space, such as walking paths, water bubblers, outdoor fitness equipment, BBQ facilities and accessible toilet facilities (currently locked toilets which can limit local use of the space). Existing spaces such as Studley Park and Sandal Crescent Reserve could be upgraded to accommodate such features.

New public open spaces

Council is currently in the process of preparing an open space strategy for the entire LGA that seeks to improve public access to quality open space amenities and support population growth. A new open space north of the railway line will be required to address existing shortfalls and accommodate future residential growth in Carramar. Investigations will need to test the best location and size of an open space of between 2,000 and 3,000m^2 between River Avenue and Mitchell Street.

In addition, consideration should be given to rezoning Heiden Park to RE1 Recreation and instituting a plan of management to ensure a balance between recreation and ecological preservation.

Communal open space on private property

Sites that can accommodate increased density should also provide public and communal open space on site as far as possible that cater for all age groups.

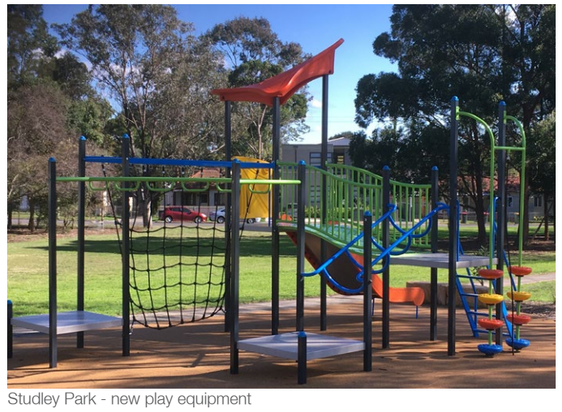
Carrawood Park provides large unstructured open space amenity


The gates to Heiden Park providing access to informal open space


Formal play equipment at Bland Oak Park


Studley Park - blank edges and poor interface conditions onto the park


The pedestrian bridge connection to Heiden Park - very attractive by not well overlooked


Studley Park - new play equipment

2.6 Carramar character areas

The character of Carramar is defined by the natural and man made features that transect the local area. Some of the key defining elements include the railway line, the riparian corridor associated to Prospect Creek; The Horsely Road overpass and the Railway Bridge.

The following character areas have been identified:

1. **The Station Gateway Precinct** - characterised by mixed use, one and two storey mixed use buildings that take advantage of footfall generated by the train station and once served the catchment with a broader daily shopping needs offering in post war years.
2. **The Station Related Apartment Housing** - this area contains a concentration of walk-up residential flat buildings of between 2 and 3 storeys. The buildings are generally oriented north south with single aspect the individual units fronting onto the common boundaries. Recent development in this area has included the Ruby Manor age care facility which is 4 storeys.
3. **The Suburban Housing Area** - comprises primarily of single and double storey detached suburban housing that are similar in scale design and layout, however vary in age and style. A number of smaller scale townhouse developments are scattered throughout. The deep blocks result in long development lots within large backyards. Some of the backyards have subdivided or developed with secondary dwellings, commonly known as “Granny Flats”. There is great variety of buildings including masonry (typically face-brick buildings) as well as weatherboard housing. The area to the north of the railway line appears to be more affluent than that in the south.
4. **The Horsely Drive Edge** - The eastern periphery of the study area is defined by its relationship with The Horsley Drive which is a heavily trafficked state road. The level of car and heavy vehicle traffic creates a hostile, noisy environment. A number of the larger properties have historically accommodated commercial uses that benefit from the exposure of passing traffic. One property is completing its redevelopment to include commercial uses at ground floor and three levels of residential apartments above.
5. **Prospect Creek Edge** - While not discernible as a character area from the public domain there are a number of properties that back onto Prospect Creek. These buildings prevent natural connections to the riparian corridor that could help define the character and the identity of the suburb as a whole.
6. **Health and Community Services Precinct-** is characterised by a cluster of low rise, low intensity health related buildings. This includes Fairfield Community Health Centre, the Fairfield Ambulance Station, an aged care facility, Karitane headquarters and STARTTS.
The precinct is gated and inaccessible. The precinct has a very different character from the surroundings residential areas with large building footprints and deep setbacks from the street away from busy and highly trafficked road The Horsley Drive.

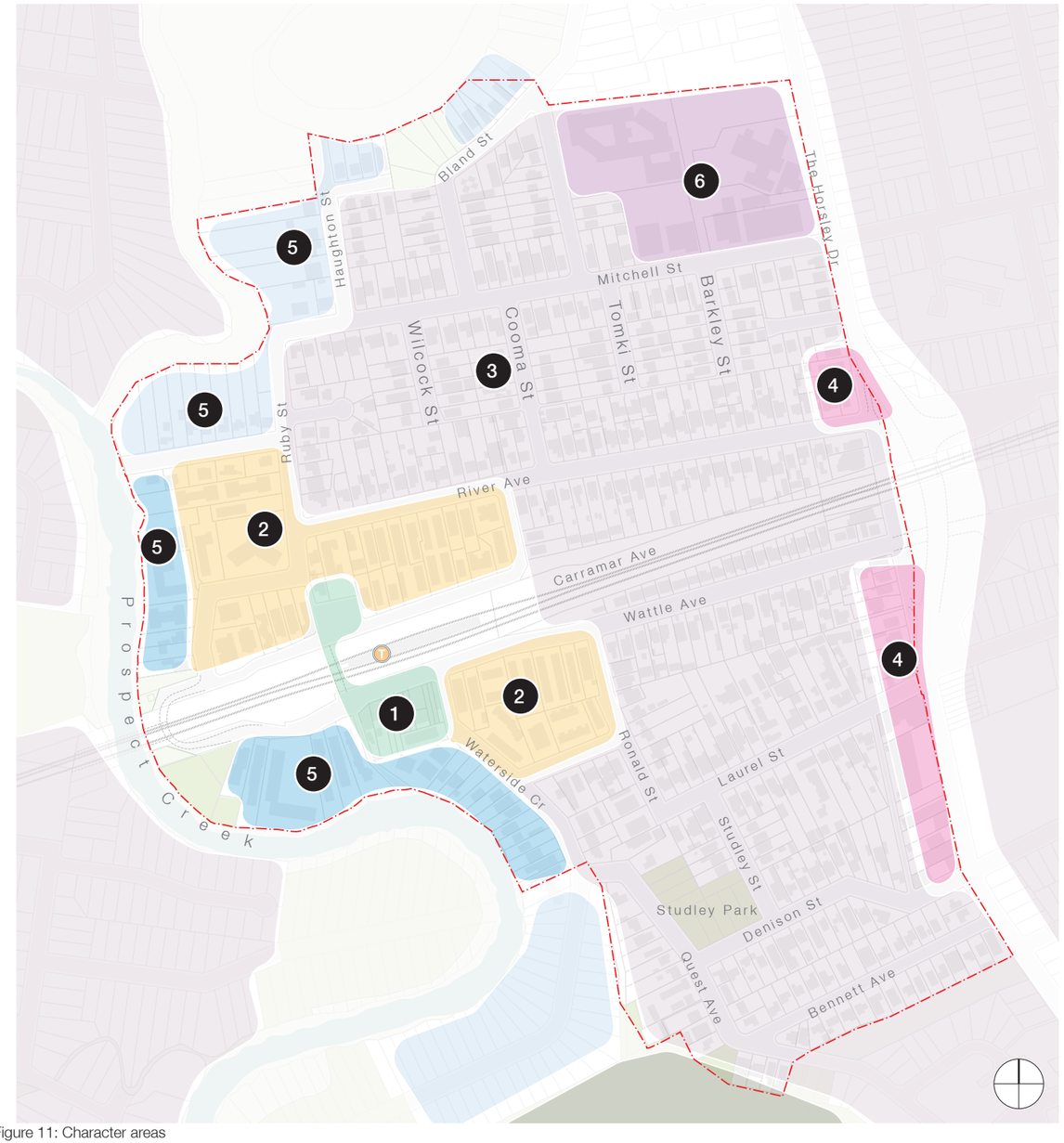
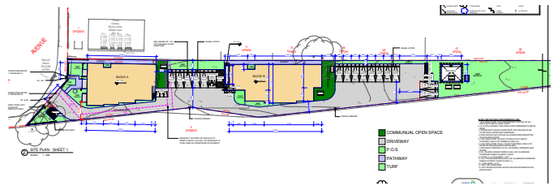


Figure 11: Character areas

2.7 Development activity

Of the three centres (Cabramatta, Canley Vale and Carramar) development activity in Carramar has been the most subdued until recently. The more significant redevelopment have occurred on the periphery of the site with the development of Ruby Manor - a 4 storey age care facility to the north of the station and a 4 storey mixed use development on The Horsley Drive.

What is noticeable in the remainder of the study area is marked increase the number of secondary dwellings (Granny Flats) and boarding houses. The majority of these developments are catering to the affordable end of the housing market.



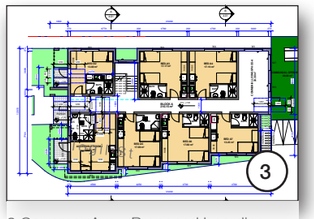
6 Carramar Ave Boarding House

A 2018 development application in the study area, a boarding house is proposed on a narrow and triangular shaped site adjacent to the railway line. The property is currently zoned R2 Low Density Residential. The application sought approval for 32 studio apartments with associated car parking and communal open space.

Council's Fairfield Citywide Development Control Plan 2013 provide controls for Boarding Houses additional to those contained within State Environmental Planning Policy (Affordable Rental Housing) 2009. Under Council policy, a boarding house in the R2 Low Density Residential zone is limited to a maximum of 12 bedrooms per boarding house, with the development having a maximum capacity for 12 residents. This application has yet to be determined.

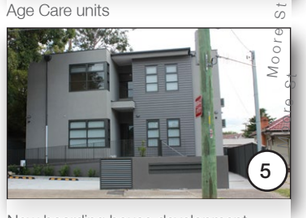
Ruby Manor age care facility

Mixed use development on Horsely Drive



6 Carramar Ave - Proposed boarding house

Age Care units



New boarding house development

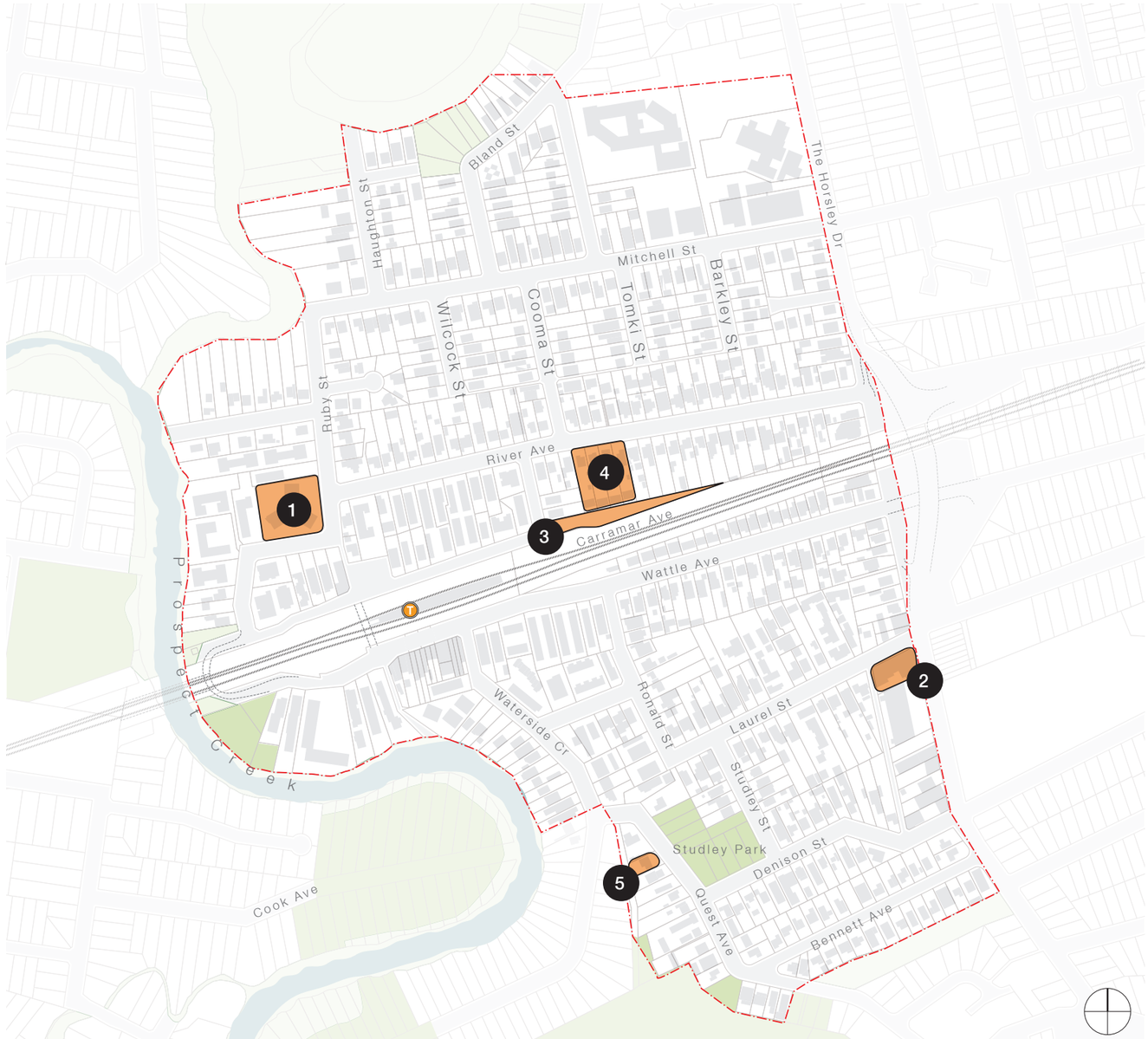


Figure 12: Recent development activity

2.8 Strengths Weaknesses, Opportunities and Threats (SWOT)

Following the review of all baseline documentation, numerous site visits, engagements with local stakeholders and a internal workshop with the design team, including CRED Consulting, the following SWOT analysis was undertaken to help inform and direct the project.

Strengths

- Proximity to the Prospect Creek riparian corridor with associated tree cover
- Carramar railway station
- Good bus services to Liverpool and Bankstown via Villawood Georges Hall & Bankstown Airport
- Proximity to Villawood town centre – Aldi
- Proximity to Carramar Public School
- Proximity to a range of specialised health services
- Wide arched pedestrian underpass under The Horsley Drive connecting Wattle Avenue
- Affordable rental properties within the Sydney housing market
- Well used district sized active sports and passive area park of 10 hectares south of the study area and open space over 3 hectares with heritage significance north of the study area, both along Prospect Creek
- Well used neighbourhood parks 6
- Active community based organisations – Woodville Alliance with office and services in the neighbourhood centre
- Positive sentiments around change and development
- Large Land and Housing Corporation land holding of old post WWII housing south of the study area

Weaknesses

- Limited awareness of connections to indigenous culture, European history and ecology
- Neighbourhood centre's limited retail and service offer leading to a lack of vitality
- Perceptions of safety (real and perceived) within an ageing precinct and transient boarding house residents
- Lack of open space in the northern part of the study area for residents of apartment buildings and dwellings that is central to the residential precinct in Carramar north.
- Carramar lacks a strong identity / heart
- The study area is split by the railway corridor
- There are multiple barriers to movement in and around the study area including the railway line, The Horsely Drive and Prospect Creek, that limit pedestrian connectivity to surrounding neighbourhoods, centres and services
- Dense social networks but weak community institutions / coherence
- The station is not easily accessible to those using prams, the aged and those with mobility impairments
- Infrequent train service
- Signals of a community in need of social support including for :
  - lone person households
  - one parent households
  - people with disability
  - people looking for work
  - households with no internet access
- Low awareness of open space areas with significant national and local heritage along Prospect Creek at Heiden Park and Oakdene Park, fragmented by four residential properties with creek frontage.

Opportunities

- Improve the arrival experience and meeting opportunity at the station and neighbourhood centre to create a vibrant heart for the area
- Affordable land / properties open up opportunities for redevelopment close to the station / public transport
- Improve the quality of the connections across the railway corridor, particularly around the station
- Create greater continuity within the green open space network and facilitate movement along the creek
- Provide additional open space amenity in areas where there is currently a deficit and use this public investment to stimulate the property market
- Improve the functionality of existing open spaces
- Connect to open spaces on the edge of the site / across Prospect Creek and explore a second cycleway connection between Waterside Crescent and Bromley Street, Canley Vale and Sandal Crescent via Nash Lane and Cook Avenue
- Deep lots with underdeveloped back yards offer opportunity for amalgamation and intensification
- Provide support for pioneering community organisations that render services to the community
- Influence the alignment of future extension to the Metro service from Bankstown to Cabramatta via Villawood and Carramar
- Provide lifts to the eastern end of the Carramar railway station platform to increase the pedestrian catchment and make the station accessible for all commuters.
- Provide a bridge crossing across Prospect Creek from Sandalwood Crescent to Moore Street, Canley Vale, pedestrian short term and vehicular long term.
- Carrawood Park with active extended use outside of organised sport times with facilities for family gatherings along Prospect Creek and passive recreation like walking at all times of the day.
- Greater sense of safety through lighting and improving passive surveillance

Threats

- Slow take up of development opportunities due to a stagnant housing market
- Low demand for retail and commercial uses due to lack of access
- Boarding houses and small scale intensification lock up sites for redevelopment
- Limited public investment in the neighbourhood (streets and open space) may deter private investment
- Potential displacement of low income households
- Changes to residential densities could inflate property prices and sterilise the development of sites in the short to medium term
- Entrenched and concentrated socio-economic problems

2.9 Stakeholder aspirations

Over the course of the project a number of key stakeholders were engaged to solicit their views on their future vision and aspirations for the area. Probing questions were asked to understand what they perceived the opportunities for the centre to be and what obstacles they foresaw for the achievement of their vision. The key messages from the stakeholders have been integrated into the above SWOT analysis and are not duplicated here.

Each stakeholder was then invited by Fairfield City Council to submit a conceptual proposal for the sites that they have an interest in. The adjacent images, descriptions and reflections summarise these proposals

This invitation has been useful in so far as it has provided the design team with an understanding of landowners expectations, however it is limited in the following ways:

- It was only possible to engage a very limited number of stakeholders within the time-frame of the project.
- There are likely to be other stakeholders, such as tenants and community members, who have been missed during the process
- There may be other stakeholders who would have liked to make a submission, either dependently or with another party, but have not been able to do so
- There may be stakeholder who may not realise the development potential of their site or do not have the resources to prepare a proposal at this time
- The proposals have been made in the absence of a holistic vision or framework for the centre
- The scale of the proposals have been directed by the landowner and as such generally seek to maximise the commercial return from the development of their site
- The proponents have had a limited time period to prepare their proposals
- The proposals have not considered the cumulative impact of similar development opportunities within the study area

The consideration of these proposals by the design team seeks to provide a measured and objective position on what would be appropriate for the study area. The developer aspirations are a useful barometer of expectations and need to be moderated based on the objectives and principles established for the study area. Other stakeholders will be able to provide their input during the public exhibition of the draft study.

Notwithstanding the above limitations key takeaway messages from these submissions and engagements are:

- There is an acknowledgment that the railway station is an asset for accessibility
- The study area's proximity to the railway station, open space and schools makes it attractive for greater residential density.
- There is an interest to provide higher quality residential accommodation
- There is concern about the impact that further boarding houses may have on the image and reputation of the area.
- There is concern about the transient nature of boarding house residents and how it impacts upon women's sense of safety
- There is a desire for a safer pedestrian environment, including lighting at night
- There is a desire to create a greater sense of safety to allow more accessibility to open space along Prospect Creek at Carrawood Park which presently feel isolated when organised sports games are not in progress with people around.
- Carrawood Park should be extended into the open space area of Waterside Crescent with facilities for family gatherings.

234, 236, 238 & 238A River Avenue

The land owner had previously considered a planning proposal to rezone the properties from R2 Low Density Residential to R4 High Density Residential with potential for land use zone B2 Local Centre or B4 Mixed Use to allow for higher density development and some commercial activity.

Reflection

The rezoning of the property to R4 High Density Residential would facilitate the delivery of apartments within close proximity to the Carramar railway station. The scale of development and the transition to the existing lower density residential environment could be managed through other development controls. The site is in an area identified as having a shortage of open space. This can be addressed through this study.

Expanding the land use to include retail or commercial uses is contrary to the recommendations of the Fairfield Centres Policy 2015. The site is removed from the station and does not experience high levels of pedestrian or vehicular traffic necessary to support commercial activity.

4-6 Ronald Street

The land owner had previously engaged Council about their intention to rezone the properties from R2 Low Density Residential to R4 High Density Residential, with an increase in building height to no less than 4 storeys. They also reflected more broadly on the need to better connect the neighbourhood centre to the strategic road network and proposed a bridge connection over Prospect Creek linking Bromley Street in Canley Vale to Waterside Crescent, Carramar which would improve vehicular and pedestrian access without the necessity to use the circuitous and congested Hume Highway.

Reflection

This modest increase in development yield could be integrated with the existing lower scale context. Key considerations would need to be overshadowing of adjacent properties. This could be addressed through appropriate design and transition controls. This site benefits from its proximity to Studley Park

6 Carramar Avenue

The stakeholder's vision for the area is high density residential in appropriate locations to maximise access to the railway station, thereby bringing about regeneration and improvement to the general locality so it can reach its potential.

In relation to the narrow, sharply triangular 2,360m2 site located along the railway line on what appears to have been located a small community hall, the stakeholder previously developed a concept for an apartment building with a view to preparing a planning proposal. A current development application for boarding houses is being considered by Council. Other development options have been considered including a child care centre, but the uses were either not feasible or desirable for the location.

Reflection

The stakeholder's vision for the area is driven by their existing property holdings and aspirations for the site. The geometry of the site and its location adjacent to the railway line makes it challenging to develop and create a liveable environment with amenity. Higher destiny housing in this location would be desirable however this particular site would need to be amalgamated with adjacent properties in order to create a larger and more regular site that would ensure an improved design outcome, inclusive of landscaping and access along the railway corridor boundary.

Resident of Carramar

An incidental insight to life as a resident in Carramar from a recently arrived resident originating from the United States of America and who was well travelled. He and his family valued the multicultural diversity in the area, the affordability of the rental market. Open spaces in the locality and the services and activities offered by the community organisation "Woodville Alliance" presently located within the neighbourhood centre, were the most inviting aspects about Carramar where they live. There are the normal underlying racial tensions in the neighbourhood; however relationship is often the doorway to overcoming these prejudices. Carramar has a great location with a train stop and easy access to major thoroughfares leading to city centres and other attractions.

The reputation of Carramar having had a drug scene and the rundown nature of many of the houses is most alienating. The shops by the train station are known in the area (surrounding suburbs) as being the worst/most rundown, with Bass Hill shopping centre being praised by other residents. Continuing to provide clean, inviting spaces for people to connect, as well as toilets at Studley Neighbourhood Park would be advantageous as there are mothers with children living in apartments near the trains station who visit the park and for whom home is too far away to quickly toilet children when needed.

Reflection

Renewal in the neighbourhood is required to bring about the necessary changes to improving dwelling stock, as well as embellishments to open space and the retail offer at the neighbourhood centre.

Woodville Alliance

The community services and meeting facilities offered by the community based organisation Woodville Alliance is a valued contribution to the community. The impressions of staff members is that the community requires urban renewal to promote viable businesses in the centre and that a vision for higher density residential development of around 3 to 4 storeys would be comparable with community needs and aspirations.

They noted that while open space in the locality is relatively plentiful, it is not as useful as it could be. The asset of the railway station is diminished for many users because it is not accessible to the aged, disabled or carers with prams. The sense of safety is a significant consideration for many residents, including women and recent arrivals. Lighting is required to promote use of open spaces, and making walking through the neighbourhood safer. Woodville Alliance are concerned that while the social fabric is dense many relationships are situational / day to day and that there is an absence of cultural / community institutions that hold groups within the community together. They are further concerned about there being a vacuum in Carramar once Woodville Alliance return to their original address in Villawood.

Reflection

The Woodville Alliance is invested in the area and is well placed to gauge community needs and attitudes. It appears there is a general appetite for renewal, and that the redevelopment is seen as advantageous to the wellbeing of the community due to the improvement in services and facilities that it would bring.
Improving the passive surveillance of open space and providing amenities in the public domain are critical in improving social cohesion, addressing safety and providing amenity for low income families who may be living in tight conditions.

2.10 Constraints

The constraints for the Carramar study area include:

1. Mainstream high flood risk along and towards Prospect Creek which limits development potential on affected sites
2. Overland stormwater flow paths in some parts of the study area are problematic and lead to localised flooding (particularly the area bounded by Wattle Avenue, Edmund Street, Laurel Street and Roland Street) . This can be addressed through design and by formalising and improving drainage lines
3. Aviation constraints from Bankstown Airport limit the height of buildings across the study area to between 50 and 90m AHD
4. Fragmented land ownership would require landowner cooperation to create larger development sites
5. Strata titled residential flat buildings that makes redevelopment of ageing buildings challenging
6. The railway line acts as a physical barrier separating northern and southern Carramar with limited crossing points
7. Noise impacts from the railway line, particularly the operation of the freight line at night
8. Limited vehicular access off The Horsley Drive

Of these constraints flooding and the presence of strata properties limit redevelopment potential.

Figure 13: Constraints plan

2.11 Opportunities

The opportunities for the Carramar study area include:

1. Improve the arrival experience around the railway station and at key gateways to the site from The Horsely Drive
2. Improving visible and spatial connections to Prospect Creek
3. Improving connectivity along the Prospect Creek riparian corridor
4. Improving connections across Prospect Creek and improving local connections more broadly to Canley Vale and Cabramatta
5. Invest in new facilities in Studley Park, improve access to the park and address currently negative frontages to the park to improve levels of passive surveillance
6. Facilitate the development of higher density residential accommodation in accessible locations with appropriate transition to adjoining housing
7. Investigate opportunities for new open space between Mitchell Street and River Avenue to serve areas where there is a shortfall in access to a neighbourhood park for existing and future residents
8. Provide access through the deep urban blocks to improve permeability for pedestrian and provide access for future development
9. Long term potential for a vehicular bridge connecting to Canley Vale
10. Strategic acquisitions to improve surveillance of Carrawood Park
11. Strategic acquisitions along Atkins Road to create a more contiguous open space between Heiden Park and Oakdene Park
12. Improve linkages from the train station to the Health Precinct

Figure 14: Opportunities plan

Vision and Studies

3

This chapter presents a vision for Carramar and presents a number of short studies that will support the Placed based urban design frameworks that follow. Key considerations that have been taken into account include:

- the desire to provide a new public space in Carramar to address existing shortfalls in relation to access to open space access;

- the recommendations from the Medium Density Housing Study; and

- the identification of opportunity sites (those areas where change and redevelopment are most likely and should be supported).

3.1 Purpose and vision

The Place Based Urban Design Framework sets out a objective based framework for land use change and public and private investment within the study area. The framework looks to strike a balance between creating value through the amendments to planning controls so as to deliver public benefits and the emergence of a vibrant and healthy community.

Rather than propose a vision for Carramar the adjacent info graphic seeks to communicate the qualities that the centre has and should aspire to.

The main qualities of Carramar can summarised as:
- An intimate neighbourhood accommodating a diverse community
- An abundance of trees and a sense of being close to nature

The main challenges for Carramar include:
- A lack of investment in the study area by property owners and Council in recent times
- Low market demand and aspirations for housing and design
- A lack of housing choice given the diversity of the community
- Low level densification including secondary dwellings, town houses and boarding houses that do not provide quality accommodation

In Carramar the community needs and desired public benefits include:
- A vibrant, attractive and convenient local centre
- Improved safety and reduced exposure to flood risk
- Affordable housing
- Open space in areas of deficiency
- Improved access to public open space
- Access to community / shared facilities for social and cultural uses

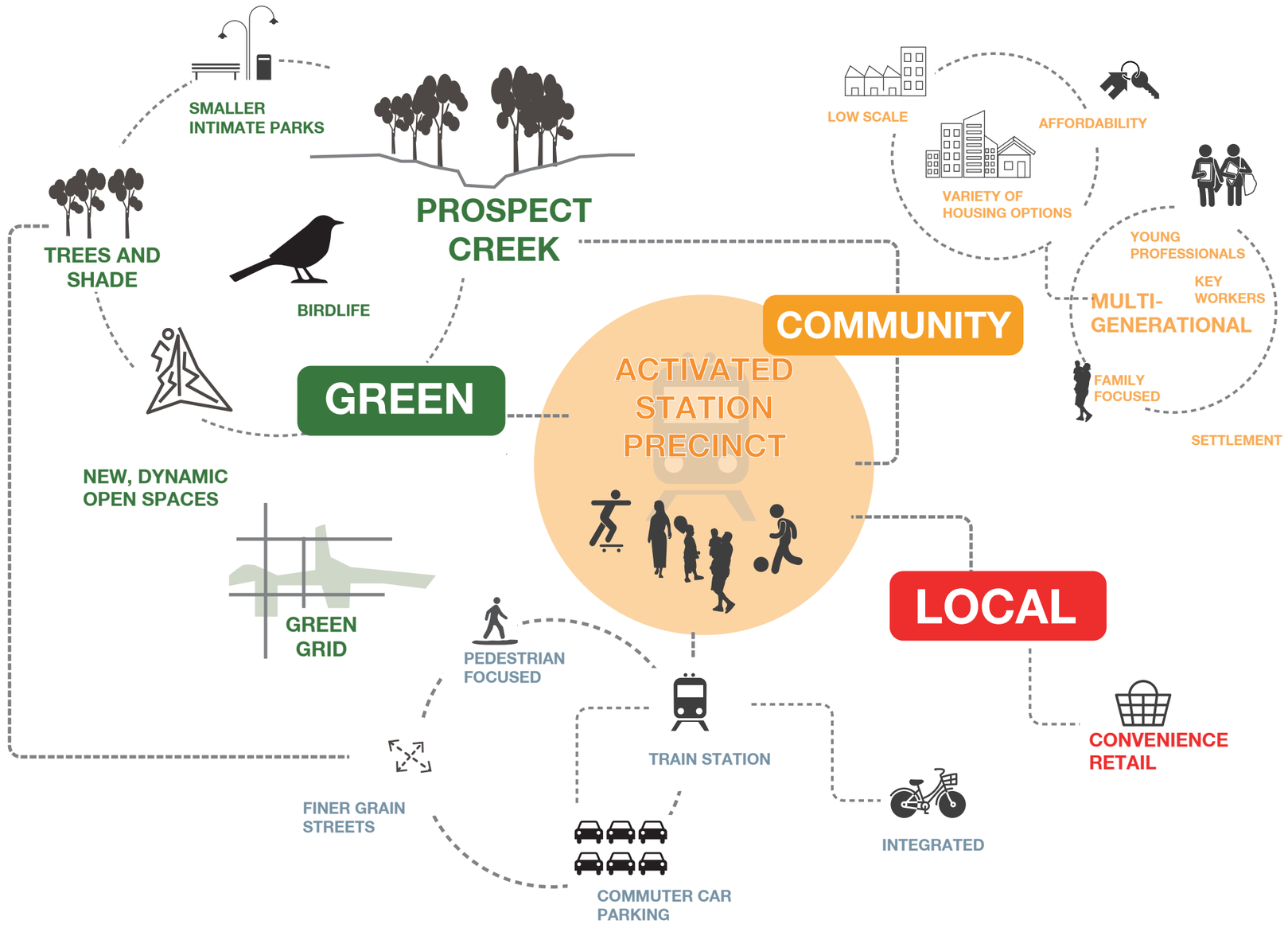


Figure 15: Vision infographic

3.2 Considering a new neighbourhood park for Carramar

As identified in the analysis section above, Carramar benefits from an abundance of green open space that is primarily associated riparian corridor along Prospect Creek and primarily performs an ecological function being zoned E2 Environmental Conservation.

The open space in the northern part of the study area along Prospect Creek is currently fragmented. Heiden Park and Oakdene Park are separated by residential properties in Atkins Street, making Heiden Park in particular unappealing to access due to a lack of passive surveillance. It's natural beauty, generous size, creekline frontage and heritage significance could make it a focal point of locals and visitors.

The study area will require open space to support future growth. To improve liveability and health outcomes for existing and future residents, a new neighbourhood park central to the residential precinct of Carramar north is needed.

The Government Architects NSW's Greener Places Strategy provides a set of principles for the provision of open space that places an emphasis on the functionality of open spaces and improving access to them. At Local Government level, other aspects in open space provision are taken into consideration such as addressing areas of shortfall, supporting density, capturing the value uplift for the delivery of community infrastructure, improving permeability as well as pragmatic issues around the cost of land acquisition.

The study recommendations that follow takes all these factors into account and scores the two potential locations for a new open space north of the railway line accordingly. On the following page two potential locations are presented for a new neighbourhood park of around 3,500m^2 – 5,000m^2 to address a current and future shortfall in accessible open space where it is safe for children to play and be observed casually by adjoining residents, passing pedestrians and cars.

State level objectives

- Conservation of the natural environment
- Increased access to open space
- Improved connectivity to promote active living
- Increase urban greening to ameliorate climate extremes

Local Government Area level objectives

- Addressing areas of shortfall
- Proximity to density
- Potential for land value capture
- Acquisition costs
- Improve permeability

Open Space Options

Figure 16: Option 1: open space on River Avenue

Option 1

Option 1 is located on River Avenue, at the southern end of Tomki Street. This would require the acquisition of six properties and is located closer to the train station where increased density is recommended and will provide accessible open space for existing and new residents. Its central location greatly improves access to open space in the area of shortfall and also improves permeability by providing a through site link between Tomki Street and River Avenue, thereby improving access to the railway station.

- Addressing areas of shortfall
- Proximity to density
- Potential for land value capture
- Acquisition costs
- Improve permeability

Figure 17: Option 2: open space on Mitchell Street

Option 2

Option 2 is located on Mitchell Street, at the northern end of Tomki Street with a dual street frontage. While still in an area of open space shortfall the site is close to Oakdene Park and further from the railway station where future development is anticipated. While Option 2 requires less acquisition it does not improve permeability and the public benefits are less than Option 1.

It is important to note that both options deliver an open space that is in the upper end of the size range required for a neighbourhood park. The eventual size and location wil be determined through further engagement with stakeholders, however at present, Option 1 is the preferred option and will be pursued in the subsequent framework plans.

- Addressing areas of shortfall
- Proximity to density
- Potential for land value capture
- Acquisition costs
- Improve permeability

3.3 An opportunity to connect Heiden and Oakdene Parks

Whilst the northern parts of the study area benefits from proximity to strategic public open spaces, most notably Prospect Creek and Fairfield Parklands, the functionality of Heiden Park and Oakdene Park is compromised by their fragmented nature and the lack of passive surveillance. The creek crossing at the northern end of Haughton Street to Fairfield Park is also currently hidden from view.

Consolidating open space amenity as well as national and local heritage items of significance in a 3 hectare open space through the acquisition of 4 private properties on Atkins Street and then rezoning this land from R2 Low Density Residential to RE1 Public Recreation is an opportunity that should be considered. This could help improve perceptions of safety remove barriers to passive surveillance, as well be bring to prominence historic elements such as the old silo into greater view.

Decisions on the such acquisition need to be balanced against Council's priorities, the available budgets and the impacts that such investments will have in the longer term. Certainly such a acquisitions at this early stage of the areas development may pay off in the longer term and the costs of acquiring such properties could be offset by upzoning of land adjacent to the open space.

Figure 18: Opportunity to link Heiden Park and Oakdene Park through the acquisition of 4-8 Atkins Street

Existing properties on Atkins Street

Existing Footpath to Fairfield Parklands

Lack of passive surveillance of the footbridge from adjacent residential properties

3.4 Medium Density Housing - Development Control Review

In March 2020 Fairfield City Council (FCC) appointed SJB to undertake a design study on medium density housing typologies to inform future amendments to the Local Environment Plan (LEP) and Development Control Plan (DCP) controls for development in the R3 Medium Density Residential zone.

This study is necessary for the following reasons:

- Strategic policy documents (i.e. the NSW State Government's Low Rise Medium Density Housing Code and 'missing middle') highlight the role medium density housing can play in improving urban efficiencies, increasing residential opportunities within the existing urban footprint, addressing housing affordability challenges, supporting local economic activity, creating more sustainable and walkable communities and delivering improved built form outcomes. Under the Code, manor houses and terraces as complying development are allowed if they can meet specified development controls to protect amenity of future residents and neighbours.
- Medium density housing encompasses a range of flexible building types which are ideal for families and households which currently comprise the majority of Fairfield residents. These types of medium density development include semi-attached dwellings, attached dwellings (narrow lot development), dual occupancies, and multi dwelling housing (villas and town-houses).
- Areas of R3 zoned land surrounding town centres are likely to be more attractive to land owners wanting to achieve additional development rights allowed through the Low Rise Medium Density Housing Code rather than use Council's development controls. The character and quality of some recent medium density development, proposed and built under the Code, does not meet community expectations and the aspirations of Council for liveable amenity for residents in and around new developments.

Council's Local Environmental Plan (containing development standards such as height of building and floor space ratio) and Development Control Plan (containing development controls such as building setbacks) are being reviewed so that future development fits in with local character.

Fairfield City's established areas are over 70 years old, many are small houses on big lots close to public transport, services and facilities. New medium density development needs to reflect a balance of amenity and economic viability while meeting housing targets and providing more housing choice to meet diverse community needs.

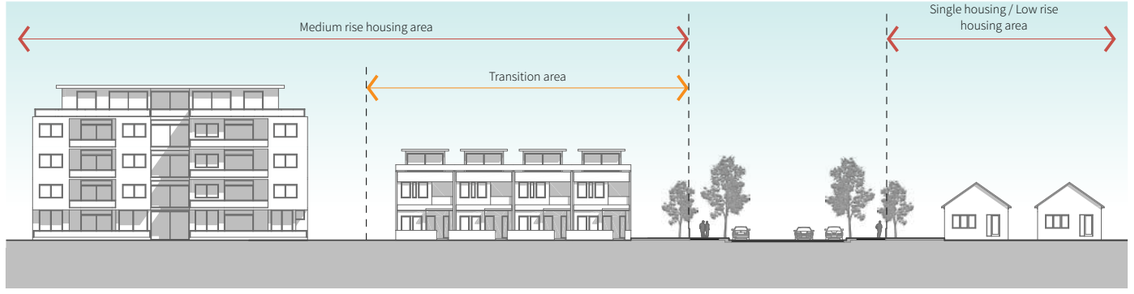
Key concerns raised by Council town planners included:

- Rental stress and low socio economic market driving backyard illegal housing inclusive of outbuildings / secondary dwellings / garden studios
- Medium density housing (inclusive of amalgamating sites) not as attractive for development and financial return as multiple dwellings
- Sites with narrow frontages (7-20m) yet depths of 35 to 50m result in gun-barrel typologies (long straight driveways with villas and townhouse looking at each other) with level of amenity compromised (neighbours hearing and seeing each other when they really want privacy and quiet).
- Units do not address the street and deep soil for mature trees at rear boundary line compromised development layouts
- At grade (on ground) car parking, driveways and garages results in significant areas of hard pavement and heat island effect (concrete getting and staying hot in summer so temperatures rise).
- Built proposal are inefficient with significant areas of underutilised space which do not add value to the development

The study aims to make it easier for small scale developers, and property owners with little development experience, to realise the development potential of their land whist delivering development that people are happy and proud to live in. The result will be planning and development rules that make meaningful and lasting change for future residents looking to make Fairfield their home.

The study reviews the existing development standards and development controls to:

- Ensure development standards such as building height and floor space ratios respect adjoining low density residential areas – known as transition and/or interface
- Allow two to three storey apartments and maisonettes where they will not affect the amenity of adjoining development, for example corner sites with two street frontages and sites next to neighbourhood parks and town centres.



The principle of medium density housing functioning as a transition zone from low density residential to high density residential around urban centres providing well located and affordable accommodation to the community, improving urban efficiencies and supporting local economic activity.
(Source JBA 2016 - Sydenham to Bankstown Urban Renewal Corridor Plan)

Examples of high quality multi dwelling housing in Canley Vale

A more contemporary gun barrel typology - Canley Vale - Circa 2018

- Make development controls easier to understand and use in successfully designing medium density housing without the need to change plans because they need improving.

The development standards and controls will create medium density development that:

- Provides more housing choice for different types of families and people while creating homes that people want to live in and enjoy
- Address the street with front entries and windows instead of side walls
- Make sure courtyards are of a size and shape that can be used for different things – entertaining, gardening, drying clothes
- Has areas of deep soil for landscaping, tree planting or preserving trees for a cooler and greener environment and provide habitat for birds and other animals.

The outcome of the review is a clear set of recommendations for development standard (LEP) and development control (DCP) amendments. The key points that are relevant to the Carramar Urban Design Study include:

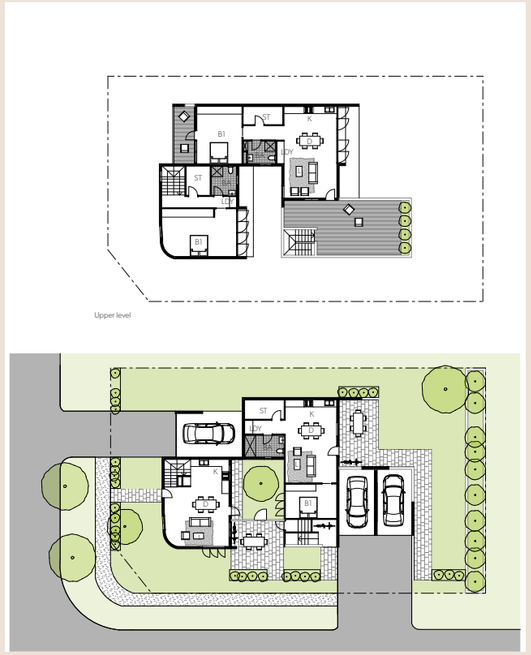
- An acknowledgement of the role of medium density housing plays as a transition are between from low (up to two storeys) to high density (up to six storeys) residential development.
- Controls for development within the R3 Medium Density Zone that support small to medium scale redevelopment in Carramar, with its advantage of a railway station, leading to better use of the land and creating even better residential development for more people.

This will be achieved by:

- Increasing the floor space ratio based on site width, providing three bedrooms for larger families and providing basement car parking – see table below:

Lot width	Base FSR	With 3 Bed Mix (+0.1)	With Basement Carparking (+0.25)
7-22m	0.5:1	0.6:1	0.85:1
22-45m	0.65:1	0.75:1	1:1

- Increasing the height of building from 9 metres (two storeys) to a maximum of 11 metres (three storeys)
- Permitting Low Rise Residential Flat Buildings in the R3 Medium Density Residential Zone

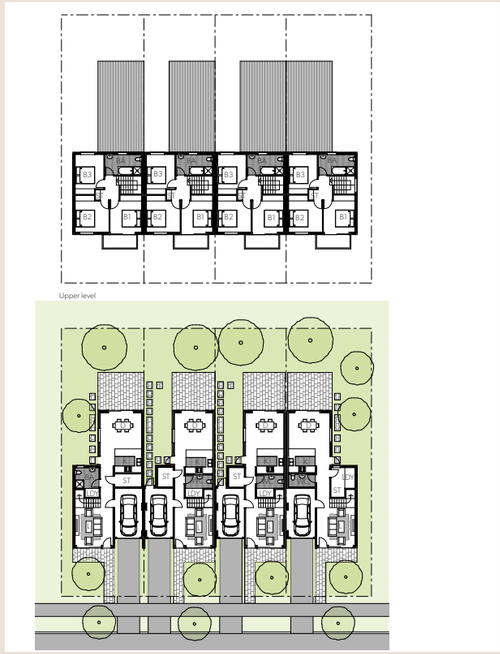


Manor House

Residential building comprising of up to 4 dwelling where at least one dwelling or one portion of a swells partially to completely above another

This typology can be designed to accommodate the following land tenure system:

- single ownership - all units are owned by a single legal entity and leased
- strata title
- community title

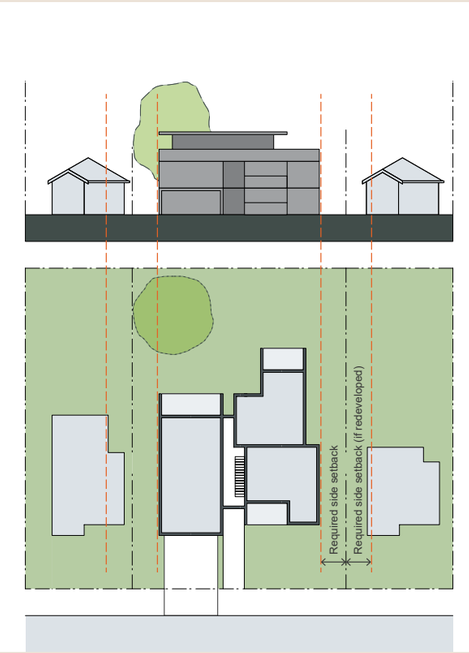


Multi Dwelling Houses

A housing typology that may comprise of three or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building.

This typology can be designed to accommodate the following land tenure system:

- torrens title
- strata title
- community title



Low-rise Residential Flat Buildings

A residential building containing three or more dwellings, where more than one dwelling is located above another, and accessed by shared stairs or lefts and is more than two storeys and less than storeys.

This typology can be designed to accommodate the following land tenure system:

- torrens title
- strata title
- community title

Housing typologies to be explored as part of this study include manor houses, attached dwellings and low-rise Residential Flat Buildings (source: Low Rise Medium Density Design Guide and Apartment Design Guide)

3.5 Opportunity analysis - development sites

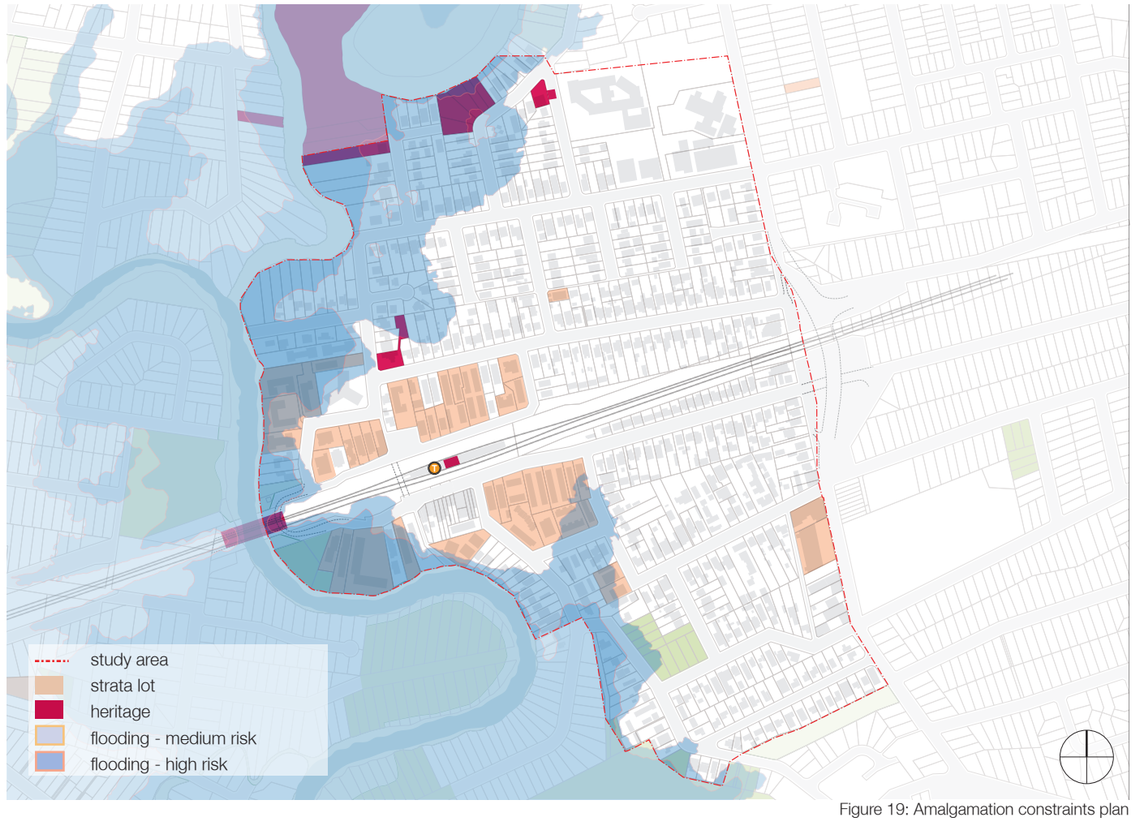


Figure 19: Amalgamation constraints plan

Figure 20: amalgamation opportunities plan

The land ownership pattern in the Carramar Study Area with its different lot sizes and shapes, mix of boarding houses, villa and townhouse strata development, new homes, and granny flats as well as sites without common ownership makes it difficult to clearly identify opportunity sites ready for redevelopment. That said, not changing the development controls would be detrimental to the future of the Carramar study area. Over time more properties will be subdivided and more granny flats built making redevelopment less feasible or attractive to landowners.

Providing affordable housing through more boarding houses will make it difficult to shift perceptions of the area. This short study seeks to identity potential opportunity / amalgamation sites based on an understanding of the constraints to amalgamation and the relative size of properties (hence their potential to accommodate a denser form of development).

Amalgamation constraints

This plan illustrates the major constraints to amalgamation of lots. The two key factors are:

- flooding particularly properties affected by mainstream or overland flooding with a high flood risk
- strata (both residential and commercial)

In comparative examples in Sydney flooding makes development prohibitively costly, strata requires significant capital investment and time and heritage has legal restrictions to change. Of the three constraints flooding and the presence of strata properties in most pronounced in the west of the study area.

Amalgamation opportunities

This plan illustrates the major opportunities to amalgamation of lots. The three key factors are:

- lots of a significantly developable size (greater than 750m^2)
- properties in public ownership where amalgamation and redevelopment are possible (Land and Housing Corporation owned land)
- several contiguous parcels with a single owner
- sites with development proposals or submissions to government

3.6 Areas of potential change

The adjacent plan builds upon the above analysis and provides an indication of those areas of Carramar where change is anticipated. Carramar is seen as an area of great opportunity. An opportunity to deliver both development and open space amenity for the broader community. The extent of change will be determined by the nature of public investment into the area, the nature of the development controls and local community and market dynamics .

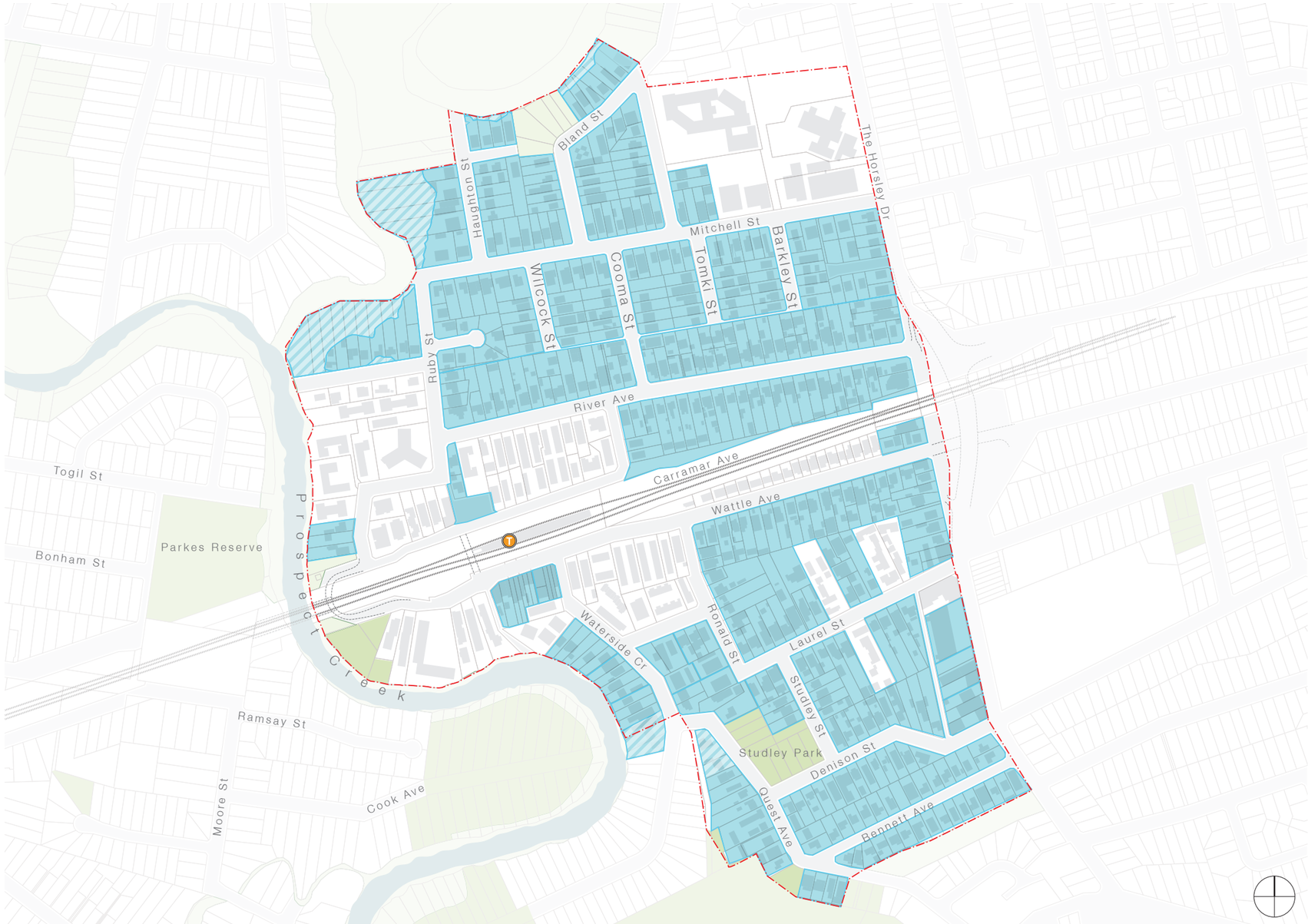


Figure 21: Areas of potential change

Place based urban design framework

4

This chapter outlines the objectives and priorities of the place based urban design framework. These are then distilled into recommendations for changes to the development controls from the perspective of landuse, public domain, built form and movement.

Each section begins by outlining the key objectives under each theme. Precedent images have been carefully selected to accompany the objectives and provide an aspiration vision of what the centre could become. This is followed by a framework plan, a set of recommended actions for Fairfield City Council and recommendations for amendments to land use zoning, development standards (for example, height of building, floor space ratio) and development controls (for example, building setbacks).

Those recommendations that have a cost / budgetary implication are identified with the following symbol: $

4.1 Land use framework

Objectives

- Retain the low scale character with an abundance of trees and relationship to Prospect Creek
- Create a vibrant heart within the Carramar neighbourhood centre by promoting commercial and non-residential activity
- Support a greater variety in the types and density of housing within the study area
- Create opportunities for small scale and medium scale densification
- Increase densities around neighbourhood parks, along Prospect Creek and within close proximity to public transport services
- Provide open space in areas of deficiency to the north of the railway line to support growing populations
- Ensure residents of new apartments have access to a quality public open space within 200m of where they live
- Ensure that development presents a interface to public streets and open spaces

Recommended actions

(refer to plan of following page)

$ 1. FCC to progress plans to improve access to and through the centre through vehicular and pedestrian connections (bridges) across Prospect Creek and past the station to support land use intensification

$ 2. FCC to develop a clear prioritisation framework for the delivery of new public open spaces and through site links specifically considering the acquisition of properties to:
   - create a new public open space on Mitchell Street (233-225 Mitchell Street)
   - improve access and surveillance of Carrarwood Park (27-33 Quest Road)
   - connect Heiden Park to Oakdene Park (1-7 Atkins Ave)

$ 3. FCC to prepare a contributions plan to assist in the funding of public projects and the delivery of community infrastructure

$ 4. FCC to develop an Affordable Housing Policy to support an increase of affordable housing provision in an equitable manner across the LGA

Medium rise mixed use development around the station

Variety of buildings types - generally below 4 storeys along pedestrian priority streets / laneways

Mix of terrace typologies, apartments and laneways

Medium density residential infill with a green interface

Pedestrian friendly laneways

Dynamic contemporary public domain around the station that is inviting to all generations

Land use framework plan and recommendations

Recommended changes to DCP and LEP controls

5. Contain commercial and retail land uses to the station precinct and key gateways to the centre where there is already commercial activity, higher levels of pedestrian foot fall and where it is possible to create a heart for the neighbourhood
6. Extend the R4 High Density Residential zoning specifically close to the station and around existing and proposed open spaces to support redevelopment and small scale densification
7. Rezone properties along Prospect Creek to R4 to increase their value to justify a riparian setback, public access along the creek and passive surveillance over the riparian corridor. The FSR could be harvested from the setback area from the portion that would be dedicated back to council
8. Rezone all R2 Low Density Residential zoned properties within the study area to R3 Medium Density Residential to support attached dwellings
9. Consider permitting low rise (3 storey) Residential Flat Buildings within the R3 zone
10. Subject to Councils prioritisation framework for open space rezone acquired properties RE1
    - create a new public open space on Mitchell Street (233-225 Mitchell Street)
    - improve access and surveillance of Carrarwood Park (27-33 Quest Road)
    - connect Heiden Park to Oakdene Park (1-7 Atkins Ave)
11. Development uplift to be used to secure new public streets and open spaces through a contribution plan / dedication to council

Figure 22: Land use planning framework

4.2 Public domain framework

Objectives

- Transform Prospect Creek, inclusive of its national and local heritage sites, into a positive and accessible asset for the community
- Reconnect Carramar to its Aborignial heritage, reflecting its name as a place in the “shade of trees”.
- Reinforce the green and natural character of Carramar as a “parkland village”
- Invest in the public domain around the station where this will have the greatest impact
- Address areas with open space deficiency north of the railway line through the creation of new public open spaces that will be delivered through the strategic acquisition and dedication
- Ensure residents of new apartments have access to a quality public open space within 200m of where they live
- Improve access to existing public open spaces through new laneways and pedestrian connections
- Improve levels of passive surveillance
- Improve legibility and wayfinding for local residents and visitors

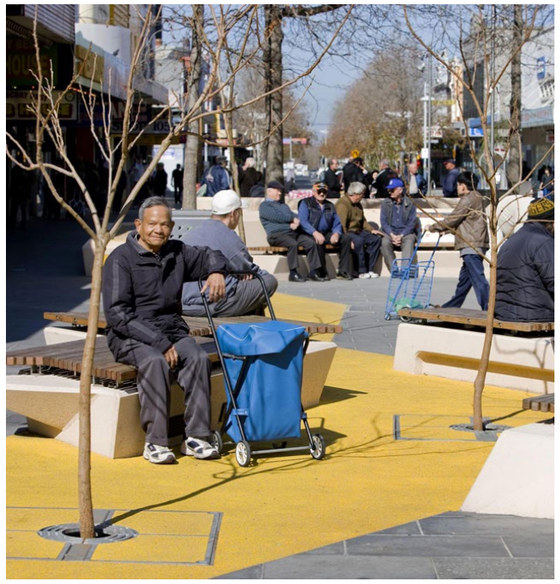
Recommended actions

(refer to plan of following page)

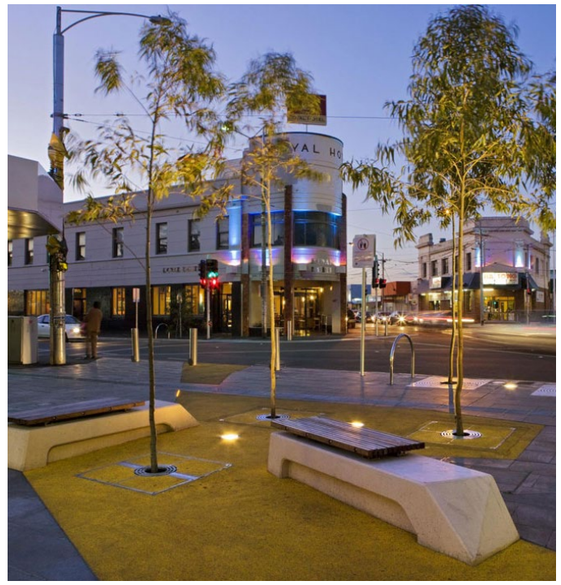
$ 1. FCC to work together with State Government and Sydney Water to develop a plan of management to revitalise Prospect Creek

$ 2. FCC to develop a public domain plan for the station area and secure grant funding to invest in public domain upgrades. This plan should consider the optimisation of station car parking areas and the provision of more urban public spaces that cater for a range of user groups

$ 3. FCC to develop a clear prioritisation framework for the delivery of new public open spaces and through-site links specifically considering the acquisition of properties and their rezoning to RE1 to:
   - create a new 3,000-5000m^2 neighbourhood park on Mitchell Street (233-225 River Avenue)
   - improve access and surveillance of Carrarwood Park (27-33 Quest Road)
   - connect Heiden Park to Oakdene Park (1-7 Atkins Ave) and improve safety and use of open space with history and creekside amenity



Public realm encouraging community gathering



Safe and attractive public realm after hours (particularly around the station)

Encouraging movement and passive recreation along Prospect Creek

Increase tree canopy and cycle / walking connections through the neighbourhood

Informal gathering space in the coolness of Prospect Creek

Encouraging movement and passive recreation along Prospect Creek

Public domain framework plan and recommendations

4. FCC to consider rezoning Heiden Park to RE1, the strategic acquisition of adjoining properties to improve surveillance and develop a plan of management to transform this space into a valuable open space amenity
5. FCC to plant trees along railway arrival corridor and along main streets to reinforce the green character Carramar and create green corridors running north south through the neighbourhood
6. FCC to take measures to increase the tree canopy more broadly within the public domain through street tree planting. Tree planting use indigenous species and could be more organic / informal in arrangement to retain a more natural character
7. FCC to invest in Studley Park by developing facilities the community needs, providing additional connections to new landscaping and ensuring that development fronts onto the open space
8. FCC to invest in improving / providing pedestrian connections between key open spaces

Recommended changes to DCP and LEP controls

$ 9. Subject to Councils prioritisation framework for open space rezone acquired properties RE1
   - create a new public open space on River Avenue (233-225 River Avenue)
   - improve access and surveillance of Carrarwood Park (27-33 Quest Road)
   - connect Heiden Park to Oakdene Park (1-7 Atkins Ave)

$ 10. Introduce buildings setbacks and interface controls along Prospect Creek to allow for a continuous public walkway along the riparian corridor and have this space dedicated back to Council

11. Introduce objectives into the DCP that require the retention of existing trees in the private domain and integrate these into new development plans where these are healthy and viable
12. Introduce development setbacks to improve legibility by providing line-of-sight connections through the centre
13. DCP to require developers with lots fronting onto any new street connections to landscape the public road reserve between the kerb edge and the property boundary through consent conditions to Council's requirements

Figure 23: Public domain framework

4.3 Built form framework

Objectives

- Maintain the open and natural character of Carramar through the location of built form and building separation
- Leverage the development potential within close proximity of the station with a greater intensity of development
- Promote built intensification adjacent to amenity (open spaces and riparian corridors
- Promote the delivery of a variety of urban residential typologies including attached dwellings and apartments
- Use increased building heights to improve legibility through the creation of local landmarks and ensure the passive surveillance of open spaces
- Ensure buildings heights transition adequately in relation to the desired future character of the area
- Support greater development intensification where a public benefit is delivered (such as dedicated laneways, open space and affordable housing)

Recommended changes to DCP and LEP controls

(refer to plan of following page)

Design Excellence

1. The LEP should require Design Excellence processes for keysites / buildings over six storeys

Public domain setbacks and landscape requirements

2. DCP to secure a 15m building setback from the riparian corridor and the dedication of land to Council to allow for a future public link
3. DCP should stipulate a minimum building setback from existing streets of 4.5m
4. DCP to include a maximum site coverage of 50% to retain trees and soft landscaping
5. DCP to require basements to be within the building footprint to deliver deep soil

Floor Space Ratio Controls

6. Introduce FSR controls to in the LEP to control density

The above collage of building typologies provides an indication of the low rise medium density development envisaged for Carramar consisting of terraced housing typologies within integrated car parking and low rise apartments

Built form framework plan and recommendations

Building Heights

7. Remove Height of Building controls in the LEP and to allow for variation and flexibility of built form
8. Building heights to be controlled through the DCP which should specify a range of heights in terms of storeys. The DCP could consider:
   - Tall (8-12 storey) buildings around the station with a 1 or 2 storey street wall to maintain a human scale
   - 4-6 storey development within the R4 zone as well as around public open spaces to improve levels of passive surveillance over these spaces
   - 2-3 storeys more generally within the R3 zone allowing for a mix of housing options

Development in the R4 High Density Zone – Residential Flat Buildings (RFB)

9. Proposed amalgamated sites within the R4 zone should not result in isolated sites of less than 1,500m^2
10. Street frontage for a RFB of 30m minimum, unless a low rise apartment block up to 3 storeys.
11. DCP should stipulate a minimum lot size for apartments / RFBs is 1,800m^2 or with a street frontage of 30m unless this a low rise apartment block that is integrated with attached housing typologies
12. DCP should stipulate a minimum street frontage for a RFB development of 30m
13. DCP should stipulate a minimum common boundary setback for RFB of 3m
14. DCP to require a minimum break between attached housing of 6m every 35m of continuous frontage, or less where overland flow links are required
15. DCP should allow minimum building setbacks from newly created lanes through the centre of blocks of 0m

Development in the R3 Medium Density Zone

16. DCP to support low rise, medium density housing typologies that have a public street address (low rise apartments, attached dwellings, manor houses etc) within the larger blocks where amalgamated sites larger than 1,800m^2 can be assembled
17. DCP controls to discourage multi dwelling housing typologies that do not directly front a public street

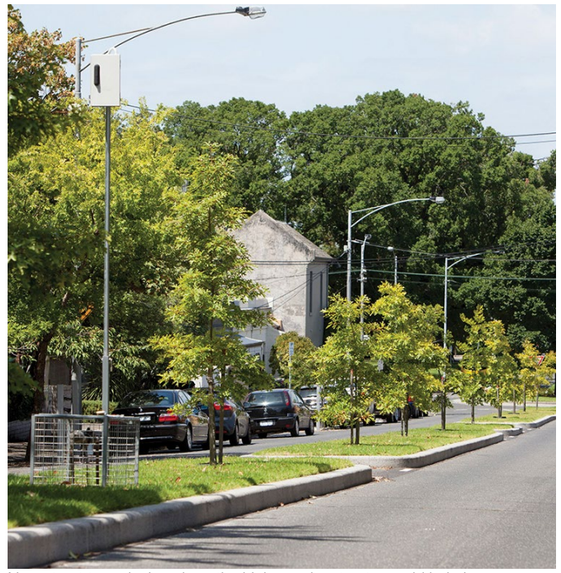
Figure 24: Built form framework plan

4.4 Movement framework

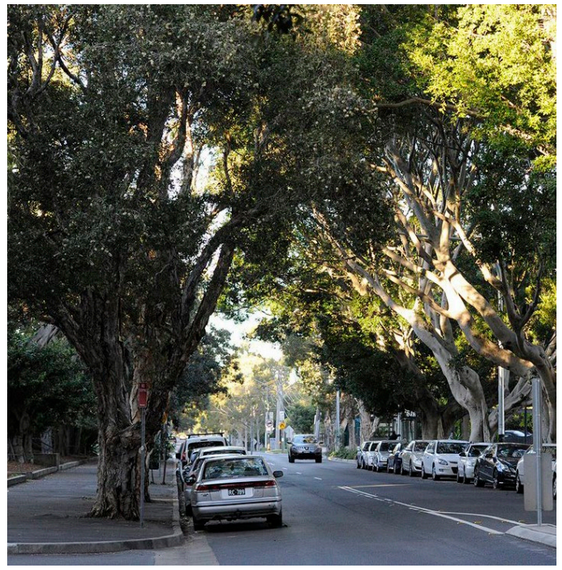
Objectives

- Formalise the street hierarchy for the centre to improve legibility and prioritise safe movement
- Encourage pedestrian and cycle movement within the centre to other local destinations and along Prospect Creek
- Improve permeability throughout the study area for pedestrians and those on cycles
- Improve way-finding to facilitate safe and convenient movement
- Provide new vehicular connections across Prospect Creek to improve integration, provide options for road based public transport and ensure that traffic impacts from future development is dissipated
- Encourage the use of Carramar Railway Station as a convenient park and ride facility to support economic activity around the station

Simple public domain upgrades around the station could enhance visitor experience

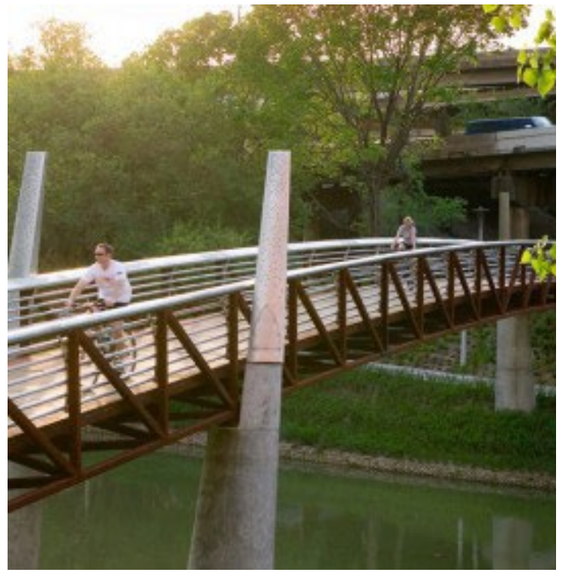


New street tree planing along the higher order streets would help improve legibility and aid in orientation

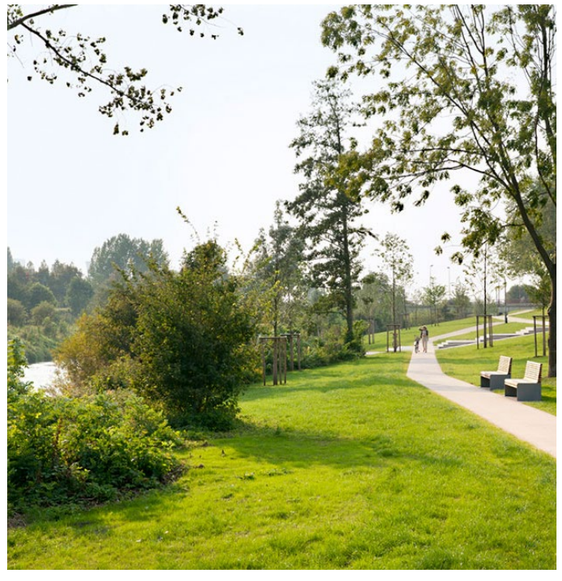


Increasing tree canopy in the public domain using indigenous tree planting would reinforce the character of the centre and cool the neighbourhood

Intimate pedestrian oriented streets with 0m setbacks



Potential new foot and cycle bridges over Prospect Creek



Encourage walking and cycling as a recreational activity

Movement framework plan and recommendations

Recommended actions

$ 1. Secure funding and invest in walking and cycle infrastructure along Prospect Creek including new pedestrian cycle bridges over the creek at strategic locations

2. Create north-south green link through Carramar linking Heiden Park (with pedestrian bridge over Propsect
$ Creek to Fairfield Park at Haughton Street) in the north and Carrawood Park in the south

3. Improve connections (pedestrian and cycle) between the train station and the Health Precinct through the delivery of a through site link from Carramar Ave to Tomki Street

$ 4. Advocate for universal access improvements to Carramar railway station at the eastern end of the platform

$ 5. Facilitate the introduction of a finer grain of streets through preferred amalgamation plans or through the strategic acquisition of properties to provide more direct and convenient access to public facilities and amenities

$ 6. Plan, design and fund a new vehicular bridge from Sandal Crescent to Moore Street to improve access to the station and Canley Vale, and open up opportunities for road based public transport services

7. Promote commuter parking around the station by improving the public realm and extending perpendicular parking along Wattle and Carramar Avenue

8. Consider rear lane access to commercial areas

9. Future planning should consider the potential impact of future universal access improvements to the station at the eastern end of the platform

10. Use public realm improvements such as street tree planting and new lighting to make the street hierarchy visible and clear for local and visitors

Recommended changes to DCP and LEP controls

11. DCP to include a riparian setback from Prospect Creek to allow for a future public promenade along the riparian corridor

12. DCP to secure new through site linkages through larger urban blocks to improve permeability for pedestrians and introduce overland flow paths for stormwater

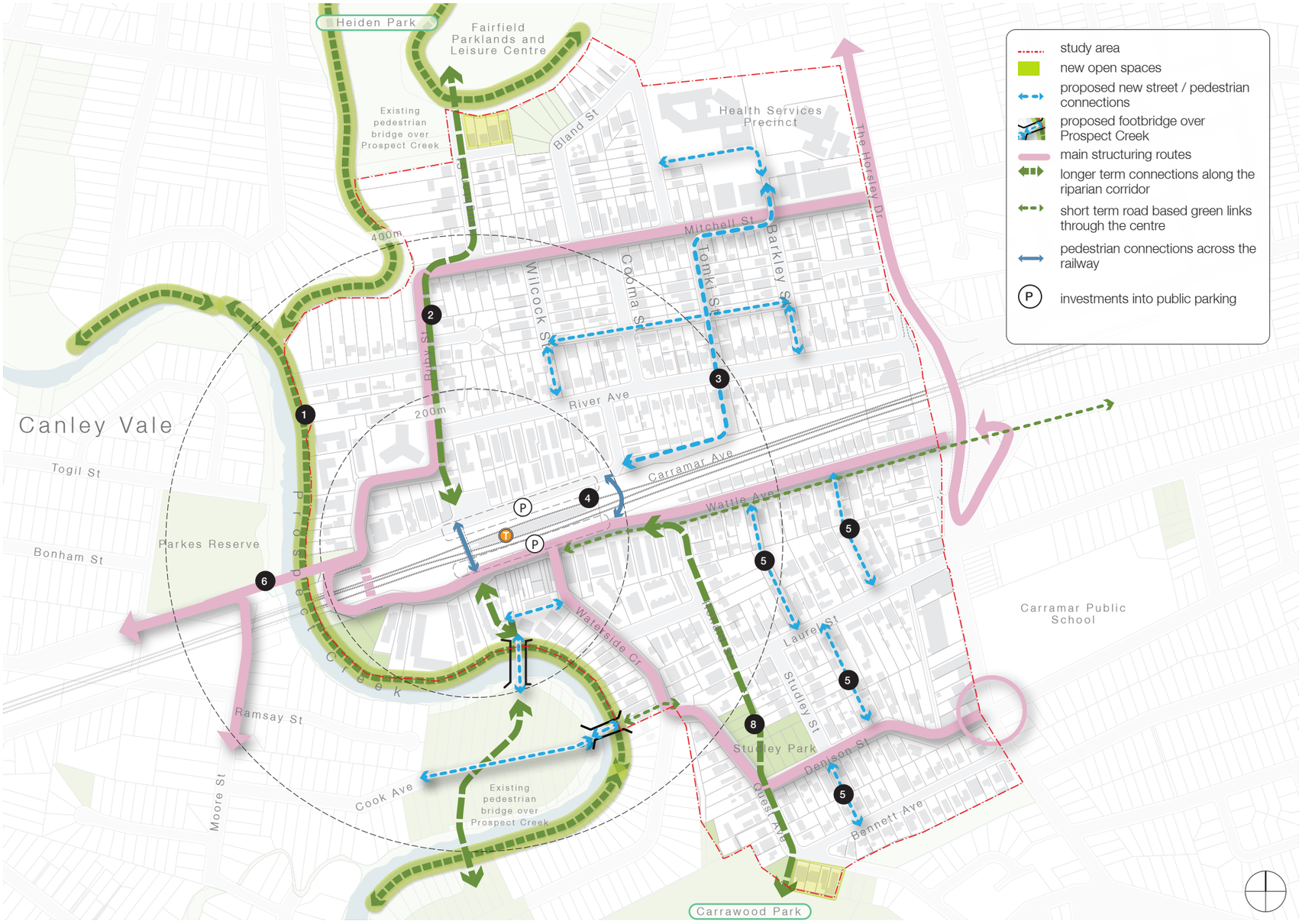


Figure 25: Movement framework plan

Illustrative massing

5

The images presented in this chapter illustrate what Carramar could look like based on the recommendations and strategies outlined in chapter 3. It is important to note that the massing is conceptual and that the purpose of presenting them in the study is to provide stakeholders and community members with a visual picture of the implications of some of the more technical terms such as Floor Space Ration (FSR) mean in terms of built form

5.1 Concept massing

The illustrations presented in this section provide an indication of what Carramar might look like based on the recommendations under each of the masterplan framework themes. The massing present an example of what development could look like. It will take many years to development to happen, with more significant change likely in 15 to 20 years. The new development is only illustrated on opportunity sites and where development is best located. Development controls proposed in this study are designed encourage good development that is also more economically feasible. Development when constructed will look different because each proposal will go through separate Development Application process and amalgamation patterns may be different.

It is important to note that the concept masterplan and yields illustrated in this section only considers redevelopment south of Mitchell Street. The proposed changes suggested in this report have implications beyond this boundary and further work will be required to provide an indication of the extent of change. The built from illustrated in this section includes the redevelopment of approximately 446 houses and the construction of an additional 3,000 new dwellings (depending on the likely conversion rate) south of Mitchell Street together with between 7,000 and 7,500m^2 of commercial GFA.

The net gain in the Carramar centre is approximately 3,321 new dwellings and 2,233m^2 of commercial GFA that could be used for a variety of uses, again assuming all opportunity sites are developed.

	TOTAL
Estimate of existing commercial GFA (sqm)	5,120
Estimate of existingl residential GFA (sqm)	34,500
Estimate of existing residential dwellings	446
Proposed new commercial GFA (sqm)	7,353
Proposed new residential GFA (sqm)	320,180
Proposed dwellings	3,767
Net increase in commercial GFA (sqm)	2,233
Net increase in residential GFA (sqm)	285,680
Net increase in dwellings	3,321

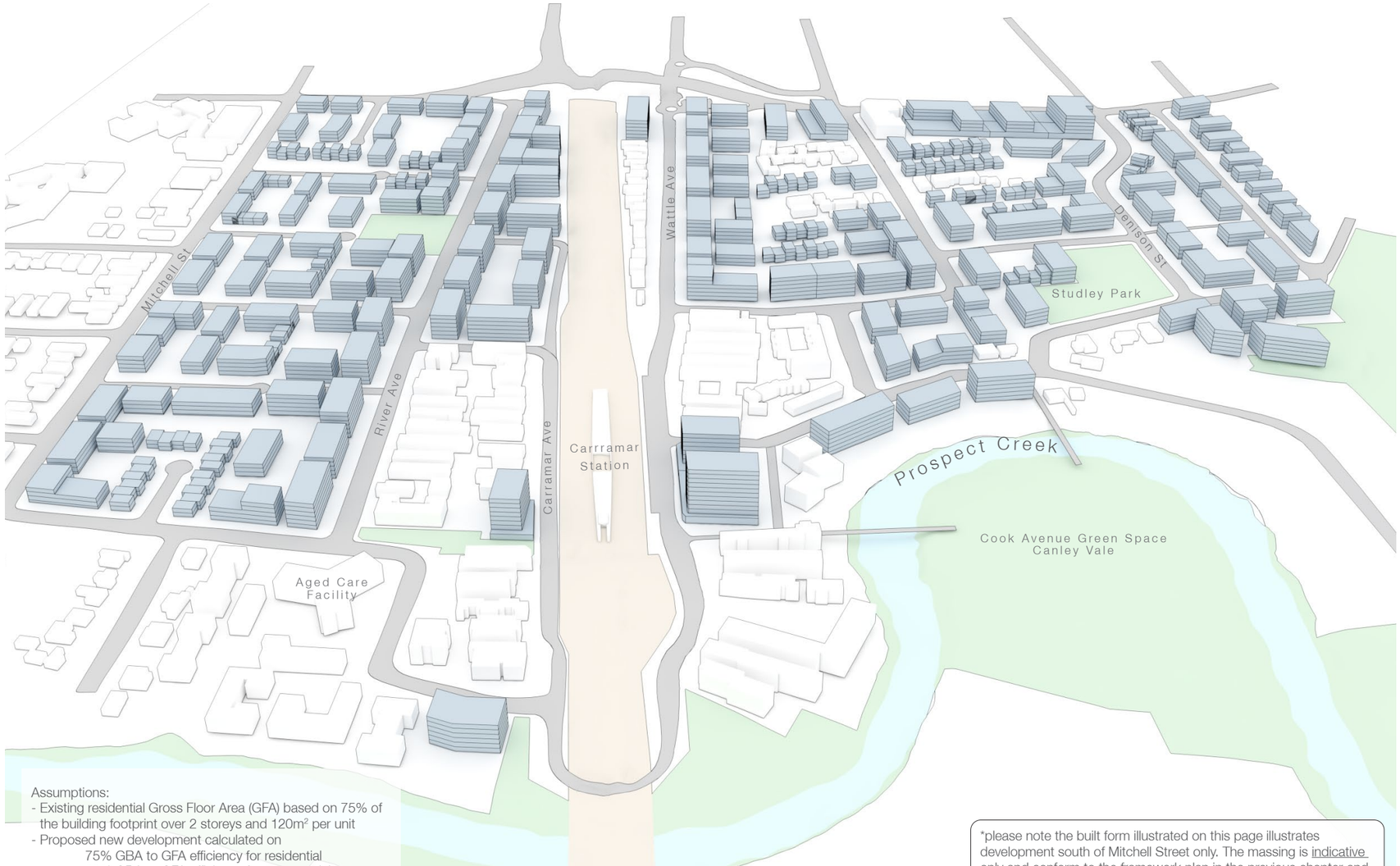


Figure 26: View from the west from above Prospect Creek

Illustrative massing

Figure 27: View from the southwest looking over Studley Park

Illustrative massing

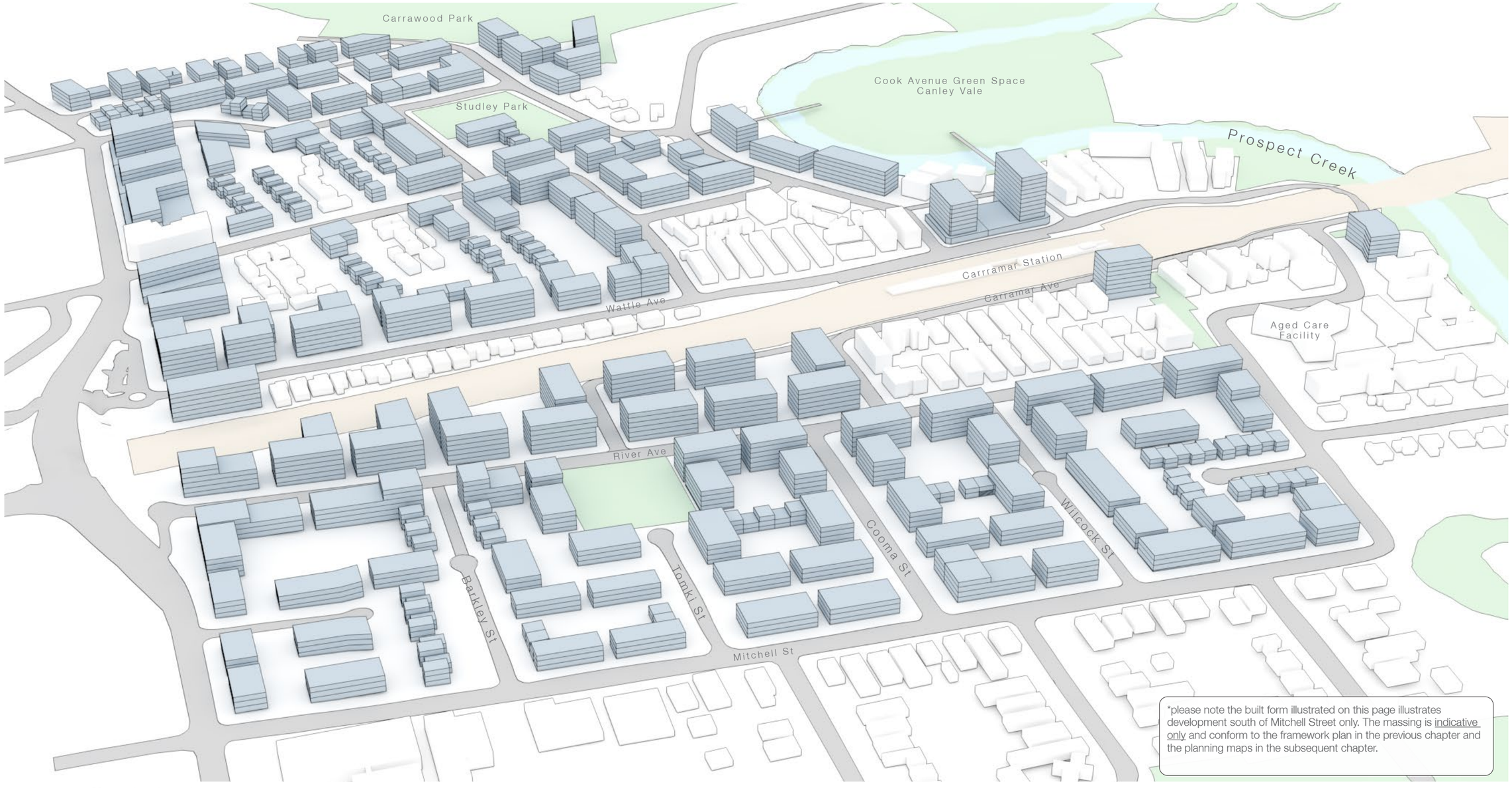


Figure 28: View from the northeast

5.2 Shadow study

Figure 29: Shadow study - 9am, 21 June

9am

Figure 30: Shadow study - 11am, 21 June

11am

The shadow study demonstrates the movement of shadows on the 21st of June (winter solstice) which is the shortest and most shady day of the year.

Illustrative massing

Figure 31: Shadow study - 1pm, 21 June

1pm

Figure 32: Shadow study - 3pm, 21 June

3pm

The shadow study demonstrates the movement of shadows on the 21st of June (winter solstice) which is the shortest and most shady day of the year.

Recommendations

6

This final chapter consolidates all the above recommendations and proposals into a series of development control plans that could form part of the revised Fairfield Local Environmental Plan (for example: land use zoning, development standards – height of building, floor space ratio etc, special clauses) or Development Control Plan (for example: setbacks, landscape area etc)

6.1 Recommended Changes to LEP Controls - Changes to Zoning

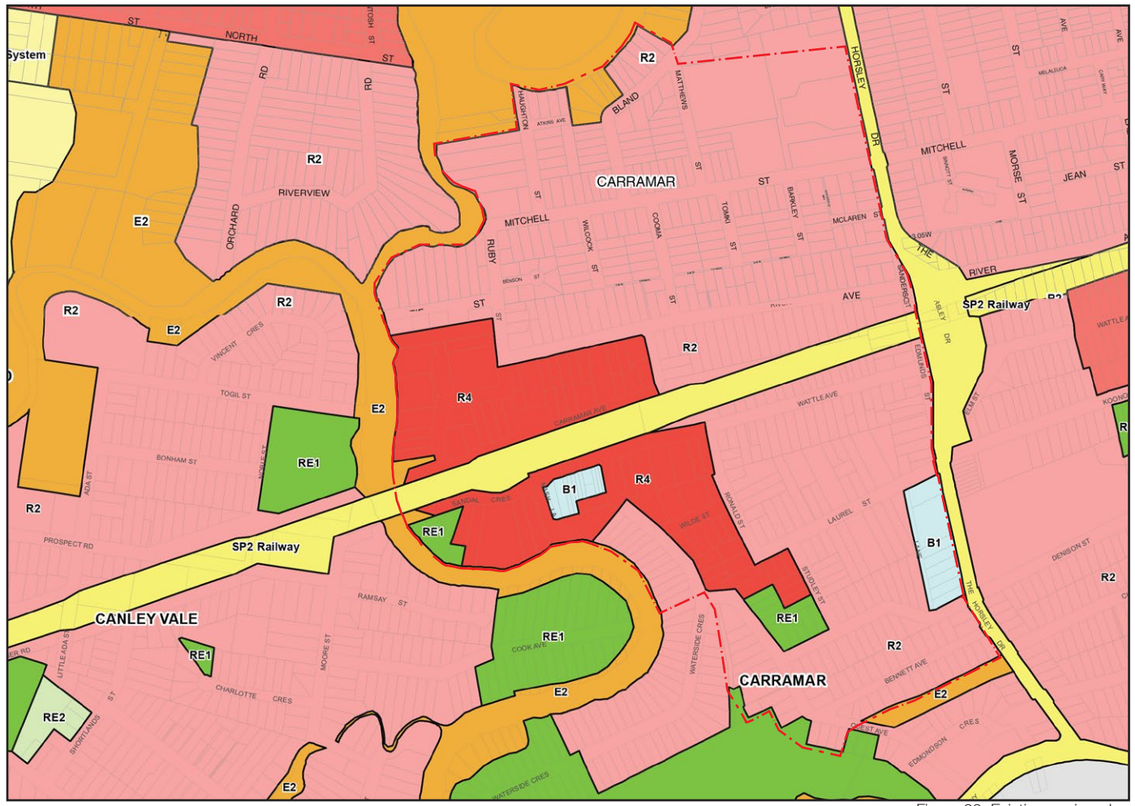


Figure 33: Existing zoning plan

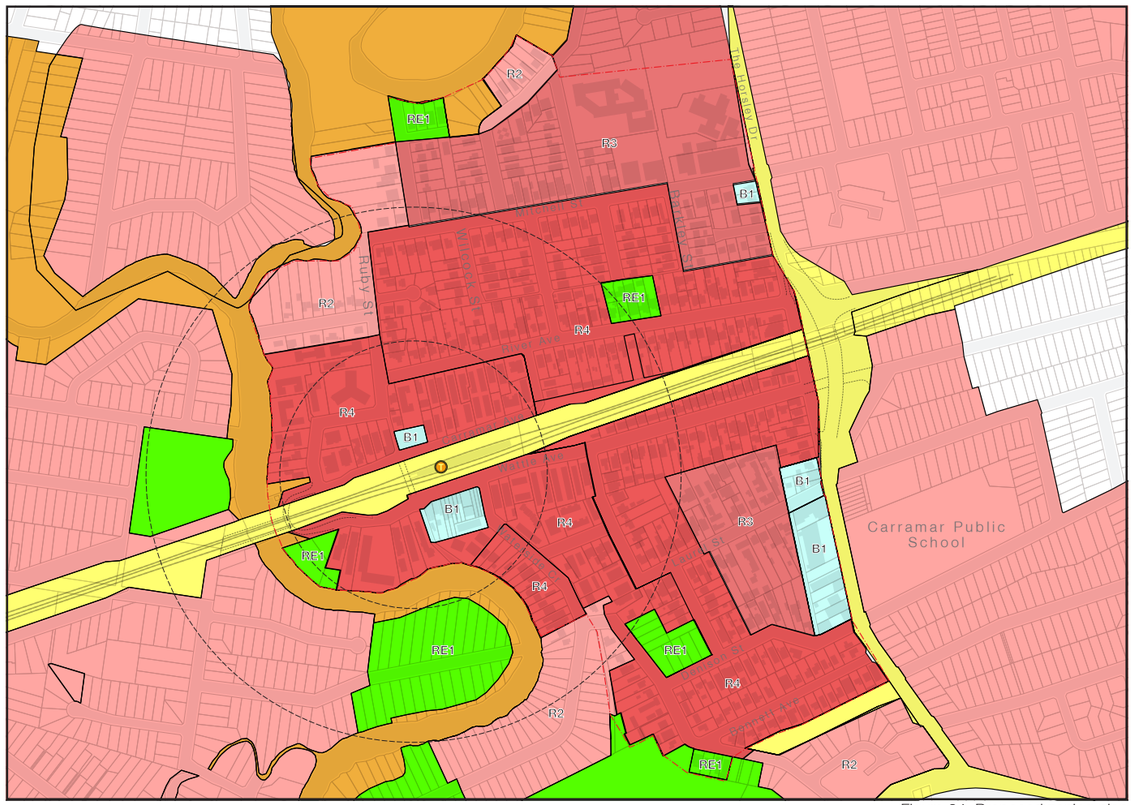


Figure 34: Proposed zoning plan

Existing Zoning

The plan above illustrates the current landuse zoning LEP map 2013

B1	Neighbourhood Centre
B2	Local Centre
B3	Commercial Core
B4	Mixed Use
B5	Business Development
B6	Enterprise Corridor
E2	Environmental Conservation
E3	Environmental Management
IN1	General Industrial
IN2	Light Industrial
R1	General Residential
R2	Low Density Residential
R3	Medium Density Residential
R4	High Density Residential
RE1	Public Recreation
RE2	Private Recreation
RU1	Primary Production
RU2	Rural Landscape
RU2	Rural Landscape
RU4	Primary Production Small Lots
RU5	Village
SP1	Special Activities
SP2	Infrastructure
SP3	Tourist
W2	Recreational Waterways
MD	SEPP (Major Development) 2005
WSP	SEPP (Western Sydney Parklands) 2
WSE	SEPP (Western Sydney Employment
DM	Deferred Matter

Recommended Zoning

The plan above illustrates the proposed landuse zoning, assuming all those properties identified as potential new open spaces are acquired by FCC and rezoned RE1

6.2 Recommended Changes to LEP controls - Floor Space Ratio

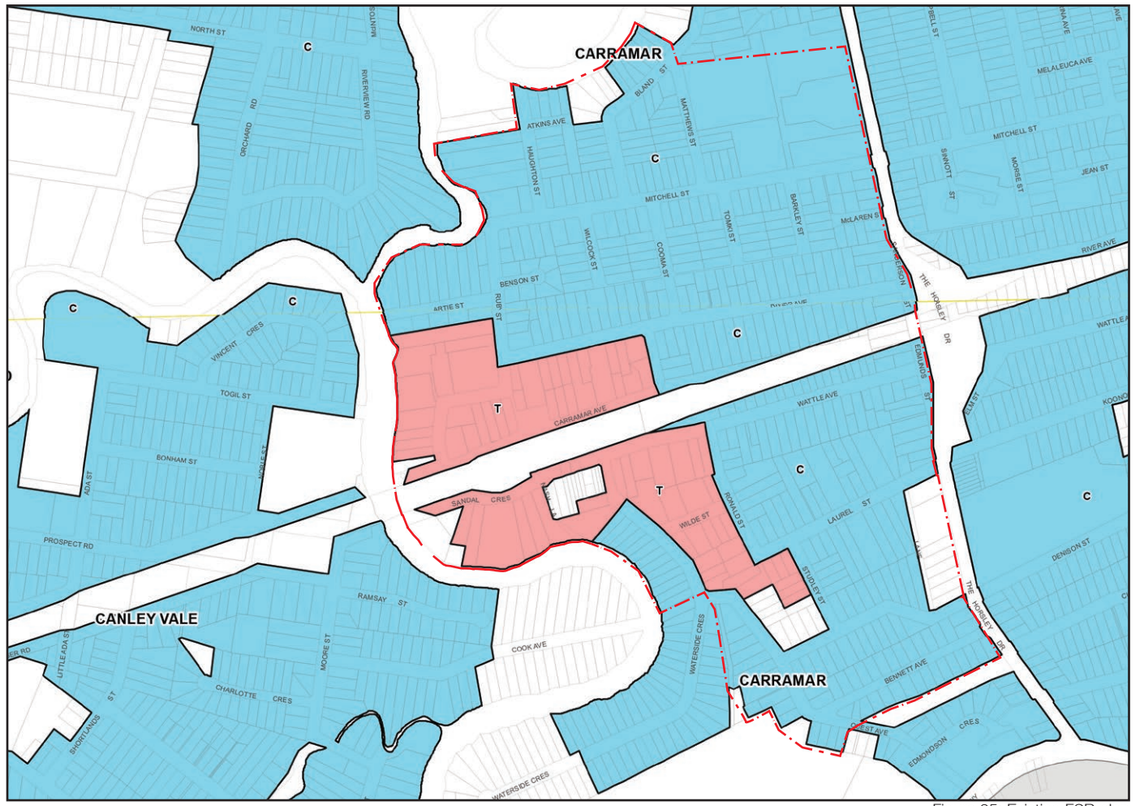


Figure 35: Existing FSR plan

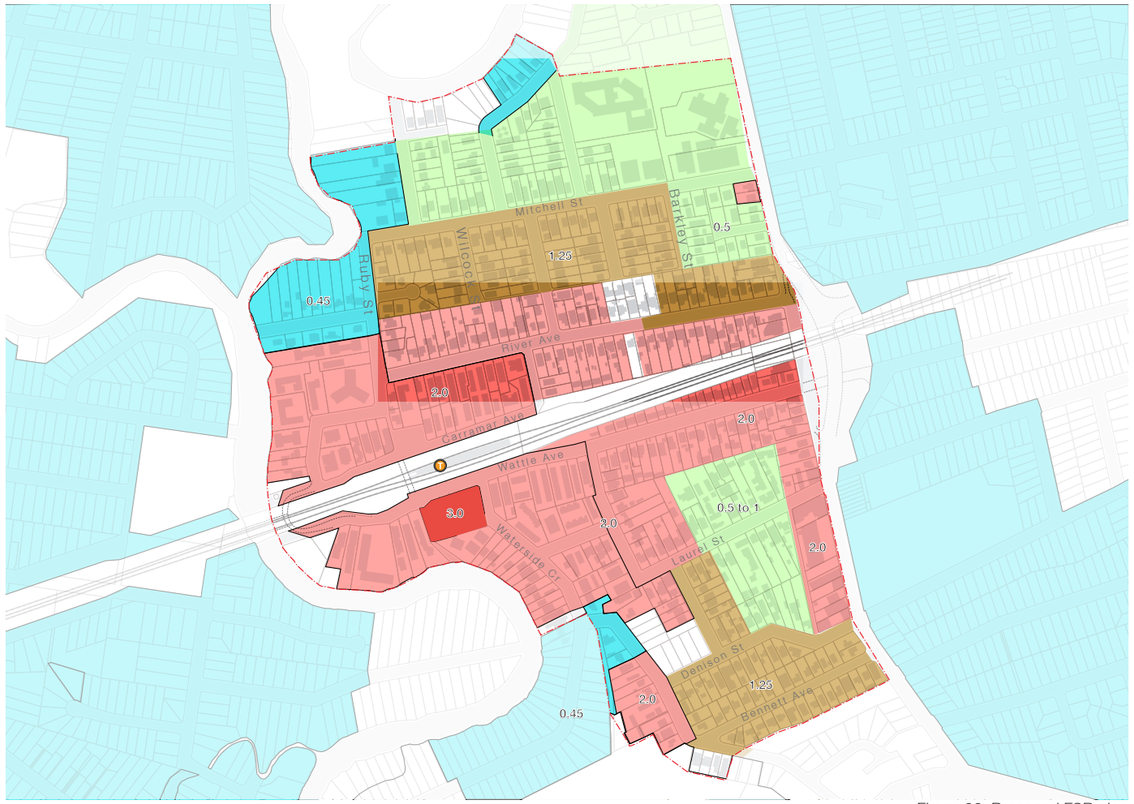


Figure 36: Proposed FSR plan

Existing FSR

The plan above illustrates the current floor space ratio LEP map 2013

A1	0.1
A2	0.33
C	0.45
D	0.5
E	0.57
J	0.8
N	1
R	1.45
S	1.5
T	2
U	2.5
V	3
W	3.5
X	4

Recommended base FSR

The plan above illustrates the proposed base floor space ratios. for the site. It must be noted that additional FSR is permissible based on a sliding scale linked to Clause 4.4 of the LEP and recommendations from the medium density housing study as laid out in the Table below.

Incentive bonuses for Residential Flat Buildings (LEP Clause 4.4A)

- street frontage < 30 metres a maximum FSR of 0.8:1 is permitted
- street frontage of 30m - 45 metres the maximum FSR permitted is
  - 1.25:1 if the site has a depth of less than 40 metres, or
  - 1.5:1 if the site has a depth of at least 40 metres,
- street frontage > 45m the maximum FSR permitted is
  - 1.5:1 if the site has a depth of less than 40 metres, or
  - 2:1 if the site has a depth of at least 40 metres

Proposed FSR intensives for Medium Density Housing

Lot width	Base FSR	With 3 Bed Mix (+0.1)	With Basement (+0.25)
7-22m	0.5:1	0.6:1	0.85:1
22-45m	0.65:1	0.75:1	1:1

6.4 Recommended Development Control Plan Changes - Through-site Links

Through-site links through existing urban blocks are proposed to be included in the DCP for the study area in order to:

- improve permeability for pedestrians and cyclists;
- provide access to the deep urban blocks;
- ensure that new development has a public street address; and
- ensure adequate provision is made for stormwater flow paths through the study area to facilitate natural drainage

Two categorises of through site links are proposed:

New local streets and laneways

These new street provides vehicular access to the deep urban blocks and may contain services. Designed as pedestrian oriented / shared streets to Council's requirement and dedicated to Council on completion.

Pedestrian and cycle links

From a minimum of 6m to 9m wide and constructed to Fairfield City Council standards. Dedicated to Council, or if registered as a public right of way as a second preference.

Figure 37: Recommended through-site links

6.5 Recommended Development Control Plan Changes - Setbacks

In order to maintain the open and green character within Carramar, introduce new public spaces and deliver new connections through deeper urban lots the following setbacks are proposed:

- study area
- 15m offset from the rear property boundary along Prospect Creek
- 9m setback from common boundaries to create a new public open space
- 4.5m setback from common boundaries / centre line of proposed new streets to create a pedestrian connection
- 4.5m street boundary setbacks to maintain the green character of the streets
- 3m street boundary setbacks for attached housing types / setbacks from open space
- 3m setback to widen a pedestrian link
- 12m setback from the railway line for street access
- 0m setback for commercial frontages with a one storey street wall. Buildings above podium level to be set back by 3m

Figure 38: Recommended street setbacks

6.6 Recommended Development Control Plan Changes - Height of Buildings

Figure 39: Existing Height of Buildings plan

Figure 40: Proposed DCP building heights control plan

Existing height of buildings (LEP)

The plan above illustrates the current height of buildings LEP map 2013

G	7	S	23
H	7.5	T1	25
I	8	T2	26
J	9	T3	27
K	10	T4	29
L	11	U1	30
M	12	U2	33
N1	13	V1	38
N2	14	V2	39
O1	15	W	42
O2	16	AA	66
P1	17		
P2	18		
Q	20		
R	21		

Recommended height of buildings (DCP)

The recommendation is that the HOB plan is removed from the LEP and that height is controlled through the DCP. The plan above illustrates the recommended range of heights for buildings that should be included in the DCP. As the FSR is factor that governs the overall quantum of development that is possible on any site the heights are suggested as a range. This encourages variation in building heights and allows developers to be generous with the floor to floor heights within the development resulting in an improved outcome for residents.

An accentuation in building height to the maximum or the range allowance is encouraged at key points in the neighbourhood centre as indicated on the plan to improve legibility.

- study area
- 2-3 storeys
- 3-4 storeys
- 3-6 storeys
- 1-8 storeys
- 1-12 storeys
- local landmark opportunities

6.7 Public benefits

Whist the market will determine the location and rate of development opportunities within Carramar it is Councils role and responsibility to ensure that public benefits are delivered to support growth and address identified community needs. As Carramar has limited opportunities for one landowner to provide benefits due to the fragmented land ownership an implementation strategy and contributions plan should be prepared and approved prior to the amendment of development controls. The implementation strategy will comprise a number of actions and funding strategies that will capture a fair proportion of the value uplift generated through changes to the development controls and complement these with public investments (grants and direct investments) to deliver the required benefits.

Such a strategy will provide a framework that will provide transparency and ensure that a fair price for land is paid. It will enable Council and State Government to purchase properties and invest in community infrastructure when the need arises or when landowners are ready to sell. In the longer term more than 3,500 new dwellings will all contribute to the community infrastructure.

The adjacent plan and companying table that follows should be used to inform the contributions plan.

Public benefits

1. Public domain upgrades around the station (including universal access at the western ends of the platforms
2. Upgrades to Studley Park
3. A new public open space on River Avenue
4. Setbacks from Prospect Creek to create a public promenade
5. Potential open space connection between Oakdene Park and Heiden Park
6. Potential opening of Carrawood park onto Quest Ave / Bennett Street
7. Potential new pedestrian bridges over Prospect Creek
8. Public domain upgrades including street tree planting on key routes
9. Improved pedestrian connections / through-site links
10. Public laneways / laneway improvements

Figure 41: Proposed public benefits plan

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