Chester Square Urban Design Framework

Priam Street, Chester Hill

Prepared for Canterbury Bankstown Council

Issued 29 April 2022

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SJB Architecture (NSW) Pty Ltd ABN 20 310 373 425 ACN 081 094 724 Adam Haddow 7188 John Pradel 7004 SJB would like to acknowledge the traditional custodians of the land on which we live and practice and pay our respects to elders, past, present and future. In particular, we would like to acknowledge the 60,000+ years of continuous engagement of this land by Aboriginal and Torres Strait culture.

The journey of Aboriginal and Torres Strait Islander people and their knowledge of this land is incredibly rich – its importance to the future of our country should never be underestimated.

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Chester Hill is one of the most northerly suburbs in the Canterbury Bankstown Local Government Area. The local centre of Chester Hill is focused around the Chester Hill railway station, which is served by the T3 railway line. The local centre is anchored by Chester Square shopping centre, which is the major retail destination that serves the local catchment. It contains a full line super market and a range of shops providing local goods and services.

The current town centre masterplan was adopted in 2014, however the centre has failed to attract any significant public or private investment. Council's Local Strategic Planning Statement (LSPS) has identified the need to undertake further planning for its local centres and is currently working on a number of other town centre masterplans.

A Planning Proposal for the redevelopment of Chester Square Shopping Centre (1 Leicester Street, Chester Hill, hereafter referred to as the Subject Property) into a high density, mixed use destination was lodged in 2019 and has brought to the fore an opportunity for development at a scale that the centre will not see for some time to come. The site represents the largest consolidated land holding in a area with fragmented ownership and has the potential to make a significant contribution to the growth of the centre. This proposal comes in advance of Council reviewing the masterplan for the Chester Hill and updating development controls.

The Planning Proposal is a departure from the current planning controls for the area. It envisages:

- · A mixed use development with a reference scheme indicating approximately 633 apartments and 15,621m² of commercial floor space:
- A multi purpose community facility of 2,000m²; and
- A new publicly accessible open space of 2,000m².

In order to realise the Planning Proposal the following key changes would be required to the existing Planning Controls:

- · Increase in Height of Buildings controls to a range from building heights from 14 metres to 62 metres (Current controls allow for 20m)
- Increase in FSR from 2.5:1 to 4.53:1

The original 2019 Planning Proposal was subject to a number of peer reviews, which identified a number of urban design issues around contextual fit and the overall bulk and scale of the proposal, and market feasibility, both of which needed

to be refined and clarified. In response to the Peer Reviews, recommendations for additional works post-Gateway Determination were applied and supported in the Council Resolution (22 September 2020). This report is in response to one of those recommendations, following the Department of Planning, Industry and Environment's (DPIE) request for these works to be brought forward, prior to issue of a Gateway Determination. The response from DPIE agreed with Council that the Planning Proposal had strategic merit though required further site specific studies to be completed.

The purpose of this study is to provide Council and DPE with an evidence base for the approval of new development controls for the site. The focus of the study is on the building envelope and urban design interface conditions and to refine the proposal submitted by the applicant before submission for Gateway.

It is important to note that SJB have been brought into the project towards the later stage of the pre-Gateway planning proposal assessment, following Council's resolution on the proposed FSR and building height. Given the progressed nature of the proposal and its assessment, the focus of this report has been around testing, refinement and recommendations - such as proposed planning controls for the site, and an accompanying Public Domain Plan for the spaces immediately surrounding the site. SJB's role has been to provide a critical appraisal of the scheme presented by the applicant within the parameters of the Council resolution, with the aim of refining the scheme rather than seeking to evaluate the proposal and its core principles.

It is important to note that the Planning Proposal seeks broad changes to planning controls and that the reference scheme illustrates one way that the development envelope could be realised. Any proposed amendments to the site's planning controls must allow a degree of flexibility in the final design, whilst also providing certainty around the potential environmental impacts. The planning controls should therefore be generous enough to allow different solutions, yet defined enough to ensure positive outcomes.







Figure 02: Artists impression of the Planning Proposal reference scheme (Source: Turner)

This report presents an extensive policy review and contextual analysis, which establishes our understanding of the site and the role of Chester Hill within the LGA. Its recognised that the centre has historically failed to attract significant public and private investment over the past few decades, however, the Future Transport Strategy 2056 does identify Chester Hill as a potential stop on a new metro line that would connect Kogarah through Bankstown to Parramatta. Despite this long term potential investment Chester Hill is still expected to function as a Local Centre. The Planning Proposal does not rely on the metro to justify the scale of proposed change. A vision and Desired Future Character Statement will be developed for the centre as part of the future masterplanning exercise, but in the interim a vision for the Chester Square Precinct has been developed based on the 2014 Local Area Plan vision.

"The Chester Square precinct is a vibrant, high density local centre with retail and commercial uses serving the boarder community. Building typologies will shift gradually towards higher density, mixed use and residential flat buildings providing affordable and well located accommodation with access to regional public transport services. New open spaces will be delivered in step with population growth."

The proposed expansion of the Chester Square shopping centre from its existing retail floor area of 8,268m² to 15,763m², together with the increased residential accommodation will help the centre fulfil this vision. This vision is underpinned by high level principles and objectives that will frame future DCP controls. A number of precedent case studies of comparable town centres, mixed use developments, streets and lanes were undertaken to benchmark the development and also provide a frame of reference for proposed controls.

A number of studies were undertaken to better understand the potential implications of the metro on the centre and opportunities to provide new open spaces for a growing population. Key lessons from these case studies include:

- Development in local centres varies in character, height and scale - there isn't a single approach to town centre renewal
- Centres undergoing rapid transformation driven by significant capital investment such as multiple large scale DAs and planning proposals benefit from masterplans, and shared uplift, rather than site-specific controls
- FSR controls in comparable local centres are generally within the range of 2:1 to 4:1, subject to land use mix
- In high density environments the provision of open space is most often supported by a masterplanning process, where the long term needs of a diverse population are considered
 there is no one solution for open space
- Open spaces in high density environments are not always regular shapes and area often composed of a series of interlinking spaces, have a minimum of two street frontages, and range in size from 1,500m² to 5,000m²
- Service lanes can be made more people-centric focusing on amenity, pedestrian comfort and activation
- Removing tradition kerbs is often used to create a space
 that feels more people focused
- Vehicle access to lanes can be limited, to manage safety and usability.
- Lanes do not need to be activated continually but moments of activation along their length help create sentiments of activation
- High performing lanes vary in width to allow for different types of activity on both sides
- The scale and proportions of lanes (width to height ratio) is important in maintaining solar access and creating a feeling of intimacy and containment
- Passive surveillance of streets, and specifically laneways, is crucial to perceptions of safety and activation
- Mixed use development require consolidated sites with multiple street frontages or access points to accommodate large format retail tenants, underground parking and servicing, in addition to residential access.
- Large format retail anchors (i.e. supermarkets) are often sited below ground or wrapped with smaller tenancies to ensure a positive interface to the public domain is created
- Designing to minimum building separation requirements (noted in the ADG), without considering building length and orientation can still lead to poor residential amenity
- Street wall or podium conditions greatly influence the impact and contribution of development by mediating overall height and creating a more human-scaled streetscape. These can be articulated to minimise perceptions of bulk and scale
- Private communal spaces can be provided at upper levels for residents with limited spatial opportunities at ground

Objective



Figure 03: Summary of key objectives

Strategy

Link through and around

Distribute public and community uses to draw people across the centre

Hard wire Frost Lane to become and active laneway

Carve out spaces in the site and development footprint for deep soil and trees

Introduce a low scale street wall

Break long street walls with meaningful connections between courtyard spaces and the street

Articulate tower forms above podiums



Figure 05: Option study for the Chester Square site

One of the key features of the Planning Proposal that required examination is the inclusion of the multi functional community facility within the development. While the delivery of a new community floorspace as a community benefit would be a substantial contribution to the centre, the embedded nature of the community centre within the development is a point of concern. The proposed location in the centre of the site and north of Frost Lane reduces it's visibility from the high street (Waldron Road) - thereby reducing its potential to contribute to the identity and legibility of the centre. This positioning also concentrates two key town centre destinations (retail and community) within the site, discouraging movement and foot traffic through the rest of the centre.

A number of alternative locations for the new community facility were explored as part of this study that would deliver different outcomes for the centre and others should be explored as part of the future masterplanning process. That said, Councils requirement for the community facility to be delivered on the Chester Square site as part of the public benefit agreement has in effect determined that this is the optimum location for a new public facility in advance of the masterplanning process. Site specific DCP controls should allow the community facility to occupy a more prominent location within the town centre and it is recommended that the design of this facility should be subject to intensive design review and public engagement to ensure design excellence is delivered. SJB also undertook a number of design studies to determine whether there were any alternate arrangements for the key elements of the Planning Proposal on the site, reflecting the parameters established by Council. This study concluded that the Planning Proposal reference scheme represents the optimum arrangement of built form with the view of maximising yield. Any changes to the location, scale or position of these key elements, namely the supermarket, open space, community facility or residential buildings, would lead to a reduced overall FSR on the site. Relaxing some requirements (for FSR) or omitting some of the key elements would result very different outcomes for the site, adjacent properties, surrounding streets and spaces, and the town centre more broadly. However, this degree of change to the proposal was considered outside of the scope of this appointment and will be further explored as part of the Masterplanning process.



Figure 06: The Planning Proposal within the context of Chester Hill Developed out to the extent of existing controls

It is important to note that this study does not propose a centre wide heights strategy, as that will be informed by a broader set of considerations (including the metro and community infrastructure requirements), and will be undertaken at a later date as part of Council's centres review.

In response to the heights outlined in the Planning Proposal a strategy that encompassed the site's immediately surrounding Chester Square should be based on the following principles:

- 1. Concentrating height in locations of greatest accessibility (close to the railway station), and where overshadowing impacts can be managed to acceptable levels or mitigated
- 2. Controlling height to minimise overshadowing impacts on open space and adjacent properties such that they hinder the site's ability to meet ADG requirements
- Transition height down from the tallest buildings on the Chester Square site to the low rise context to the north, west and east
- 4. Maintaining a three storey street wall across the centre, referencing the height of existing buildings to allow for the gradual transition in built form over time with taller buildings set back from the street

Figure 07: The Planning Proposal within the context of a Chester Hill Centre with amended controls allowing for increased in height in the blocks directly adjacent to Chester Square to allow for a more gradual transition in building heights

This study illustrates an increase in buildings heights for those blocks immediately surrounding the site, changing the permissible heights from 6 - 8 storeys to a range of building heights of up to 15 storeys. This primarily serves to transition building heights from the existing 1-2 storey in the low rise neighbourhood towards the subject site (60m/18 storeys). This transition may be challenging to achieve given the fractured nature of property ownership around the centre.

Fure 0?: The Planning Proposal within the context of a Chester Hill Centre with an adjacent to Chester Square to allow for a more gradual transition in build





Figure 08: Urban Design Framework Plan

The vision, objectives and design studies by SJB have informed the overarching Urban Design Framework for the site and town centre. The diagrams above build on the previous Precinct Plan and includes the following elements:

- 1. A more pedestrian oriented town centre with high quality public domain along Chester Hill Road, Waldron Road, Bent Street, Priam Street and Frost Lane
- 2. A new landmark destination within the centre on the Chester Square site
- 3. Mixed use intensification along Waldron Road with active frontage at ground floor level
- 4. Residential intensification within 400m of the train station

- 5. Active frontages along Priam and Bent Street
- 6. A connected network of open spaces linking across the railway line from Nugent Park south, across Waldron Road and into a new open space within Chester Square
- 7. New cycle connections between the railway station, along Priam and Bent Streets.



Figure 09: Aspirational future Movement and Place categorisation of streets

Central to the Urban Design Framework is the recatagorisation of the street network based on the Movement and Place Framework. The objectives of these changes are to:

- · Create more people focused spaces within the centre
- Make it safer for pedestrians to cross busy roads
- · Reduce vehicles speeds
- · Introduce more tree planting and urban greening to reduce the heat island effect

- Key changes include
- · improving connections across the railway line
- improving environmental conditions along Waldron Road to improve its place function as a main street with active uses making Bent and Priam Streets function as civic spaces with active frontages
- activating Frost Lane as a multifunctional lane way and improving amenity within this space
- Illustrative street cross sections were developed in Chapter 7.8 and will be progressed as part of the public domain plan and future masterplanning process.



Figure 11: Consolidated built from controls

The next step in the process was to consider a wide range of potential DCP controls that would help ensure positive urban design outcomes. The reason for developing these controls before making recommendations for changes to LEP controls is to lock in key urban design moves and ensure controls are flexible enough to allow for multiple design solutions. This will also help avoid potential future conflict where it is not possible to achieve the yield sought by the applicant, should the development controls be too rigid. The draft controls cover;

- · Access
- Landscape and greening
- Active frontages
- Built form articulation

These will be further refined post Gateway.



Figure 10: Alternative reference scheme

The draft controls were used as the basis for the preparation of an alternate reference scheme for the site, as a means of testing potential development outcomes arising from the draft controls. This study was undertaken on the basis of Council's endorsement of the Planning Proposal and a revised letter of offer from the proponent. This reference scheme was then tested against the draft DCP controls to better understand the implications on yield, impact and town centre integration.

heights there are still over shadowing impacts on Frost these properties will be able to be redeveloped under the existing controls and meet ADG solar access requirements this will need to be assessed during DA assessment. access conditions on end users (such as anchor tenants) as these detailed requirements are not known at this stage of residential GFA bring the site FSR down from 4.53:1 to 4:1. It should be noted that an FSR of 4:1 is high relative in other comparable local centres, as illustrated in case studies section

1. Despite greater built form articulation and reduced building Lane and the Waldron Street properties. It is unlikely that 2. It is not possible to determine the impact of changed 3. The alternative reference scheme indicated 10,000m² loss



The key observations of design testing are:



Figure 12: Recommended potential changes to land use zoning beyond the site to be considered as part of the future masterplanning exercise to extend active frontages on both sides of Bent Street from Waldron Road to the through-site link/ entrance to Chester Square shopping centre

In conclusion, although the proposed development in its original state may support many of Councils aspirations for the centre and provide needed services and amenity for local residents, the long term implications of the development may not have been appreciated at the time of Council's determination. For this reason, the findings in this report recommend refinement of the proposal and a reduced building envelope through a set of DCP controls. It should also be noted that the alternative reference scheme may not address the specific needs and requirements of some end users, tenants or market requirements. The combination of these recommendations may create a situation where facilities, such as the multi-purpose community centre are no longer deliverable and the proposal may need to be revisited in part or entirely.

Land use:

No changes to the land use zoning is required. The B2 zone is consistent with the vision for the centre. As part of the future masterplanning work Council may want to consider the extension of the B2 zone on Bent Street north of Frost Lane to create a double sided retail environment connecting from Waldron Street to the proposed pedestrian entrance into Chester Square shopping centre



Figure 13: Recommended changes to Height of Building controls for the site and within the centre to be considered as part of the future masterplanning exercise

Height of Building controls

In the context of an outdated Local Area Plan and in absence of a more comprehensive masterplan for the centre as a whole it has been challenging to justify the heights proposed for the Chester Square site from an urban design perspective. Council's endorsement of the Planning Proposal has determined that buildings of 18 storeys on this site is appropriate and this will establish a new character for the centre.

A centre wide heights strategy will need to be developed as part of the future masterplanning exercise and must take into account a range of different considerations, including overshadowing, yield, traffic impacts and open space needs. The plan above illustrates what the controls in the adjacent blocks could look like, assuming a gradual height transition from the tallest buildings on the Chester Square site, to the low scale residential context. Alternative arrangements should be explored by Council in the future masterplanning process.

It was noted that the heights sought by the applicant in the Planning Proposal exceeded the height of the reference scheme. Council officials have also made it clear that Councils endorsement of the proposal was based on a building height of 18 storeys. Both the proponent's reference scheme and the alternative reference scheme developed by SJB illustrated in this report indicated that it is possible to achieve buildings of 19 storeys within the proposed 62m height limit. To limit the height of buildings to 18 storeys, it is suggested that the maximum height of buildings is reduced from 62 to 60m. Also recommended is a slight reduction in other building heights across the site to be consistent with the proponent's reference



Figure 14: Recommended changes to Floor Space Ratio controls for the site and within the centre to be considered as part of the future masterplanning exercise

scheme, and also to improve solar access to the public domain. Notwithstanding this, there are still significant overshadowing impacts on Waldron Road properties that cannot be addressed unless an alternative design is delivered or the site's height and FSR is further reduced. The overshadowing of adjoining properties remains an issue and it is recommended that this be controlled through an additional solar access controls as presented in draft in this document and will need to be assessed at DA stage. This control may mean that it will not be possible to achieve the full extent of the FSR sought for the site.

Floor Space Ratio

It is SJB's position that the FSR for the site should be a consequence of the desired outcomes and not be a driver for the site. The built form testing and case studies suggest that it will not be possible to achieve an FSR of 4.53:1 on the site without significant amenity impacts on the centre.

A lower FSR would be more appropriate in the context of the draft DCP controls developed to date. It is important to note that the recommended FSR is premised on the assumption that 7,000-9,000m² of the 15,000m² commercial / retail GFA is located below the level of Leicester Street. Should the development mix change or if more retail floor space is provided above the ground floor level the impacts on the public domain would be different.

It is therefore recommended that the FSR for the site be reduced to 4:1, with site specific controls such as a minimum extent of retail to be delivered on the site and specifically how much non-residential floor space is required to be below the level of Leicester Street.

Chester Square Urban Design Framework

Introduction

1

Introduction

1.1 Background and intent

Located 4km north of Bankstown and 8 km south of Parramatta Chester Hill is one of the most northerly suburbs in the Canterbury Bankstown Local Government Area. The local centre of Chester Hill is focused around the Chester Hill railway station which is served by the T3 railway line. The local centre is anchored by Chester Square shopping centre, which is the major retail destination that serves the local catchment. It contains a full line super market and a range of shops providing local goods and services.

The current town centre masterplan was adopted in 2014, however the centre has failed to attract any significant public or private investment despite planning controls allowing for substantial uplift. Council's Local Strategic Planning Statement (LSPS) has identified the need to undertake further planning for its local centres and is currently working on a number of other town centre masterplans in the Sydenham to Bankstown Metro Corridor.

A Planning Proposal for the redevelopment of Chester Square Shopping Centre (1 Leicester Street, Chester Hill, hereafter referred to as the Subject Property) into a high density, mixed use destination was lodged in 2020 and has brought to the fore an opportunity for development at a scale that the centre has not seen yet. This proposal comes in advance of Council reviewing the masterplan for Chester Hill and updating development controls, which will take place after the first round of centre centres studies along the Bankstown to Sydneham Line has been concluded. The Planning Proposal envisages:

- A mixed use development with a reference scheme indicating approximately 633 apartments and 15,621m² of commercial and retail floor space;
- · A multi purpose community centre of 2,000m²; and
- · A new publicly accessible open space of 2,000m²)

In order to realise the Planning Proposal as proposed the following key changes would be required to the existing Planning Controls:

- Increase in Height of Buildings controls to a range of building heights from 14 metres to 62 metres (Current controls allow for 20m)
- · Increase in FSR from 2.5:1 to 4.53:1

The Planning Proposal was subject to a number of independent peer reviews, including a economic, transport and urban design assessments. The economic assessment (by SGS) questioned the viability of the Planning Proposal in light of existing low market values in the area, high construction costs and current market conditions. Of a number of options it considered it found that development under existing controls was the only viable scenario for the development of the site. The urban design peer review undertaken by Place Design Group raised a number of concerns with regards the scale and massing of the development and suggested a development of reduced height as well as a new public open space on the existing Post Office site to better connect to Waldron Road.

Notwithstanding the advice of the peer review the Planning Proposal remained largely unchanged and was supported at the Local Planning Panel (17 August 2020) and the Ordinary Council Meeting (22 September 2020) with additional studies to be completed post Gateway Determination.

A request for Gateway Determination with post-gateway conditions was lodged to the Department of Planning, Industry and Environment (DPIE). In late 2020 Council received a response from DPIE which agreed that the Chester Square Planning Proposal had strategic merit and requested the additional studies be completed ahead of the Gateway Determination being issued to address site specific considerations.

Since the Council Resolution the Future Transport Strategy 2056 has been amended and identifies Chester Hill as a future metro and rail interchange. While this is a significant development the planning proposal is not contingent on the Metro being delivered here.

This study and Urban Design Framework is a direct response to DPIE and Council Resolution.



Introduction

1.2 Intended outcomes

In the context of Council's in principle support for the Planning Proposal the intended outcomes of this study is to:

- Develop a high level vision for the Chester Square Shopping Centre Precinct that is consistent with emerging policy directions set by other levels of government and refine this vision such that it could be incorporated into the future master-planning process, holistically
- Explore alternative arrangements for key land uses, built form and public domain linkages to arrive at a broad Urban Design Framework for the precinct
- Assess the impacts on the proposed planning envelope on the centre and make recommendations for amendments to the proposed LEP controls for the site that will be submitted to DPIE for gateway Determination, with a particular focus on building height and density
- Develop and test high-level site specific DCP controls for the subject property that may further inform built form outcomes and ensure that these are aligned with the recommended DCP controls

1.3 Limitations and assumptions of this study

This study is limited in the following respects:

- This study is not a town centre masterplan. It does not propose an overarching strategy that includes a testing on the cumulative impact of potential uplift to guide future development across the centre, as a whole
- As a starting point it assumes that Council has approved in principle the scale and massing proposed by the applicant and that DPE has confirmed the strategic merit of uplift to the site, dependent on the resolution of site-specific issues
- The study has been guided through engagements with Council officials and DPE representatives through collaborative workshops. Many of these officials have an in depth knowledge of the application and the site
- It assumes that Council is committed the provision of a new multi-purpose community centre on the subject property
- It is targeted at the level of urban design, which is primarily focused on the building envelope and interface conditions.
- It does not propose an alternative reference scheme or suppose that specific end user requirements will be met within the controls.
- SJB is not the author of the reference scheme and without knowledge of end user requirements can not guarantee that the land uses and servicing arrangements proposed by the proponent are still deliverable



 Investigations have been undertaken based on the level of information provided to the consultant team. Where possible additional information on levels have been sourced from publicly available databases

1.4 Process and report structure

The structure of this report reflects the collaborative process that the team, together with Council embarked on. This started with a high level policy review and site analysis that sets the context for the review of the proposal. This formed the basis for a high level vision and principles for the Chester Square Shopping Centre Precinct.

The Planning Proposal was then assessed and a series of design objectives and key moves were developed to inform future options and studies. The option studies interrogated alternative arrangement of key elements and built form with the view of arriving at an overarching urban design framework for the centre. Draft development controls were then developed and tested against the Planning Proposal reference scheme and an alternative built form envelope.

The following section outlines the policy context applicable to Chester Hill. This includes high level strategic planning through to good practice guidelines and local plans. In the pages that follow each policy is revised and the key takeaways from that policy identified.



2.1 Policy Context Review

The following section outlines the policy context applicable to Chester Hill. This includes high level strategic planning through to good practice guidelines and local plans. In the pages that follow each policy is revised and the key takeaways from that policy identified.

The final page seeks to summarise the common themes that have emerged through this study

Strategic Planning Policy and strategy







Sydney Green Grid



Greater City Region Plan

NSW 2040

Future Transport Strategy





Local Policy



Chester Square Urban Design Framework





Local Area Plans

Other studies

2.2 Greater Sydney Region Plan 2018

In March 2018, the Greater Sydney Commission (GSC) released the Greater Sydney Region Plan, A Metropolis of Three Cities ('the Plan'). The Plan is built on a vision of three (3) cities where most residents live within 30 minutes of their jobs, education, health facilities and services (refer to Figure 01). 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 the Sydenham to Bankstown Corridor as a key integration area where further growth in population and growth is expected, supported by the conversion of the existing T2 rail service to a metro line with greater capacity and frequency of service. The other key long term move is a proposed metro line connecting Bankstown to Kogarah.

Bankstown and Kogarah are identified as a strategic centre and Health and Education Precincts. There is a notional metro connection from Kogarah to Norwest through Bankstown and Parramatta, although the exact alignment of this route would be subject to further studies. These proposals have been further developed in the Future Transport Strategy 2056.

2.3 South Sydney District Plan

Fairfield

Liverpool

The South City District Plan builds off the direction provided in the Greater Sydney Regional Plan. It expects that growth will be fuelled by previously unparalleled levels of city-scale infrastructure investment including transport, public realm and sporting and cultural institutions, which will attract new and exciting business to Greater Parramatta and Olympic Peninsula (GPOP) and beyond.

The plan sees intensification in areas that enjoy high levels of accessibility and close to major centres such as Bankstown and Paramatta. As such, future growth in the short to medium term is seen as being concentrated in a number of Transit Orientated centres related to the Metro South West line that GSC. will link Bankstown to Sydney CBD and ultimately through to Tallawong with the Sydenham to Bankstown Corridor being a key growth area.

Planning Priority S8 talks to "Growing and investing in health and education precincts" and Bankstown Airport trade gateway as economic catalysts and the Kogarah health and education precinct and emerging Bankstown-Lidcombe health and education precinct are identified. The notional metro connection from Kogarah to Bankstown is identified that links towards Parramatta.

Burwood Chullora Bass Hill Campsie Greenacre s Hall Bankstown Bankstown Airport Bardwell P Roselands Revesb Peakhurst Hurstville -



Figure 16: Greater Sydney Regional Plan (Greater Sydney Commission 2018)

Chester Square Urban Design Framework



Figure 17: South City District Plan (Greater Sydney Commission 2018)

Chester Hill is identified as a local centre but no further mention is made of the area in the district plan.

The South City District Plan is currently under review by the

2.4 Green Grid Strategy

The South District Green Grid Guidelines document includes a potential north-south link along the eastern edge of Chester Hill, roughly aligned to the Duck River. A shaded walking and cycling link along the River would allow access to a range of open spaces along the River as well as connections north to the Parramatta River.

Open Space planning in Chester Hill town centre should incorporate the intent of the Green Grid work - to created tree lined streets for walking and cycling - in planning the roles and character of streets in the town centre.

SOUTH DISTRICT: THE GREEN GRID PROJECT OPPORTUNITIES

PROJECT OPPORTUNITIES

- 1. The Cooks River Open Space Corridor
- 2. Wolli Creek Regional Park and Bardwell Valley Parklands
- 3. The Coastal Walk: Botany Bay Foreshores
- 4. Illawarra Rail Line: Wolli Creek to Sutherland
- 5. M5 Motorway Open Space Corridor
- 6. East Hills Rail Line Open Space Corridor
- 7. Bankstown to Sydenham Open Space Corridor
- 8. Salt Pan Creek Open Space Corridor
- 9. Sutherland to Botany Bay Open Space Corridor [F6 Corrido
- 10. Sutherland to Cronulla Cycleway and Pedestrian Link
- 11. The Coastal Walk: Kurnell to the Royal National Park
- 12. Georges River Parklands incl. Chipping Norton Lakes
- 13. Cronulla Beaches and Peninsula Walk
- 14. Kia'Mia Way River Foreshores Walk
- 15. Woronora Pipeline and Loftus Open Space Corridors
- 16. Green Links to Cronulla Beaches
- 17. The Boulevarde Green Link
- 18. Freight Rail Line Chullora to Canterbury
- 19. Bankstown CBD Green Links
- 20. Bankstown to George River Parklands Links
- 21. Sutherland to Waterfall Active Transport Corridor
- 22. Still Creek and Bushland Trails, Menai
- 23. Mill Creek and Bushland Trails, Alfords Point
- 24. Como, Kareela and Oyster Bay Gullys and Open Space
- 25. Yowie Bay, Buraneer Bay and Port Hacking Open Spaces
- 26. Open Space Links from Port Hacking Bays to Urban Centi
- 27. Boat Harbour, Greenhills and North Cronulla Beaches
- 28. Towra Point Nature Reserve and Woolooware Bay Foresh
- 29. Oatley Memorial Park to Como Pleasure Grounds
- 30. Kurnell to La Perouse Ferry

31. Gannons Park, Lime Kiln Bay and Gungah Bay Open Spac

- 32. Padstow to Sutherland Cycle Link
- 33. Heathcote and Royal National Parks Trails

Extract from South District Green Grid Strategy



2.5 Future Transport Strategy 2056 (2020)

Future Transport 2056 sets the 40-year vision, directions and principles for customer mobility in NSW, guiding transport investment over the longer term. It presents a glimpse of the large economic and societal shifts we will see in the future and places the customer at the centre of everything we do, to ensure we harness rapid advances in technology and innovation to create and maintain a world-class, safe, efficient and reliable transport system.

Future Transport 2056 is being delivered through a strategy and a suite of supporting plans setting out a 40-year vision for transport in NSW. The new vision places a greater emphasis on the customer and seeks to build on the principle of Movement and Place to deliver a broader set of objectives.



Implications for the project

The Future Transport vision illustrates a commitment to link Norwest to Kogarah with an interchange at Chester Hill between Metro and Rail services. The north-south east-west connection to Parramatta and Liverpool places Chester Hill uniquely to benefit from improved accessibility that will make it a more desirable place to live. It will be important for Council and State Government to get ahead of the curve and strategically plan and acquire sites for greater community benefit.



2.6 CBCity 2028 - Community Strategic Plan

The CBCity 2028 Community Strategic Plan emerged through an extensive period consultation with more than 10,000 community members. It presents a vision for the City that is Thriving, Dynamic and Real. The plan consists of seven "Destinations" and seven "Transformations". The seven "Destinations" outline the qualities that citizens want to see manifest in the City. These are:

- 1. Safe and Strong;
- 2. Clean and Green;
- 3. Prosperous and Innovative;
- 4. Moving and Integrated;
- 5. Healthy and Active;
- 6. Liveable and Distinctive; and
- 7. Leading and Engaged

The seven "Transformation" are the actions and outcomes that will be delivered through the coordinated action of residents, businesses and government. These include:

- 1. We are a 'child friendly City'
- 2. A large scale solar farm is constructed
- 3. A network of Smart infrastructure is constructed across the City
- 4. The Bankstown transport hub and underground station connects movement for health, education and employment to Sydney's three cities
- 5. Canterbury and Bankstown-Lidcombe Hospitals are transformed into state of the art facilities
- 6. Our town centres are transformed through the Complete Streets approach
- 7. A collaboration is formed where local and state services are delivered through a single lens

The plan then sets out a number of indicators that will be used to measure the success of projects and initiatives



Figure 18: CBCity 2028 - Community Strategic Plan cover page

7 Destinations	City Transformations	Pathways	Impact					
Safe & Strong a proud inclusive community that	We are a 'child friendly City'	Provide high quality community services and buildings	•	ê			4 \$	•
unites, celebrates and cares		Make the City safer, more accessible - care for others	•	٢	١,	V	-	•
		Value our history and identity and promote harmony and inclusiveness	•			۲	# \$	•
Clean & Green	A large scale solar farm is constructed	Protect and promote local biodiversity	Ø	,				
with healthy waterways and natural areas		Improve local waterway health	g	7				•
		Reduce our carbon footprint	Ø	7	١,		-	۶
		Clean the city using advanced recycling and waste services	g	P				
Prosperous & nnovative	A network of Smart infrastructure is constructed across the City	Provide opportunities for a cosmopolitan, vibrant and dynamic City		٢		•	1	•
ity with exciting pportunities for westment and creativity	the City	Pursue Smart City innovations	Ø	7	۱,	V	45	۶
		Promote long term economic and employment growth		٢	۱,			
		Provide and promote artistic and cultural opportunities	•	٢		۲	4 \$	
Moving & Integrated	The Bankstown transport hub and underground station connects movement for health, education and employment to Sydney's three cities	Facilitate improved movement around the City for all users	Ø	•	٩,	¥		•
an accessible city with great local destinations and many options to get there		Provide convenient, equitable and accessible parking		٢	١,			
Healthy & Active a motivated city that nurtures healthy minds and bodies	Canterbury and Bankstown-Lidcombe Hospitals are transformed into state of the art facilities	Promote accessible parks and open space catering to all ages and cultures	•	•	4	V	4 \$	
		Promote healthy eating and active lifestyles	•	٢		۲		
		Promote life-long learning	•	۲		٠		۶
Liveable & Distinctive a well designed, attractive city which	Our town centres are transformed through the Complete Streets approach	Deliver an attractive, sustainable, affordable built environment	9		4		4 \$	
attractive city which preserves the identity and character of local villages		Ensure compliance with, and understanding of, local laws	\$	•	١,	۲	4 \$	۶
Leading & Engaged	A collaboration is formed where local	Engage, involve and empower the community						

Leading & Engaged a well- governed city with brave and future focused leaders who listen	A collaboration is formed where local and state services are delivered through a single lens	Engage, involve and empower the community to participate in decisions that affect them Deliver local and state services through shared facilities	•	
		Be innovative, responsive forward thinking leaders providing well managed, open government		
		Understand and manage vulnerabilities, interdependencies and risks for a more resilient City	Ŷ	ý

Figure 19: 7 actions, pathways and indicators of the in the CBCity 2028 - Community Strategic Plan

Success Indicators (2018 baseline)



People feel safe

- Increased use of Council's community building
 Reduced domestic violence reoffending rates
- Improved socio-economic indicators Reduced crime rates in top offending category
- Increased number of volunteers









- People feel they have access to the natural
- Resilience of the City's biodiversity is maintained
- 2km of the City's modified waterways
- 20% of the City is using renewable energy
- CBCity is a Water Sensitive City
 20 new water sensitive urban design features
- Percentage waste to landfill is reduced
- Recycle/reuse facility established
- People feel they have access to a diverse range of shopping, leisure and dining experiences
 The City holds at least five major festivals per year
- Increased youth employment
- Increased completion rate of apprenticeships and traineeships
- Increased percentage of employed residents with tertiary qualifications
- · Increased professional, health and education sector employment
- 10,000 new jobs in Bankstown and 1,500 new job in Campsie
- People are happy with their travel times to get place.
- People feel that they have access to reliable and efficient public transport
- 10% increase in length of park pathways
- Increased journey to work ratios by cycling, walking and public transport
- . Increased journeys by non-fossil fuelled vehicles
- People feel they have access to high quality health service People feel they can view and/or participate in sport and recreation
- Local health districts report 5% reduction in childhood obesity by 2025
- Catchments have safe, accessible open space within 5-10 minute walk
- Increased number of Year 3 children s
- Number of schools sharing open space with Council
- Increased active library membership per capita 10% increase in number of students in top two NAPLAN bands
- Increased percentage of local students undertaking tertiary studies
- Range of modern aquatic facilities meet future needs of our community
- · People feel they have access to affordable, decent housing Isso fall new development in growth precincts is affordable housing
 Increased art in the public domain
- New rules are introduced that deliver major
- improvements to the design and sustainability ou in all new developments across the City Percent of people living and working in the City
- NPS People recommend CBCity to others as a good place to live
- Increased satisfaction with 'confidence in leaders'
- Increased satisfaction with 'opportunities to participate in decision making' Increased local Australian citizenship
- The City is becoming more resilient

2.7 Connective City 2036 Canterbury Bankstown Local Strategic Planning Statement 2020

The Canterbury Bankstown LSPS builds on the CB City Vision 2028 and sets out a bold vision for the futre development of the LGA as a "connected city". It builds on the LGAs strong blue-green links, specifically particularly the three major river systems - the Cooks, Georges and Parramatta rivers - as well as planned public transport investments into the metro line that will connect Bankstown to Sydney CBD with a high capacity high frequency commuter rail service.

Emphasis is placed on the two Strategic Centres of Bankstown and Campsie as nodes of employment and residential intensification. Chester Hill is identified as a local node with a green open space system linking the Cooks River to the south to the Duck River to the north.

Five city-shaping moves or "Directions" are set out that will guide the structure and growth of the LGA. These include:

The 5 Metropolitan Directions are to:

- 1. Support Greater Sydney's evolution into a Metropolis of Three Cities;
- 2. Allocate metropolitan-serving roads while optimising Canterbury-Bankstown as a freight and distribution powerhouse
- 3. Fulfil the aspiration for an interconnected mass transit system
- 4. Connect the Cooks, Georges and Parramatta river catchments through the Greater Sydney Green and Blue Grids
- 5. Support a growing Sydney by creating a hierarchy of great places and dynamic urban centres.

The 5 more local City Directions focus on:

- 1. Chapel Road Precinct, Connective City's heart from Chullora to Bankstown
- 2. Eastern Lifestyle and Medical Precinct Campsie to Kingsgrove
- 3. Bankstown Aviation and Technology Precinct
- 4. 34 centres and their surrounding suburbs
- 5. Canterbury-Bankstown's river systems and tributaries.



Chester Hill is identified as one of 34 local centres. As a local centre Chester Hill will is expected to provide urban services to a broader catchment and make a substantial contribution to meeting local housing targets.



Implications for the project

In light of the future metro link from Kogarah to Norwest outlined above in the Future Transport Strategy the long term role and function of Chester Hill as a local Centre maybe under-represented. Forward planning should consider the implications of the future metro and steps taken to ensure that growth is adequately considered in the long term

2.8 Draft Housing Strategy 2020

The Housing Strategy outlines Councils strategy for accommodating future growth with the view of aligning investments into community infrastructure and planning. Chester Hill is catagorised together with Sefton with a population of 18,468 and experienced a growth of 11% from 2011- 2016. No specific targets are made for Chester Hill targets to 2036 - with the need to accommodate 10,100 across the 9 local centres which amounts to approximatively 1,100 per centre..

The general direction is facilitating multi-unit dwelling options within a core area of the centre with a transition to lower density residential neighbourhood areas outside the centres, with a focus on improving the vitality of shopping centres by increasing the population.

Also of significance is the Canterbury Bankstown Affordable Housing Strategy that sets a target for all Planning Proposals that include significant residential uplift. Currently this target is 5% of total dwellings to be provided in perpetuity.



22.9 Employment Lands Strategy 2020

The Employment Land strategy seeks to protect and support employment growth within the LGA. The strategy notes that there is currently 16,000m² of employment floorspace in Chester Hill with 8,300m² being the existing retail centre (50%).

Forecast growth is 26%, which is low compared to other centres (Canterbury 63%, Belmore 42%, Punchbowl 47%) The anticipated growth in floorspace to 2036 is 5,900m² - which includes 1,900m² retail and 4,000m² commercial

Implications for the project

- There is an expectation that Chester Hill will contribute to the delivery of housing targets. Based on a highlevel review, the indicated target could probably be accommodated within the existing planning controls.
- Despite existing controls allowing for building up to 8 storeys market conditions and fractured ownership currently hinder this centre from delivering large numbers of units
- Chester Square is strategically well located close to a train station and will be expected to provide 5% affordable housing on the site

Implications for the project

- The site is adjacent to Villawood and Regents park employment areas and will not compete with these important nodes of employment.
- The expansion of retail uses on the site will improve the attractiveness of the centre and better service local residential and working populations.
- Growth in non-residential floor space is likely to be local population serving and will compete with other local centres such as Fairfield that have a broader retail and commercial offering.



2.10 Draft Connecting with Country Framework

The Draft Connecting With Country Framework is a framework for developing connections with Country to inform the planning, design, and delivery of built environment projects in NSW. It is intended to help project development teams – advocating ways they can respond to changes and new directions in planning policy relating to Aboriginal culture and heritage, as well as place-led design approaches. It also aims to help project teams gain a better understanding of, and to better support, a strong and vibrant Aboriginal culture in our built environment.

The methodology includes four stages including:

- Sensing
- Imagining
- Shaping
- Caring

It promotes a continuous, iterative and cyclical approach to planning and design and goes on to establish seven principles of design including:

- 1. Respecting the rights of Aboriginal peoples to Indigenous cultural intellectual property, and we will support the right of Country to be cared for.
- 2. Prioritising Aboriginal people's relationship to Country, and their cultural protocols, through education and enterprise by and for Aboriginal people.
- 3. Prioritising financial and economic benefits to the Country where we are working, and by extension to the Traditional Custodians of that Country.
- 4. Sharing tangible and intangible benefits with the Country where we are working, and by extension the Traditional Custodians of that Country, including current and future generations.
- 5. Respecting the diversity of Aboriginal cultures, but we will prioritise the local, place-specific cultural identity of the Country we're working on.
- 6. Prioritising recognition and responsibility of Aboriginal people, supporting capacity building across Aboriginal and non-Aboriginal communities, and across government project teams.
- 7. Supporting Aboriginal people to continue their practices of managing land, water, and air through their ongoing reciprocal relationships with Country to create opportunities for traditional first cultures to flourish.











Implications for the project

Council and significant development partners need to look for ways to connect to Country and involve Traditional knowledge holders in the design and planning process

2.11 Movement and Place Guidelines

The Movement and Place Practitioner's Guide signals State Governments commitment to public space and place-based planning within within State and local government. It responds to emerging challenges of adapting to a changing climate, changing demographics, population growth, and supporting healthy lifestyles and social interaction.

The objective of Movement and Place is to achieve roads and streets that:

- contribute to the network of public space within a location, where people can live healthy, productive lives, meet each other, interact, and go about their daily activities
- are enhanced by transport and have the appropriate space allocation to move people and goods safely and efficiently, and connect places together. Balancing movement and place recognises that trade-offs may be required to achieve a best fit for the objectives.

The guide establishes a process and language that sets the conditions for successful places to occur around roads and streets. It introduces:

- 1. A six-step process of collaboration has been established as the means of taking a Movement and Place
- 2. New methods are advanced for understanding place through "form, activity and meaning" and movement in its relationship to,through, and within places
- Performance indicators have been defined for all projects to report against, grouped into five built environment themes, including core and supplementary indicators for evaluating options
- 4. Classification of street environments has been adapted, and its role and purpose redefined

Implications for the project

The increased draw of Chester Square as a retail destination and the planned Metro service and interchange with the rail station requires an interrogation of the movement and place functions of the streets within the centre with a greater emphasis on creating nice streets that service a broader range of users and prioritise people and pedestrians





Movement





2.12 NSW Government and Council Polices for Open Space

There are a wide range of NSW Government and Council policies that are used to inform design and planning around open space. Some of these include Greener Places (2020), landscape of the site specifically are listed and summarised below.

Greener Places - GANSW (2020)

Greener Places is a design framework for urban green infrastructure. It seeks to capture the State's collective aspiration and expectations in planning, designing and delivering green infrastructure in urban areas across NSW. The aspiration is to create a healthier, more liveable, and sustainable urban environment by improving community access to recreation and exercise, supporting walking and cycling connections, and improving the resilience of our urban areas. The guide places a particular emphasis on open space quality and fit for purpose criteria.

Design guides for Open Space for Recreation – Green infrastructure for people, Urban Tree Canopy – Green infrastructure for climate adaptation and resilience and Bushland and Waterways – Green infrastructure for habitat and ecological health support the delivery of the Greener Places Targets and have been used to inform the design development of this master plan.

GANSW Urban Tree Canopy – Green infrastructure for climate adaptation and resilience:

The percentage of canopy cover in areas identified as priority links within the Sydney Green Grid aligns with the urban tree canopy targets:

- \cdot > 15 % in CBD,
- \cdot > 25 % in medium to high-density areas; and
- \cdot > 40 % in suburban areas.



Implications for the project

As the site is heat prone and subject to significant uplift a minimum of 12% tree canopy cover should be sought , though the LSPS has set higher targets for the tree canopy cover.



Open Space for Recreation Performance Criteria

The OSFR Guide outlines the typical process for preparing an open space for recreation plan, involving the analysis of the existing and potential future provision of open space within a given area. This is assessed against performance criteria relating to accessibility and connectivity, distribution, size and shape, quantity, quality, and diversity. Each criteria has a set of performance indicators that are tailored to different development scenarios, ranging from greenfield to high density areas.

The open space performance criteria summarised opposite are provided in the OSFR Guide. A set of performance indicators is provided for each criteria, focusing on the requirements for high density areas (>60-100 dwellings/ hectare),

Accessibility and Connectivity

- For high density areas, residents must be within 2-3 minutes / 200m walking distance to a local, district or regional park
- For medium density areas, residents must be within 5 minutes / 400m walking distance



Distribution

- For high density areas, residents must be within 2-3 minutes walk / 200m of local open space
- For medium density areas, residents must be within 5 minutes walk / 400m of local open space
- Residents must be within 25 minutes walk / 2km of district open space
- Residents must be within 30 minutes travel / 5-10km to regional open space
- Workplaces must be within 400m of open space
- Schools must be within 400m of open space

Quantity

- · Quantity refers to the capacity of open space, meaning the quantum in relation to the population density within the access catchment.
- While the capacity of open space is important, other factors such as the quality and diversity of open space should also be considered.
- The World Health Organisation (WHO) states that on average, a minimum of 9 sqm of accessible open space should be provided per person.
- An average of 3 sqm of accessible local open space should be provided per person
- An average of 11sqm of accessible district open space should be provided per person



Quality

Key characteristics that may influence the quality of open space include:

- · Visual and physical access
- Landscape setting
- · Condition of facilities and equipment
- · Maintenance
- · Number of activation within the space
- Size, shape and topography
- · Adjacent land uses
- · Amount of vegetation
- **Biodiversity outcomes**

Diversity

as:

- · Local recreation space
- · Active recreation space
- · Large community outdoor recreation area
- · Fitness and exercise space
- · Off-leash dog exercise area

Implications for the project

As part of this development and in the future masterplanning processes additional open space will need to be secured for the growing population of Chester Hill

Size and Shape

Desirable minimum size of a local park is 0.3 ha · Local open space: 0.15-0.5 ha for high density areas Consider specific size / shape requirements for sporting facilities



The diversity of open space is determined by the types of recreation opportunities available. These are categorised

- · Local play for the very young
- · Local children's play
- · Youth recreation space

· Trail and path-based recreation

2.13 Canterbury Bankstown Urban Heat Study 2020

The purpose of the Study is to provide Council with an evidence-base relating to the issue of urban heat and the urban heat island effect in the City of Canterbury Bankstown local government area (LGA/CBCity), particularly in relation to community heat vulnerability and resilience.

The Study recommends a range of actions with time lines for Council to consider that address urban heat and work towards cooling CBCity, under the following five themed strategies:

- Increased greening
- Increased water in the landscape
- Increased use of cool materials
- · Policy and planning controls that prioritise resilience, and
- · Education, engagement and partnerships.



Figure 20: Heat vulnerability mapping CRED 2020)



Figure 21: Tree density mapping (CRED 2020)



Chester Hill is classified as very vulnerable and strategies to mitigate potential negative impacts of urban heat. Increases vegetation cover will be a critical contributor to this as the centre is identified as having 0-10% canopy cover

Future DCP controls should also consider minimum tree canopy cover requirements and the use of the use of lighter material to minimise the heat island effect



LGA Boundary	Vegetation Density - Trees
Suburbs	0% - 10%
Waterbodies	10% - 20%
Streams	20% - 30%
Hailway	30% - 40%
Major Roads	40% - 50%
Sydenham to	50% - 60%
Bankstown Urban renewal	60% - 70%
Corridor	70% - 80%
	80% - 90%
	90% - 100%

2.14 Local Area Planning 2012

A raft of local area planning was undertaken in 2012 that was used to inform local area controls. This shows commercial uses along Waldron Road and around Chester Square shopping centre with buildings of 6-8 Storeys. Nugent Park is seen as the primary public open space serving the centre with a cultural hub located to the south around Chester Hill Public school and the Chester Hill library and Knowledge Centre, and Chester Hill RSL

Community Aspirations

Community	 Local youth Elderly Child care Indoor sports Green open space
Movement	 Additional parking near station and local shops Improved traffic through the centre Regional cycle links Accessible train station
Public Domain	 Better lighting Upgraded footpaths Signalised pedestrian crossings
Built Form	 Maintain small scale development Sense of community in the centre New housing near public transport Consolidation of land to promote redevelopment Some support for higher residential development Some support for 'missing-middle' typologies

 Provide variety of housing forms to allow for 'ageing in place'

Implications for the project

The existing controls allow for a substantial amount of additional development in the centre. These have largely not been taken up from a number of reasons including fragmented property ownership, LAHC prioritising other land holdings and a generally suppressed local property market. If this project can deliver increased amenity and livability, it could be catalytic development for increased investment and renewal of the centre.



Figure 23: Vision for Waldron Road - LAP 2012



Figure 22: Vision for Waldron Road - LAP 2012

2.15 Strategic Priorities

The following is a brief summary of the findings of the policy review and combines the key elements of each document into a series of priorities that talk to the future visioning for Chester Hill as considered by the various authorities.



Economic growth with an emphasis on supporting centres

Providing an appropriate amount and diversity of floor space for local businesses will support economic growth and support the development of the centre and needs change



Connecting centres and 2 communities

New and improved connections will allow residents to access opportunities and amenities in the broader metropolitan area



Support Transit-Oriented Development



Deliver connective infrastructure and supporting land use intensity in close proximity to public transport and encouraging less car use and increase liveability



Improve resilience and and Increase Canopy Cover



Mitigating environmental effects to create more comfortable public spaces and increase sustainability of the centre will make Chester Hill more resilient to urban heat and climate change



Promote active mobility and local movement



Improved connections, better public domain, safer and more comfortable spaces and encouraging active transport

Improving the quality of development



7

The quality of the built environment dictates the character and identity of a place. Improving the quality of the buildings and public domain has long lasting effects on quality of life and attractiveness of places



4



Connect Public Open Spaces and Embrace Existing Natural Assets

자_开 New and improved open space networks will allow the community to interact in diverse environments and connect with Country and explore the benefits of the natural environment

Growth of Housing Density and Diversity

The development of new housing would encourage revitalisation and activity within the centre and a diversity of housing options would provide for the varied demographic of Chester Hill

This chapter presents a high level analysis of the centre with the view of defining the constraints and opportunities for the urban design framework.



3.1 Contextual Overview

Key observations include:

- Chester Hill is a suburban local centre which benefits from a close proximity to employment areas.
- \cdot The centre is split by the railway line
- The community hub including the library and school are separated from main commercial centre
- · Currently low rise suburban context
- Lack of visible development activity
- · Concentration of LAHC properties along the railway line
- A significant retail offering would cement the economic role
 of the centre and attract more private vehicles and traffic
- Road network is discontinuous with limited crossing points over the railway line
- The existing open spaces are located adjacent to the station and railway line, experience access limitations and offer limited amenity to residents. It could be argued that these sites are more valuable as development



Implications for the project

- The area has not attracted any significant public or private investment in the last twenty years.
- The low density nature of the context and the spread out nature of land uses impacts negatively on the level of activity that happens within the centre

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3.2 Site photos - Waldron Road and surrounds



Shops along Waldron Road - eastern end / Priam Street



Shops along Waldron Road



Large Plain Tree outside the post office and link to Chester Square



Shops along Waldron Road - close to the station



Retail adjacent to the station, at Chester Hill Road



Poor quality connection to Waldron Road via Charles Place



Recent small scale development on Priam Street



Shops along Waldron Road -fronting onto Nugent Park



Infill opportunities on Priam Street







Chester Lane link to Chester Square



Mariner shopping centre with a level change and no real street address

Street front retail at the southern end of Priam Street

3.3 Site photos - Chester Square shopping centre



North west corner at the intersection of Bent and Leicester Streets



Open parking with trees along Leicester Street



Service yards opening directly onto Leicester street



Frost Lane functions as a service lane with level changes north to south



South western corner with parking entrance at the corner of Frost Lane and Priam Street



Tree planting along the northern edge of the site (Leicester Street



Food and beverage cluster on the corner of Leicester and Priam Streets



Internal level change with link to Frost Lane / Chester Lane



Car dominated forecourt to retail units with no relation tot he street



External level changes onto Priam Street

3.4 Bankstown Open Space Strategic Plan 2013

The Bankstown Open Space Strategic Plan from 2013 identified a general lack of open space in Chester Hill, especially at the local scale. Regional parks such as Campbell Hill Pioneer Reserve to the north, Shortland Brush to the South West and Maluga Park to the East are difficult to access via walking/cycling, however are popular places to visit via car. The closest park to the town centre is the sports grounds at Frank Bamfield Oval. This facility includes two sporting fields, a youth centre and a very small playground.



Figure 24: North West district diagram from Bankstown Open Space Strategic Plan, prepared in 2013



1 Frank Bamfield Oval at Abbot Park



2 Maluga Park



Maluga Park Playground



- Cricket oval
- Soccer Pitch
- Small playground
- Youth centre hall for hire

- Pond and bird habitat
- Walking trails
- Picnic facilities



- Playground
- Outdoor gym
- Picnic Facilities



- Walking trails
- Picnic facilities
- Views to Prospect Creek
- Bushland

3.5 Open space near the town centre

Open spaces near the Town centre include one sports field complex at Abbot Park, a local park on Chester Hill Road -Nugent Park, a small park along the main street of Waldron Rd, also named Nugent Park and a pocket park on Forshaw Avenue.

Due to the proximity of the two portions of Nugent Park to the town centre, train station and public schools, these parks offer great potential to enhance the range of outdoor activities available within short walk of the town centre as well as increase the vibrancy of Waldron Road.

The Bankstown Open Space Strategy suggests the development of a Masterplan for North Nugent Park and the CBCity Playground Strategy suggests:

- \cdot increasing the play level and equipment type at Forshaw Reserve;
- upgrading play equipment at Nugent park to the same play level; and
- $\cdot\,$ increase play levels at Abbott Park, with a focus on older children.





1. Nugent Park on Chester Hill Rd



2. Nugent Park on Waldron Rd



3. Abbot Park sports fields



4. Pocket park on Forshaw Ave

Nugent Park North





A significant proportion of Nugent Park is hard landscaping and asphalt adding to urban heat Level changes have made it challenging for development to address the park in a positive way and the park is unactivated



The toilet block in Nugent Park creates potential CPED issues in the park after hours







Nugent Park is dominated by transport related infrastructure, including covered walkways and bus shelters and provides no amenities for children

3.6 Quantifying Open Space

The adjacent plan maps the quantum of public open space within a 200m catchment of the Chester Square site. Traditional planning guidelines recommend 2.8Ha of open space per 1,000 people. While the existing amount of open space may be appropriate for the existing population residing in low density housing, as densities increase investment will be required to improve both the quantum and quality of public open space in the centre.

The Government Architects guidelines for the provision of open space recommends that residents in high density environment should have access to quality open space within 200m of where they live. The total public open space within 200m of the high density centre is 11,362m².

It is also important to note that the construction of the future metro station is likely to lead to the loss of Nugent Park North (2,937m²) as a recreational space for residents. While a civic station plaza is likely to be developed as part of the metro this space together with any open space provided on the Chester Square site will only be able to meet some of the recreational needs of residents and appropriate spaces for children's play and passive recreation will need to be found within the precinct.

Council should further explore the opportunity to provide additional open space within the Chester Hill Centre as part of the future Masterplan.



Figure 25: Existing open space accessibility and quantums
3.7 Movement and Place Assessment

To develop an appreciation for what an appropriate response to the site, and more broadly the centre would be the adjacent plan illustrates the existing categorisation of the street based on the GANSW's Movement and Place Framework. the Framework identifies four street environments to provide an understanding of where movement and place interact.

Plan illustrates that the majority of the streets can be catagorised as local streets. What is also evident is that the streets are car oriented and that there is a lack of civic space (pedestrian priority shared spaces) within the centre.







Figure 26: Existing movement and place categorisation of streets

3.8 Vehicular Traffic Conditions



Map 2

Source: TEF Consulting 2017

The traffic study undertaken by TEF Consulting in 2017 reveals a number of key trends for how the centre is used and accessed by pedestrians and vehicles. The key take aways include:

- Walldron Road is a key regional east- west link that is classified as a regional distributor carrying high levels of traffic. TfNSW will need to be consulted for any changes to these roads.
- Priam Street appears to be the main street for accessing the centre and is also a by-pass for traffic looking to avoid traffic signals at Chester Hill Road.

Volumes and Speed Counts



Car Crashes (July 2009 to June 2014)

3.9 Existing Pedestrian Movement



Map 3

Source: TEF Consulting 2017

The key take aways from a pedestrian movement perspective include:

- The highest pedestrian counts at signals are to the west of Chester Hill Road, with pedestrian numbers being highest at Bent Street
- The highest number of informal mid-block crossings for pedestrians occurs across Waldron Road to the east of Chester Hill Road and also across Wellington Road in the vicinity of Nugent Park south as people move towards the station or access the park informally.

Pedestrian Peak Hour Counts at Crossing Facilities

Map 4

Mid-block Pedestrian Peak Hour Counts

3.10 Existing LEP Controls



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Land use zoning Figure 27: Existing LEP plans

The existing LEP controls for the centre are aligned with the 2012 Local Area Planning Framework that envisages mixed use development along Waldron Road and buildings up to 26m / 8 storeys along Waldron Road. Buildings heights scale back from the high street with buildings of 20m / 6 storeys permitted on the Chester Square site.

FSR controls along Waldron Road are relatively generous at 3:1 allowing for medium rise development. All these controls are typical for local centres.

Zone			
B1	Neighbourhood Centre		

B2	Local Centre
B4	Mixed Use
B5	Business Development
B6	Enterprise Corridor
B7	Business Park
E1	National Park and Nature Reserves
IN1	General Industrial
IN2	Light Industrial

- IN2 Light Industrial
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- RE1 Public Recreation
- RE2 Private Recreation RU4 Primary Production Small Lots
- Special Activities
- SP2 Infrastructure
- W1 Natural Waterways

Floor Space Ratio

Maximum Floor Space Ratio (n:1)

0.5
0.6
0.7
0.75
1
1.25
1.5
1.75
2
2.5
3
4.5

Maximum Building Height (m)

J	9.0
K	10.0
L	11.0
N1	13.0
N2	14.0
0	16.0
Ρ	17.0
Q1	19.0
Q2	20.0
S	23.0
T1	25.0
T2	26.0

3.11 Constraints

The key constraints within the study area include:

- 1. The railway line which has limited crossing points
- 2. The important mobility function of Waldron Road limits access, opportunities to cross and opportunities to change intersections.
- 3. Fine grain and fragmented property ownership along Waldron Road and within the blocks surrounding the centre that will present challenges for amalgamation and redevelopment
- 4. A discontinuous road network that concentrates traffic and leads to congestion
- 5. A lack of high quality open space within the centre

Key

	Study Area
	Planning Proposal Area
	Open Space
	Small, fragmented lots along the high street would be difficult to maintain and develop in the long term unless multiple lots are under single ownership
\rightarrow	The high street is the primary movement corridor through the town centre and is immediately adjacent the busiest foot traffic area creating a conflict of uses
	Busy intersections along the high street contribute to increased traffic congestion and movement potential to residential areas
~	Stronger traffic along part of the high street would need to be mitigated through future urban interventions
1	Noise from the high street and primarily from the railway line can limit development potential and impact quality of public life on the high street
×	Primary north to south link includes crossing a rail bridge that can be tight and constricted and difficult to accommodate future changes in traffic congestion
→	Close proximity to the industrial precinct can cause conflict with residential uses due to noise and a high amount of traffic from large vehicles
:0:	200m open space catchment. Only Abott Park and Nugent Park are of adequate size for local open spaces according to CANSW Grooper Places quides. All dwollings under this quide

GANSW Greener Places guides. All dwellings under this guide are expected to be within 200m of local open space. There is a lack of open space in Chester Hill particularly to the east.



Figure 28: Constraints Plan

3.12 Opportunities

The adjacent plan illustrates the key spatial opportunities in the centre. These include:

- Use underdeveloped land to attract new investment 1. into the centre and reinforce Waldron Road as a vibrant high street
- 2. Better connect Chester Square Shopping centre to Waldron Road via Priam Street, Bent Street and Charles Lane
- З. Improve the quality of the public domain for pedestrians and connections across Waldron Road
- Better connect the areas north and south of the railway 4. lines
- Intensify development within 400m of the railway 5. station / potential metro station location
- 6. Optimise development opportunities on strategically well located sites (commuter car parks)
- Improve the quality and functionality of open spaces 7. within the centre and increase tree canopy and deep soil to address urban heat
- 8. Retain the human scale and fine grain qualities of the shopping main streets

Key

	Study Area
	Planning Proposal Area
	Mix of open spaces within close proximity to the town centre and the study area
	Large areas of undeveloped R4 lands could accommodate significant residential uplift and increase activity
	Mixed use intenfication along important streets
\rightarrow	Clearly defined circulation and strong permeability from the high street to residential areas to the north
→	Multiple rail crossings allow for increased movement potential between north and south and could help to mitigate future traffic impacts
	Clearly defined areas of active frontage and street activation
*	Multiple and diverse community facilities and points of interest are spread throughout the town centre and within close provinity of the station and study area

- proximity of the station and study area
- Opportunity to provide improved interface and connectivity from the town centre core area with surrounding residential areas 1



This section of the report presents a brief synopsis of the Planning Proposal for Chester Square and the peer reviews that were prepared prior to the submission of the proposal with DPIE for Gateway Determination.

It is important to note that this study is not a second peer review, however issues picked up by the peer reviews and notes from the Local Planning Panel are important as the future DCP controls will need to address some of the issues raised.



4.1 Planning Proposal Description

The Planning Proposal seeks to redevelop the existing Chester Square Shopping Centre into a mixed use development with a two level retail mall, a multi-purpose community centre / library, a publicly accessible open space and apartments above. One level of retail floorspace is located partially below ground and a 2,000 cold shell would be provided for Council to re purposed as a multi purpose community centre / library The proposal included a connection to Waldron Road via Chester Lane.

The original Planning Proposal for the site maintained a B2 Local Centre Zoning and sought and increase in FSR to 4.53:1 and building heights between 11m and 65m across the site, allowing for buildings of up to 18 storeys.

The GFA would be increased from 8,268m² retail floor space and 1,000m² of commercial floorspace to 15,763m² of retail floorspace, and approximately 648 apartments on top of the shopping centre.

The proposal was subject to a peer review and changes were made to the Planning Proposal which was resubmitted to Council. The revised planning proposal increased the FSR to 4.53:1 and reduced building heights to range of buildings heights up to from 14-62m (up to 18 storeys as endorsed by Council). It also proposed the 5% affordable housing, a 2,300m² open space and the widening of Frost Lane by 1.5m.

4.2 Initial observations

While this is not a peer review, in it's support of the proposal the Local Planning Panel did identify a number of urban design issues that needed to be addressed through development controls. Many issues identified by the Peer Reviews, especially in relation to the urban design concerns, were not addressed in the proponent's revised submission (as per July 2020).

The positive features of the Planning Proposal include:

- The Planning Proposal represents a significant investment into the centre which
 has largely not seen any significant development in the last 20 years
- · It is the largest and most consolidated development opportunity in the centre
- $\cdot\,$ The delivery of a new open space within the centre will create a place for the community to be proud of and identify with
- The under-grounding of large floor plate retail units and servicing opens the ground floor for active uses and public domain





Figure 30: Visualisations of the Planning Proposal (Turner 2020)

Areas that need refinement and improvement as part of this study include:

- The proposed new open space is located within the urban block, has only one street frontage and is not strongly connected with the surrounding street and open space network
- The location of the multi-purpose community centre in the centre of the sit and surrounded by the shopping centre and residential towers means that it lacks a strong street address and urban presence
- The concentration of retail and civic destinations on one site centralises activities within the centre and could discourage people from moving through and around the centre
- The scale and nature of the proposal is not in keeping with the character and identify of Chester Hill which is comprised of narrow stop fronts and fine grain ownership. It is unlikely that this is likely to change given the barriers to amalgamation
- The proposal is significantly taller than any building within the local context with little to no reference to existing contextual architectural elements such as street walls and awnings
- No architectural devices (such as street walls or setbacks) have been employed to mediate the transition in height and allow for a transition in scale over time, particular along Priam Street
- Frost Lane is significantly overshadowed by the residential towers and library canopy and is likely to be impacted by wind down drafts
- A high level of primacy given to Frost Lane as primary address for residential towers, however this street functions as a back lane with servicing and vehicular access to the Waldron Street properties. The 1.5m setback along Frost Lane is not likely to deliver a positive urban environment
- The under-grounding of the shopping concourse creates an internalised retail experience that is not connected to street level and requires artificial lighting and ventilation
- The eastern and western edges of site (Priam and Bent Streets) are compromised by servicing and vehicular access
- The development has not delivered any deep soil (most tree planting is on structure) and the level of tree canopy provided falls short of Governments guidelines and aspirations
- The single mega structure typology doesn't lend itself well to staging and could result in the offloading of a large number of residential units within the local area at a time when there is a lack of demand. This may have impacts on the viability of redevelopment opportunities in the short to medium term









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Figure 31: Proposed east-west cross section

Figure 32: basement retail level

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Figure 33: Frost Lane / intermediate level

Chester Square Urban Design Framework



4.3 Supporting Documentation and Peer Reviews



In March 2020 Place Design Group undertook a review of the original Planning Proposal as submitted to Council and noted the following:

Issues around height and transition

The proposal fails to address the height of the buildings in relation to their existing context and consider building heights in relation to the future context as determined by the planning scheme and Local Area Plan. The recommendations included reducing the height of the buildings to 14 storeys and locating taller elements in the centre of the site.

Articulation of the building

The building well-articulated horizontally, but the vertical building planes could be better articulated. The revised planning proposal provides a better articulation response breaking the building through changes in materiality and facade detail to achieve articulation. Increasing building setbacks does little in the way of breaking up vertical surfaces.

Connectivity

The proposed connections from both Bent and Priam Streets need to be carefully detailed in order to link into the existing high street and improve levels of safety. It was suggested that the through-site link should open to the sky, be generous in width (6m minimum), be suitably activated along their edges, facilitate end to end views, be appropriately lit, have surveillance from surrounding buildings and no points of concealment. The inclusion of pedestrian access points if they were for the full height of the buildings, would contribute to the articulation of the proposal and help break down the bulk



Figure 36: Proposed delivery of Chester Place through the acquisition and dedication of the post office site (Place Design Group)

Frost Lane

Frost Lane currently functions as a service lane. Any further activation of this lane with retail and commercial uses has the potential to detract from activation along Waldron Road. The focus of retail activation and public realm improvements should be on maintaining an active and vital main street for Chester Hill being Waldron Road. Any activation or public realm detail should be limited to the activation of a pedestrian connection between the planned development through Charles Place to Waldron Road. It was the position of this review that any further activation of Frost Lane was unnecessary.

Chester Place

Place Design Group also proposed changes to the public domain and movement system including the widening of Chester Place into a public square through the acquisition and dedication to Council of the existing post office site.

It is important to note that the original planning proposal was amended in response to this review



Figure 37: Recommended reduction in building heights from 18-14 storeys



Figure 38: Recommended reduced FSR to 3.5:1



Economic Impact Assessment (AEC) and Peer Review (SGS)

Development on Waldron Road

Development is unlikely to occur along Waldron Road due to fragmented lot ownership and low desire for increased commercial floorspace increasing construction costs. This can be mitigated through site specific controls that limit the amount of car-parking required or the ability to locate carparking elsewhere.

Commercial Development

There is little demand for additional commercial floorspace. The previous planning proposal had 1,000sgm commercial floorspace however this was removed in the latest amendment due to this information.

Retail Demand

Retail demand across the Chester Hill centre is 912sqm. The proposal is providing an additional ~7,400sqm from existing, much higher than the demand. This could mean two things; Chester Square could dominate the retail sector of Chester Hill and would lead to diminishing value of retail on Waldron Road, or, Chester Square could drive the renewal and increase the demand for retail floorspace that revitalises the entire centre.

Chester Square Feasibility

Feasibility modelling suggests that development on the Chester Square site would be more feasible under current planning controls of 2.5:1 FSR compared to the proposed 4.5:1 FSR or reduced 3.5:1 FSR. This is due to increased construction costs as height increases which in turn reduces the residual land value. The existing control scenario is the only scenario that returns a positive feasibility.

Dwelling Demand

There is enough latent capacity in existing controls to facilitate the demand for apartments in Chester Hill to Sefton, however some of this may not be feasible now, but may become feasible under future market conditions. The proposal would outpace demand and deliver 166% of the apartment demand from 2016-2036 and would likely take a long time to sell down. Demand also highlights a need for alternative housing typologies beyond just apartments such as dual occupancies or medium density housing.

The applicant responded via Atlas Urban by asserting that the proposal is consistent with planning policy objectives and would not lead to any unacceptable trading impacts on existing retail centres in the surrounding area and also argued that SGS feasibility results were not benchmarked against development site sales and that the site is not feasible for redevelopment under current planning controls, requiring a rezoning to enable higher densities to unlock the development opportunity.



Chester Hill Social Infrastructure Needs Peer Review (Ethos Urban)

It must be noted that this peer review appears to be related to the original Planning Proposal prior to the inclusion of a 2,000m² multi purpose community facility within the development.

Key Findings

- There are a relatively large number of local community facilities within Chester Hill that are owned and operated by Council, including Chester Hill Library and Knowledge Centre, Chester Hill Neighbourhood Centre, Bill Lovelee Youth Centre, a childcare centre and guides hall; as well as open space assets.
- Recommendations from previous social infrastructure planning emphasise increasing the utilisation, size and guality of existing facilities, and enhancing the connections between existing facilities to deliver a vibrant "hub" of community facilities in a single location close to the train station. The recommendations do not support delivery of a new standalone facility of below benchmark size, disconnected from other community facilities in the Chester Hill local centre.

Adequacy of proposed social infrastructure

· The following social infrastructure is proposed to accommodate the needs generated by the proposed development, and the development of the Chester Hill local centre more broadly:

• Supply of up to 5% housing stock within the development to be retained by the Proponent and operated by a Service Housing Provider as affordable

· 60sqm community centre (cold shell) within the development

 Financial contribution towards upgrade of Nugent Park North and Nugent Park South

· The delivery of a relatively small, standalone, cold shell

community centre within the development does not align

with Council's broader approach to social infrastructure provision in the LGA, or with best practice principles for

social infrastructure provision

Based on the peer review, the existing proposed community benefits are considered inadequate, and the following alternative community benefits are proposed:

 Financial contribution towards upgrade of Nugent Park North and Nugent Park South.

· Financial contribution towards upgrade and/or expansion of existing community facilities within 400m walking distance of the site, including:

· Bill Lovelee Youth Centre

Chester Hill Library and Knowledge Centre

Chester Hill Community Centre

Following review of these Peer Reviews, the following responses were provided by the proponent:

Additional advice from Altas Economics on behalf of the proponent regarding the project's feasibility.

Removal of 1 storey from the reference scheme down to 18 storeys (Height of Building controls were reduced from 65 to 62m), noting that additional urban design works would be required post-Gateway to confirm the detailed controls. An increased Public Benefit offer from the proponent to Council which included:

• circa 2,000 community space constructed within the development,

• 1.5m widening of Frost Lane (to be dedicated to Council), • public domain improvement to Waldron Road (as

proposed by the Place Design Group),

· embellishment of Charles Place,

• the creation of a circa 2,800m² publicly accessible central plaza (24/7 public access to be secured on title),

Upgrades to local traffic network including intersection

signalisation at Waldron Road / Priam Street, and,

housing for a minimum period 10 years.

4.4 Aligning Assumptions



Figure 39: Model provided by Turner illustrating a high level of architectural resolution

As alluded to in the introduction the purpose of this study is to provide Council and DPIE with an evidence base for the approval of new development controls for the site. The focus of the study is on the building envelope and urban design interface conditions and to refine the proposal submitted by the applicant before submission to the Department of Planning, Industry and Environment to request Gateway.

It is clear from the documentation provided by the applicant has been resolved to a high level of detail to ensure that the spatial requirements of the end users (specifically the anchor retailer are met). The reference scheme is highly detailed with GFA calculated from an architectural model that considers a specific apartment mix and this ensures that the various elements are arranged to meet building regulations and standards (ADG and BCA).

It is also worth noting that the model provided by the proponent during this process illustrated that one of the towers in the centre of the site was 19 storeys (not 18 as outlined in the Planning Proposal). This is because it is possible to deliver a building of 19 storeys within the 62m Height of Building Control sought in the Planning Proposal.

This study does not get into the same level of detail and it is therefore important to ensure a level of consistency with regards to the how the GFA and FSR has been calculated. This study uses a generous building envelope as the basis for calculating the GFA. The assumptions used in this study area as follows:



Figure 40: Model developed by SJB (it should be noted that this model was generated prior to the provision of the model to the design team

Residential

- GBA footprint calculated from the 3D model building envelope
- · General rules of thumb for the building envelopes:
- Towers 20-24m wide
- Tower footprint 900m² GBA
- · 12m depth for single aspect residential sleeves
- · 75% efficiency to the GBA to get to a GFA for residential - this takes into account vertical circulation, plant and balconies
- 85m² average unit size

Commercial and community

- 85% efficiency to the GBA to get to a GFA for non-residential
- Includes internal malls, circulation and back of house



Figure 41: Overlay of two models showing a high level of consistency between the built form modeled

The applicants architect (Turner) provided the team with detailed drawings and floor plans and these have been used to confirm the assumptions mentioned above. The study on the following page illustrates these alignments over a number of typical floors.

The key observations are worth noting:

- · GBA to GFA efficiencies range depending on floor plate to floor plate from 72-76%. This is broadly in line with the assumption proposed (75%). This is also broadly in line with ADG recommendations of 70-80%.
- suggested in the ADG
- may be included at the lower / basement level.
- based on ADG recommended minimums.

This confirms that the assumptions proposed by SJB are sound and will be used going forward when reviewing built form proposals and developing DCP controls.

• The floor plate sizes of the residential towers (>800m² GFA) are large for local centres and able to accommodate more than 8 units per level as currently

GBA- GFA efficiencies for commercial / non residential uses are generally higher than the assumptions (90% as opposed to 85%). This may be a consequence of the fact that the ground floor plan assess does not currently illustrate areas of plant, servicing and storage that would not be included in GFA. These spaces

· The yield for the site generated by Turner was based on a detailed layout with an average unit size of 91m²/ unit resulting in 633 units. A more conventional unit mix with an average 85m² unit size would result in 683 units. An average 85m²/unit is

GBA as calculated by SJB

GFA as calculated by Turner

Ground floor

Residential:

- · GBA: 6,240 sqm
- GFA: 5,755 sqm
- Efficiency: 67%

Retail

- · GBA: 3,574sqm
- GFA 2,387 sqm
- Efficiency: 92%

Library

- · GBA 910sqm
- · GFA 820sqm
- Efficiency: 90%

Typical U shape floor plate under 8 storeys

Residential

- · GBA: 3584 sqm
- · GFA: 5180sqm
- Efficiency: 72%



50.5m





Typical tower floor plate

Residential

- · GBA: 4352 sqm
- · GFA: 3,329 sqm
- Efficiency: 76%





The above study shows two ways of calculated GFA. On the Left is the methodology used by SJB at the urban design / planning proposal stage of a project. It uses a gross building area foot print that includes the outer envelope of the building and includes balconies , corridors, plant and vertical circulation that is usually excluded from GFA. An efficiency assumption is then applied to this area based on the use to arrive at an approximate GFA.

One the right is the methodology used by Turners in arriving at the GFA for the project. This is based on a detailed architectural proposal and the GFA is calculated by excluding non-GFA elements.

Both options are equally valid in calculating GFA at the Planning Proposal stage of design. The study confirms that the GBA and efficiency assumptions and methodology used by SJB are broadly aligned with Turners calculations as outlined on the previous page.







This short section presents a number of case studies highlighting key lessons and qualities that should be brought into the study and review of the proposal for Chester Square.



5.1 Benchmarking Local Centres

The Canterbury Bankstown LSPS places a great emphasis on supporting the renewal of it's local centres to support the growth and prosperity of the community. The LSPS highlights Chester Hill as a local centre and recognises that it is not currently performing optimally relative to other centres in the broader area.

There a a number of interventions that could be undertaken to nudge Chester Hill from its under performing position towards a place that it could be. Key to turning the centre around will be shifting perceptions and expectations that currently exist around Chester Hill that are currently making investment in other centres more attractive To achieve the greatest impact the suite of interventions that could be undertaken by Government and the private sector should be coodinated and could include:

- \cdot improved public domain
- new public spaces
- \cdot an improved retail offer
- \cdot improved access to public transport and the rest of the city
- · more diversified housing

Notwithstanding the above and even with the delivery of the Metro Station Council does not foresee Chester Hill's role changing from a Local Centre. Improved public transport services will make Chester Hill a more attractive place to live and will attract higher densities, but it is not expected that it will attract other non-residential higher order uses that would shift it beyond its local serving function. This may be reassessed in the future masterplanning process.



Figure 42: Tracking centres in then local area

Sydney CBD	
Metropolitan centre	
Strategic centre	
Major centre	
Town centre	
fer Local centre	

Neighborhood centre

5.2 Precinct Benchmarking

The adjacent images of local centres are useful in that they illustrate the diversity of the built form and open spaces that can be found in local centres. What is clear is that Chester Hill is currently very low scale and as the centres mature one expects to see more diverse, taller and more dense development. Discussions with officials suggest that Chester Hill is likely to develop characteristics similar to both Wolli Creek and Marrickville - namely compact - with a range of building typologies transitioning down to the existing low rise context, evolving incrementally and still having opportunities to accommodate taller building typologies close to public transport.



Chester Hill

1-2 storeys 5,989 units 17,088m² Retail 8,825m² Commercial / non retail



Canterbury

8-12 storeys 2,745 units 9,688m² Retail 2,300m² Commercial / non retail



West Ryde

3-8 storeys 2,840 dwellings 16,000m² Retail 16,000m² Commercial



Marrickville

3-10 storeys 5,091 dwellings 27,650 m² Retail 14,830m² Commercial / non retail



Five Dock 3-8 storeys

4,062 dwellings ?m² Retail ?m² Commercial

Chester Square Urban Design Framework



Wolli Creek

8-20 storeys 6,500-7,000 units (proposed) 21,456m² Retail



Granville

2-20 storeys 5,800 units (proposed) 7,000 (Granville Place) plus others

The benchmarking analysis below dives a little deeper and serves as a comparative analysis of different local centres across Sydney. It provides a broad understanding scales of development / dwelling quantum underpinned by public transport and open space provision. For the purposes of this exercise the study area for this project has been used as the proxi for Chester Hill and dwelling counts are an estimate

of the number of existing dwellings within this area. While building heights in these emerging centres is higher than Chester Hill the FSRs are generally lower than that proposed in the planning proposal. Further comparative analysis will be useful at the next masterplanning process.





North Ryde

12.7ha







30

0.5:1 - 3.5:1



9.5m² / dwelling 4.5m² / person









Wolli Creek

35ha







2:1 - 4:1



2.5m² / dwelling 1m² / person









Chester Hill

5.3 Open Space Benchmarking

Well planned centres also balance the provision of open space with development and population growth. The purpose of the scale comparison provided on this page is to benchmark the provision of open space within other high density environments.

- The following points are worth noting:In high density environment the provision of open space is most often supported by a master planning process
- · Open spaces are not always regular shapes and often composed of a series of interlinking spaces
- $\cdot\,$ Open spaces generally have more than two street frontages
- Open spaces range in size from 1,500 to 5,000m²





Zetland



Waterloo

Waterloo



5.4 Development Benchmarking

The proposal for Chester Square also seeks to be a catalyst for the regeneration of the area. This short precedent study illustrates a number of different types of development to give an indication of comparative scales, FSR and built form outcomes. As far as is possible the key positive elements from each proposal and their relevance to the project are highlighted.

Lachlan's Line

East Village

Balgowlah



The Lachlans Line development forms part of a larger masterplan prepared for Landcom. The development is similar in nature to the Planning Proposal for Chester Square in terms of building typology (tower and podium) and an open space. The tower forms have limited articulation and while the buildings comply with ADG separation distances the units look directly into each other and have limited articulation. The development has an FSR of 3.3:1 and most overshadowing impacts are over the M2 and Epping Road

East Village also formed part of a Landcom led masterplan and includes a two level podium structure with five storeys of residential accommodation above. It have generous communal courts at podium level that are accessible to residents. There is no public open space provided on site but the dimension of the urban block are broadly comparable to those of Chester Square.

The Balgowlah Centre in the north shore also sites within a low rise residential context. It is of interest in that it sits ONE street back from Sydney Road, the local high street and has a network of small lanes adjacent to it. The centre supports the retail along the strip and integrates car parking and new residential accommodation sensitively. The urban block is of similar proportions to the Chester Square site and the development is of 4-6 storeys.



Mesa Hurstville Articulated three storey podium





The Mesa development in Hurstville is located in a fast transforming centre. One of the strengths of the development is the introduction of through site links and the stepping down of the bulk and scale towards its lower scaled receiving context. Another notable feature is the highly articulated three storey street wall. This elements helps to mediate the SCale of the towers above and create a more human scaled and fine grain street environment.

Surry Hills Village

Integrated supermarket, commercial and residential







The Surry Hills Village development also contains a large format retail anchor that has been buried below ground. The development WOrks creatively with level changes across the site includes a through site link and a strong commercial and residential base or podium that is treated with a masonry style that takes its reference from the low scale terrace typologies in the and around the site. The articulation of buildings above the street wall is different and has been articulated to minimise the visual appearance of the bulk and massing of the development. Other strengths of the retention and maintenance of a green public domain with WSUD and soft landscaping

Westin Hotel Perth

Raised public / communal spaces









Harold Park

Treatments of the base





The Harold Park development in Glebe, whilst purely a residential scheme, illustrates a very urban treatment of the ground floor with narrow setbacks and a well designed interface can ensure privacy for residents and an activated public domain. Many of the ground floor units are of a terrace typology and architecturally help mediate the perceptions the height and scale of the building. This is useful precedent for residential uses on Priam, Bent and Leicester Street.

The Westin Hotel in Perth demonstrated how level changes and an activated public domain at the upper level can be used to create amenity and activity at different levels within a development. Care and attention has been given to the design of the stairs and landscaping to ensure a seamless transition within the public domain such the Spaces feel public and are well used by the community



5.5 Envisaging an Improved Streetscape for Frost Lane

One of the key opportunities that the Planning Proposal presents is to change the character and identity of Frost Lane and transform it from being a back alley and service street to being an active and people centred space. The location of the vertical circulation servicing the towers on Frost Lane will help activate the street but at the same time demands more attention as Frost Lane will be the primary address for residents.

Achieving meaningful transformation is challenging for the following reasons:

- Frost Lane is currently very narrow with the walls of Chester Square shopping centre built hard up to the property boundary. The proposed widening of the lane in the Planning Proposal by 1.5m is unlikely to make a substantive difference to the way this street functions as the pedestrian environment is narrow and constrained.
- The lane will always need to provide vehicular and servicing access for properties fronting onto Waldron Road
- There are level changes between Frost Lane, Waldron Road and Leicester Street that make it challenging to integrate levels and maintain active frontages on both sides of the laneway
- The fine grain nature of the Waldron Road block will make it challenging for these properties to redeveloped in the short to medium term. Environment improvements on the southern edge of the street will only materialise some time in the future.

The next section of the report explores the ways in which this lane could be transformed by looking at other examples of lane way transformation and the techniques that have been used to achieve this level of change.







The Esplanade / Markham Place, Ashfield

The Esplanade in Ashfiled offers useful precedent for what could happen in Frost Lane if the development interface between the Chester Square site and the lane is not managed adequately. While the new development has responded relatively positively to the lane way with active frontages, tree planting, street furniture and lobbies this street still feels and functions as the back door to the shops and businesses that front onto Liverpool Road. The street is most successful when there is more generosity in the width of the street. The also maintains a vehicle oriented Character as a result of the kerbs, bollards and street markings.











Lessons for Chester Hill

The temporal factors impacting the evolution of Frost Lane as the centre undergoes renewal will need to be considered. Consideration may include specific DCP controls and further exploration as part of the future master plan.

The variation in width along this laneway as neighbouring properties renew has been well considered and accounted for within the plan.

Kiaora Lane

Kiaora Lane in Double Bay was upgraded as part of the development of a town centre site to include a new library, large format supermarket and structured car parking. While Kiaora Lane still performs the role of servicing lane with loading and servicing access, vehicle movements are restricted and the ground plain has been treated as a Shared surface environment by removing the kerbs and installing trees and a mix of hard and soft landscaping. The surrounding development is relatively low scale 2-6 storeys and the development is of a similar scale that fits neatly into the scale and character of the centre. What makes the lane successful is that the width of the street varies. At its narrowest part it is 9m wide and in others it is up to 18m wide allowing for outdoor dinning and landscaping elements.







Lessons for Chester Hill

It is possible for a laneway to maintain its servicing function while also prioritising pedestrian movements and making this space a key part of the local public domain.

The width of the laneway is key and varies from 9m to 18m wide.



Totem Lane Balgowlah



Totem Lane is located between Sydney Road and the Balgowlah Shopping centre and One street back from the high street. The lane provides access to residential car parking and functions and feels like a servicing lane with very little active frontage along at ground floor. The street varies in Width from 9-18m and is treated in a more traditional manner with kerbs and street furniture in select locations. While the ground plain is inactive, units above ground floor provide passive surveillance of the street making it feel safe. The scale of the buildings (3-4 storeys) provides a sense of enclosure and allows sunlight into the space. Key lessons for Frost Lane is to keep the scale of the buildings adjacent to the lane low and treat the streetscape like a shared space.

Lessons for Chester Hill

Maintain an appropriate scale of neighbouring buildings adjacent to the lane and treat the streetscape like a shared space.

Active frontages and vehicular entrances need to be balanced and treated carefully

Birdwood Lane - The Canopy Lane Cove

The Canopy in Lane Cove presents an innovative way to deliver a new public open space and large format supermarkets into the heart of a local centre. The proposal buries the supermarkets and car parking below ground with the open space provided above with access to the retail through pavilions containing escalators and lifts. Birdwood Lane still performs a servicing functions but the space is treated as a shared space. Serving areas and loading bays are provided informally along the edges with time limited access for servicing. This allows for Outdoor dining in select locations and soft landscaping in pots and planters.



The Canopy

Birdwood Lane

Lessons for Chester Hill

select locations.

Informal provision of serving areas and loading bays along the edges of Frost Lane to provide for outdoor dining in



5.6 Key Lessons from Case Studies and Benchmarks

Centre Hierarchy & Character

- Chester Hill is not performing as well as it could. While there is capacity for growth it will remain a local centre in function
- Development in local centres varies in character, height and scale
- Centres undergoing rapid transformation (such as Granville) would have benefited from a stronger outcomes based planning framework / masterplan
- FSR ranges in local centres range depending on the land use mix but are generally within the range of 2:1 to 4:1
- Marrickville a useful precedent as it is undergoing incremental change and has been able to absorb change whilst maintain the character and identity of its high streets
- Wolli Creek provides useful precedent in that it delivers open space and amenity with a clear strategy for open space

Public Domain & Open Space

- In high density environments the provision of open space is most often supported by a master planning process where the long term needs of a diverse population are considered
- There is no one solution for open spaces as each have a character and identity that is defined by a number of factors
- Open spaces are not always regular shapes and area often composed of a series of interlinking spaces
- Open spaces generally have more than two street frontages
- Open spaces range in size from 1,500 to 5,000m²

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- Service lanes can be made more people centred by focusing on amenity
- Removing tradition kerbs helps create a space that feels more people focussed
- Servicing can be time limited to manage impacts
- Lanes need to be overlooked to make them feel safe
- Lanes do not need to be activated continually but
- moments of activation help improve activation High performing lanes vary in width to allow for different types of activity on both sides
- The scale and proportions of lanes (width to height ratio) is important in maintaining solar access and creating a feeling of intimacy
- In areas undergoing slow transition lanes can be messy and unattractive spaces in the short term

Built form

Mixed use development require larger consolidated sites to accommodate large format retail anchors, underground parking and services

To create a positive public domain interface designed to work creatively with level changes (topography) with large format retail anchors often buried underground or wrapped with smaller tenancies

While buildings may comply with ADG separation requirements direct overlooking between buildings impacts negatively on the amenity and quality of development

A lower storey level street wall condition helps to mediate height and create a more human scaled streetscape.

These can be articulated to minimise perceptions of bulk and scale

Private communal courtyards are provided at upper levels for residents

As part of this study a number of studies were undertaken to explore how the objectives and principles for the centre and for the site could be met. The studies varied in the level of analysis and scale of concern from site to precinct. It started with a high level appreciation of the open space requirements.



6.1 Metro Station Parameters

The proposal for a new metro station at Chester Hill is a game changer for the centre. While the Planning Proposal is not contingent on the delivery of the metro it is important that the Urban Design Framework considers the potential implications of the metro on the centre and how the Planning

Proposal could respond to this future opportunity. While planning for the new metro station that is yet to commence, and will take decades to eventuate, there is a high degree of confidence that:

- The new metro line will operate in a north-south direction and run perpendicular to the existing railway line
- TfNSW will likely plan for an integrated modal interchange with no gate lines between train and metro services
- · Planning will need to be undertaken to scale up existing bus services and improve interchange between modes. This may require a new bus interchange or, at minimum, road widening to accommodate new bus stops
- Metro will target public land for land acquisition. This may include Nugent Park (both north and south, the library and Knowledge centre and commuter car park
- Nugent Park North appears to be a suitable location for a combined metro / station entrance
- · There will be conflict with east- west mobility function of Waldron Road



Figure 45: Key metro principles and how they would apply to Chester Hill



Figure 46: Likely metro station and interchange location

This diagrams illustrates the potential location of the new metro station and underground platforms with the station entrance located on Nugent Park to support the existing centre Figure 47: Likely changes to pedestrian movement

The new metro station will change the way pedestrians move around the centre with more people and activity likely to gravitate to the west of Chester Hill Road. Bent Street is likely to experience higher pedestrian flows.

6.2 Opportunities for Charles Place

One of the opportunities developed by Place Design Group as part of their peer review was the widening of Charles Place through the demolition of the existing post office and the expansion of the public space to the east. This widened public open space would help:

- · deliver a new urban plaza within the centre and create a place for people to meet
- improve the spatial link between Chester Square and Waldron Road
- address existing CPTED issues

During engagements with the applicant it has become clear that while all parties see the benefit of improving this link the following points are worth noting:

- While narrow, Charles Place still provides an adequate link from Waldron Road to Chester Square that is proposed to be upgraded by the applicant
- There are no planning grounds to compel the applicant to acquire the post office and dedicate this back to Council as open space as the applicant is delivering an open space as part of the development
- · While it may be possible to accommodate Australia Post in the shopping centre there is no imperative for Australia Post to vacate their current location
- Australia Post is a third party and there is no commercial imperative for the applicant to acquire the site on a commercial basis
- There is currently adequate open space to serve the existing community within the centre and there are no compelling grounds for the compulsory acquisition of this site for public purposes
- The existence of public facilities and public land south of the railway line together with the proposal for a community facility within Chester Square weakens the argument for the acquisition of the site for community facilities
- · The Post Office would need to be acquired by Council on a commercial basis and Council do not currently have the funding to acquire this at this stage

Notwithstanding these limitations there are strong urban design merits to widening the open space and delivering a new plaza within the town centre and this should be considered in the future masterplanning process.







Figure 50: Charles Place is a 8m side pedestrian open space

6.3 Opportunities for new Community Infrastructure in Chester Hill

The existing clustering of community facilities to the south of the railway line, including the Chester Hill Public School, Chester Hill library and Chester Hill RSL, is a positive feature of Chester Hill. It is understood that the future of all these community facilities, including the library, which is nearly 50 years old, will be considered as part of the future masterplanning process.

For practical and administrative reasons Council is moving towards the consolidation of its existing facilities to more multi-purpose community facilities. New community centres hold great potential to become anchoring points for communities and places that communities feel proud of. It is therefore critical that these are located in the best locations to harness their regenerative and place making potential.

Council and the Local Planning Panel supported the provision of the new facility within the Chester Square shopping centre site and this will be written into the planning agreement for the site. This decision precedes the future masterplanning process where traditionally the delivery of new community infrastructure is explored within a broader understanding of how the centre will evolve and change to meet local needs. The planning requirement for the new facility to be delivered as part of this development may not allow for a meaningful interrogation of alternative options for the community facility within the town centre in the future.

While the inclusion of a multi-purpose community facility within the Chester Square development would be a community benefit and would ensure the delivery of a new public facility at a reduced cost to Council, there is a risk that concentrating town centre destinations (anchor retail and community facilities) within one site will draw energy and activity away from the rest of the centre and Waldron Road.

From an urban design perspective, the proposed location of the new multi-purpose community facility in the centre of the Chester Square site and without a prominent public address does not leverage the city shaping potential of this facility within the centre. There are excellent examples of where new community facilities have helped provide direction and shape the character and identify of emerging centres by locating public institutions on prominent sites. Some examples include Bankstown Library, Marrickville Library and Surry Hills Library. All have been located on key urban structuring routes and in visually prominent locations. It may also be useful to reflect on



Figure 52: The existing Chester Hill library on Chester Hill Road

other instances where new facilities have not been successful in contributing positively to the functionality, character and identity centres. Some include, Liechhardt Library located at the lower level of the Italian Forum and hidden from view, Five Dock Library on the first floor of the Pendium development and Dulwich Hill Library that is accommodated as a shopfront within a mixed use development on New Canterbury Road.

As part of this study alternative options for the location of the multi-purpose community centre within the centre were explored. These are presented on the pages that follow and the pros and cons for each location suggested. Council should continue to explore the optimal location for this important facility as part of the detailed design phase for this project and the Chester Hill masterplan to ensure that the community facility positively contributes to the character and identity of this growing centre.



Figure 51: The existing clustering of community facilities on either side of the railway line creates an expanded centre with two parts, each of which has a distinct character and identity



At the southern end of the new retail plaza (as per the Planning Proposal

Within the podium of the mixed use development / Chester Square site



Pros and cons

- The community centre has its own identity separate from the mixed use development The community centre has a positive relationship with the new retail court / open space The community centre is embedded and not clearly visible from Waldron Road, unless the post office site is acquired and dedicated as open space The plaza becomes enclosed with no visibility from Walrdon Road
- Visitors to the shopping centre are not encouraged to venture out into Waldron Road and into the rest of the centre



Pros and cons

- A more generous open space is provided
- The community centre has a positive relationship with the new retail court / open space
- The identity with the library is part of mixed use development and reliant on the architectural treatment of the podium to have its own identity
- The community centre is embedded and not clearly visible from Waldron Road, unless the post office site is acquired and dedicated as open space
- Visitors to the shopping centre are not encouraged to venture out into Waldron Road and into the rest of the centre

Chester Square Urban Design Framework



On the Post Office site



Pros and cons

The community centre has its own identity and address of Road and functions as a bridge to the new retail centre	on Waldron		BRAD
A more generous open space is provided on the Chester Square site		HH	
Library has a positive relationship with the new retail court / open space		TH -	
The community centre has a positive relationship with the new retail court / open space	•	1	
The post office site is small and would require a bespoke architectural solution			
It is not possible for the applicant to deliver this option unless it acquires the post office	1		

On the commuter car park with enabling development

The community centre has its own identity and address on Waldron Road
 Visitors to the shopping centre encouraged to venture out into Waldron Road and into the rest of the centre
 A more generous open space is provided on the Chester Square site
 Could be enabled by adjacent development
 It is not possible for the applicant to deliver this option unless it engages with Council and alternative options would need to be found for commuter parking (if required)

Pros and cons

Chester Square Urban Design Framework





On the commuter car park with an new open space on Waldron Road

On the commuter car park with small park to the side / rear



Pros and cons

PIOS	
	The community centre has its own identity and address on Waldron Road
	A new civic space is provided on Waldron Road
	Visitors to the shopping centre encouraged to venture out into Waldron Road and into the rest of the centre
	A more generous open space is provided on the Chester Square site
	It is not possible for the applicant to deliver this option unless it engages with Council and alternative options would need to be found for commuter parking (if required)
	Lack of enabling development will require Council funding



Pros and cons

The community centre has its own identity and address on Waldron Road
Urban and active frontage is maintained along Waldron
Visitors to the shopping centre encouraged to venture out into Waldron Road and into the rest of the centre
A more generous open space is provided on the Chester Square site
It is not possible for the applicant to deliver this option unless it engages with Council and alternative options would need to be found for commuter parking (if required)
Lack of enabling development will require Council funding





Peckham Library - London

6.4 Anticipating Built Form Change in Chester Hill



Figure 53: The Planning Proposal within the context of Chester Hill Developed out to the extent of existing controls

The approval of the Planning Proposal will set a benchmark for future heights within the centre that will need to be considered in the future master planning process. In order to develop an appreciation for the scale of development that might occur in the centre (as a consequence of the Planning Proposal and metro station), the following scenarios were investigated.

The first scenario is a low density scenario that shows the scale of the Planning Proposal surrounded by context that is based on the existing DCP and LEP controls. The scenario illustrates commercial / retail land uses on ground floor with residential development above, set back by 3m from the 3 storey or 10m high street wall.

What is clear is that the proposed development is taller than the existing context. Even if the surrounding blocks are built up to the extent of the planning controls allow (up to 8 storeys) the Planning Proposal is the tallest development in the centre. This suggests that in order to achieve a level of height transition within the centre, changes to the development controls for the adjacent blocks will be required.

Planning Proposal			
Non-Residential GFA	15,869m ²		
Residential GFA	58,043m ²		
Dwellings	633		
Surrounding context			
Non-Residential GFA	22,138 m ²		
Residential GFA	181,340m ²		
Dwellings	1,708		
Total			
Non-Residential GFA	38,007m ²		
Residential GFA	203,322m ²		
Dwellings	2,341		



Figure 54: The Planning Proposal within the context of a Chester Hill Centre with amended controls allowing for increased in height in the blocks directly adjacent to Chester Square to allow for a more gradual transition in building heights

The second scenario envisages increased height in the sites directly adjacent to Chester Square to provide a transition in scale from the low rise suburban neighbourhood to the tallest buildings proposed on Chester Square. Buildings heights along Waldron Road are increased from 8 to between 10 and 15 storeys and development to the north of the Leicester Street is increase from 4 to 6 and 8 storeys.

This approach is based on the buildings on Chester Square determining the heights within the centre with buildings on Chester Square being the tallest. This will need to be tested in detail in the masterplan study that will consider a composite set of issues such as feasibility, density, traffic impacts, overshadowing impacts, amongst others.

One consideration could be a solar clipping plain related to the southern edge of Waldron Road and the existing public open spaces to ensure improved solar access to the public domain. This would impact on the heights of all buildings in the centre including Chester Square and impact on the viability of the redevelopment of the Waldron Road properties.

Planning Proposal	_	
Non-Residential GFA	15,869m ²	
Residential GFA	58,043m ²	
Dwellings	633	
Surrounding context		
Non-Residential GFA	22,138 m ²	
Residential GFA	185,819m ²	
Dwellings	2,187	
Total		
Non-Residential GFA	38,007m ²	
Residential GFA	243,862m ²	
Dwellings	2,820	
Studies and Options

6.5 Options for the Chester Square site



FSR	4.53:1
Retail GFA	15,869m ²
Residential GFA	58,043m ²
Dwellings	633





Option 1 - Library in podium, more articulation, wider Frost	
Lane	

Chester Square site

FSR	3.98:1	(-0.55)
Non-Res GFA	14,719m ²	(-1,150)
Residential GFA	50,002m ²	(-8,042)
Dwellings	544	(-89)

- 89 DWELLINGS



Chester Square site FSR Non-Res GFA Residential GF Dwellings

- 0.85 FSR

Option 2 - Open space on Frost lane

	3.68:1	(-0.85)
ł	13,968m²	(-1,901)
FA	45,729m ²	(-12,314)
	496	(-137)









Option 3 - Central tower open space on Frost Lane

Chester Square site		
FSR	3.61:1	(-0.92)
Non-Res GFA	14,249m ²	(-1,620)
Residential GFA	44,146m ²	(-13,897)
Dwellings	479	(-154)



Option 4 - Shopping centre with Priam Street open space

Chester Square site

FSR	3.87:1	(-0.66)
Non-Res GFA	16,553m ²	(+684)
Residential GFA	46,235m ²	(-11,808)
Dwellings	502	(-131)

- 131

DWELLINGS



Chester Sq
FSR
Non-Res GF
Residential G
Dwellings



Option 5 - Shopping centre with open space on Bent Street

quare site

	3.65:1	(-0.88)
A	15,124m ²	(-745)
GFA	44,076m ²	(-13,967)
	478	(-155)







Proponents reference scheme

Library in podium, more articulation, wider Frost Lane



Open space on Frost lane





Central tower open space on Frost Lane

Shopping centre with Priam Street open space

The adjacent matrix presents a comparison of the proponents reference scheme against the options tested. Some key observations include:

- The options are all seeking to deliver the same key elements whilst maintaining the GFA proposed for the site as part of the Planning Proposal that Council has endorsed. Different options would have been possible if some of the variables could be swapped out or omitted with different outcomes. Maintaining the same GFA is a key driver for the overshadowing impacts.
- The layout of the site as per the Planning Proposal reference scheme represents the most efficient arrangement of built form on the site that meets ADG requirements
- The central location of the open space allows for the applicant to control all edges of the open space with more control of the built form outcome
- The central location of the open space means that it is only visible from a 40m wide section of Leicester Street, which itself is a low order street 230m long linking Bent to Priam Street
- The level at which the open space is located will influence the success of the retail
- · Locating the multi-purpose community centre to the centre of the site limits it visibility from key public streets and limits its ability to contribute to the structure of the centre
- Options 4 and 5 would create an opportunity for a more consolidated and internalised shopping centre that would improve the retail experience but risk internalising retail activity



The proponent's reference scheme achieves the highest

yield



Shopping centre with open space on Bent Street

6.6 Key Observations and Lessons Learnt

Public domain & open space

- The propsed open space on the Chester Square site would make a positive contribution to the quality of the public domain within the centre
- · The undergrounding of the big box retail elements, parking and serving has a positive impact on the public domain and street interface
- The open space will be privately owned and managed and this will influence the way the space will be used and perceived by the community
- The level of densification envisaged demands a more strategic consideration of open space within the centre and should be considered holistically as part of the masterplanning process
- · Additional open space will be required to serve a growing community. This may require Council acquiring additional properties adjacent to smaller open spaces to improve their functionality. This will be further explored as part of the Public Domain Plan and masterplan
- Some spaces such as Abbots Park may need to be revisited to serve a broader range of users

Community Space

- · Community facilities are important civic and community destinations within local centres
- Contemporary community facilities are multi-functional spaces and serve a diverse range of functions including library, after hours learning, meeting, gathering and early childhood learning
- · Most new community facilities have a visible public address on high order / important street
- · Alternative locations for a new community facility within the town centre could have improved outcomes for the centre and community. If Council is still of the opinion that this is the best location for a new public facility then additional controls will need to be developed to ensure a civic address for this building. This could be achieved through a design excellence process that specifically considers the design of the facility and any public element of the proposal

Adjacent sites

- · The approach to building heights on adjacent blocks presented in this section is based on the assumption that the buildings on Chester Square being the tallest in the precinct and that changes to the controls on adjacent sites will need to be considered as part of the future masterplanning work
- This approach will need to be tested in detail in the masterplan study that will consider a composite set of issues such as feasibility, density, traffic impacts, overshadowing impacts, amongst others
- In the light of the identification of Chester Hill as a potential location for a new metro station there is capacity for the adjacent sites to absorb additional height and density, although this UDF is not contingent on the delivery of the metro
- Scenarios should be explored as part of the future masterplanning work that considers increased height closer to the proposed future metro and within 400m of the station (including south of the railway line). In particular LAHC owned properties on the southern side of Waldron Road may have the capacity to accommodate buildings of equivalent scale to the planning proposal given that their overshadowing impacts would be over the railway line and they would deliver public benefits in the form of affordable housing
- One consideration could be a solar clipping plan related to the southern edge of Waldron Road and the existing public open spaces to ensure improved solar access to the public domain

Options

• The layout of the site as per the Planning Proposal reference scheme represents the most efficient arrangement of built form on the site that meets ADG requirements

· Councils endorsement of the FSR and heights on the site for the site limits the extent to which options can be tested and drives built form outcomes

• An alternative place-based approach considering a range of alternative arrangements would result in very different options

• The desire to deliver both the community facility and open space on the site is driving built form outcomes as additional residential floorspace needs to be delivered to cross subside these elements

This urban design framework presents a high level spatial vision for the area around Chester Square shopping centre based on the above principles with a specific focus on the public domain and urban structure.



7.1 Vision

The objective of this study has been to review the Chester Square Planning Proposal and make recommendations for how it could be improved in the context of existing planning legislation and guidelines. As identified in the LSPS, Council is currently focused on those centres within the Sydenham to Bankstown corridor. A masterplan for Chester Hill will be prepared as part of an ongoing program for masterplans being prepared fro centres across the city.

In the interim, the findings of this study suggest that while Chester Hill will benefit from a new metro station in the longer term, its role as a local centre will not change substantially from the North West Local Area Plan that was prepared in 2014. That vision stated:

The vision for the Centre will need to be reconsidered as part of the future masterplanning process and will need to take into account improved accessibility to Parramatta, Bankstown and beyond. For the purposes of this study, and to support Councils aspirations for the centre, the vision for the precinct around Chester Square Shopping Centre and to the north of the railway line is outlined adjacent.

This suggests that planning controls will need to be reviewed to accommodate increased densities and that there needs to be a greater focus on the public domain.

"The Chester Hill Village Centre will continue to function as the largest shopping precinct servicing the northern suburbs of the North West Local Area. The built form will offer a wide range of medium and high density living within easy walking distance of the accessible railway station and civic spaces.

The **SOUTH** side of the precinct will provide a conveniently located and highly valued **COMMUNITY hub** for the residents of the northern suburbs to gather and meet, comprising the multi-purpose community centre, library and meeting spaces."

North West Local Area Plan 2014

Chester Hill is a vibrant, high density local centre with retail and commercial uses serving the boarder community. Building typologies will shift gradually towards higher density, mixed use and residential flat buildings providing affordable and well located accommodation with access to regional public transport services. New open spaces will be delivered in step with population growth.

7.2 Principles

1. Public Domain

1.1 Enhance the quality and character of streets

Define the role and identify of each street and understand their relationships. Plan for intensification and ensure adequate access to open space.

Considerations:

- Improve the pedestrian environment and reduce conflict with vehicles
- · Consider setbacks and street walls to reduce wind and shadow impacts
- Ensure the public domain plan that supports the Movement and Place role and function of each street

1.2 Increase the diversity of the open space offer

Provide more reasons for people to visit the centre.

Considerations:

- · Creatively adapt and improve existing public open
- spaces
- · Identify opportunities for new public spaces to accommodate a growing community
- All dwellings within 200m local open space >1,500sqm high density areas
- · All dwellings within 400m local open space >3,000sqm low density areas
- Ensure high levels of amenity (sun and wind)
- High quality landscaping for all age groups

1.3 Combat the urban heat island effect

New built form controls and approaches to public domain design should mitigate urban heat island to create more comfortable public spaces that encourage walkability and well-being.

Considerations:

SJB

- Increased tree canopy coverage around the site in line with DPE open space guidelines
- 20% in high activity areas
- 40% in low activity areas
- Minimum landscape areas
- Rooftop gardens
- Appropriate materials



2.1 Support Waldron Road as an activity spine

As the historic high street of Chester Hill, Waldron Road should maintain it's existing character whilst still enabling new economic and business opportunities that encourage revitalisation and support a growing population.

Considerations:

- Active frontage linkages between Chester Square and Waldron Road
- · Create a more a pedestrian friendly environment through public domain improvements
- Reduced vehicle speeds and car dominance through street design and upgrades
- Integrate car parking and access
- Improve development and retail feasibility through more flexible controls

2.2 Leverage the attraction of Chester Square

Chester Square should build it's own identity and offer different services that compliment rather than override Waldron Road so as to maintain distinct differences and enable diversity within the centre.

Considerations:

- Introduce a retail circuit that includes / is an extension of Waldron Road
- Clear legibility of access and entrances to the shopping centre
- · Character and identity should be different
- · Accommodate retail tenancies not currently available in the centre

2.3 Spaces for events

Explore the provision of public spaces and streets that can be used for public events to enable Chester Hill to be highlighted as a key cultural location in Canterbury Bankstown.

Considerations:

- Temporary / permanent use of parking spaces as parkletts
- Activation of lane ways and temporary closures
- Programmed or curated events in new open spaces

Chester Square Urban Design Framework



3. Movement

3.1 Support transit oriented development

The Chester Hill Station and the future Sydney Metro will enable Chester Hill to become a transit oriented development centre that prioritises the use of public and active transport above private vehicular use.

Considerations:

- · Reduced car parking provision / car free future
- Improved connectivity with future Metro

3.2 Encourage active transport

Access to safe and legible walking and cycling links should be explored to encourage healthy lifestyles and reducing dependency on private vehicles. Reducing conflict with vehicles through mode separation and pedestrian priority areas should be investigated.

Considerations:

- Pedestrian connectivity
- · Deliver more north-south and east-west connections for pedestrians and cyclists
- Improve Safety
- Improve legibility and wayfinding
- · Shared streets
- · ·Signalised pedestrian crossings

3.3 Mitigate traffic impacts

The provision of adequate parking, access arrangements, and reduced traffic to Waldron Road and Chester Square will be vital in encouraging greater activity of the town centre

Considerations:

- · Clear access and serving strategy
- Road upgrades
- Intersections
- Parking provision
- Mode separation on Waldron Road

4. Built Form

4.1 Share opportunities for development

There has been limited development in Chester Hill. Changes should be investigated that encourage renewal and offer a diversity of typologies to explore alternative feasibility including car-free developments to encourage financial feasibility along Waldron Road

Considerations:

 Changes to planning controls to facilitate development Logical amalgamation patterns (minimum and maximum) and amalgamation bonuses · Diversity of housing typologies

4.2 Build identity and character

Develop a desired future character that builds upon the existing character and takes into account the character that will be defined by the development of Chester Square and surrounding areas

Considerations:

· Reference existing qualities (street wall heights and awnings)

· Uses of locally used material

• Fine grain frontage controls

4.3 Ensure transition in the short and long term

Consider changes to controls that enable an appropriate height transition around the Chester Square site and provide appropriate setbacks and DCP controls that do not limit potential redevelopment

Considerations:

- Appropriate heights
- Variation in building heights
- Height transition
- · Street walls
- · Setbacks

7.3 Objectives and Strategies for the Chester Square Site

The vision and principles set establish a broad framework through which to interrogate and develop any proposals on the Chester Square site.

The adjacent diagrams and objectives map out the objectives, strategies and design implication that should inform future design explorations and subsequent design controls. This includes:



Articulate tower forms above podiums

Waldron Road

Streets

planted verges

Introduce a two to three storey street wall along the edges of the site with a meaningful setback above

Chester Square Urban Design Framework

Design implications

- Improve Charles Place as a public domain connection between Waldron Road and the proposed new open space on the Chester Square site
- Reconsider the location of the community facility / library to create a more generous open space connection between the proposed retail plaza and
- Relocate the existing car parking entrances away from Priam and Bent
- Introduce active frontages between Waldron Road and the entrance to the east- west retail connection through Chester Square
- If the post office or community facility are included in the Chester Square development, these must have a public street address
- Associate new public facilities with existing streets or new civic spaces
- Remove the library and canopy structure to allow more light into Frost Lane
- Additional setbacks both north and south to create more space for people and access and allow for the two way working of Frost Lane
- Limit east-west through traffic along Frost Lane between through pedestrianisation / one way working
- Introduce a street wall that creates a more intimate streetscape
- Reduce the height of buildings in the infill between towers
- Activate the corners
- Retain the existing setbacks and Jacaranda trees of Leicester Street
- Support further planting on Bent and Priam streets with rain gardens and
- Create large pockets of deep soil associated with the main open space
- Create opportunities for tree planting on Frost Lane
- Consider creating visual and physical links (pedestrian access) between upper communal open space and the street
- Articulate the long building forms to improve cross ventilation and minimise appearance of mass

7.4 Urban Design Framework Concept Plan

The overarching Urban Design Framework diagrams is illustrated in the adjacent plan. It builds on the previous Precinct Plan and includes the following elements:

- A more pedestrian oriented town centre with high quality public domain along Chester Hill Road, Waldron Road, Bent Street Priam Street and Frost Lane
- 2. A new landmark destination within the centre on the Chester Square site
- 3. Mixed use intensification along Waldron Road with active frontage at ground floor level
- 4. Residential intensification within 400m of the train station
- 5. Active frontages along Priam and Bent Street
- 6. A connected network of open spaces linking across the railway line from Nugent park South, across Waldron Road and into a new open space within Chester Square
- 7. New cycle connections between the railway station, along Priam and Bent Streets. Exact alignment of the cycle way is to be reviewed further in the Public Domain Plan and masterplan

The key elements of this framework are unpacked in greater detail in the pages that follow.

Key	
	Study Area
	Planning Proposal Area
	Open space network
*	Key destinations
	Library / community facility
->	Primary town centre circuit
_	Active Frontage
\rightarrow	Active mobility route
\rightarrow	Main streets
	Mixed use intensification
	Residential intensification



7.5 Key Public Domain Moves

The key town centre public domain moves include:

- · Connect key destinations (eg school/station/Nugent Park/ central plaza)via streets that encourage walking/cycling
- Provide generous setbacks for footpaths trees and integrated WSUD
- $\cdot\,$ Improve tree canopy on Waldron Road and look at opportunities to slow traffic to create enhanced Main Street and encourage outdoor dining
- · Retain existing trees on Bent and Leicester streets and infill with additional trees with understory planting or WSUD
- · Create new generous shared footpath on Priam Street and include new trees in WSUD
- · Potential for a separated cycle lane on Priam Street
- · Review width of footpaths on rail bridge on Chester Hill Road seek widening from TFNSW.
- · Create shared path along eastern edge of Chester Hill Road

Connect key destinations via streets that encourage walking/cycling



Increase tree canopy and inculde WSUD in key streets



Improve tree canopy on Waldron Rd and create enhanced Main Street



Create a shared laneway where access and outdoor dining coexist



- Retain character of laneway next to Post office, improve paving and seating, retain existing trees, and explore opportunities to expand
- · Review need for shade canopies and heavy bus shelters on Waldron Road and Chester Hill Road
- Review opportunities for new street tree planting on Waldron Road and other urban greening, such as verge planting
- Consider better layout and use of Nugent Park on Waldron Road to increase use and amenity - reduce extent of paving and increase shaded seating areas
- · Consider upgrade of Nugent Park on Chester Hill Road to include more inclusive playspace, better picnic facilities, more shade trees, learn to cycle loop path, fitness equipment





Improve amenity and useability of Nugent Park along Waldron Rd



Create safe and tree-lined connection along Chester Hill Rd



Upgrade Nugent Park with play/picnic/learn to ride/fitness facilities



7.6 Public Domain Diagram

- 1. Connect town centre to Abbott Park with shared path for walking and cycling
- 2. New street tree planting on Waldron Road and other urban greening, such as verge planting
- 3. Upgrade Nugent Park on Waldron Road to increase use and amenity, reduce extent of paving and increase shaded seating areas
- 4. Upgrade Nugent Park on Chester Hill Road to include more inclusive playspace, better picnic facilities, more shade trees, learn to cycle loop path, fitness equipment
- 5. Connect town centre to school with shared path on Chester Hill Road - review street design and potential to create widened shared path for walking and cycling
- 6. Retain character of laneway next to Post office, improve paving and seating and retain existing trees
- 7. Create new shared zone in Frost Lane, activated by ground floor building uses with new street trees
- 8. Add to existing street trees on Bent Street, Leicester Street and Priam Street, with additional trees in blistered rain gardens to slow traffic and integrate WSUD
- 9. New open space within development to be open to public 24/7 and include substantial green space



7.7 Movement and Place Strategy



Figure 57: Movement and Place catagorisation of streets today

This study is focussed on the public domain and structure of the centre. Following on from the principles set out in the vision section above, the aspiration is to transform the streets of Chester Hill incrementally into more people friendly spaces that are lively and safe. The plans above illustrate this long term transition with a shift towards a transit-oriented and people focused place around the train and future metro station. The mobility function of Waldron Road is maintained as a main street and the surrounding streets are proposed to be upgraded to more civic-type spaces as envisaged in the Movement and Place framework. The sections on the following pages outline in more detail what these streets could look like. These sections will be further progressed in the Public Domain Plan, future masterplaning exercise and DCP controls for the site and centre.









7.8 Street Types

Priam and Bent Street

Priam and Bent Streets are key connectors from Waldron Road to Chester Square. They can play an important role as north- south connectors for active mobility (walking and cycling) which will become more important when the metro is delivered. Given the wide width of the street, these sections suggest the provision of a dedicated cycle way and WSUD elements on the Chester Square side of the street through the removal of on street parking.

The sections also illustrate the aspiration to maintain a three storey /10m street wall within the centre. This references the existing low rise commercial buildings and helps to mediate the visual impact on the new taller buildings and the street. This also intends to reduce down draft. Good examples of articulated street walls from Surry Hills Village and the Medina in Hurstville are useful reference points.

The street interface condition changes along the street. Closer to Frost Lane commercial / non-residential uses are proposed at ground floor to activate the street. North of the entrance to the shopping centre the interface could be more residential in nature with an urban interface with level change used to ensure privacy to ground floor apartments. The building setback is proposed to be reduced from 5m (that the Planning Proposal suggested) to 3m. The sections show that the public domain delivered is still very generous and can deliver a good urban outcome, noting that the street carriageway width has been reduced and street car parking has been removed.





COMMERCIAL INTERFACE



RESIDENTIAL INTERFACE

Chester Square Urban Design Framework







FROST LANE SHARED STREET

The aspiration is to incrementally transform Frost Lane into a more people centred street. It will be the primary address for the proposed residential towers and will still need to perform a servicing and access function for properties fronting onto Waldron Road. The sectional exploration on this and the following page draw lessons from the case studies. The key components being:

- \cdot the removal of kerbs and the creation of a shared street environment
- lower scale buildings (up to 3 storeys) providing enclosure and passive surveillance of the space whilst allowing daylight into the street
- \cdot a varied width the lane way
- · active frontages at key locations
- $\cdot\,$ opportunities for loading and access
- opportunities for outdoor dining
- · opportunities for soft landscaping

It is important to note that operation of the street and the width of the carriageway from an vehicular access perspective might change the cross section and will be informed by future transport and access studies.

The option on this page illustrates Frost Lane as one way working with a 3.5m carriageway and 3.1m loading zone. Building setbacks are based on the centre line of the lane to achieve minimum building separation requirements of the ADG. A 3m setback and awning is proposed on both sides of the street with soft landscaping potentially in select locations. This may present challenges for the Waldron Road properties which are narrower and will need to be tested in the future masterplanning process.







LEICESTER STREET

Leicester Street has a wide road reserve and is seen as developing into a low - key residential street. The intent with this street is to reduce the effective width of the street to slow traffic down and create a more generous public domain that takes advantage of the favourable northern aspect. This is achieved by pushing the kerb lines out northwards to provide a generous shared path or sidewalk that links to the open space. The existing jacaranda trees on the Chester Square site are retained within a generous 5m deep soil zone that can be used as private gardens for residents.













LEICESTER STREET - ALTERNATIVE

This alternative for Leicester Street makes provision for a turning lane into the development with the narrowing of the carriageway and a more generous footpath on the southern side of the street adjacent to Chester Square.













Recommendations for Gateway Submission

Considering the endorsement of the Planning Proposal by Council and the Local Planning Panel, the analysis undertaken as part of this study and the principles set out in the Urban Design Framework this study refines rather than revisits the proposed planning controls that will be submitted for Gateway approval.

The recommendations relate to the Planning Proposal site specifically and also suggest changes to the controls for the surrounding context, recognising that these will be reviewed again during the future masterplanning process.

Development on the site will also be controlled through a set of DCP controls that will be prepared post Gateway. Drafts of which a potential to impact on built form and yield have been prepared in the section that follows.



8.1 Land Use Zoning





Figure 60: Recommended land use zoning controls for the Chester Square site



Figure 61: Potential changes to land use zoning beyond the site to be considered as part of the future masterplanning exercise to extend active frontages on both sides of Bent Street from Waldron Road to the through-site link/ entrance to Chester Square shopping centre

The Planning Proposal proposes no changes to the existing B2 zoning of the site. Council may wish to consider rezoning a select number of properties along Bent Street from R4 High Density Residential to B2 Local centre to encourage active uses on both sides of the street from Frost Lane to the proposed entrance to the Chester Square shopping centre. This should be reviewed as part of a future Masterplan for the centre.

Key Land use

 Study Area
B2 Local Centre
R2 Low Density Residential
R3 Medium Density Residential
R4: High Density Residential
SP2: Infrastructure
RE1: Public Recreation

8.2 Height of Building Controls

As outlined above, the Planning Proposal sought to increase the Height of Building Controls from 20m across the site to a range of building heights from 14m to a maximum of 62m. This represents a step change in building heights that is much higher than what the existing controls currently permit. It is understood that Council's endorsement of the proposal was based on a maximum height of buildings being 18 storeys. A detailed review of the proponents reference scheme reveals that the built form envelope does not utilise all the height sought in the Planning Proposal. This is particularly true to the west of the site where the buildings are lower than the proposed maximum height of buildings (40m). It was also noted that a building of 19 storeys was proposed within portion of the site identified with the 62m height limit, which is inconsistent with Council's resolution to endorse a maximum 18 storey building envelope for the site. To ensure consistency with Council's endorsed maximum height for the site, SJB has undertaken a review of the Height of Building controls to only permit buildings of a maximum height of 18 storeys.

The table below presents a numerical assessment of what the total height of buildings would be if Council wished to limit the height of the development to 18 storeys. This assumes that:

- Two levels of retail is the equivalent to 3 storeys of residential accommodation
- Lift overruns are 2.5m
- $\cdot\,$ an allowance is made for level changes across the site.

In light of Council's endorsed maximum building envelope of 18 storeys, a maximum Height of Buildings control of 60m is suggested (2m less than sought by the proponent).

Total Storeys (No.)	18	17
Building type	Residential flat building	Mixed use building with two levels of retail
Lift overrun (m)	2.5m	2.5
Typical residential floors (assumed 3.1m floor to floor)	52.7m (17 Storeys)	46.5m (16 Storeys)
Second floor retail	-	5
Ground floor (m floor to floor)	3.6	5
Allowance for level change	1	1
Calculated	59.8	60
Recommended for LEP (m)	60m	60m



Figure 62: Existing Height of Building controls

As noted above this study recommends a reduced maximum Height of Building controls to be in line with the reference scheme as indicated in Figure 63. This includes reductions in height from west to east as follows:

- · 40 to 35m (11 storeys)
- · 31 to 20m (6 storeys)
- 59 to 55m (17 storeys)
- · 62 to 60m (18 storeys)
- · 52 to 42m (15 storeys)

This is to improve amenity in Frost Lane and minimise solar impacts on the Waldron Road properties (see later study).

This study has illustrated an increase in buildings heights in the blocks immediately surrounding the site, increasing permissible heights from 6 to 8 storeys to a range of building heights up to 15 Storeys. This primarily serves to transition building heights from the existing 1-2 storey towards the subject site (18 storeys). This approach suggests that the Planning Proposal height endorsed by Council forms the baseline for determining the heights within the centre. Scenarios should be explored in the future mastertplanning process that considers increased height closer to the proposed future metro and within 400m of the station (including south of the railway line). In particular LAHC owned properties on the southern side of Waldron Road may have the capacity to accommodate buildings of equivalent scale to the planning proposal given that their overshadowing impacts would be over the railway line and they would deliver public benefits in the form of affordable housing.



Figure 63: Recommended Height of Building controls for the Chester Square site



Figure 65: Building height originally sought by the applicant (Source:Turner)



Figure 64: Potential changes to Height of Building controls beyond the site to be considered as part of the future masterplanning exercise

Key HoB

· ·	Study Area
	9m
	12m
	15m
	17m
	20m
	23m
	30m
	35m
	45m
	55m
	65m

8.3 Floor Space Ratio Controls





Figure 66: Existing Floor Space Ratio controls

The FSR for the site should be the consequence of grounded planning and design outcomes. The FSR sought by the Planning proposal of 4.53:1 is particularly high for a local centre and it will not be possible to achieve the yield within the constraints of the draft DCP controls. It is therefore recommended that the FSR for the site be reduced to 4:1. Additionally site specific controls could also be considered that include a maximum residential FSR, minimum non-residential FSR and minimum non-residential FSR that needs to be to be delivered below ground floor level or the level of Leicester Street.

In order to achieve a more gradual transition in buildings heights, FSR controls within the study area and on adjacent site will also need to increased to allow buildings of heights illustrated in the heights plan to be developed. This is indicated on the above maps.

It must be noted that no additional analysis has been undertaken to test the implications of the increased FSR and density suggested for the surrounding context. Additional density will have impacts on public infrastructure, open space and traffic and will need to be assessed during the future masterplanning process.

Note: Traffic simulation modelling of the precinct is currently underway.

Figure 67: Recommended Floor Space Ratio controls for the Chester Square site



masterplanning exercise

Figure 68: Potential changes to Floor Space Ratio beyond the site to be considered as part of the future

Key FSR

· <u> </u>	Study Area
	0.5
	0.8
	1.2
	1.5
	1.8
	2.5
	3
	3.5
	4

Draft DCP Controls

In order to help ensure positive design and public domain outcomes, the following draft DCP controls have been developed. These draft controls have informed an alternative reference scheme and will be further refined post Gateway determination when they will be informed by additional transport and traffic studies and incorporate findings and recommendations from the Public Domain Plan, which is currently under development.



Draft DCP Controls

Access

Objectives:

- · Create a pedestrian prioritised precinct
- Promote active frontages linking into and supporting Waldron Road
- $\cdot\,$ minimise the impacts of vehicular access and servicing

Controls:

Pedestrian

- 1. A through-site link and pedestrian right of way at least 6m wide must be provided between Frost Lane and Leicester Street. The route should be universally accessible and accessible to the public 24/7.
- 2. A through-site link and pedestrian entry into the shopping centre shall be provided between Bent and Priam Street approximately mid-block between Leicester Street and Frost Lane. The route should be universally accessible and access may be restricted at particular times of day.

Bent and Priam Streets

- 3. Only one vehicular access point may be provided on Priam and Bent Street into the site. This access point may not be located closer than 30m from the Frost Lane.
- 4. The maximum width of this access point is 12m and access for servicing and private parking may be shared.

Frost Lane

- 5. Subject to further studies Frost Lane will be designed as a one way shared surface street accommodating loading and access for properties along Waldron Road
- 6. A maximum of two vehicular access points are permitted on Frost Lane.
- 7. No access for large articulated service vehicles is permitted

Leicester Street

- 8. A maximum of two vehicular access points are permitted to the site from Leicester Street
- 9. The maximum width of these access points is 6m
- 10. Access for service vehicles on this edge is prohibited.



Figure 69: Proposed access control diagram



Streets and open space

Frost Lane (shared street)

Objectives:

- Create a public space that connects the development to the rear of properties along Waldron Road through a new pedestrian priority laneway
- Create a spaces where all vehicle, pedestrian and cycle
 movements occur slowly and safely
- Encourage outdoor dining and retail trading out onto the laneway to activate the space through the day and evenings.
- integrate tree planting, WSUD elements and careful paving selection to make an environment that is comfortable in the hot months and does not increase urban heat



Design Criteria:

- Frost Lane is to be of a sufficient width to allow for movement of vehicles, loading and serving, for pedestrian movement, outdoor dining and short stay parking. An overall of width of 13m is recommended subject to further traffic studies
- 2. Wind conditions: minimum 70% of the space must achieve wind conditions suitable for sitting and outdoor dining, demonstrated through wind modelling with points taken in at least 8 locations in the laneway
- 3. Grading: Is graded to create a spoon drain, likely to the south side, or central in laneway and has no raised kerbs
- 4. Paving: Is suitable for vehicular movement and DDA compliance, minimizes urban heat generation, and is permeable in zones for trees
- 5. Trees: are incorporated on one side, or staggered along length of laneway, to provide 15% canopy coverage of the laneway.
- 6. Building interfaces: new buildings and renovations to existing buildings prioritizes locating active uses along the laneway, with minimized width of vehicular access points
- 7. Vehicle management: furniture elements, planting and trees are to be laid out in combination with bollards to denote zones where pedestrian access is separate from the central shared paved zone

Priam, Bent and Leicester Streets (local streets)

Objectives:

- Create upgraded streets that increase opportunities for walking and cycling in the town centre.
- Embed a Connection with Country in the design of WSUD elements, street trees and understory planting
- Provide adequate pavement widths for the increased population density
- Allows vehicular movement, but at slower speeds appropriate for a densely populated town centre.
- Integrates substantial tree planting and understory planting areas, WSUD and careful paving selection, to make an environment that is comfortable in the hot months and does not increase urban heat
- Protects and retains as many existing trees as possible, with new planting of varying species to increase biodiversity

Design Criteria:

- 1. Dimensions: minimum footpath width of 3m
- 2. Where separated cycle: On Priam St, allow 2.5m wide separated two way cycle path
- 3. Solar access: minimum 70% of the space must achieve 6 hours of sunlight when measured at the winter equinox
- 4. Trees: new trees are incorporated on development side, with additional infill trees to non-development side of street, to provide 50% canopy coverage of the whole street.
- 5. WSUD: integrate rain gardens and passively irrigated verges to all streets and located trees within planted zones.
- 6. Wind conditions: minimum 70% of the space must achieve wind conditions suitable for sitting and outdoor dining, demonstrated through wind modelling with points taken in at least 8 locations in the open space





Draft DCP Controls

Central Publicly Accessible Open Space

Objectives:

- Create a vibrant public space, activated by ground floor retail and communal uses that is open and welcoming to the whole community.
- Embeds a Connection with Country in the design of the public space, creating place-specific identity and sense of place
- Celebrates the multi-cultural population of Chester Hill
 and is designed to be socially inclusive space
- Integrates seamlessly with the public domain streetscape on Leicester Street and Frost Lane, with level transitions through the open space designed to create DDA accessible and welcoming spaces
- Integrates substantial tree planting and understory planting areas, including lawn, to make an environment that is comfortable in the hot months and does not increase urban heat



Design Criteria:

- 1. Dimensions: minimum width 40m, minimum area 2,800m²
- Solar access: minimum 70% of the space must achieve at least 4 hours of direct sunlight between 10 am and 3 pm on 21 June
- Wind conditions: minimum 70% of the space must achieve wind conditions suitable for sitting and outdoor dining, demonstrated through wind modelling with points taken in multiple locations
- 4. Includes a through-site link from Frost Lane to the open space for pedestrians that has a minimum 6m width, is open to sky, aligns with breaks in buildings and is visible from Waldron Road. Through site access is required 24 hours a day and must include DDA compliant ramps / lifts
- 5. Tree canopy cover: incorporate tree planting to provide minimum 30% cover of open space. Utilise a mixture of local native species to enhance habitat benefits. Where it is not possible to deliver 30% tree canopy cover demonstrate alternative solutions that will minimize urban heat island effects to the same extent as 25% mature tree canopy coverage (i.e. Green Roofs, Green walls, etc.)
- 6. Biodiversity: use predominantly local native species in the design of the planting, with a focus on supporting local fauna species habitat
- 7. Soil volume for trees: Central open space to be designed with deep soil zones at interfaces to Leicester St and Frost Lane to allow planting of trees in deep soil at either end of the space. Any trees located over structure are to be provided with ADG compliant soil volumes in a combination of raised or mounded soil volumes. Setdowns in structure to be provided where possible to minimise visible height of any raised planters. Where possible access of canopy trees to bedrock is preferred for longevity and growth.
- 8. Integrated play: develop the design to include formal or informal opportunities for children to play within the space including elements such as water features and misting devices that help deal with urban heat
- 9. Artworks and heritage interpretation: artworks and heritage interpretation must be provided and considered as integral to the design of the open space and developed concurrently with the public domain design. The value of this artwork is to be as stipulated in the VPA

Private Communal Space

In-accessible Green Roofs

Objectives:

- Provide communal open space which is inviting and welcoming to all residents
- Embed a Connection with Country in the design of communal spaces
- Incorporate places to sit and work/study/read outdoors
- Consider informal and formal play opportunities
- Integrates substantial tree planting and understory planting areas, WSUD and careful paving selection, to make an environment that is comfortable in the hot months and does not increase urban heat
- May include areas of lawn for use by residents in conjunction with planting areas of varying species to increase biodiversity

Design Criteria:

- 1. Dimensions: minimum width of 24m
- 2. Area: minimum area equal to 25% of the site
- 3. Solar access: Achieve a minimum of 50% direct sunlight to the principal usable part of the communal open spaces for a minimum of 2 hours between 9am and 3pm on 21 June
- 4. Trees: Provide trees to ensure 25% of communal space is covered by mature tree canopy. Where it is not possible to deliver 25% tree canopy cover demonstrate alternative solutions that will minimize urban heat island effects to the same extent as 25% mature tree canopy coverage (i.e. Green Roofs, Green walls, etc.)
- 5. Wind conditions: Achieve wind conditions suitable for sitting to the principal usable part of the communal open space, demonstrated through wind modelling with points taken in at least 8 locations in the open space

Objectives:

- Incorporate green roofs and bio-solar roofs to decrease urban heat
- Provide planted roof spaces of local native species to increase biodiversity and provide habitat for birds and
- small mobile fauna

Built form controls

Active Frontage

Objectives:

- · Create a pedestrian prioritised precinct
- Promote active frontages linking into and supporting
 Waldron Road
- · Minimise the impacts of vehicular access and servicing

Controls

- 1. Big box retail units and car parking must be provided below the level of Leicester Street
- 2. Active retail frontage must be provided on both Priam and Bent Street for 30m north of Frost lane or to the entrance of the proposed east- west through site link with the corner at Frost lane activated with retail uses onto Frost Lane.
- 3. Active retail frontages should be provided around the proposed new central open space.
- 4. The remaining frontages north of the through site link (apart from where access or devices area required) should be residential with level changes and architectural devices used to ensure privacy to ground floor units



Key

- Active / non-residential frontage
- Residential frontage

The location of public elements

Objectives:

- Ensure new public elements have a public address and are visible from key movement routes
- Encourage people to move through the centre, from the station, along Waldron Road and across the centre as a whole

Controls:

- A cold shell for a 2,000m² community facility shall be delivered as part of the development for a public purpose to be determined by Canterbury Bankstown Council. The detailed design of the facility is to be developed in collaboration with Canterbury Bankstown Council and should be subject a design excellence process and should include a community engagement process
- 2. The primary entrance to the facility must be from ground level off a public street
- The external envelope of this element must be visible from a high order street (Waldron Road / Priam Street or Bent Street)
- 4. The design and appearance of the facility shall be such that it visually separate and district from the shopping centre / mixed use towers

Draft DCP Controls

Built form articulation

Objectives:

- · To ensure that new development responds sensitively to the existing context and do not appear out of scale when viewed from street level.
- To allow for the incremental, long term growth of the centre where there is a positive relationship between new taller development and existing low scale development
- To mitigate the visual and perceived impact of the bulk and scale of the high density development
- To mitigate environmental impacts such as wind down draft and solar access
- To provide residents and visitors to the centre with protection from adverse weather conditions and create positive micro climates, particularly along Priam and Bent Streets and Frost Lane where outdoor dining and active frontage is desired
- To ensure residents of ground floor units have acceptable visual and acoustic privacy from the passing public

Street Setbacks

Leicester Street

- 1. Buildings with a street wall height of between 6.5m and 10m to be set back by from the street boundary by 5m to retain the trees that exist on the site
- 2. A 6m wide and 40m wide deep soil setback must be provided along the Leicester Street frontage to align with the proposed new open space
- 3. Buildings taller than 8 storeys to be set back from the property boundary by at least 8m

Frost Lane

- 4. Buildings with a street wall height of between 6.5 and 10m to be set back by from the property boundary of Frost Lane by a minimum of 3m
- 5. Buildings taller than 8 storeys to be set back from the centre line of Frost Lane by 12m

Priam and Bent Streets

- 6. Buildings with a street wall height of between 6.5 and 10m to be set back by from the street boundary by 3m (reduced from 5m)
- 7. Buildings taller than 8 storeys to be set back by from the street boundary by 6m



Figure 72: Consolidated built from controls

Draft DCP Controls

Street walls

- 8. Minimum 6.5m street wall (2 storeys) along all public streets
- 9. Maximum 10m street will (3 storeys) along all public streets
- 10. All buildings above the street wall to be set back by a minimum of 3m, with the exception of Frost Lane where buildings above the street wall should be set back 12m from the centreline of the existing road reserve

Awnings

11. A minimum 3m awning shall be provided:

- · Along Frost Lane
- On Bent and Priam Streets between Frost Lane and 18. Any linking building to the south of the open space is the proposed East-west through site link
- · Around the publicly accessible open space

Built form articulation

Buildings 8 storeys and under

- 12. Maximum building length of 45m, elevations longer than 45m should be designed to be read as separate massing with a recess of at least 3m deep and 6m wide separating the two masses to create more vertical proportions
- 13. Buildings running east west are limited to an 18m depth to allow for cross ventilation

Towers above 8 storeys

14. Limited to a maximum GFA footprint of 700m²

Building heights

- 15. Tower heights should be varied across the site to ensure variation in the skyline and minimise overshadowing impacts on the public domain and adjacent properties as per the heights indicated above:
 - Tallest central tower 60m (18 storeys)
 - Second tower 55m (17 storeys)
 - Priam Street 45m (15 storeys)
 - Bent Street 35m (11 storeys)
- 16. Linear buildings oriented north south are limited to 8 storeys or 29m in height
- 17. Linking buildings between the residential towers along Frost Lane are limited to 6 storeys or 20m in height
- limited to 12m in height

Overshadowing

19. Solar modelling at DA stage shall demonstrate that the northern elevations of the existing permitted built form envelopes of the Waldron Road properties still receive more than 2 hours of direct solar access at winter solstice. For this test it can be assumed that the building facades on the Waldron Road properties are set back from the centre line of Frost Lane by 12m.





Figure 73: Built form envelope height in metres

This section of the report presents an alternative reference scheme / built form envelope based on the above draft controls. This reference scheme provides a level of certainty around the scale, massing and arrangement of the key components of the scheme. It is only one of multiple potential solutions for the site and will need to be resolved at DA stage when end user requirements are know and more detailed technical information is available.

It is important to note that both the proponents reference scheme and the alternative reference scheme illustrated in this section show one tower of 19 storeys. This is because it is possible to deliver buildings of 19 storeys within the 62m height control sought by the proponent. The instruction to reduce buildings heights to 18 storeys was given late in the process and the reference scheme has not been updated. While this represents a loss of around 700m², this floor space can likely be accommodated elsewhere in the site and impacts will need to be assessed at DA stage.

The findings of this study is that :

- A reference scheme that complies with the above controls will be limited to an FSR of 4:1 (where the planning proposal sought and Council resolution permitted 4.53:1).
- Despite the reduction in FSR and greater setbacks there are still issues with the built form envelope overshadowing the properties on Waldron Street to the extent that these will not be able to be developed to the extent of the existing planning controls and be able to meet ADG solar access requirements. This issue will need to be addressed at DA stage.

10

10.1 The Proponent's Reference Scheme

The adjacent image illustrates the built form envelope that formed part of the Planning Proposal Reference scheme. The unit numbers are from the planning proposal are based on an average GFA unit size of 91m² per unit resulting in 633 units. Based on a more traditional unit size of 85m² per unit the yield on the site increases to 683 units.

Chester Square site

FSR	4.53:1
Retail GFA	15,869m ²
Library GFA	2,020m ²
Residential GFA	58,043m ²
Dwellings	633 *(683* *)

* Based on applicants reference scheme 90m²/unit

** Based on 85m²/unit





Figure 74: Planning Proposal reference scheme

10.2 Recommended changes to the Proponent's Reference Scheme

The design considerations identified above have been translated and overlaid onto the typical floor plans of the reference scheme. These have been used to inform an alternative built form envelope and DCP controls.

The key changes to the reference scheme include:

Providing greater primacy for Bent and Priam Streets by:

- Providing active frontages on Bent and Priam Street linking to new entrances to Chester Square
- Relocate the proposed carriageway crossings and vehicular access points off Bent and Priam to other parts of the site

Improved transition and integration of built form

- · 2-3 storey street wall on the perimeter with 3-6m setback
- · Reduce height on the edges / increase height in the centre
- Increase heights on adjacent land
- Additional breakup of massing through meaningful articulation

Improved amenity to Frost Lane / Waldron Road

- Reducing the height of filler blocks between the towers to 6 storeys to improve amenity in Frost Lane and properties along Waldron Road
- · Omit canopy structure associated to the library
- $\cdot\,$ Increase the building setback on Frost Lane from 1.5 to 3m

Greater focus on public domain

- Public domain investments on all adjoining street and linking to Waldron Road
- Increased tree canopy and deep soil
- · Consider pedestrian flows and loss of open space







Improved links to Waldron Road



deep soil zone

3 storey street wall and setback

+

+

-

Figure 75: Potential improvements on a floor plan by floor plan level



+

≯

+

→

4

+

2-3 storey street wall and setback

Reduce the height linking buildings to improve solar and visual bulk

deep soil zones

Assume servicing to remain on Bent / Priam

Introduce active retail frontage onto Priam

Improved links to Waldron Road

Consider parking access off a widened Frost Lane

Reduce setback to introduce street wall

Introduce active retail frontage onto Priam

Relocate existing vehicular access (Frost Lane)

Improved links to Waldron Road

Consider parking access off a widened Frost Lane

10.3 Alternative Reference Scheme

The adjacent illustration shows an alternative reference scheme based on the above LEP and DCP controls. It provides an indication of the scale and massing of the building, interface conditions and yield. The adjacent sites are illustrated as being built out to the existing maximum built form envelope as defined by existing controls.

As a result of the recommended LEP and DCP controls the development is able to achieve an FSR of around 4:1. Like the proponents reference scheme this alternative reference scheme includes a 19 storey tower which is inconsistent with the intent of the Council resolution for an 18 storey tower. The associated amendment to height of building control to reflect the maximum 18 storey building envelope will have a minor impact to FSR as the GFA can likely be distributed elsewhere on the site. This scheme is one of many designs deliverable within the proposed controls.

Chester Square site	Planning Proposal	Alternative
FSR	4.53:1	3.96:1
Retail GFA	15,869m ²	15,403m ²
Library GFA	2,020m ²	2,000m ²
Residential GFA	58,043m ²	48,745m ²
Dwellings	633* (683**)	573**

* Based on applicants reference scheme 90m²/unit

** Based on 85m²/unit





Figure 76: Alternative reference scheme





Recommended permissible built form envelope





Comparison of the proponents reference scheme and the recommended permissible built form envelope



Comparison of the alternative reference scheme and the recommended permissible built form envelope

Figure 77: Building envelope study



The above study shows how the alternative reference scheme and the Planning Proposal perform with reference to the building envelope created by the DCP controls. The building envelope still allows for a level of adjustment within the bounds of the reference scheme.

10.4 Shadow Study



The above studies illustrate the overshadowing impacts of the alternative reference scheme (4:1 FSR and 19 storeys) at winter solstice - 21 June. The impacts include:

- $\cdot\,$ Overshadowing of Frost Lane with very little improvement as a result of the retention of the multi-purpose community facility as per the proponents reference scheme
- The open to sky connection in the centre of the site provided a shaft of direct sunlight light into Frost Lane around mid-day
- · Improvement overshadowing impacts on the Waldron Road properties as a result of the lowering of the linking elements
- From around 11.30am onwards there is no overshadowing of Nugent Park north of the rail line
- \cdot A proportion of shadows fall will onto the rail line, station, roadway of Waldron Road

Figure 78: Winter solstice shadow diagrams



Key

- Shadow of existing buildings
- Shadow of reference scheme

10.5 Solar Insolation Study - Public Domain

The adjacent solar insolation study illustrates that the public domain adjacent to the site generally received more than adequate levels of solar access. Frost Lane however performs very poorly from a solar access perspective and omitting the linking roof between the proposed new community facility and the tower does help improve solar access in the middle of the lane. This open space should be maintained as a clear, open to sky connection.



Figure 79: Solar access to ground level open space during winter solstice

9am - 3pm June 21st



10.6 Solar Insolation Study - Waldron Street Properties

The adjacent study illustrates the impact of overshadowing on the adjacent Waldron Road properties based on existing DCP controls. It is important to note that the existing DCP built form envelope as a continuous 8 storey element is illustrated as it is not possible to determine at this stage what the site amalgamation pattern for these blocks could be. The setbacks at ground floor are based on the indicative cross sections explored for Frost Lane.

The key findings of this study are that:

- Reducing the height of the connecting blocks between the towers and increasing the setbacks along Frost Lane have helped improve the solar impact of the development on Waldron Road properties
- The east-west orientation of the blocks mean that it will be particularly challenging for the Waldron Road properties to be redeveloped to the extent of their existing controls and meet the 2hours of direct sunlight to 70% of the units as only one facade receives northerly light
- There is a more significant impact on those properties to the east of Charles Place as a result of the two taller buildings
- North facing units at the lower podium level will not receive more than 2 hours of direct sunlight however, it is noted that the Draft Consolidated Canterbury Bankstown LEP will only permit apartments as part of 'shop top housing development' which must include ground floor level commercial uses that are not subject to minimum solar access requirements
- The block to the west of Charles Place, where the buildings on the Chester Square site are lower, perform better as a result of the reduced height of the linking elements

It should also be noted that increasing the permissible heights of building on Waldron Road would help improve solar compliance as there would be more dwellings above the shadow cast by the development. This may be explored further in the future Masterplan.



Figure 80: Solar study on Waldron Road properties



10.7 Solar Insolation Study - Communal Open Space

The adjacent study illustrates how much sun the communal open space on the site and on the Waldron Road Properties have. What is clear is:

- That the communal open spaces on the communal deck above the shopping centre on the Chester Square perform particularly well
- That communal open space on the Waldron Road properties will need to be on the roof of these developments. Any communal open space that may be provided at the lowers levels (such as above retail tenancies / at street wall level) would be heavily impacted by the overshadowing caused by the towers on the Chester Square Site and will not receive the 2 hours of direct sunlight required by the ADG.
- · ADG requirements
 - " Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)"



Figure 81: Solar access to communal open space

9am - 3pm June 21st



Conclusion and recommendations

This section concludes the report and summaries the key outcomes that inform the response to DPIEs request for additional studies as they relate to urban design and public domain.

11

11.1 Conclusion

The recommendations contained in this report respect and make reference to the decisions, engagements and studies that have preceded it. In particular, Council's endorsement of the Planning Proposal sets the framework for this study, which is focussed on the refinement of the development controls for the site. The objective of this refinement process is to effect positive urban outcomes for the community and reduce opportunities for disagreement at later stages should it be found the development controls have an unreasonable impact on the delivery of the project.

It is important to note that a 'reference scheme' illustrates one way that the development controls and associated building envelope can be realised. Planning controls should allow for multiple design outcomes in the future, and should therefore be generous to allow different solutions, whilst providing certainty around environmental impacts and positive outcomes. The conclusion of this study is as follows.

Strategic merit

The Chester Square site is the largest consolidated land parcel in the Chester Hill centre and its development has the potential to:

- Deliver a significant retail destination with a large format food anchor that would support the economic performance of the centre;
- · Deliver a new open space;
- Deliver a new community infrastructure, in the form of a multi-purpose community centre;
- Deliver a quantum of units that could lift perceptions of the area; and
- Relocate parking underground for improved urban design outcomes

While the Planning Proposal is not contingent on the delivery of the Metro, the other strategic driver for this scale of density is the potential future location of a new metro station at Chester Hill. This significant infrastructure investment would further elevate the attractiveness of the centre as a place to live, whilst improving its local centre function. That said, any development on the site could help catalyse further development activity in and around the centre, which has failed to attract private investment for some time. The challenge presented by this Planning Proposal is what scale of development would be appropriate for the centre and what public benefits can be delivered within the centre, as this will set the tone for the centre as a whole.

There would be several implications associated with the scale of the development proposed. In particular, the number of units envisaged on the site exceeds housing targets for the centre in the Housing Strategy and LSPS for the short to medium term. This could result in an oversupply of housing in the short term that could hinder other sites in the centre to turn over and the renewal of the centre as a whole may be delayed until the metro is delivered and demand picks up again. This is made more challenging as the adjacent lots would require site amalgamations and in turn need higher values and FSR to make them economically viable as development sites.

Streets and public domain

A key aspiration of the urban design framework is to better connect the Chester Square shopping centre to Waldron Road and the rest of the centre. The streets in Chester Hill are relatively wide and residential in nature. Public domain interventions should seek to:

- · Create active streets
- · Prioritise pedestrian and cyclist movement;
- Reduce vehicle speed by reducing the width of the carriageway;
- Improve Bent and Priam Streets as active street connections with non-residential uses activating then ground plane;
- · Introduce WSUD and tree planting where possible;
- Invest in improving the quality of Charles Place as a pedestrian link between Waldron Road, Frost Lane and the new proposed open space on Chester Square. Consideration should be given to the widening of this link as part of the future masterplanning process;
- Improve levels of amenity along Frost Lane acknowledging it's role as a service lane.

A Movement and Place street hierarchy has been proposed in this report and will be developed further in the Public Domain Plan.



Figure 82: Imagry of the Planning Proposal reference scheme

Open space

- While there are large areas of open space in the centre Chester Hill lacks high quality public domain and public investment into the parks and open spaces has been limited
- The Chester Square site offers the best opportunity to deliver a new open space within the centre that the community can benefit from and which can help stimulate investment in the area
- This open space on the Chester Square site will be privately owned and is likely to have a commercial focus with active outdoor dining and activity throughout an extended period of the day. These conditions suggest that the quality of the open space will be maintained at a high level at no cost to Council
- It is recommended that the minimum width of this open space should be 40m to ensure that it is flexible and able to accommodate a range of uses and that deep soil is provided within the site to help deliver Councils tree canopy targets
- While interventions such and children's play can be provided within the open space, the Planning Proposal includes a significant residential component that sets the scene for a denser centre and larger populations. The recreational needs of these new residents will need to be addressed elsewhere and within close walking distance of the site - addressed as part of the future masterplanning process
- The future master planning process will need to consider the long term needs of a larger population and other sites may need to be acquired (i.e. Post Office) or transformed (i.e. Frank Bamfield Oval) to serve these longer term needs
- · Delivering new open spaces in the future that meet current open space guidelines (access within 400m) will be much more challenging given the fine grain pattern of ownership and infrastructure barriers (rail and busy roads)
- While Nugent Park North could be upgraded to serve the community in the short term it is likely that this open space will be required in the longer term for the Metro Station
- Short term upgrades to Nugent Park North could help rejuvenate areas directly adjacent to the park such as Mariners Shopping Centre
- More detail will be provided in the Public Domain Plan which is currently in preparation and will be made available for exhibition post Gateway

Proposals for a new multi-purpose community centre

It is understood that the inclusion of the multi-purpose community centre within the design occurred after the previous peer reviews of the Planning Proposal and at the request of Council. Where there is a need for new community infrastructure within a local area this is typically identified through a community needs study. Good urban design and planning practice is to consider the potential location strategically through a masterplanning process. Opportunities to collocate and use public investments to improve the functioning of a centre should also be explored to ensure future needs are also addressed.

This inclusion of the multi-purpose centre within the Chester Square site poses a number of challenges and opportunities for Chester Hill. This approach can be considered a public benefit as it will ensure the delivery of a new public facility within the local area at a reduced cost to Council. There are also clear benefits for the proponent for the inclusion of a multi-purpose community centre within the shopping centre as it will draw foot traffic into the development and command higher rentals. At the same time, there is a risk that concentrating two major town centre destinations (retail and community) within one site will draw energy and activity away from other parts of the centre and Waldron Road to the detriment of the centre as a whole.

While the proposed multi-purpose community centre within the scheme could be treated as a distinctly unique architectural element, with a positive relationship to the new open space it will not be visible from Waldron Road or from other key spaces and streets within the centre. As noted in Chapter 6.3 above this does not take advantage of the city shaping potential that a new community facility within the centre could bring. The applicant has argued that the community facility would be visible from Leicester Street, across the proposed open space, however Leicester Street is a low order street, that is discontinuous and only 200m long. The ability of the community facility to contribute to the character and identify of Chester Hill is diminished.

The previous peer review proposed the opening up of views to the community facility from Waldron Road with a new open space on he existing Post Office site that would widen Charles Place into a more civic plaza. It is understood that it is not possible to bind this open space to the approval and this is therefore



Figure 83: Massing view of alternative reference scheme



Figure 84: Obscured view of the library as per the reference scheme from Waldron Road looking through Charles Lane

Conclusion and recommendations

not considered within this Urban Design Framework and will be explored further as part of the future masterplanning process. The challenge of visibility, legibility and address still remains and will need to be carefully considered as part of the next design stage.

The design team, including SJB and Aspect, is of the opinion that alternative locations within the town centre would have other positive outcomes for the centre and community and should still be considered in future masterplanning work. If Council is still of the opinion that this is the best location for a new multi-purpose community centre then additional controls will need to be developed to ensure a civic address for the new facility. This could be achieved through a design excellence or design review process.

Heights strategy

There are strong planning arguments to be made for taller and more substantial urban buildings within local centres and close to public transport. The precedent study undertaken as part of this project illustrate that there is no single approach to building heights within any centre, and the scale and massing of development within each centre generally aligns with strategic policy and a clearly defined Desired Future Character Statement. While the existing panning controls envisage a low rise, eight storey centre, there certainly is scope for the centre and the Chester Square site to accommodate buildings of some scale.

Council's and the Local Planning Panel's endorsement of the heights sought by the Planning Proposal establishes the framework for this study. Contextual fit, bulk and scale have been identified by this study, as well as in the previous peer review, as an urban design concern. The receiving context is generally low scale (less than 4 storeys) with the existing planning controls support buildings up to 6 and 8 storeys along Waldron Road. In this context, any development significantly over 8 storeys could be considered out of context.

There are very few contextual cues that could act as reference points for buildings heights of 18 storeys as proposed. While the delivery of a metro station at Chester Hill could be a lever for supporting additional height, the timeframe for the delivery of the metro is uncertain and a comprehensive heights strategy for the centre would need to be developed with this in mind. Council and the Local Planning Panel have determined that buildings of 11 to 18 storeys are appropriate for the site and the scope of this appointment does not allow for this decision to be interrogated or reviewed substantially.

This study does not propose a centre wide heights strategy as that will be informed by a broader set of considerations (including housing targets, population growth, proposed metro and community infrastructure requirements) and will be undertaken at a later date and as part of Councils centre master planning process.

A high level heights strategy for the precinct around Chester Square should be based on the following principles:

- Concentrating height in locations of highest accessibility (close to the railway station) and where overshadowing impacts are not over sensitive uses
 Controlling height to minimise overshadowing impacts
- Controlling height to minimise overshadowing impacts on open space and adjacent properties such that they hinder the site's ability to meet ADG requirements
 A gradual transition down from the tallest buildings on
- A gradual transition down from the tallest buildings on the Chester Square site to the low rise context to the north, west and east
- 4. Maintaining a three storey street wall across the centre that references the height of existing buildings to allow for the gradual transition in built form over time with taller buildings set back from the street

This study has illustrated an increase in buildings heights in the blocks immediately surrounding the site, increasing permissible heights from 6 to 8 storeys to a range of building heights up to 15 Storeys. This primarily serves to transition building heights from the existing 1-2 storey in the low rise neighbourhood towards the subject site (18 storeys). This approach suggests that the Planning Proposal height is determining the heights within the centre. Commensurate impacts on traffic, amenity, community infrastructure and open space of this additional yeild will need to be tested in the future masterplanning process.

It has been noted that the Heights of Buildings sought in the Planning Proposal exceed the height of a number of buildings that form part of the reference scheme. Where this has been observed, the recommendations for changes to Heights of Buildings has been reduced to more closely align with the height of the reference scheme to ensure that the impacts of



Figure 85: The Planning Proposal within the context of a Chester Hill Centre with amended controls allowing for increased in height in the blocks directly adjacent to Chester Square to allow for a more gradual transition in building heights

the reference scheme have been tested and understood.

This study has recommended reducing the maximum height for new buildings on the site from 62m to 60m to be in line with the 18 storey building height endorsed by Council. Further reductions to the maximum Height of Buildings are recommended across the site as illustrated in the plans that form part of this report with the view of improving solar access and ensuring variation within the skyline. It also recommends a number of setbacks and reduced building heights along Frost Lane and solar access controls to ensure good outcomes for adjacent properties.

This study has identified overshadowing impacts on the Waldron Road properties that may prevent these sites from meeting ADG solar access requirements under existing controls. Rather then reducing heights and FSRs on the Chester Square site at this stage the approach has been to develop a DCP overshadowing control and allow for these impacts to be addressed at DA assessment.

Site layout and design

The layout of the site and the arrangement of built form is a product of the site geometry and various policy instruments, most specifically the ADG which stipulates building separation and solar access requirements. The Planning Proposal reference scheme, including the location of the open space, community facility and built form represents the optimum arrangement of built form with the view of maximising yield. The options study and workshopping with Council officers revealed that any departure or deviation from this layout would have a significant impact on the site FSR. Relaxing some requirements (for FSR) or omitting some of the key elements would result in very different outcomes.

It is important to note that SJB is not the author of the Planning Proposal or designer of the reference scheme for the proposed redevelopment of Chester Square shopping centre. The alternative reference scheme presented in this report should be considered the refinement of the built form envelope that was crafted by the proponent, endorsed by Council and shaped by Council Officers with urban design input from SJB. SJB are not aware of the proponents particular requirements and have not been appointed to resolve the architectural detail of the proposal. It is acknowledged that the draft DCP controls may require the substantial revisiting of the proposal and this will need to be resolved by the proponent in subsequent design stages.

Floor Space Ratio

An appropriate FSR for the site should be the consequence of grounded planning and design outcomes. The FSR sought in the Planning Proposal of 4.53:1 is particularly high for a local centre when compared to other local centres. It should be noted that there are developments underway around Sydney and within the LGA that are feasible at FSRs much lower than that which has been proposed.

The FSR appears to the consequence of certain cost drivers including:

- · The scale and complexity of the development
- The under-grounding of the parking and accommodating large format retail anchor
- The delivery of the generous privately owned open space; and
- The delivery of the mulit-purpose community centre within the site.

This study prioritises place-based outcomes and suggests that a lower FSR would be more appropriate and would avoid future tensions if the FSR is not achievable within the DCP controls. It is important to note that the recommended FSR is premised on the assumption that 7,000-9,000m² of the 15,000m² non-residential GFA is located below the level of Leicester Street. Should the development mix change or if more retail floor space is provided above ground floor level the impacts on the public domain would be different.

It is therefore recommended that the FSR for the site be reduced from 4.53:1 to 4:1. Additionally site specific controls could also be considered to include a maximum residential FSR, minimum non-residential FSR and minimum nonresidential FSR that needs to be to be delivered below ground floor level (or the level of Leicester Street).

Built form controls

This study has also suggested a number of built form controls to minimise the apparent bulk and massing of the building and achieve positive urban design outcomes. To address the issue of height transition created by the proposed development a three storey street wall across the entire centre is recommended. This corresponds to the height of the many of the existing commercial buildings that will take time to redevelop, it helps maintain a human scale within the street and helps deal with adverse environmental impacts associated with tall buildings such as wind down draft.

Other controls includes:

- · Maximum tower footprint controls,
- Maximum buildings lengths
- \cdot Maximum street wall heights
- \cdot Minimum street wall setbacks
- \cdot Solar access controls

All of these controls will be refined post Gateway and through further testing.

In conclusion, the proposed redevelopment of Chester Square has the potential to be a catalyst for the renewal of the centre and provide much needed services, activation and investment in Chester Hill. At the same time the scale and nature of the development represents a step change in how development has traditionally taken place in the area and will change the character and identity of the broader area. This scale of development has been supported by Council and the Local Planning Panel. Future renewal needs to be coordinated and directed by a strong masterplan that enables development beyond this site and Council has committed to undertake this process. It is hoped that this investment in the area will help overcome real and perceived barriers to development and install confidence in the area.

Given Councils endorsement of the proposal and the still evolving vision for the centre, this study recommends a refined building envelope through a set of revised set of LEP and DCP controls. The combination of these recommendations may lead to a situation where facilities, such as the multi-purpose community centre are no longer viable and the proposal may need to be revisited in part or entirely. However the legacy of these recommendations is important and a more thorough review of the controls for the centre through a masterplanning process will deliver a suite of high quality streets and public open spaces that will make Chester Hill a great place to live, shop and work. SJB Architects

sjb.com.au

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We create spaces people love. SJB is passionate about the possibilities of architecture, interiors, urban design and planning.

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