Hodyl & Co

Cremorne Built Form Review

Prepared for the City of Yarra May 2022



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Prepared by Hodyl & Co for the City of Yarra

Proiect team:

Leanne Hodyl, Bec Fitzgerald, Huei-Han Yang and Alice Fowler

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Hodyl & Co Pty Ltd ABN 85 613 469 917 www.hodyl.co





Contents 3

Executive summary	04
Introduction	06
Methodology	80
Understanding the context	10
Design strategies	16
1. Building on Cremorne's valued character (18)	
2. Creating a comfortable and engaging public realm (26)	
3. Delivering high-quality sustainable buildings (32)	
4. Ensuring buildings are responsive to context (38)	
5. Improving the setting of heritage buildings (58)	
Sub-Precincts	66
Cremorne West (68)	
Railway (74)	
Church Street (78)	
Birrarung (86)	

Executive summary

Project purpose

The purpose of the Built Form Review is to set a built form strategy for growth and change in Cremorne and to provide greater clarity and certainty for the future of development. The built form review is driven by an understanding of the urban context and underpinned by rigorous analysis. The outcomes of the project will inform the preparation of the broader Urban Design Framework and the proposed built form controls for the Cremorne.

Method

A mixed methodology was used to develop the recommendations which included site visits, a policy review, spatial analysis, sectional analysis, a development capacity review and 3D testing. The method also included the integration of independent heritage advice by heritage architecture specialists - Trethowan.

Design strategies

Five design strategies were established for Cremorne with each underpinned by an analysis of the existing context to inform place-specific design objectives and built form controls. These were:

- 1. Building on Cremorne's valued character
- 2. Creating a comfortable and engaging public realm
- 3. Delivering high-quality sustainable buildings
- 4. Ensuring buildings are responsive to context
- 5. Improving the setting of heritage buildings

Sub-precincts

The Built Form Review study area includes areas of commercial land use as defined by Commercial 2 Zoned land in Cremorne.

The four sub-precincts (Figure 1 and Figure 2) and several strategic sites were identified through an urban structure analysis of Cremorne.









Figure 1. Four sub-precincts.

Recommendations

The built form review recommends introducing design objectives and built form controls to guide design outcomes in Cremorne. The following built form controls are proposed:

- · Building heights
- · Street wall heights
- Maximum boundary wall heights
- Upper-level setbacks
- Building separation requirements
- Residential zone interface requirements
- · Solar access controls

These place-specific built form controls implement the vision for Cremorne and are supported by design objectives to guide the qualitative outcomes sought.



 $\label{eq:Figure 2. Cremorne sub-precincts map.} Figure 2. \quad \text{Cremorne sub-precincts map.}$

Introduction

'Cremorne is a global innovation precinct with a vibrant village feel, new sustainable development, quality public spaces, active transport options, set within narrow streets and historic industrial buildings and workers cottages.'

Vision from the Cremorne Place Implementation Plan¹

Project purpose

The purpose of the Built Form Review is to set a built form strategy for growth and change in Cremorne to provide greater clarity and certainty for the future of development. The built form review is grounded in a strong understanding and rigorous analysis of the urban context. The outcomes of the project will inform the preparation of the broader Urban Design Framework and proposed built form controls for the commercial areas of Cremorne.

The Built Form Review must deliver the vision for Cremorne established in the Draft Cremorne Place Implementation Precinct² which sets out the overarching strategic direction for Cremorne. The Built Form Review is one part of a broader program of work intended to inform a coordinated set of actions in the Urban Design Framework.

Project objectives

- To analyse the existing and emerging urban and built form character and provide recommendations that achieve high-quality built form outcomes that contribute to the success of the Enterprise Precinct.
- To identify opportunities for development to contribute to the function, amenity, quality, character and safety of the public and private realm and deliver public benefits such as open space.
- To provide greater certainty around development outcomes in Cremorne through built form recommendations that can be translated into future planning scheme built form controls.
- To provide logic and evidence to support the introduction of built form controls into the Yarra Planning Scheme.

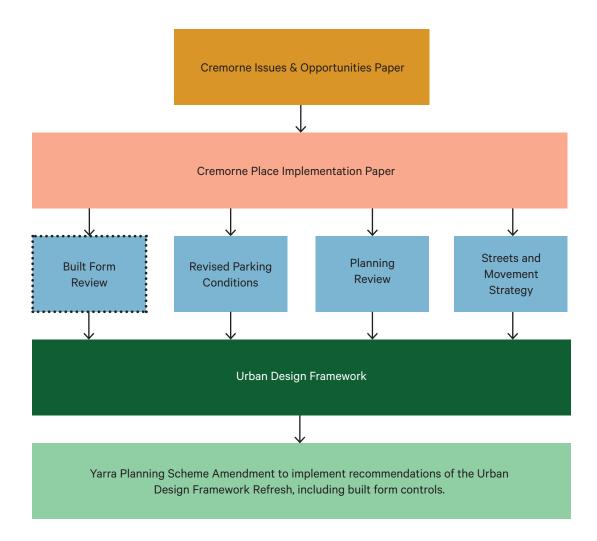


Figure 3. Integration with broader program for the Cremorne Enterprise Precinct.

Methodology

Figure 4 provides an overview of the report structure and the method for undertaking the built form review. The report is structured into three sections - context, design strategies and sub-precincts.

Understanding the context

A context analysis was undertaken to understand the vision for the Cremorne Precinct, the existing commitments in State and Local Government policies, the factors driving enterprise precincts and emerging trends in contemporary office development.

Design strategies

Five design strategies were established for Cremorne (see Figure 4). Each of these design strategies were underpinned by an analysis of the existing context to inform place-specific design objectives and built form controls for the Cremorne Precinct. This mixed methodology of analysis included:

- Multiple site visits to analyse the existing and emerging character of Cremorne.
- A policy review of existing visions and strategies for the Cremorne Precinct.
- A spatial analysis to assess the urban structure, public realm, site typologies, heritage character and interface characteristics.
- A sectional analysis of recent development applications to identify transition issues and to determine an appropriate design response at sensitive interfaces.
- Built form modelling to test solar impacts and to determine the appropriate built form typology to respond to the urban structure of Cremorne.
- The integration of independent heritage advice by heritage architecture specialists Trethowan.

This comprehensive analysis led to the development of design objectives and built form controls. These include general design objectives which apply to the Cremorne Precinct, place-specific design objectives which apply to identified locations and subprecinct-specific objectives which are tailored to each of the four sub-precincts.

Sub-precincts

The four sub-precincts and several strategic sites were identified in the design strategy 1 - Building on Cremorne's valued character. These were identified based on an urban structure analysis of Cremorne. The existing conditions of each of the sub-precincts was analysed and this analysis was used to inform the sub-precinct character statements and design objectives.

Developing five design strategies

- 1. Building on Cremorne's valued character
- 2. Creating a comfortable and engaging public realm
- 3. Delivering high-quality sustainable buildings
- 4. Ensuring buildings are responsive to context
- 5. Improving the setting of heritage buildings

Identification of four subprecincts









'Cremorne is a vibrant and diverse inner urban suburb home to over 2,000 residents, 700 businesses and 10,000 workers.'

Cremorne Place Implementation Plan¹

The suburb now known as Cremorne had been inhabited by Aboriginal people for tens of thousands of years prior to European settlement in 1835. The Wurundjeri People are the Traditional Owners of the land. They used to camp on both banks of the Birrarung (Yarra River) and catch eels in fish traps in the swamps and lagoons.² The Wurundjeri People continue to be the custodians of the land and water of Cremorne.

Today, Cremorne is a maturing suburb with distinct pockets of residential and commercial land. It's commercial areas are a destination for technology and creative industries. The suburb has a history of creative production, a diversity of building types available and an authenticity that is a key attractor to the area. The precinct has an annual contribution of \$4 billion to the Victorian economy.³ This success has in part been driven by its heritage, its location, its accessibility and the adaptability of its built form. The suburb has excellent access to public transport, the Swan Street Major Activity Centre and a rich industrial and residential heritage that is highly valued by those that live and work there.

Post settlement history

Cremorne was originally the site of the Cremorne Gardens (now the site of the Rosella Complex), founded by James Ellis and named after gardens of the same name in London. The Cremorne Gardens consisted of 4 hectares of ornamental planting and features including a theatre, menagerie, artificial lake, maze, pavilion for dancing, fountains, grottoes and bowling alleys.⁴ The Cremorne Gardens eventually closed in 1863 and was later subdivided in 1898. By this time, there was considerable settlement in Cremorne including a church and three schools.⁵

Large factories were then constructed along with neighbouring cottages to house Cremorne's new workers. Some of these factories still stand including the Richmond Power Station (built in 1891), the Bryant and May match factory (built in 1909) and the Rosella Complex (built in 1905). There were also smaller garment factories around the railway station. Several of these large scale manufacturing operations closed in the 1980s and 1990s.

These larger scale industries eventually moved out of Cremorne and by the mid-century light industry became more prevalent. The suburb continues to evolve as a space for technology and creative industries and was identified as a Enterprise Precinct in 2018 by the State Government.

Study area

Cremorne is a relatively small Melbourne suburb (approximately 70 ha) located to the south-east of Richmond and on the north bank of the Yarra River. The suburb is bounded by Punt Road to the west, Swan Street to the north and the Yarra River to the south. It is divided into two parts by the railway line which runs north-south through the middle of the suburb.

The focus of the Built Form Review is the areas of commercial land use (defined by Commercial 2 Zoned land) in Cremorne (see Figure 5). The study area excludes certain areas within Cremorne including -

- Residential land.
- Public Park and Recreation Zones.
- · Public Use Zones.
- Land affected by the Swan Street Design and Development Overlays (DDO25 - DDO28).
- Richmond and East Richmond Station.
- Major development sites which are already completed or under construction.

The project will consider the interface to these locations but no direct recommendations will be made to affect change in these areas.

¹ Victorian Planning Authority, 2020

² Yarra River Business Association, 2020

³ REMPLAN Yarra Economy Profile, 2018

⁴ City of Yarra Thematic History, 1988

⁵ Victorian Places, 2021



Figure 5. Study area of the built form review.



Image 1. Typical industrial buildings found in Cremorne.

'Enterprise precincts are typically dense, accessible and amenity-rich urban areas that provide fertile ground for business formation and ideas development and innovation'

— Cremorne Place Implementation Plan¹

Factors driving Enterprise Precincts

The State Government launched the 'Unlocking Enterprise in a Changing Economy'² in 2018 to provide a framework to identify and support enterprise precincts. 'Enterprise Precincts' are hubs for the emerging knowledge economy focused on job creation, responding to changes in the economy and evolving new ways of working.

This policy document identified Cremorne as an Enterprise Precinct and an area suitable for growing a knowledge and service-based economy as Melbourne's competitive advantage shifts from large-scale manufacturing to inner-city knowledge-based jobs. A key strategic objective of the Cremorne Urban Design Framework is to deliver the vision to develop a world-class Enterprise Precinct.

Victorian Planning Authority, 2020

To assess the potential of enterprise precincts, 'Unlocking Enterprise in a Changing Economy' includes a checklist of 9 factors that drive their success -

- 1. Quality of place
- 2. Diversity and inclusion
- 3. Affordability
- 4. Critical mass
- 5. Infrastructure
- 6. Accessibility
- 7. Anchor institutions
- 8. Competitive advantage
- 9. Collaboration

The criteria promote a holistic approach to developing enterprise precincts and assess the comparative strengths of different enterprise precincts. Quality of place is a factor that has attracted many industries to locate in Cremorne. Quality of place is when areas have a distinct character and offer high quality experience in the public and private realm. Cremorne's ability to retain and improve this quality will be essential to its ongoing success as an Enterprise Precinct. The quality of buildings will be integral to achieving quality of place, both in terms of their contribution to the character and amenity of Cremorne and their individual quality as places.

Increasing popularity of Cremorne

There are multiple major commercial offices in Cremorne including Carsales, MYOB, Uber, Tesla Motors, Red Energy and REA Group. Seek and Reece are also building major commercial offices signifying Cremorne's ongoing popularity as a location for commercial headquarters.

By 2020, MYOB will become the largest commercial resident in Cremorne, occupying the office precinct of the new Malt District at the iconic Nylex site.³

The Bendigo Kangan Institute is the major educational anchor in Cremorne with an educational focus on Fashion and Creative Industries. The campus has over 800 local and international students involved in a range of different programs including fashion, millinery and textiles.⁴

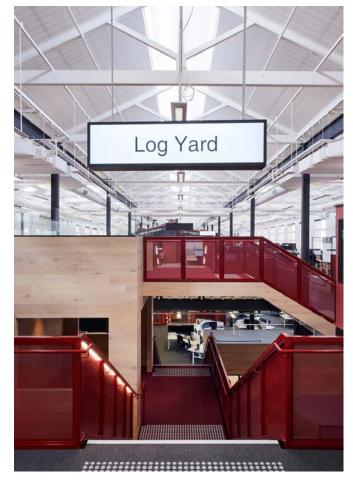


Image 2. Red Energy offices design by Carr Architects. A heritage adaptation of the Bryant & May factory. Source: Carr Architects.

A need for certainty

While there are specific built form and character policies relating to the Yarra River corridor and to landmarks in Cremorne, there are no specific design policies or built form controls for much of the commercial area in Cremorne, such as those typically found in a Design and Development Overlay. In the absence of specific design policy and built form controls, decision makers (Yarra City Council and VCAT) increasingly have to negotiate improved development outcomes on a site-by-site basis, through conditions on permits and other legal agreements, which has delayed the planning approval process. A lack of certainty also results in a mismatch of expectations between residents and investors in the precinct.

³ Property Council, 2018

⁴ Kangan Institute, 2021

'13 Cremorne is a seven storey 2900m² commercial project with retail on ground floor and a penthouse event space situated near Richmond Train Station'

Architects EAT

Demand for progressive workplaces

Cremorne needs high-quality buildings if it is to continue to support the progressive workplaces that have been attracted to the sub-precinct during its recent period of growth. According to the Property Council, organisations are increasingly using flexible, progressive workplace strategies to attract talent, boost productivity and retain staff.

This has led to a shift in the commercial office market to place an increased importance on a range of factors (other than floorplate size which has traditionally been a key driver). These include:

- End of trip facilities including bike racks, lockers and change rooms.
- Environmentally sustainable office environments.
- · Digital connectivity.
- Integrated services such as gyms, dry cleaning and childcare.
- Dynamic and flexible fit-outs with an emphasis on agile and collaborative workplace.¹

There are many small and medium scale sites in Cremorne which are suitable for the provision of smaller building floorplates that are focused on the quality of experience rather than traditional large-floorplate office buildings. 13 Cremorne Street is an example of a smaller scale commercial building that has an active ground floor and a mixture of indoor and outdoor spaces to create a high-quality experience for its workers.



Image 3. 13 Cremorne Street by Architects EAT, featured in Australian Design Review AR159.

Responding to Covid-19

Thousands of Australian businesses and their workers have begun working from home as Covid-19 continues to fundamentally reshape the ways we live and work. Many large corporate tenants in Melbourne have started giving up office space and weighing up their long-term workplace needs. Since January, Melbourne's CBD office vacancy rate has almost doubled from 3.2% to 5.8%.¹ Increasingly, tasks traditionally done in physical offices are now being done elsewhere. This will lead companies to reconsider the best value use of physical office spaces and the ongoing role of digital work and collaboration.²

Adapting to the way we work

Companies will now be starting to focus on both physical and digital worlds to create an integrated workplace ecosystem. Physical spaces will have an emphasis on human connection as the space in which collaborators come together. It is predicted that repetitive tasks done in the physical office, especially those done at a computer, are unlikely to continue in the long-term. Deloitte has established a series of principles to guide the shift to future-oriented workplaces summarised as follows -

- A focus on wellbeing, mental health and inclusivity.
- Continuity between physical and virtual experiences.
- Sense of place to develop community and productivity in everyday routines.
- Increased focus on informal and formal collaborative workspaces over individual work stations.
- A focus on learning and collaboration in physical workplaces.
- Rapid testing and piloting of new spaces and technologies to determine what works.

These principles indicate that there will be an increasing focus on well-designed commercial spaces that are focused on collaboration. High-quality buildings will be needed that support the values, culture and work activities of workplaces as employees become increasingly distributed.³

'There is a growing appetite for smaller [building] footprints that minimise environmental and visual scale impacts. With a renewed focus on workplace culture, small footprint commercial towers are becoming not just viable but increasingly desirable.'

- Andrew Cortese (Grimshaw), 2020

¹ The Urban Developer, 2018

² Deloitte, 2020

³ Deloitte, 2020

Design strategies

The five strategies.

There are five proposed design strategies to guide growth and change in the Cremorne context. These overarching design strategies are supported by additional objectives for the four identified character sub-precincts. These can be found in the character sub-precincts chapter (see pages 66-93).

These five strategies were informed by the vision for the Cremorne Precinct, State and Local Government strategic policy guidance and best-practice approaches to urban design policy. Each strategy is underpinned by a series of design objectives and built form controls which will help realise the vision for the Cremorne Precinct as a vibrant and diverse inner urban suburb.

- 1. Building on Cremorne's valued character
- 2. Creating a comfortable and engaging public realm
- 3. Delivering high-quality sustainable buildings
- 4. Ensuring buildings are responsive to context
- 5. Improving the setting of heritage buildings



Existing conditions

Cremorne is continuing to evolve as a unique employment precinct within Melbourne. It has a valued industrial character and a mixture of building types set within a network of narrow streets. Views of heritage landmarks such as the Bryant and May clocktower can be seen from different locations throughout Cremorne. Large areas of Cremorne are not covered by the Heritage Overlay but nonetheless have a strong neighbourhood character that reflects the area's industrial history. The area is currently under significant development pressure and much of the ageing building stock is being replaced with contemporary office buildings. As Cremorne changes, it is important that new buildings contribute to the character and amenity of Cremorne, respecting its existing qualities while celebrating emerging contemporary design.

Urban structure

Figure 6 visualises the overarching urban structure in Cremorne. Blocks to the west of Chestnut Street are oriented north-south whereas blocks to the east are oriented east-west. This creates a different character in the east and west of Cremorne. The blocks that interface the railway line are oriented north-south and are shallower in depth, creating a fine-grain block structure in the centre of the study area.

Low-scale context

At the interface of the study area there is a clear change in scale and use to low-scale residential uses. The Neighbourhood Residential Zone (NRZ) and the General Residential Zone (GRZ) apply to these areas and very little redevelopment has occurred over the last decade. Any development is typically in the form of low-rise infill development, additions to existing dwellings and small-scale apartment developments. As well as sites at the interface of the study area, there are a number of low-scale heritage clusters within the Commercial 2 Zone.

Heritage places

Cremorne has a number of heritage places that play an important role as anchors in the urban fabric. These heritage places include the former Richmond Primary School on Cremorne Street, the Bryant and May Complex on Church Street, the Rosella Complex on Balmain Street, the Richmond Power Station on Green Street and the Slade Knitwear sky sign at the intersection of Kelso Street and Dover Street.

Public realm

The public realm is limited in Cremorne due to the narrow width of the streets and the minimal extent of open space. There are some examples of buildings that have provided ground floor setbacks in order create well-defined building entrances and seating areas. There are four small public open spaces in Cremorne: Stephenson Street Reserve, White Street Park, Charles Evans Reserve and Dale Street Reserve.

Key streets

Cremorne is a relatively disconnected precinct, there are limited entry streets into the area. The railway line creates a barrier to the north and to the centre of the study area. The main streets that connect the east and west parts of the precincts are Balmain Street and Stephenson/Dunn Street. Cremorne Street is the key street in the west connecting to Richmond Station in the north. Church Street is the key north-south street in the east and connects to South Yarra via the Church Street bridge.

High visibility interfaces

Cremorne can be viewed from the southern side of the river and from the railway line which cuts through the centre of the precinct. That means that buildings interfacing the railway and river corridor are very visible from the rivers edges and when travelling through Cremorne on the train. Views from these corridors form an important part of the character of Cremorne.

Strategic sites

There are some very large strategic sites in Cremorne that have significant design potential due to their scale. These are:

- The Bendigo Kangan Institute
- 167 Cremorne Street
- The Rosella Complex
- 658 Church Street
- The Bryant and May Complex
- 534 Church Street

Three of these sites include heritage buildings that are on the Victorian Heritage Register - The Bendigo Kangan Institute, the Bryant and May Complex and 658 Church Street. The Rosella Complex has a series of individually significant and contributory heritage buildings. The redevelopment of these sites has the potential to significantly change the character of the area.

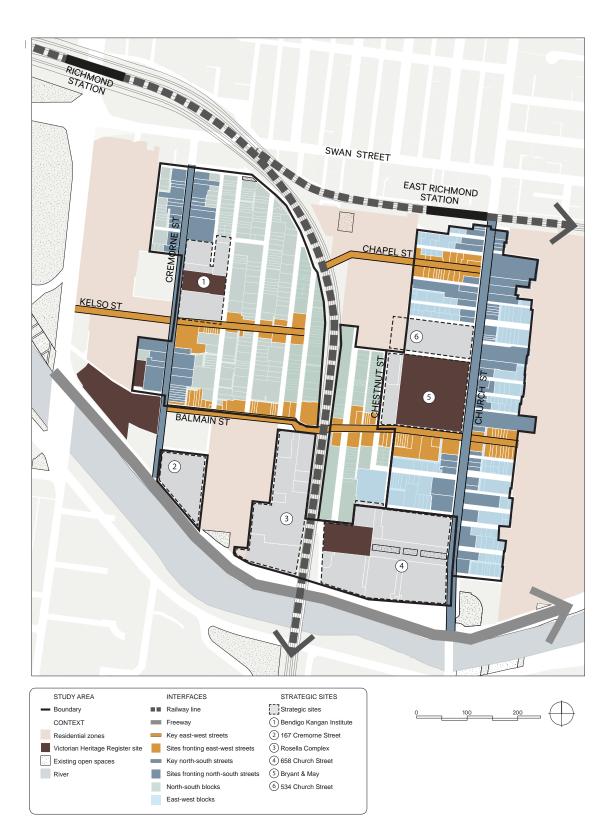


Figure 6. Urban structure analysis.



 $\label{thm:eq:loss} \mbox{Image 4.} \quad \mbox{Townhouse and industrial typology buildings along narrow Kelso} \\ \mbox{Street.} \quad$



Image 5. A mixture of buildings typologies on Church Street.



Image 6. Low-scale residential typologies at 143 Cremorne Street.



Image 7. Heritage landmark on Cremorne Street, the former Richmond Primary School.



Image 8. The Slade Knitwear sign as viewed from the Dover Street and Kelso Street intersection.



Image 9. A view of the Richmond Power Station on Green Street.



Image 10. White Street Park, one of the few open spaces in Cremorne.



Image 11. Looking south along Church Street towards South Yarra. Church Street is a key street that connects Cremorne to surrounding areas.



Image 12. View of the narrow footpath along Cremorne Street.



Image 13. Balmain Street Plaza.



Image 14. The southern interface of Cremorne directly interfaces the freeway which limits connections to the south.



 ${\bf Image~15.} \quad {\bf Mix~of~residential~and~commercial~buildings~along~Cotter~Street.}$

The urban structure analysis of Cremorne was used to identify four character sub-precincts -Cremorne West, Railway, Church Street and Birrarung.

The block structure was a key driver in identifying the four different subprecincts. The blocks structure changes markedly between the east, west and south of Cremorne which creates changes in character as you move through the precinct (see Figure 7).

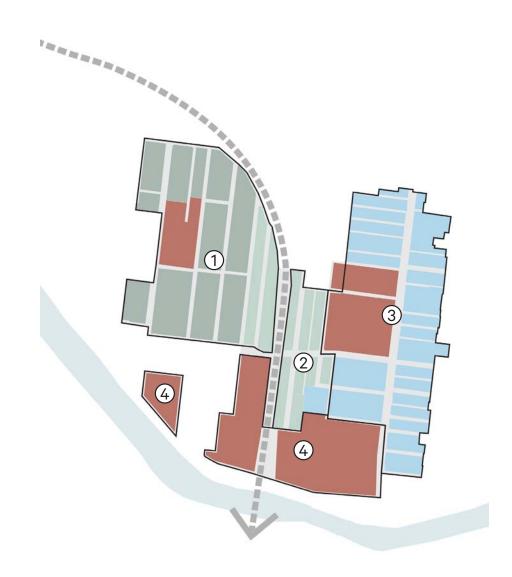


Figure 7. Block structure diagram.

- Wide north-south oriented blocks
- Narrow north-south oriented blocks
- East-west oriented blocks
- Strategic sites

The main corridors in Cremorne were also key drivers in determining the different sub-precincts. These were the two main streets - Cremorne Street and Church Street and the two corridors - the railway corridor and the river corridor (see Figure 8).

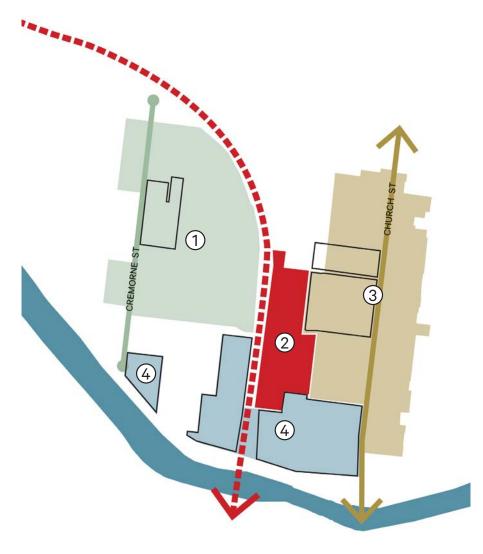


Figure 8. Key Sub-precinct drivers diagram.

1. Cremorne West Sub-precinct - Cremorne Street
2. Railway Sub-precinct - Railway line
3. Church Street Sub-precinct - Church Street
4. Birrarung Sub-precinct - Yarra river

Strategic sites

The four sub-precincts.

Each of the four identified sub-precincts have different character considerations. The sub-precincts chapter outlines the existing conditions, place-specific character statements and design objectives for each of these sub-precincts (see pages 66-93).



Cremorne West is south of Richmond Station. It is bound by Stephenson Street in the north, Jessie Street and Cremorne Street in the west, Balmain Street in the south and the railway line in the east. The Bendigo Kangan Institute is the key strategic site within the Cremorne West subprecinct.



The Railway Sub-precinct is directly east of the railway line. It is bounded by Adelaide Street in the north, the railway line in the west, Electric Street in the south and Walnut Street in the east. There are no strategic sites in the Railway sub-precinct but the Richmond Power Station is visible when looking south along Green Street.



The Church Street Subprecinct is south of East Richmond Station. It is bounded by the railway line to the north, Walnut Street to the west, Newton Street and Howard Street to the south and Brighton Street to the east. There are two strategic sites in the Church Street Sub-precinct - the Bryant & May Complex and 534 Church Street.



The Birrarung Sub-precinct consists of three large strategic sites that interface the Yarra River and the freeway - the Rosella Complex, 658 Church Street and 167 Cremorne Street.



Figure 9. Cremorne sub-precincts map.

2. Creating a comfortable and engaging public realm

Existing conditions

There is limited public space in Cremorne, however, the public space that is available is well used by local workers and residents. The lack of access to traditional open space has led people to inhabit other public spaces that are available to them including car parks, streets, underpasses, kerbsides and ledges built into buildings. While this creative response to using these spaces is effective in the short term, for Cremorne to retain its quality of place, it will need to increase public space in order to meet the increasing demand of residents and workers.

Open space

Cremorne's open space quota is well below best practice provision, at $2m^2$ per person, it is the lowest level of open space provision in Melbourne. This figure also doesn't account for the demands of the worker population which brings 10,000 additional people into Cremorne during the working week. There are three small open spaces at the periphery of the study area - Church Street Park, Charles Evans Reserve and White Street Park. These are supplemented by very small open spaces and seating areas across the study area including some within private land. These are insufficient to meet the needs of the population and on the whole, there is a severe lack of open space.

Streets

As well as having limited open space, the majority of streets in Cremorne are very narrow, and as a result, most footpaths are less than 1.5 metres wide. These footpaths are often obstructed by lights, poles and bins which forces many people to walk in the centre of the road alongside cars and bikes. Many of these narrow streets have no street trees which is common for former industrial suburbs in inner Melbourne.

Streets that have been identified as having the greatest importance in the public space network are Balmain Street, Cremorne Street and Church Street. These streets support a higher concentration of shops and cafes and are key connector streets for public transport, walking and cycling.

Laneways

Cremorne has a network of narrow laneways, originally introduced to provide rear access to properties. Some of these continue to provide a servicing role, while others are too narrow to support the servicing requirements of new higher-density buildings. As well as supporting servicing requirements, these laneways create a fine-grain pedestrian movement network.

Yarra River

Cremorne is on the north bank of the Yarra River but is disconnected from the banks by the freeway. The construction of the freeway alongside the Yarra River has meant that much of the natural significance of the river has been severely degraded on the north side. The Main Yarra Trail is accessible from Cremorne with access provided by a pedestrian crossing at Harcourt Parade/Punt Road or via a bridge and steps from Oddy's Lane and Church Street.

Schedule 1 to the Design and Development Overlay (DDO1), the Yarra (Birrarung) River Corridor Protection overlay, introduced an overshadowing requirement onto three of the strategic sites interfacing the river:

- 167 Cremorne Street
- The Rosella Complex (57 Balmain Street)
- 658 Church Street

This DDO does not specify mandatory or discretionary requirements regarding buildings height, however buildings must not cast any additional shadow across the Yarra River between 11:00am and 2:00pm on 22 June. Building facades that interface the Yarra are highly visible from the public realm, however, no additional guidance is provided on the appropriate design response at the interface to the Yarra River.

Emerging issues

The street interface has the most significant impact on the quality of the public realm as it is the most visible part of the building from the public realm. The following emerging issues have been identified in Cremorne:

- Building frontages dominated by car parking entrances, roller doors or carparking located at the ground level.
- Buildings with glazing at ground level which don't create meaningful engagement with the street.
- Buildings that have poor wayfinding with difficult to find entrances
- Buildings that have carparking at the ground level rather than commercial uses.

¹ Cremorne Place Implementation Plan. 2020



Figure 10. Development at 44 Gwynne Street with approximately 80% of the ground floor dedicated to servicing and carparking resulting in a poor-quality street interface.

- Buildings that visually dominate and overshadow the street due to the height of the street wall.
- Increased scale of buildings leading to overshadowing of the public realm.
- Buildings built to the boundary with minimal space for circulation around building entrances.

A key challenge when designing the ground floor of buildings is minimising the impact of inactive uses such as carparking and servicing. This is particularly challenging on small sites with narrow frontages which can become dominated by carparking entrances and service requirements (see Figure 10). Many of the sites in Cremorne have rear vehicle access but there are also areas with small sites that have no rear access for vehicles. This results in much less flexibility in how the ground floor is designed and generally results in a poor interface with the street.

Proposed changes by Council to apply a maximum car parking rate of 1/100m² per leaseable floor area (office and retail) will result in reduced carparking requirements and have a positive impact on these constrained sites.

2. Creating a comfortable and engaging public realm



Image 16. Example of a chamfered building corner at the intersection of Kelso Street which has the benefit of creating additional public space at the entrance to the building and at the intersection.



Image 17. Building setback at the ground level on Cremorne Street to allow for outdoor seating at the street level.



Image 18. Good example of an inset building entrance with integrated seating on Gwynne Street.



Image 19. Poor example of ground floor design on Church Street with floor to ceiling glazing and limited architectural detailing.



Image 20. Inconsistent awning provision on Church Street with some awnings designed in a manner that provides limited shelter to the street.

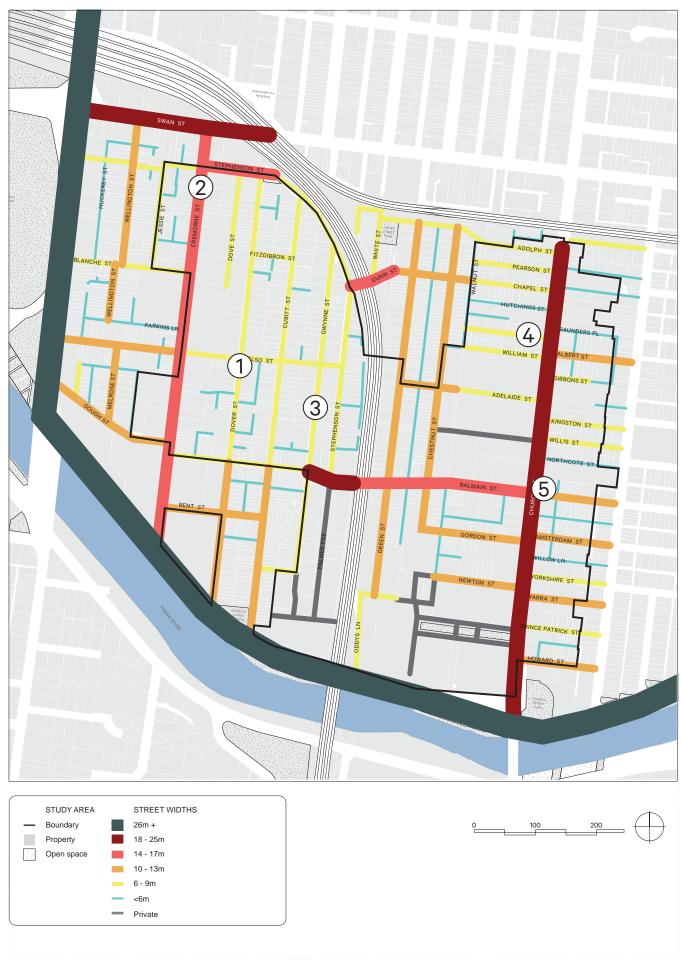


Figure 11. Street widths.

2. Creating a comfortable and engaging public realm

Design objectives

Each building must contribute to the creation of a comfortable and engaging public realm and encourage people to inhabit streets and public spaces. The following overarching objectives are required to ensure that buildings contribute to the creation of a comfortable and engaging public realm:

General objectives

- To allow for solar access to the footpaths along key streets; Church, Cremorne and Balmain.
- To design safe and engaging ground floors that contribute to the expansion of the public realm.
- To minimise the negative impacts of servicing and carparking on the public realm.
- To provide floor-to-ceiling heights that allow for commercial uses to be located at the ground level.
- To provide well-designed entrance spaces that create a transition between the public and private realm and encourage activity to occur at the street interface.
- To provide a higher level of design detail at the ground floor and lower levels of buildings.

Further to these general objectives, the design response to the public realm should vary based on the specific opportunities afforded on sites based on their size and location. For example, sites on keys streets are required to make a more significant contribution to the public realm as there are more people anticipated to use these streets. Figure 12 identifies place-specific opportunities for sites to contribute to the public realm:

Specific objectives

STREETS AND SPACES

- To provide chamfered building corners at intersections of streets (where appropriate) to create additional public space at points of pedestrian congestion.
- To contribute to an expanded public realm through inset building entrances and the integration of seating and landscape.
- To ensure that the southern footpath along Balmain Street (a minimum of 3m) is not overshadowed between 11am and 2pm at the spring equinox.



Image 21. Outdoor seating area at the corner of Balmain Street and Gwynne Street which supports social activity in the public realm.

- To ensure that the eastern/western footpath along Cremorne Street and Church Street (a minimum of 3m) is not overshadowed between 10am and 2pm at the spring equinox for a minimum of 3 hours.
- To increase the width of existing laneways and streets to a minimum of 6m where a property extends the full length of the laneway or street.

STRATEGIC SITES

- To provide publicly accessible open spaces on identified strategic sites.
- To provide ground floor setbacks where appropriate that integrate landscape, generous entrance spaces and seating and contribute to a sense of openness.

HIGHLY VISIBILITY INTERFACES

• To provide well-resolved facade strategies at the interface to the railway line and to the Yarra River.

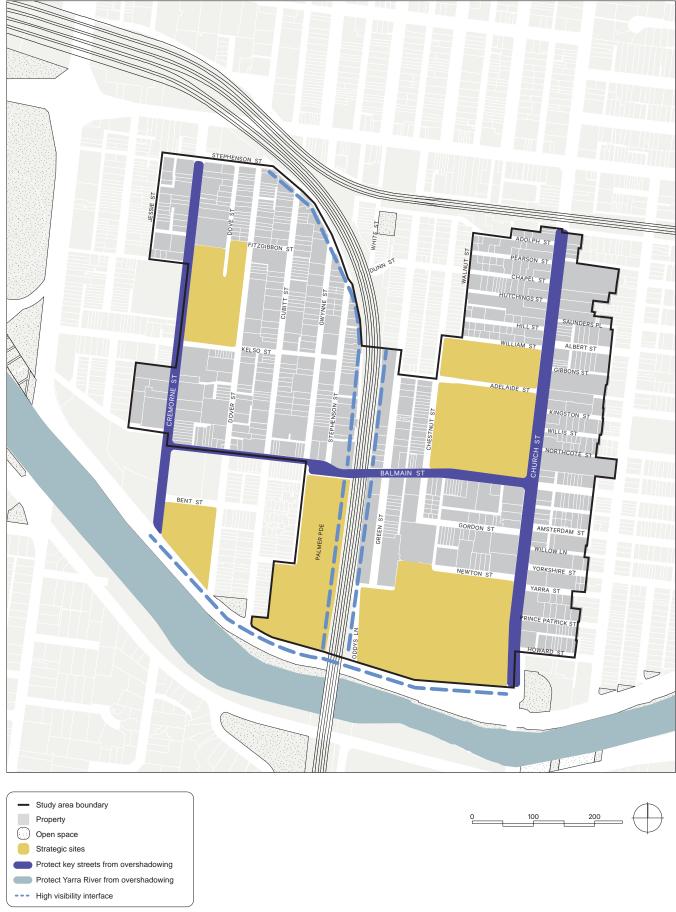


Figure 12. Public realm strategy.

Delivering high-quality sustainable buildings

Key urban design considerations

Delivering sustainable office environments is integral if Cremorne is to continue to attract progressive businesses to the sub-precinct. Sustainable, high-quality building design leads to reductions in energy costs and healthier workplace environments. The following are key urban design considerations when delivering sustainable, high-quality office buildings:

Daylight access

Buildings with good daylight access reduce their reliance on artificial light and therefore reduce their energy demand. Access to daylight also contributes to the improved health and wellbeing of employees. Buildings with shallow floorplates, adequate light-wells, separation between buildings, sufficient windows and adequate floor to floor ceiling heights are required to provide better access to daylight (see Figure 13).

Natural ventilation

Buildings with good natural ventilation can be cooled down without relying on artificial cooling. Cross-ventilation is the optimal approach to achieving natural ventilation. Incorporating operable openings allows them to be closed or opened based on the heating/cooling requirements of a building at any given time (see Figure 14).

Facade design

The design of building facades can improve the thermal performance of a building. Each facade should be treated differently based on its orientation. The design should consider the windows to wall ratio; the size, height and depth of windows; and whether the use of shading elements is required (vertical or horizontal). The type of glazing treatments used is also an important consideration. For example, double glazing can be used which reduces the need for cooling, helps to manage noise pollution and increases comfort levels (see Figure 15).

Green infrastructure

Buildings that integrate green infrastructure can have a better thermal performance. For example, the use of leafy plants on north and west facing walls can help to minimise heat gain in summer. Green roofs also have multiple benefits including reduced stormwater run-off, recreational and amenity uses, maximised thermal insulation and contribution to biodiversity and habitat. Cool roofs are a lower cost way to achieve lower roof temperatures and reduce heat gain. Ground level planter boxes increase greening at street level and can be integrated with seating in order to expand the public realm (see Figure 16).

Water resources

Managing water resources is more sustainable and reduces water costs. This can be achieved through the use of water efficient fittings and fixtures, by creating on-site water storage (grey and rainwater harvesting systems) and by maximising use of rainwater (i.e. for flushing toilets and for irrigation (see Figure 17).

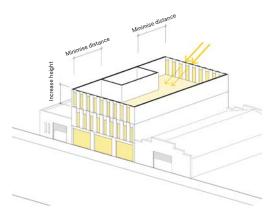


Figure 13. Daylight access

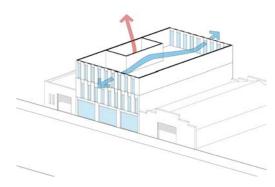


Figure 14. Natural ventilation

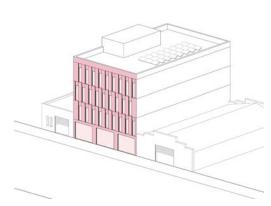


Figure 15. Facade design

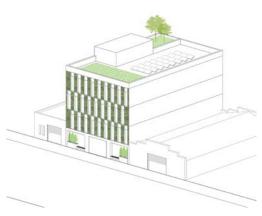


Figure 16. Green infrastructure

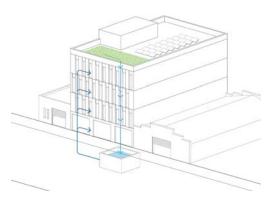


Figure 17. Water resources

3. Delivering high-quality sustainable buildings

Design objectives

Delivering high-quality sustainable buildings requires sustainability to be treated as integral to the design of buildings rather than as a last-minute addition. The following overarching objectives are required to guide the delivery of sustainable buildings:

- To design building footprints which maximise access to daylight through windows, lightwells, shallow floorplates, adequate floor to ceiling heights and building separation.
- To provide adequate floor to ceiling heights to allow floorplates to be adapted to different uses over time.
- To separate buildings adequately in order to achieve access to daylight, natural ventilation, high-quality outlook and development equity between neighbouring sites (see Figure 20 - Figure 25).
- To achieve optimal thermal comfort, including through natural ventilation, high performance insulation and the integration of green infrastructure.
- To design facades that are responsive to orientation to achieve optimal thermal comfort.
- To implement systems that allow water to be managed efficiently and sustainably.
- To encourage active transport through the provision of well-designed bicycle infrastructure and end-of-trip facilities.

These objectives are not place-specific and should apply to all buildings as a minimum standard.

Case study 17 William Street

Cremorne Studios won the Yarra Sustainability Award for Building Design and Development in 2018. The six storey building is a highly sustainable, energy efficient, commercial development. The building was modelled on the world-class German sustainability standards of Passivhaus. Materials were used in their pure form for easy reuse at the end of the building's life cycle.¹

Optimal thermal comfort was achieved through high performance insulation, highly efficient glazing, heating, ventilation and air conditioning. High levels of daylight mean that workplace lighting is almost unnecessary and high-quality cycling facilities encourage active, healthy commutes to work.²



Figure 18. Elevated view of Cremorne Studios, photographed by Peter Bennett Source: Layan Architecture.



Figure 19. View of Cremorne Studios from the street, photographed by Peter Bennett. Source: Layan Architecture.

¹ City of Yarra Website, 2021

² City of Yarra Website, 2021

3. Delivering high-quality sustainable buildings

Why do buildings need to be separated?

Adequate building separation distances are required to ensure that good levels of daylight and sunlight enter into buildings. Building separation also ensures that an outlook is provided from within buildings to connect occupants to the outside world and that privacy between neighbouring buildings is managed.

Building separation is also important to provide development equity, ensuring that the way one site is developed does not diminish the potential to deliver a well-designed building on the adjacent site. This is achieved by setting buildings back from side and rear boundaries and by separating buildings within sites.

Determining building separation

Building separation is a common issue that has been tested through a range of different contexts in Victoria and elsewhere. The recommendation to introduce building separation requirements does not seek to investigate this aspect from a 'first principles' basis but instead adopts commons metrics that have been adopted in mixed use contexts to achieve adequate building separation for built outcomes of different scales:

- A 3m setback to achieve a separation of between 3m and 6m.
- A 4.5m setback to achieve a separation of between 4.5m and 9m
- A 6m setback to achieve a separation of between 6m and 12m

These building separations requirements are consistent with those used in mixed use and residential contexts. A reduction in these metrics is not proposed due to the commercial context. These are considered suitable to a commercial context if resilient and adaptable built form outcomes are to be delivered that deliver a commensurate quality of outlook than those found in residential buildings.

Adapting to the Cremorne context

Typically, the overall heights of buildings have been used to determine the building setback requirements that should apply to a site. This is based on the assumption that the taller a building is, the further away the lower levels of the building are from the direct light source. Therefore, building separation must increase as buildings increase in height to allow more light to penetrate the lower levels of the building. The problem with this logic is that it assumes that each level of the building requires access to light from the side or rear boundary. However, buildings are frequently built to side boundaries at the lower levels in Cremorne and therefore light penetration at these levels is not required.

A more flexible control is required that is reponsive to the built form character of Cremorne in which a number of builldings are built to the boundary.

Proposed building separation

The proposed control recommends using the no. of levels of the building above the ground or boundary wall to determine the building separation requirement (see Table 1 and Figure 20 to Figure 25). This requirement should be applied at property boundaries and at laneway interfaces (measured from the laneway centreline).

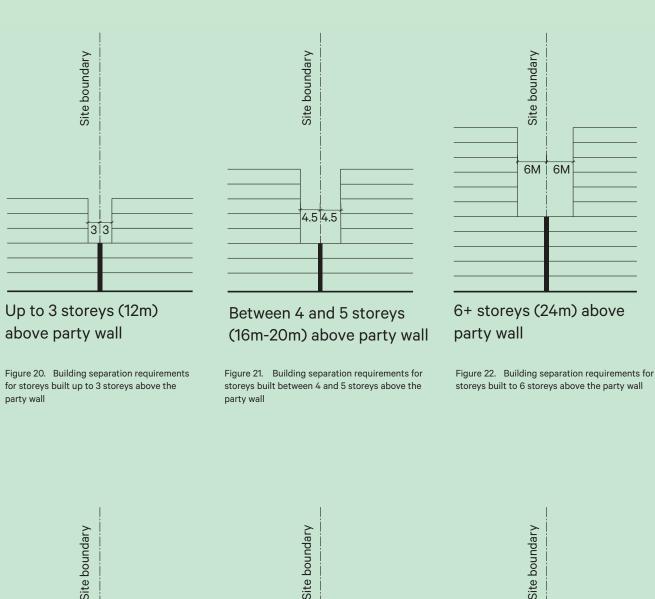
NO. OF LEVELS ABOVE THE GROUND OR BOUNDARY WALL	MINIMUM SETBACK FROM SIDE/ REAR BOUNDARY OR LANEWAY CENTRELINE
1-3	3m
4-5	4.5m
6+	6m

Table 1. Required building separation between sites.

On some larger sites, multiple buildings or tower forms may be proposed within a site. Table 2 outlines the recommended building separation controls for these sites.

NO. OF LEVELS ABOVE THE GROUND OR BOUNDARY WALL	BUILDING SEPARATION WITHIN SITES
1-3	6m
4-5	9m
6+	12m

Table 2. Recommended building sepration within sites.



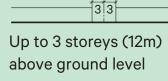
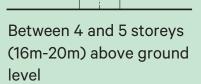
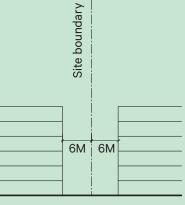


Figure 23. Building separation requirements for storeys built up to 3 storeys above ground level



4.5 4.5

Figure 24. Building separation requirements for storeys built between 4 and 5 storeys above ground level



6+ storeys (24m) above ground level

Figure 25. Building separation requirements for storeys built up to 6 storeys and above, above ground level

Existing conditions

Cremorne is an interesting mix of industrial heritage, institutional buildings, contemporary office buildings, low-scale terrace houses, showrooms and higher density residential apartments. The juxtaposition of these different buildings is an important characteristic of Cremorne which is known for its eclectic urban form.

While juxtaposition is a valued characteristic, it is still important that new buildings are responsive to their context. The existing buildings in Cremorne are predominantly 1-3 storeys but more recent developments have been 10+ storeys. This change in building scale can create challenges when managing the amenity of existing buildings within Cremorne and the amenity of buildings at the edges of the study area.

There are several factors that inform the development of suitable built form envelopes that are suitable for the context:

- Urban structure
- · Heritage context
- · Size of sites
- Low-scale residential zones at the edges

Urban structure

The streets in Cremorne are very narrow with the majority of streets between 6m and 13m wide. This means that any taller buildings need to carefully designed to ensure that they don't visually dominate the street. This can be achieved through providing a lower street wall height and then setting back the upper levels of buildings. Street wall heights of 3 storeys (12m) in the Cremorne context would create a roughly 1:1 (see Figure 27) to 2:1 (see Figure 26) relationship between the width of the streets and the street wall height of buildings in Cremorne. This is widely accepted as creating a comfortable 'human-scale' as experienced from the street.

The overall heights of buildings must also be carefully considered to ensure that the scale of buildings is complementary to the urban structure of Cremorne. Streets that are wider can typically accommodate taller buildings without comprimising the experience at street level. Building heights that are complementary to urban structure reduce visual bulk at the street level, maintain access to sunlight at the street level and are responsive to site size.

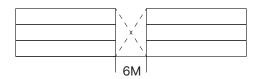


Figure 26. A 2:1 ratio where the street wall is twice the width of the street.

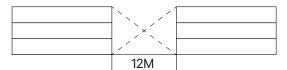


Figure 27. A 1:1 ratio where the street wall is equal to the width of the street.

Heritage context

There are sites with heritage overlays in Cremorne that may only be able to accommodate minor increases in heights due to their heritage sensitivity. For example, single-storey heritage buildings with a residential typology. Further to this, there are buildings with state-wide heritage significance that require a tailored design response to allow heritage buildings to remain prominent.

Size of sites

The size of sites has an influence on the overall scale of building that can be supported on a site. Larger sites can sometimes accommodate increased heights while still sufficiently managing the impacts on the public realm and providing sufficient building separation to neighbouring sites. Discretionary building heights allow minor increases (e.g. 1-2 storeys) to be supported if it can be sufficiently demonstrated that the design objectives have been met.

Sites are predominantly small-scale within Cremorne (up to 1,500m²) but there are some larger scale sites (1,500m²+) distributed across the study area (see Figure 28). Sites are typically 26m-28m deep and vary in width. Strategic sites are most likely to be able to accommodate the greatest heights within Cremorne due to their significant scale. However, this must be balanced with maintaining the prominence of heritage landmarks within these strategic sites.

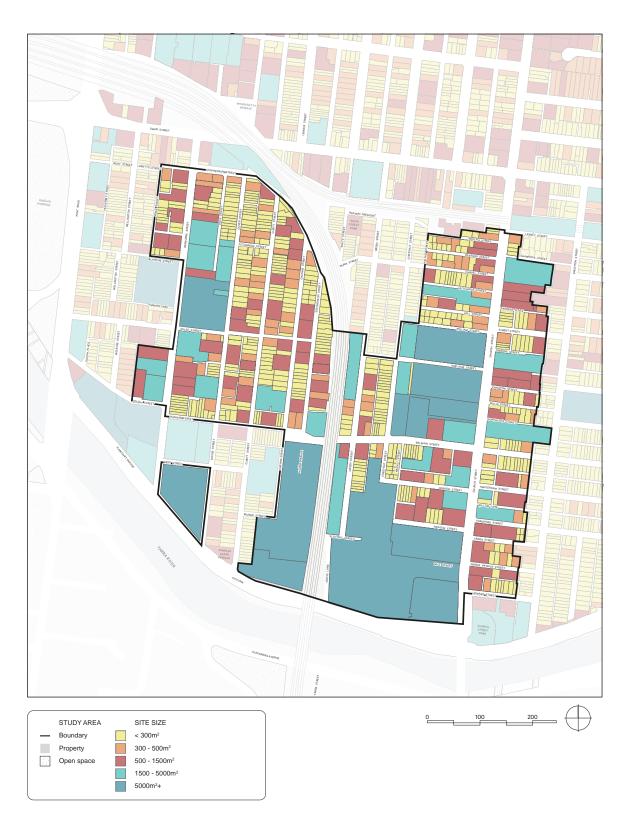


Figure 28. Site size.

Low-scale typologies at the edges

There are four residential zoned areas that interface the study area. It is important that built form transitions in scale at these sensitive interfaces in order to minimise amenity impacts on surrounding areas. Three of these residential zoned areas have heritage value and are covered by Heritage Overlays. There is no major anticipated change in these areas in the future and it is therefore important that new buildings in the Commercial 2 Zone adequately respond to this low-scale context. There are three different types of interfaces, each of which requires particular consideration:

- Direct interfaces where properties share a common boundary. The majority of these are rear to rear interfaces with a few sites with rear to side interfaces.
- Laneway interfaces where properties are separated by a laneway.
- Street interfaces, where properties are separated by a street.

There is a need to provide a good design response at these edges to ensure that the quality and amenity of these interfacing residential areas are preserved. An analysis was undertaken of selected development applications to understand the approach that had been taken to date. This indicated the following:

- An varied approach was taken to managing the transition to low-scale areas.
- Transitional heights were often poorly resolved with building mass stepping back multiple times.
- A common approach to managing transition at interfaces is to apply a defined angle that a building must be built within above the street wall rather than a setback in metres (e.g. 45 degrees). This allows the requirement to be applied across multiple sites regardless of their varying overall height.
- There is a need to account for the different types of interfaces - direct, laneway and street interfaces (see Figure 29).

Direct interfaces are the most difficult to manage, followed by laneways and then streets. This is because streets provide the greatest extent of natural separation between built form of varying scale. The sectional analysis demonstrates the response that four recent development applications have taken to transitioning to low-scale areas (see Sections 1-4).

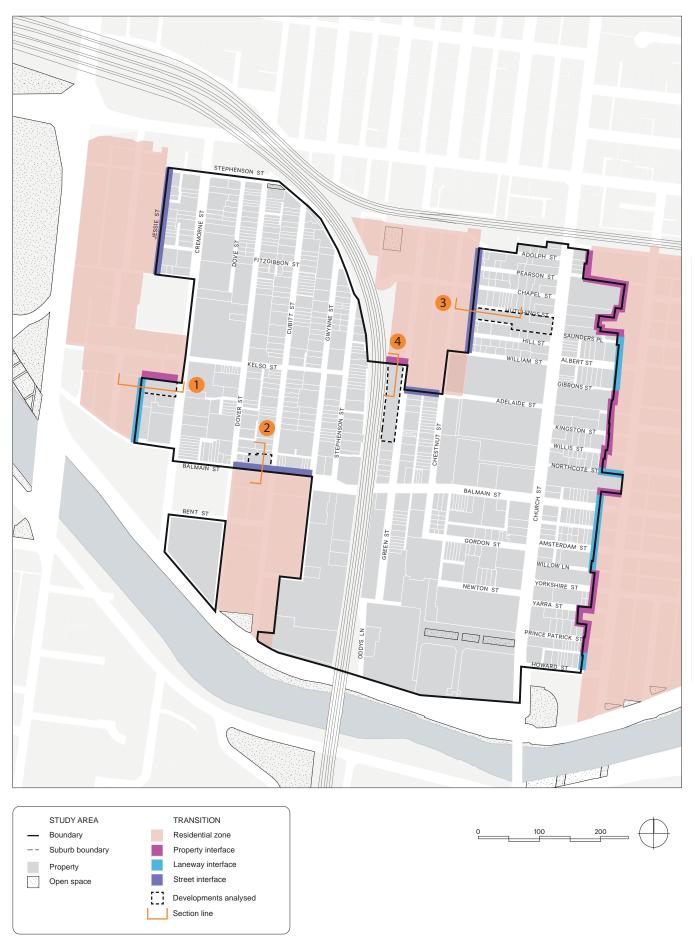
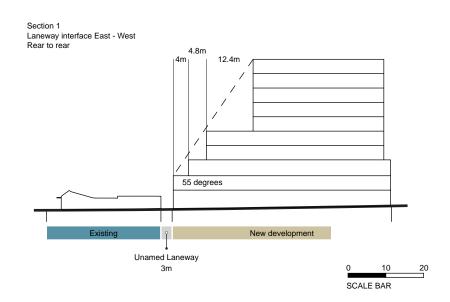


Figure 29. Low-scale typologies at the edges and interface types.

Section 1 - Laneway interface

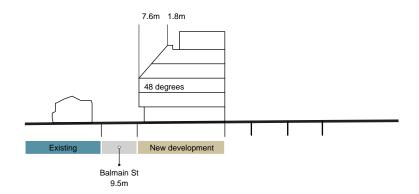
Section 1 demonstrates a response to a laneway/rear to rear interface. A two storey street wall height is provided to the laneway and the building then steps back three times with a total setback of 21.2 metres. The angle of the overall setback above the street wall is 55 degrees. A two-storey street wall is considered acceptable at this interface. However, the multiple steps in form (three) is considered a poorly resolved outcome.



Section 2 - Street interface

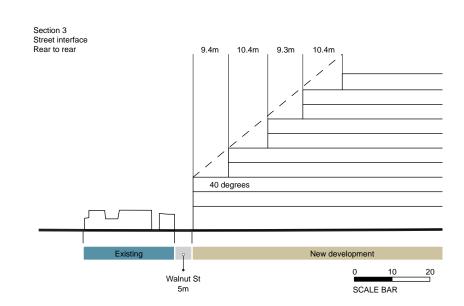
Section 2 demonstrates a response to a street/front to front interface. A three storey street wall height is provided to the street. The three upper levels are then stepped back. The fourth and fifth level at an angle of 48 degrees with the sixth level setback an additional 3.1 metres.

Section 2 Street interface Front to front



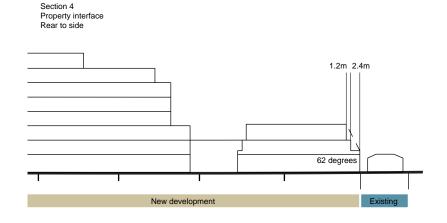
Section 3 - Street interface

Section 3 demonstrates a development response to a street/rear to rear interface. A three storey street wall height is provided to the laneway and the building then steps back four times with a total setback of 39.5 metres. The angle of the overall setback above the street wall is 40 degrees. A three-storey street wall is considered acceptable at this interface. However, the multiple steps in form (four) is considered a poorly resolved outcome.



Section 4 - Property interface

Section 4 demonstrates a development response to a property/rear to side interface. A two storey street wall height is provided at the interface with a balcony at the second level. The angle of the overall setback above the street wall is 62 degrees. The overall setback at the third level is 3.6 metres.



Emerging heights

An analysis of emerging development applications identified the following overarching building height trends based on the 49 development applications that were under consideration, approved or being constructed -

- The majority of buildings (63% or 31/49) of buildings were between six and nine storeys.
- 22% (or 11/49) of buildings were up to 5 storeys and these were found in both the east and west of the study area
- 14% (or 7/49) of buildings were above 10 storeys and these were predominantly located along Church Street the widest street in the study area.



Figure 30. Buildings of between 2 and 6 storeys along Cremorne Street.



Figure 31. Buildings of between 1 and 6 storeys along Church Street.

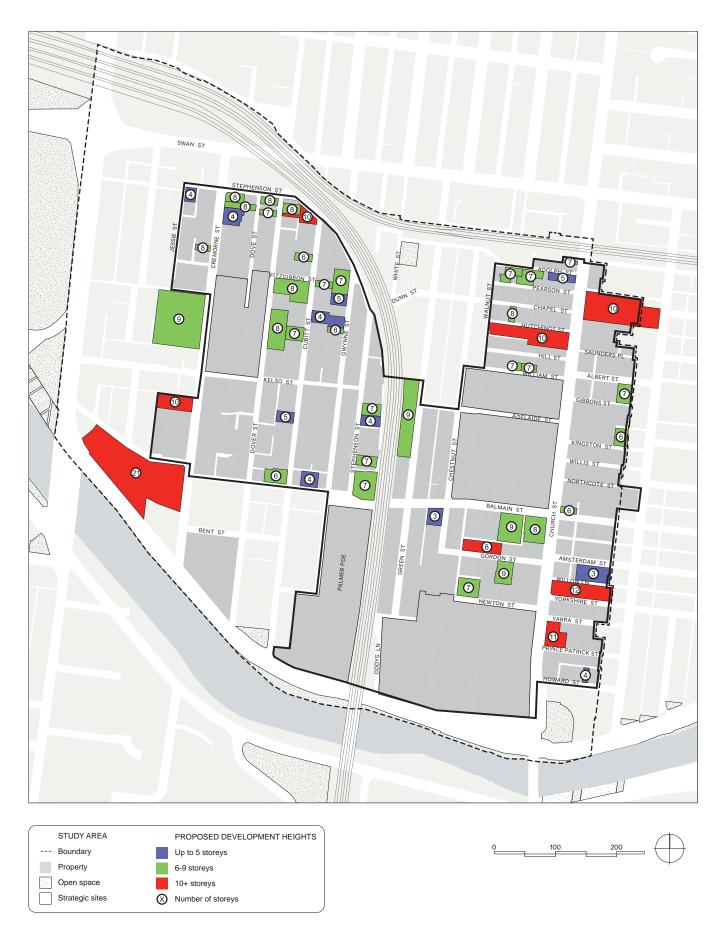


Figure 32. Analysis of emerging heights, development applications as of June 2021.

Design objectives

Each building must be responsive to its context including the neighbouring buildings, the character of the street and the broader Cremorne context. The following overarching objectives are required to ensure that buildings are responsive to their context:

- To design buildings that respond to the form of neighbouring buildings.
- To minimise visual bulk at street level by providing street walls, maximum boundary walls and overall heights that are responsive to the width and character of the street.

- To provide upper-level setbacks above the street wall that allow for a clear delineation between the street wall and the upper levels.
- To protect the amenity of properties in interfacing residential zones in terms of overshadowing of private open space and overlooking.
- To avoid expansive building forms that contribute to visual bulk by providing visual breaks, articulated massing and/or separation between building forms at street level and upper levels.

Sub-precinct height strategies



Buildings are between 4 and 8 storeys in height with street wall heights ranging from 2 to 4 storeys. The majority of the sub-precinct is 5-7 storeys with a 3 storey street wall to respond to the narrow width of the streets in Cremorne West.

The lowest buildings (4-5 storeys) are at the edges of the sub-precinct to manage the transition to residential areas in the west and south and the highest buildings (8 storeys) are along Cremorne Street as the widest street in Cremorne West.

Guidance on building form for the strategic sites is in the sub-precincts chapter.



Buildings are 5-7 storeys in height with street wall heights of 3 storeys to respond to the fine-grain streets and sites in the railway sub-precinct.

The lowest buildings are to the north edge of the subprecinct to transition to the residential zone in the north.



Buildings are between 5 and 10 storeys in height with street wall heights of 3 to 4 storeys.

The majority of the subprecinct is 5-7 storeys with a 3 storey street wall to respond to the fine-grain streets and sites in the Church Street sub-precinct.

The highest buildings (10 storeys) are along Cremorne Street as the widest street in the Church Street subprecinct and the broader study area. The street wall height is 4 storeys.

Guidance on building form for the strategic sites is in the sub-precincts chapter.



Guidance on building form for the strategic sites is in the sub-precincts chapter.

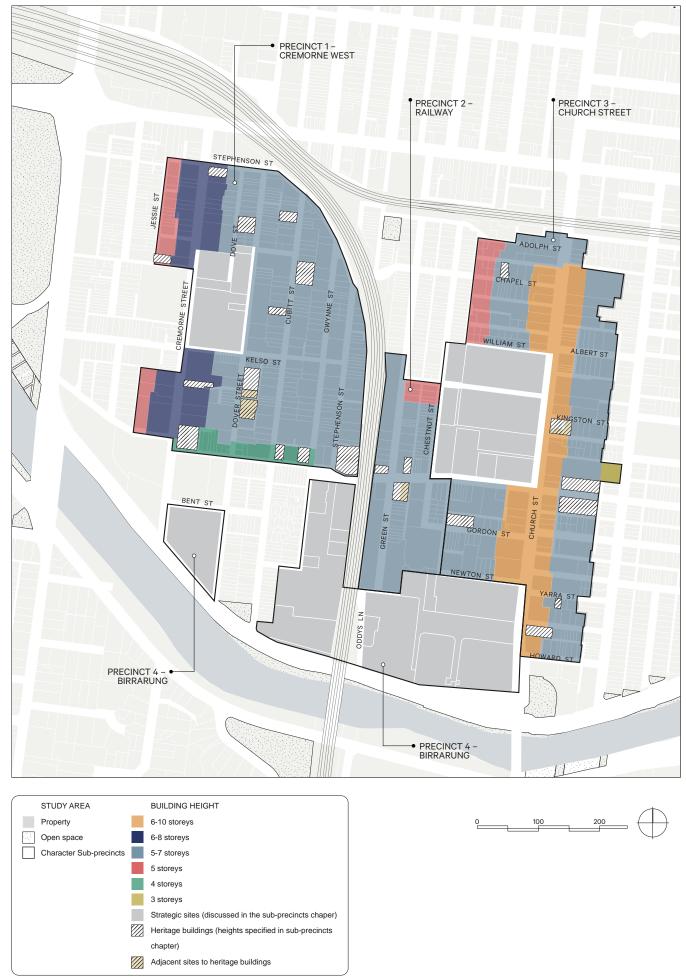


Figure 33. Building form strategy.

Building typology

The built form controls provide guidance on key elements of building form - building height, maximum boundary wall height, street wall height and upper level setbacks. Figure 35 to Figure 39 demonstrate how the built form controls work together to deliver different design outcomes suitable to the Cremorne context.

BUILDING HEIGHTS

The proposed building heights range between 4 and 10 storeys (16m-40m). Building heights increase along main streets (Cremorne and Church Street) and decrease towards low-scale residential zoned areas. On sites in which two height controls apply, the height should begin to transition to a lower-scale after 30m at a maximum. In some instances, sites will be unable to reach the maximum building height if they are not wide enough to meet building separation requirements above the boundary wall, or, deep enough to meet the solar access requirements. In these instances, the maximum boundary wall height will become the maximum height.

Figure 34. Solar diagram

STREET WALL HEIGHTS

Street wall heights are between 2 and 4 storeys (8m and 16m) to respond to the narrow street network in Cremorne and to maintain solar access to key streets. Lowering the height of the building at the street interface creates a comfortable 'human-scale' where the building is most directly experienced from the public realm.

MAXIMUM BOUNDARY WALL HEIGHTS

Maximum boundary wall heights supports the delivery of an infill typology while allowing sunlight to reach the street between buildings. This reduces the presence of tall, blank boundary walls at side interfaces and supports the delivery of varying heights across the sub-precincts based on the different typologies of sites.

UPPER LEVEL SETBACKS

Setting back the upper levels of buildings above the street wall enables the benefits of the preferred street wall height to be realised. Upper level setbacks of 3m and 5m are generally proposed. The upper level setback requirements increases as building get taller. This allows for a clear delineation between the street wall and the upper levels. Additional upper level setbacks will be required in specific locations in order to meet the solar access requirements (see Figure 34).

Side elevation



Front elevation

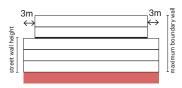


Figure 35. Diagram demonstrates the relationship between height, street wall height, boundary wall and building separation (5 storeys)



Figure 36. Diagram demonstrates the relationship between height, street wall height, boundary wall and building separation (4 storeys)

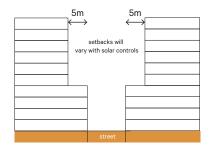
FIGURE	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER-LEVEL SETBACKS
	6-10 storeys (24m-40m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)
	6-8 storeys (24m-32m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)
	5-7 storeys (20m-28m)	5 storeys (20m)	3 storeys (12m)	3m
	5 storeys (20m)	3 storeys (12m)	3 storeys (12m)	5m
	4 storeys (16m)	2 storeys (8m)	2 storeys (8m)	7m
	3 storeys (12m)	2 storeys (8m)	2 storeys (8m)	5m

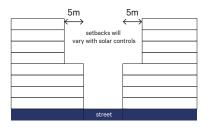
Figure 40. Building form strategy. Indicative sections that demonstrate the built form controls at Figure 35 to Figure 39.

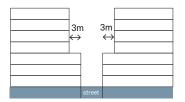


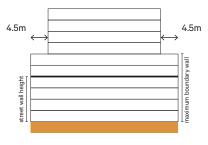
Figure 41. Building form strategy diagram

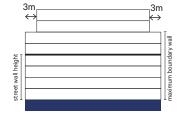
Side elevation











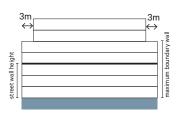


Figure 37. Diagram demonstrates the relationship between height, street wall height, boundary wall and building separation (6-10 storeys)

Figure 38. Diagram demonstrates the relationship between height, street wall height, boundary wall and building separation (6-8 storeys)

Figure 39. Diagram demonstrates the relationship between height, street wall height, boundary wall and building separation (5-7 storeys)

Laneway/direct transition

A consistent approach to transitioning to residential zones at laneway and direct interfaces should be adopted. A consistent 2 storey (8m) street wall height with an upper level setback of 45 degrees (up to a minimum of 12m) will provide sufficient transition at these edges (see Figure 43 and Figure 44).

A ground floor setback of 3m should be provided at direct interfaces to create a buffer at these sensitive edges (see Figure 43). A maximum of two steps in building form should be provided to achieve the setback requirements to avoid creating a 'wedding-cake' outcome (see Figure 45).

FIGURE	GROUND FLOOR SETBACK	MAXIMUM BOUNDARY WALL	UPPER- LEVEL SETBACKS
	3m	2 storeys (8m)	45° to a distance of 12m
	N/A	2 storeys (8m)	45° to a distance of 12m

Figure 42. Building form interface controls. Indicative sections that demonstrate the built form controls at Figure 42 to Figure 43.

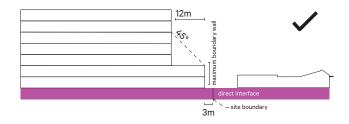


Figure 43. Direct interface transition.

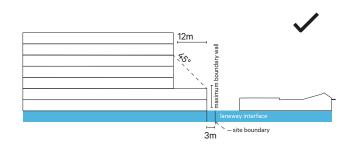


Figure 44. Laneway interface transition.

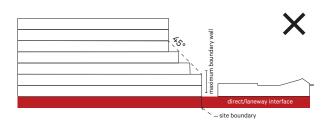


Figure 45. Unacceptable 'wedding cake' outcome.

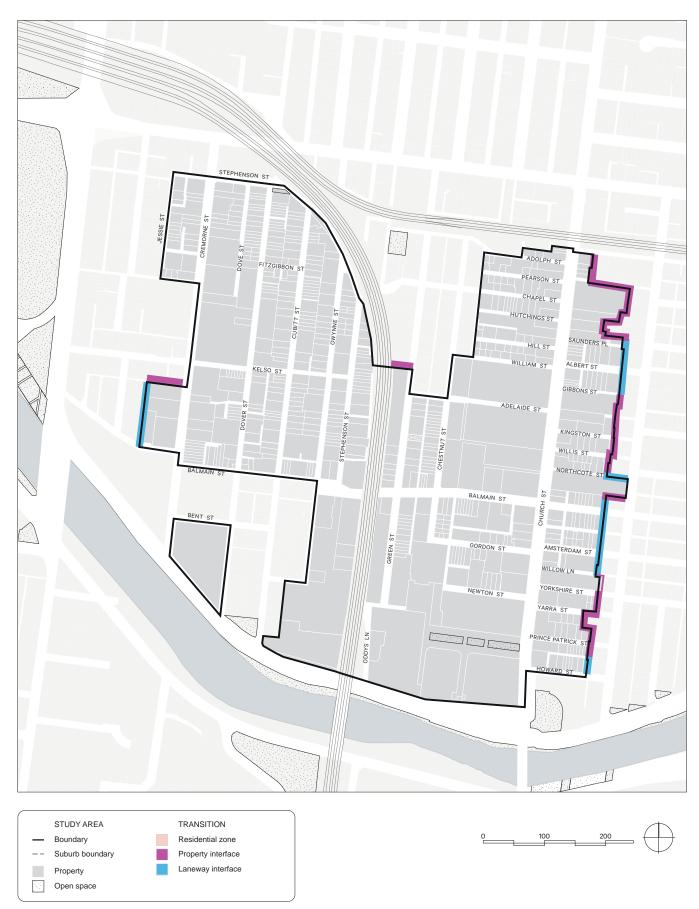


Figure 46. Low-scale typologies at the edges and interface types.

Church Street solar testing

A 5m upper level setback (minimum) is recommended above the street wall height for Church Street. This allows for sunlight access to the adjacent footpath (for a minimum of 3m) to be protected between 10am and 2pm at the spring equinox for a minimum of 3 hours (see Figure 50 to Figure 54). In some instances, a minor increase in the upper level setback may be required in order to meet the solar access requirements.

The red line in the shadow diagrams indicates a 3m wide footpath.

FIGURE	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER-LEVEL SETBACKS
	6-10 storeys (24m-40m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)

Figure 47. Building form strategy



Figure 48. Building form strategy diagram

Side elevation

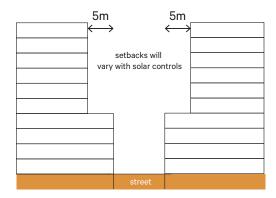


Figure 49. 6-10 storeys

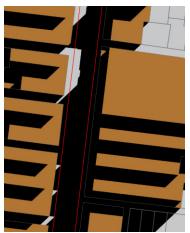


Figure 50. Solar access at 10am

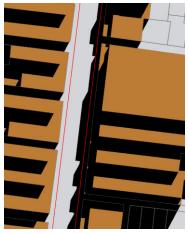


Figure 51. Solar access at 11am

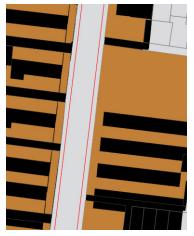


Figure 52. Solar access at 12pm

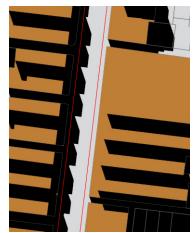


Figure 53. Solar access at 1pm



Figure 54. Solar access at 2pm

Cremorne Street solar testing

A 5m upper level setback (minimum) is recommended above the street wall height for Cremorne Street. This allows for sunlight access to the adjacent footpath (for a minimum of 3m) to be protected between 10am and 2pm at the spring equinox for a minimum of 3 hours (see Figure 50 to Figure 54). In some instances, a minor increase in the upper level setback may be required in order to meet the solar access requirements.

The red line in the shadow diagrams indicates a 3m wide footpath.

FIGURE	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER-LEVEL SETBACKS
	6-8 storeys (24m-32m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)

Figure 55. Building form strategy

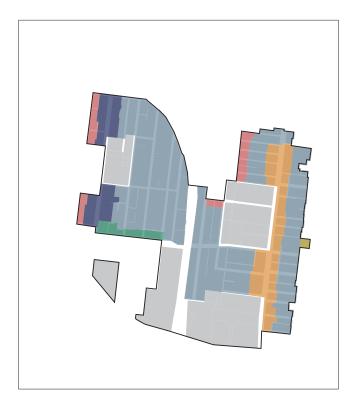


Figure 56. Building form strategy diagram

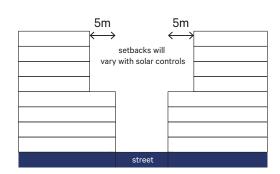


Figure 57. 6-10 storeys

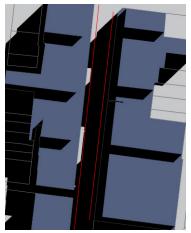


Figure 58. Solar access at 10am

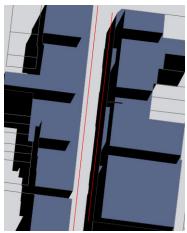


Figure 59. Solar access at 11am

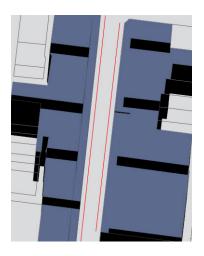


Figure 60. Solar access at 12pm

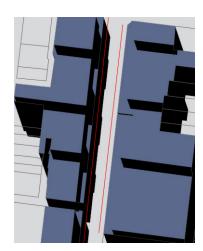


Figure 61. Solar access at 1pm

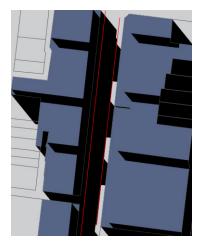


Figure 62. Solar access at 2pm

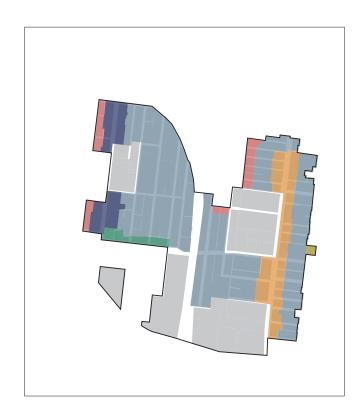
Balmain Street solar testing

A 7m upper level setback above the street wall height is proposed for Balmain Street. This allows for sunlight access to the adjacent footpath (for a minimum of 3m) to be protected between 11am and 2pm at the spring equinox (see Figure 65 to Figure 69). In some instances, a minor increase in the upper level setback may be required in order to meet the solar access requirements.

The red line in the shadow diagrams indicates a 3m wide footpath.

FIGURE	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS
	4 storeys (16m)	2 storeys (8m)	2 storeys (8m)	7m

Figure 63. Building form strategy



Side elevation

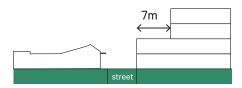


Figure 64. 4 storeys

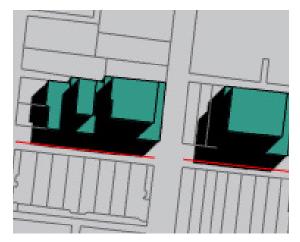


Figure 65. Solar access at 10am.

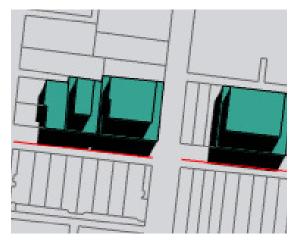


Figure 66. Solar access at 11am.

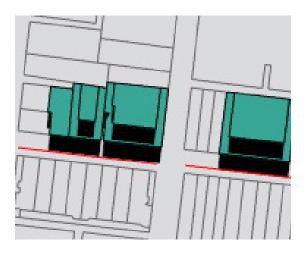


Figure 67. Solar access at 12pm.



Figure 68. Solar access at 1pm.

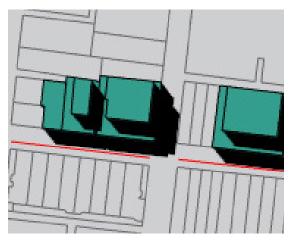


Figure 69. Solar access at 2pm.

5. Improving the setting of heritage buildings

Existing conditions

Cremorne has an eclectic mix of heritage architecture with buildings of varying sizes and character scattered throughout. There are a mixture of residential, commercial and industrial heritage typologies. There are also several buildings on the Heritage Victoria Register and a sky sign that is included in the landmarks and tall structures policy.

The appropriate response to heritage buildings will vary depending on the typology, size and status of heritage buildings and any built form guidance must respond to the many different types of heritage buildings in Cremorne.

Heritage Overlay Buildings

There are heritage buildings that are individually significant and contributory scattered throughout Cremorne. The former Yarra Hotel is an individually significant building as is the Slade Knitwear building of which the sign atop of the building is identified as a major landmark. There are also contributory buildings which are predominantly within the Rosella Complex and to the south along Balmain Street.

These different buildings require careful design responses that are tailored to the specific characteristics of different building typologies. For example, residential heritage buildings have ground floor street setbacks with front gardens, whereas industrial heritage buildings are built to the street edge.

Victorian Heritage Register buildings

There are four heritage buildings in the study area which have state-level cultural heritage significance. These sites are managed by Heritage Victoria under the Heritage Act 2017. Two of these buildings are in the Bryant and May site (Richmond South Post office and the former Bryant and May industrial complex), one is in the Bendigo Kangan Institute (former Richmond Primary School) and one is in the business park at 534 Church Street (former Richmond Power Station.)

Buildings on the Victorian Heritage Register are of statesignificance and need to be assessed on a case-by-case basis by Heritage Victoria.

The Slade Knitwear Sign

The Slade Knitwear Sign is individually significant and is in the Landmarks and Tall Structures Policy which seeks to maintain the prominence of culturally valued landmarks and landmark signs. A viewing location has been identified to assess the visibility of the sky behind the Slade Knitwear Sign at the northwest corner of the intersection of Dover Street and Kelso Street.

Heritage precincts at the edges.

The residential pockets that interface the study area are covered by three large heritage precincts.

- The Wellington Street precinct is a well-defined area of Victorian and Edwardian-era houses that correspond with the major residential growth periods in Richmond's history.
- The Green Street Precinct is an intact cluster of modest, mainly late 19th century and some early 20th century housing that forms an island of residential buildings in an otherwise industrial area.
- The Cremorne Precinct is a well-preserved example of a residential area that demonstrates the two key phases in the development of Cremorne, comprising Victorian era housing, supplemented by Edwardian and interwar infill with commercial buildings on corner sites.

Emerging issues

There were 8 relevant VCAT cases provided by the Yarra City Council for review. Of these 8 development applications, two had existing heritage buildings. The concerns raised by heritage advisors included the minimal extent of heritage retained as well as the unreasonable impact of new development on retained heritage buildings. It was recommended that further guidance is provided on the desired extent of heritage retention and the appropriate response to heritage buildings and identified landmarks.

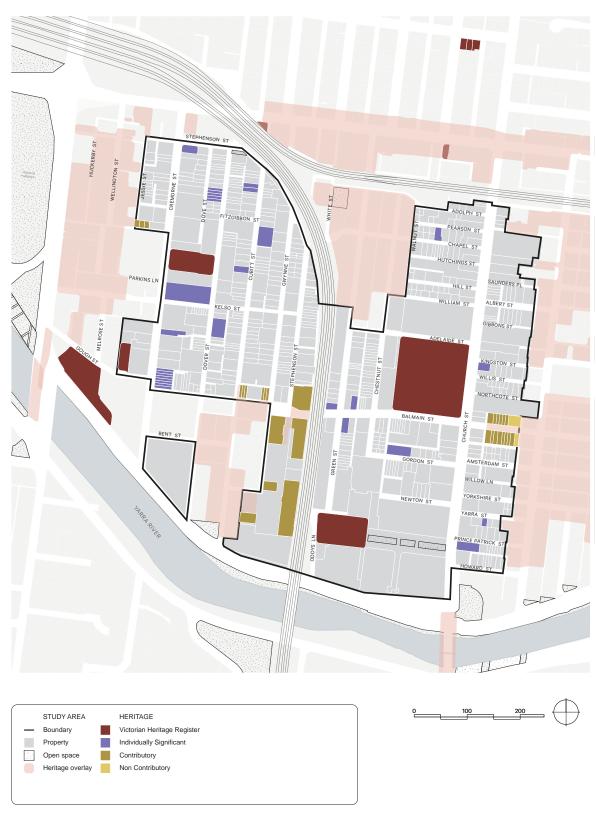


Figure 70. Heritage policy

5. Improving the setting of heritage buildings

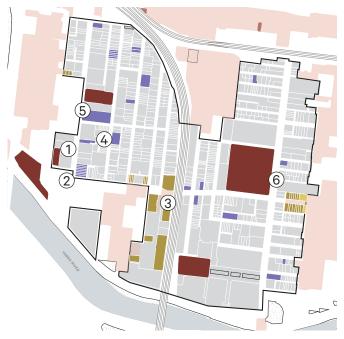


Figure 71. Heritage photo location map



Image 22. 119 Cremorne Street, Yarra Hotel identified as significant for its roof form, chimneys and decorative facade.



 $Image\ 23.\quad 143\ Cremorne\ Street, row\ of\ heritage\ houses\ with\ decorative\ facades\ and\ chimneys.$



Image 24. Corner of Balmain Street and Green Street, Former Klembro Factory (1928).



Image 25. 105-115 Dover Street - Slade Knitwear sign.



Image 26. Former Richmond Primary School as viewed from Cremorne Street.



 ${\bf Image~27.} \quad {\bf Bryant~and~May~building~as~viewed~from~Church~Street.}$

5. Improving the setting of heritage buildings

Design objectives

Heritage objectives are required to apply to heritage sites that are being redeveloped as well as new buildings that are adjacent to nominated heritage sites. The requirements for heritage sites and heritage adjacent sites may differ but ultimately are guided by the same overarching objectives:

- To enhance the setting of existing heritage buildings.
- To maintain the prominence of existing heritage buildings within sites.
- To retain the visibility of significant architectural features from the public realm.

Further to these overarching objectives, the design response to heritage buildings should vary depending on the specific characteristics of the heritage building in question. There are different design responses that can be used in combination to create a holistic design response that allows heritage buildings to remain prominent.

Architectural features

The architectural features present in Cremorne are varied and reflect the mixture of typologies in the precinct. They include:

- Rooflines
- · Side gables
- Sky signs
- Parapets
- Chimneys
- Decorative urns
- Verandahs
- · Decorative facades

Heritage Design Response

Design objectives are proposed which articulate a series of design responses that can be used if developing on a site with an existing heritage building or developing on a site that is adjacent to a heritage building.

EXISTING HERITAGE BUILDINGS

The following design responses, developed in conjunction with heritage advisors, are proposed as guidance for sites with existing heritage buildings:

- Set new developments back behind the heritage forms to avoid dominating the heritage place and avoid facadism.
- Adopt heights specific to the site characteristics in Table (Section 3.6) in the Trethowan Heritage Report to ensure the new development does not visually dominate the existing heritage building and the generally modest scale of residential forms.
- Facade heights of infill developments within the heritage overlay match the parapet height to ensure new built for responds to heritage context.
- Retain existing heritage fabric to retain the threedimensional form as viewed from the public realm and the original or early elements of the heritage fabric, its principal facade and primary roof form.
- Building additions that are distinguishable from the existing heritage fabric.
- Use of high-quality materials that are complementary to the materiality of the existing fabric heritage fabric.

SITES ADJACENT TO EXISTING HERITAGE BUILDINGS

The following design responses are proposed as guidance for sites adjacent to heritage buildings:

- Ground floor street setbacks that align with neighbouring buildings to retain oblique views along the street where identified.
- Side setbacks that allow heritage buildings with 'side' features to be viewed from the public realm where identified
- Street wall heights that match the parapet height of adjacent heritage buildings to create a transition between forms.
- Upper level setbacks that allow significant architectural features to remain visible.
- Overall heights that create a transition between new buildings and existing buildings.
- Side interfaces that are designed to minimise visual bulk to adjacent heritage buildings.
- Use of high-quality materials that are complementary to the materiality of the existing heritage fabric.
- The design objectives provide high-level guidance on the design outcome sought.
- Further guidance has been provided by Trethowan
 Architecture on the recommended design response to
 specific heritage typologies. Table 6 on page 72 provides
 a summary of these recommendations.

While the intent of the Cremorne Built form Framework is to provide an overarching design strategy, given the identified heritage places are unique within Cremorne specific built form metrics are recommended by Trethowan Architecture to ensure acceptable heritage outcomes. Clear and specific metrics are warranted in these few instances to help retain the identified original elements of the fabric of these significant buildings, including the principal façade, primary roof form and chimneys etc.

COMMERCIAL		
BUILT FORM ELEMENT	RECOMMENDATION	RATIONALE
Retention of existing heritage fabric	Retain the full roof form and full volume of principal building form.	To retain the three-dimensional form as viewed from the public realm.
Upper-level setback (development within the Heritage Overlay)	Set new development back behind the heritage form.	To avoid dominating the heritage place and avoid facadism.
Building height (development within the heritage overlay)	Adopt heights specific to the site characteristics in Table (Section 3.6) in the Trethowan Heritage Report.	To ensure that new development does not visually dominate the existing heritage building.
Facade height (infill development within the Heritage Overlay)	Match the parapet height.	To ensure new built form responds to the heritage context.

Table 3. Commercial Typology

RECOMMENDATION	RATIONALE
Retain significant primary & secondary facades on corner sites.	To retain the three-dimensional form as viewed from the public realm.
Set new development back behind the heritage form, retaining a section of roof form approx. two structural bays.	To avoid dominating the heritage place and avoid facadism.
Adopt heights specific to the site characteristics in Table (Section 3.6)	To ensure that new development does not visually dominate the existing heritage building.
	Retain significant primary & secondary facades on corner sites. Set new development back behind the heritage form, retaining a section of roof form approx. two structural bays. Adopt heights specific to the site characteristics in

Table 4. Industrial Typology

RESIDENTIAL (DETACHED)		
BUILT FORM ELEMENT	RECOMMENDATION	RATIONALE
Retention of existing heritage fabric	Retain heritage fabric to a depth of two front rooms (approx. 9m).	To retain the original or early elements of the heritage fabric, its principal facade and primary roof form.
Upper-level setback (development within the Heritage Overlay)	Set new development back behind the heritage form, retaining at least first two room depth.	To avoid dominating the heritage place and avoid facadism.
Building height (development within the heritage overlay)	Maximum overall height of three storeys (12m) (discretionary).	To avoid new development dominating the generally modest scale of residential forms.

Table 5. Residential Typology (Detached)

RESIDENTIAL (TERRACES)				
BUILT FORM ELEMENT	RECOMMENDATION	RATIONALE		
Retention of existing heritage fabric	Retain heritage fabric to a depth of two front rooms (approx. 9m).	To retain the original or early elements of the heritage fabric, its principal facade and primary roof form.		
Upper-level setback (development within the Heritage Overlay)	Set new development back behind the heritage form, retaining at least first two room depth.	To avoid dominating the heritage place and avoid facadism.		
Building height (development within the heritage overlay)	Maximum overall height of three storeys (12m) (discretionary).	To avoid new development dominating the generally modest scale of residential forms.		

Table 6. Residential Typology (Terraces)

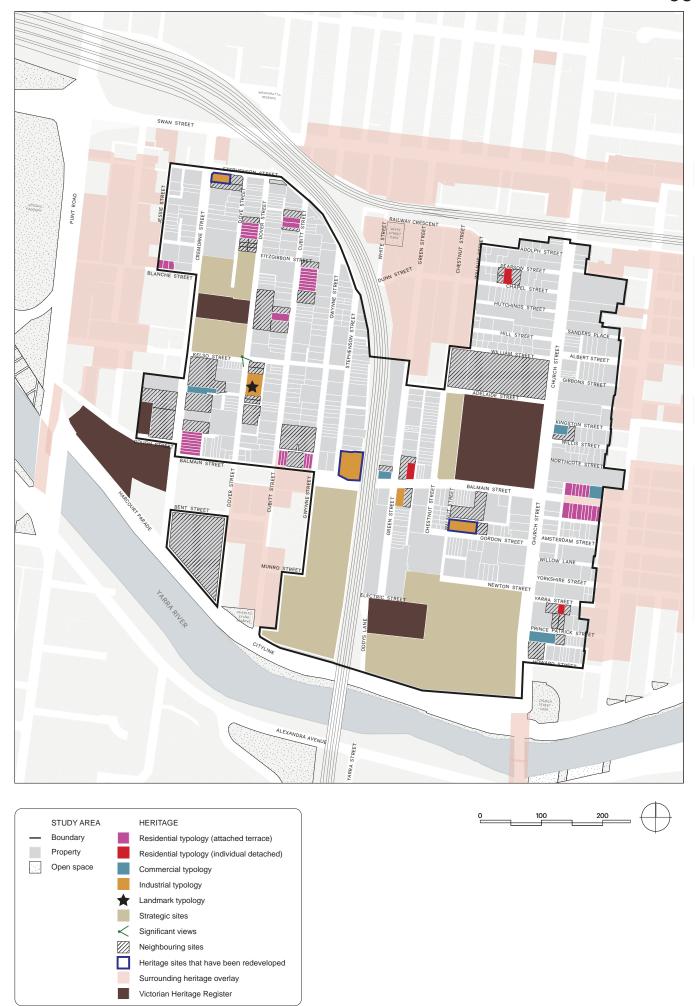


Figure 72. Heritage typologies and heritage adjacent sites.

Sub-precincts

Each of the four identified sub-precincts have different character considerations. This section establishes the existing conditions in each character precincts, a character statement to guide future character and design objectives for each of the sub-precincts and strategic sites based on the analysis in the design strategies section of the report. A summary is also provided of the built form controls that apply to each of the sub-precincts.



Figure 73. Cremorne sub-precinct aerial.





Cremorne West Sub-Precinct existing conditions

Cremorne West is a busy, compact sub-precinct that is in close proximity to Richmond Station and Swan Street activity centre. Cremorne Street, Kelso Street and Balmain Street are the key streets in the sub-precinct. Balmain Street and Stephenson Street connect through to the east. It has a network of narrow north-south streets and a fine-grain network of laneways. Key features are Richmond Station (directly north), the Bendigo Kangan Institute, the Slade Knitwear sign, the former Yarra Hotel and several clusters of heritage terraces.

The Cremorne West built form character is predominantly fine-grain, industrial buildings interspersed with low-scale residential typologies and contemporary office developments. The industrial buildings are often brick with roller doors, large steel-frame windows and interesting parapets. Contemporary developments generally use robust materials such as concrete and have a stark, industrial character.

Buildings generally range in height from 1 to 8 storeys and are usually built to the side boundary creating a compact urban form. The buildings abut low-scale residential zones with predominantly 1-2 storey residential forms. Older building stock in the sub-precinct is 1-3 storeys, recent development ranges between 5-8 storeys with higher forms on key streets (Cremorne and Stephenson) and larger sites with broad frontages or multiple street frontages. The variable and contrasting height of the buildings is part of the character of the sub-precinct.

The public realm has an industrial character with narrow streets, limited landscaping and narrow footpaths. There is a small public space on Stephenson Street. The ground floor of buildings is often dominated by carparking. Small ground floor setbacks within some sites provide additional 'breathing room' in the public realm.

Recent development activity in the sub-precinct has shifted towards a higher scale of built form (up to a maximum of 10 storeys). A 9 storey development on Cremorne Street (Seek Headquarters) contrasts the existing fine-grain industrial buildings in this sub-precinct. The trend of consolidating smaller sites in order to deliver larger floorplate developments is anticipated to continue. These larger-scale sites have the potential to deliver more significant upgrades to the public realm. Retaining a mixture of small, medium and large-scale floorplates will be key to retaining the mix of employment uses supported in Cremorne West.

There is a significant shift in the scale of built form to the south of the sub-precinct adjacent to the freeway. The Richmond Maltings site is highly visible at 21 storeys. By contrast, the built form scales down to a single storey at the western interface and southern interface.

Bendigo Kangan Institute

The Bendigo Kangan Institute is a large site on Cremorne Street that plays an important role in the long-term strategic future of the area. The site includes a series of institutional buildings, including high-value heritage buildings, set within a carpark. This is in contrast to the predominant urban form in Cremorne West. There is a small open space at the Dover Street interface which is fenced and accessed through a gate. There are limited formal connections through the site although it is possible to walk through the at-grade carparks.



Image 28. Former Yarra Hotel (HO247) at 119 Cremorne Street.



Image 31. Narrow streets and a limited public realm as seen from the intersection of Kelso Street and Cubitt Street.



Image 29. Small existing open space within the Bendigo Kangan Institute.



Image 32. Industrial buildings of varying heights on Gwynne Street.



Image 30. Cafe with outdoor seating on Cremorne Street.



Image 33. $\,$ 105-115 Dover Street (HO343) - Slade Knitwear sign.



Character statement

Contemporary commercial buildings of up to 8 stories reinforce the industrial character of Cremorne West in their form and materiality. Buildings reduce in height at the street interface to create a human-scale environment along the narrow streets.

Cremorne Street and Balmain Street are the main streets in the sub-precinct and an expanded public realm attracts and encourages those living and working in the sub-precinct to gather along these streets.

The former Richmond Primary School and the Slade Knitwear sign are of heritage significance in the sub-precinct. The Slade Knitwear sign serves as a heritage landmark and therefore built form controls are proposed to protect significant views. New buildings celebrate, complement and enhance these landmarks by creating breathing space around them.

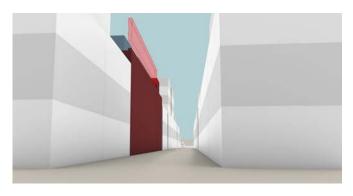


Figure 74. Slade Knitwear sign looking South, parapet of the neighbouring buildings to the south aligned with upper-level setbacks of 11m.

Sub-precinct design objectives

- To deliver buildings between 4 and 8 storeys (16m and 32m) with heights increasing along Cremorne Street and reducing in height at sensitive low-scale areas to the south and west.
- To provide a human-scale along streets and laneways through 2-4 storey (8m-16m) street wall and sufficient architectural detail at lower levels (e.g. materials, fenestration, lighting, awnings).
- To contribute to the industrial character of the subprecinct through designs which use robust materials and reference industrial typologies.
- To expand the public realm through inset building entrances, integrated seating (where determined appropriate) and limit overshadowing of Cremorne Street and Balmain Street as key pedestrian streets within the sub-precinct.
- To enhance the setting of the former Richmond Primary School within the sub-precinct by providing an ample transition between new buildings and existing buildings and to maintain views to the Slade Knitwear sign as viewed from the intersection of Kelso Street and Dover Street
- Maintain clear sky views Slade Knitwear sign with a 11m upper-level setback for the adjacent sites to the south, see Figure 74.

CREMORNE W	EST				
Solar access controls Heritage sites		o overshadowing of ninimum of 3m) of B nd 2pm at the spring	almain Street I		
		No overshadowing of the adjacent footpath (minimum of 3m) of Cremorne Street between 10am and 2pm at the spring equinox. Additional setbacks will be required at 6 storeys and above to meet the solar access requirements.			
		pecific built form gui uildings and sites ad hese are are include ecommendations Re	joining heritag d in the Herita	e buildings. ge Review and	
	GROUND FLOOR SETBACK	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS	
LANEWAY INTERFACE	N/A	2 storeys (8m)	N/A	45° to a maximum distance of 12m	

CREMORNE WEST	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS
	6-8 storeys (24m-32m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)
	5-7 storeys (20m-28m)	5 storeys (20m)	3 storeys (12m)	3m
-	5 storeys (20m)	3 storeys (12m)	3 storeys (12m)	5m
	4 storeys (16m)	2 storeys (8m)	2 storeys (8m)	7m
•	•		•••••	



STUDY AREA

BUILDING HEIGHT

Figure 75. Cremorne West sub-precinct design objectives map



Character statement

The Bendigo Kangan Institute is a revitalized and vibrant campus that forms the civic heart of Cremorne West, where students, entrepreneurs and industry come to learn and collaborate. A series of contemporary buildings are designed and spaced to create a visually interesting skyline and streetscape around the former Richmond Primary School, whilst also being distinguishable as a coherent sub-precinct. Buildings are delivered that support the growth of the Bendigo Kangan Institute as a critical educational institution within Cremorne.

An open space is co-located to the south of the former Richmond Primary School and sufficient space is provided to the north of the building to allow its key features to remain prominent when viewed from the south. An internal laneway network is well-integrated into the surrounding street network drawing the public through the site.

	BENDIGO KANGAN INSTITUTE				
	Maximum boundary wall	6 storeys (24m)			
	Street wall height	3-4 storeys (12m-16m)			
	Upper-level setbacks	3-5m			
	Solar access controls	No overshadowing of the adjacent footpath (minimum of 3m) of Cremorne Street between 10am and 2pm at the spring equinox.			
	Ground floor setbacks	Minimum 6m ground floor setback to Cremorne Street. This does not apply where heritage buildings directly interface key streets.			
	Heritage sites	Specific heritage advice is included in the Heritage Review and Recommendations Report prepared by Trethowan.			

Strategic site design objectives

- Buildings range in height with building massing carefully located to ensure that views to the roofline of the former Richmond Primary School remain prominent within the skyline.
- An open space is located to the south of the former Richmond Primary School (extending the full width of the building) that enhances and complements the existing building.
- A new east-west link is provided to the north of the former Richmond Primary School (minimum 10m wide) and a secondary east-west link is provided alongside the future open space.
- A ground floor setback is provided to Cremorne Street (minimum 6m) that aligns with the building line of the former Richmond Primary School and allows for the integration of seating and landscape at the street interface.
- Public access to the existing open spaces within the site are improved.



Figure 76. Bendigo Kangan Institute design objectives map



Figure 77. Bendigo Kangan Institute aerial

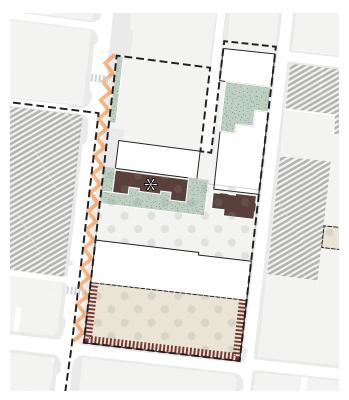
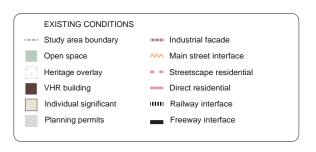


Figure 78. Bendigo Kangan Institute existing conditions





Railway Sub-Precinct existing conditions

The Railway Sub-Precinct is a low-scale (2-4 storeys) industrial sub-precinct with a fine-grain block structure. It centres around three narrow streets that run north-south: Green Street, Chestnut Street and Walnut Street. These streets transition to leafy residential areas to the north.

Key features of the sub-precinct are the small-scale warehouses, the long views north to the Dimmeys Clocktower, the railway corridor, the Balmain Street underpass and the Bryant & May industrial complex which can be seen from Chestnut Street and Balmain Street.

The built form character in the Railway Sub-precinct is defined by fine-grain industrial buildings interspersed with low-scale residential buildings and more contemporary style office development. These newer buildings range in height from 3-4 storeys. The majority of sites have two frontages, one to the street and one to a rear laneway.

The sub-precinct transitions into a low-scale residential, heritage precinct to the north along Green Street. Although there is a distinct change in character to the north, the fine-grain low scale character of the industrial and residential areas along these north-south streets make them feel cohesive in character.

The public realm has an industrial character with narrow streets, limited landscaping and narrow footpaths. The ground floor of buildings is often dominated by carparking. To the north of the sub-precinct, the public realm transitions to a landscaped character with street trees and landscaped front gardens.

The majority of sites in the sub-precinct are small scale with a few larger scale sites abutting the railway line. On a site to the north of the sub-precinct, there is an approved development application (9 storeys) and on a site to the south, an at-grade carpark that is owned by VicTrack. This carpark affords excellent views across the railway lines to the industrial heritage buildings in the Rosella Complex.

There are two Victorian Heritage Register buildings that are visible from the sub-precinct - The Richmond Power Station to the south of Green Street and the Bryant & May building to the east of Chestnut St. There are also three individually significant heritage buildings of varied character (residential, former factory and shop/residence) clustered around the intersection of Balmain Street and Green Street.



Image 34. Looking south along Green Street at a mixed typology of buildings.



Image 35. Looking across the railway line towards the Rosella Complex from the intersection of Electric Street and Oddy's Lane. Richmond Power Station to the left.



Image 36. Looking north along Green Street towards the intersection with Balmain Street.



Image 37. An industrial-style commercial building alongside a single storey building with a residential typology.



Image 38. Looking south along Green Street towards Richmond Power Station.



Image 39. Looking south along Chestnut Street which has a mix of commercial and residential building typologies.



Contemporary small-scale buildings of up to 7 storeys reinforce the fine-grain industrial character of the Railway Sub-precinct. Buildings increase in height along the railway corridor and create a well-designed edge to Cremorne as viewed from the railway line.

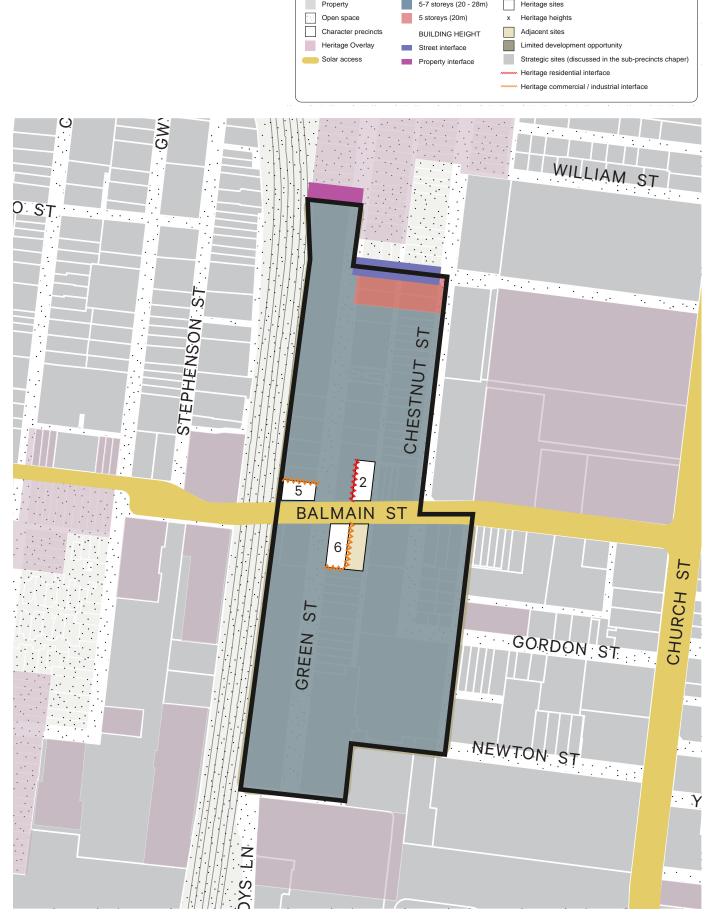
The cluster of heritage buildings at the intersection of Green Street and Balmain Street is enhanced and views to the Richmond Power Station are well-framed.

Sub-precinct design objectives

- To deliver 5-7 storey (20 28m) buildings with a 3 storey (12m) street wall height with sufficient architectural detail to provide a human-scale along streets and laneways.
- To contribute to the industrial character of the subprecinct through designs which use robust materials and reference industrial typologies.
- To limit overshadowing of the southern footpath of Balmain Street as the key pedestrian street within the sub-precinct.
- To enhance the setting of the heritage cluster at the intersection of Green Street and Balmain Street by providing an ample transition between new buildings and existing buildings.

RAILWAY	
Solar access controls	No overshadowing of the southern footpath (minimum of 3m) of Balmain Street between 11am and 2pm at the spring equinox.
Heritage sites	Specific built form guidelines apply to heritage buildings and sites adjoining heritage buildings. These are are included in the Heritage Review and Recommendations Report prepared by Trethowan.

RAILWAY	BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS
_	5-7 storeys (20m-28m)	5 storeys (20m)	3 storeys (12m)	3m
	5 storeys (20m)	3 storeys (12m)	3 storeys (12m)	5m



STUDY AREA

Property

BUILDING HEIGHT

5-7 storeys (20 - 28m)

Heritage sites

Figure 79. Railway sub-precinct design objectives maps



Church Street Sub-Precinct existing conditions

Church Street is a traditional linear high street along a tram corridor that has a mixed function with commercial, hospitality and retail uses found along the street. East Richmond Station is directly to the north of the sub-precinct. The built form character in the Church Street Sub-precinct is diverse and the style of architecture is markedly different to the architecture found on the east-west streets that extend from the corridor. Buildings are generally higher along Church Street and transition down to the east and west to lower-scale residential areas at the edge of the sub-precinct.

Church Street has a mixture of traditional shopfronts, corner pubs, heritage buildings, large-format retail stores and contemporary office buildings. The character is not cohesive and the architectural style varies from corner to corner. There is an opportunity to harness this eclectic character of Church Street and create a corridor that is a more comfortable and inviting place for people.

The built form character at the edges of Church Street is a mixture of industrial warehouses and residential buildings. Buildings on these side streets are generally smaller in scale and range between 1 and 4 storeys. There is a mixture of site sizes and site typologies which afford different types of development outcomes.

Recently approved developments in the sub-precinct range in height from between 3 storeys and 10 storeys. Many of these higher developments are visible from low-scale residential areas, particularly to the east.

The majority of east-west streets intersecting with Church Street are very narrow with a few wider streets to the east (Albert Street and Amsterdam Street). Improving the amenity of these side streets will ensure that they are comfortable in the long-term.

Bryant & May

The Bryant & May Former Industrial Complex site is a Victorian Heritage Registered site on Church St. The buildings represent an important part of Cremorne's industrial history as one of the first large-scale manufacturing businesses operating in Cremorne.

The Bryant and May Complex is a group of robust buildings set within grounds that are primarily dedicated to carparking. The site has recently been adapted to as the office for Red Energy. There is an opportunity on this large site to expand the public realm network and to better celebrate the valued heritage within the site. Taller elements such as the clocktower and chimney are highly visible from the immediate streets and contribute to the overall image of Cremorne.

534 Church Street

This site is a rectilinear, east-west site fronting four streets – Church, William, Adelaide and Chestnut. It is currently occupied by multiple buildings include a 7-storey office complex (fronting Church Street), single storey warehouses and a two-storey car park (fronting Chestnut Street). There is a limited amount of at-grade car parking within the site. There are no heritage overlays that apply to the site.



Image 40. Looking south along Church Street at the Bryant and May building.



Image 41. Mix of heritage and contemporary commercial buildings along Church Street.



Image 42. Contrast between new and old development on Howard St.



Image 43. Internal street within the Bryant and May Complex looking west towards Chestnut Street.



Image 44. Corner cafe at the intersection of Willis Street and Church Street, window details and awnings create interest at the ground level. The footpath width allows for outdoor dining.



Image 45. View of buildings of mixed architectural styles along Church Street with limited engagement with the street.



The Church Street sub-precinct is a thriving commercial and retail sub-precinct with an eclectic mix of buildings between 6 and 10 storeys in height. Bryant & May is the landmark building within the sub-precinct and has a publically accessible open space which welcomes the broader community into the site.

The retail experience along Church Street is improved as buildings are designed to enhance pedestrian comfort at street level. A 4 storey street wall in robust materials creates a consistent human-scale experience at street level.

Buildings reduce in scale to the east, west and north to respond the narrow width of streets and laneways and the adjacent lowscale residential areas which include heritage precincts.

Sub-precinct design objectives

- To deliver buildings between 6 and 10 storeys (24 and 40m) with heights increasing along Church Street and reducing along narrow streets and laneways to the east and west.
- To create a human-scale along streets and laneways by providing a 3-4 storey (12m-16m) street wall with increased architectural detail at lower levels.
- To contribute to the high-street character of Church Street by designing engaging ground floors that integrate awnings at the ground level.
- To contribute to the industrial character of the subprecinct along east west streets and laneways through designs which use robust materials and reference industrial typologies.
- To expand the public realm through awnings, inset building entrances, integrated seating and ground floor setbacks where determined appropriate and to limit overshadowing of Church Street and Balmain Street as key pedestrian streets within the sub-precinct.
- To retain the prominence of the Bryant & May building within the sub-precinct and enhance visibility of key features from surrounding streets.

Solar access controls	No overshadowing of the adjacent footpath (minimum of 3m) of Church Street between 10am and 2pm at the spring equinox. Additional setbacks will be required at 6 storeys and above to meet the solar access requirements.
Heritage sites	Specific built form metrics apply to heritage buildings and sites adjoining heritage buildings. These are are included in the Heritage Review and Recommendations Report prepared by Trethowan.

	GROUND FLOOR SETBACK	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS
DIRECT INTERFACE	3m	2 storeys (8m)	N/A	45° to a distance of 12m
LANEWAY INTERFACE	N/A	2 storeys (8m)	N/A	45° to a distance of 12m

BUILDING HEIGHT	MAXIMUM BOUNDARY WALL	STREET WALL HEIGHT	UPPER- LEVEL SETBACKS
6-10 storeys (24m-40m)	6 storeys (24m)	4 storeys (16m)	Minimum 5m (subject to solar controls)
5-7 storeys	5 storeys	3 storeys	3m
(20m-28m)	(20m)	(12m)	
5 storeys	3 storeys	3 storeys	5m
(20m)	(12m)	(12m)	
3 storeys	2 storeys	2 storeys	5m
(12m)	(8m)	(8m)	
	6-10 storeys (24m-40m) 5-7 storeys (20m-28m) 5 storeys (20m)	HEIGHT BOUNDARY WALL 6-10 storeys (24m-40m) (24m) 5-7 storeys (20m-28m) (20m) 5 storeys (20m) 3 storeys 2 storeys	HEIGHT BOUNDARY WALL HEIGHT 6-10 storeys (24m-40m) 6 storeys (24m) 4 storeys (16m) 5-7 storeys (20m-28m) 5 storeys (20m) 3 storeys (12m) 5 storeys (20m) 3 storeys (12m) 3 storeys (12m) 3 storeys (20m) 2 storeys 2 storeys



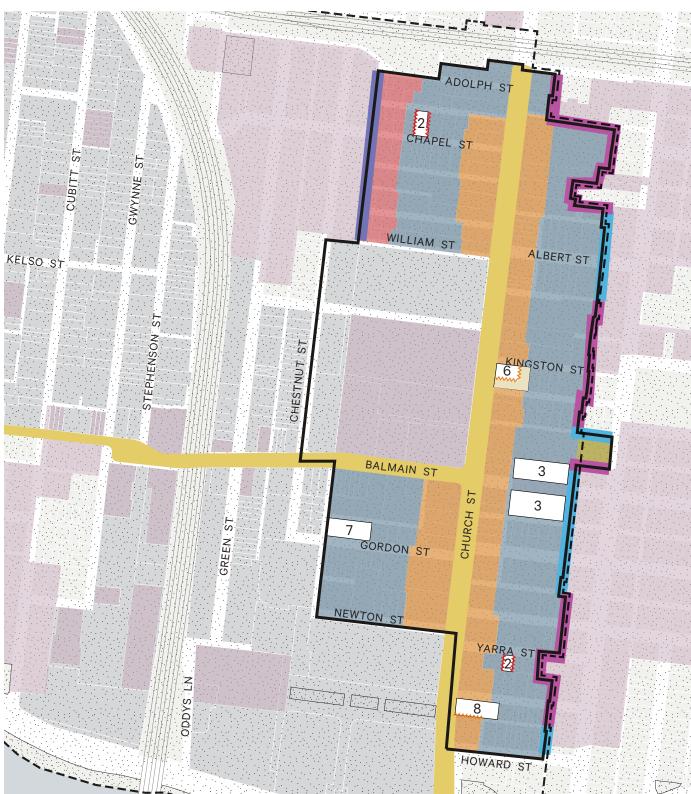


Figure 80. Church Street sub-precinct design objectives maps



The Bryant & May Complex will host multiple high-quality contemporary buildings set within a network of publicly accessible streets, laneways and public spaces. The buildings are designed and spaced to create a visually interesting skyline and streetscape around the Bryant and May building, whilst also being distinguishable as a coherent sub-precinct.

Views to the Bryant and May complex are enhanced through upgrades to the public realm. Walnut, Willis and Northcote Street are extended through the site to knit the Bryant and May site into the broader urban fabric of the Church Street Subprecinct.

Building height	To be determined through a masterplanning process.
Maximum boundary wall	6 storeys (24m)
Street wall height	3-4 storeys (12m-16m)
Upper-level setbacks	To be determined through a masterplanning process.
Solar access controls	No overshadowing of the adjacent footpath (minimum of 3m) of Cremorne Street between 10am and 2pm at the spring equinox.
	No overshadowing of the southern footpath (minimum of 3m) of Balmain Street between 11am and 2pm at the spring equinox.
Ground floor setbacks	Minimum 6m ground floor setback to Balmain Street.
Heritage sites	Specific heritage advice is included in the Heritage Review and Recommendations Report prepared by Trethowan.

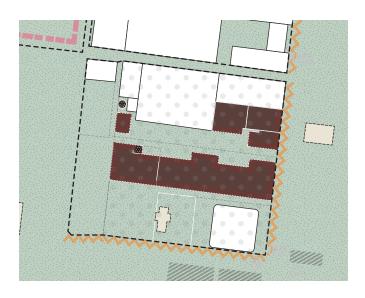
- Building massing is carefully located to ensure that heritage features remain prominent within the sites including decorative facades, parapets and taller elements including the chimney and clocktower.
- Walnut Street, Willis Street and Northcote Street are extended through the site to create a publicly accessible and legible network of streets and laneways that are connected to the broader street network.
- A new publicly accessible open space is provided to the west of the site which supports the retention of key views to the Bryant & May building.
- A ground floor setback (minimum 6m) is provided at the Balmain Street interface which integrates seating and landscape and contributes to an expanded public realm.
- Overshadowing to Church Street, Balmain Street and open spaces within the site is minimised.



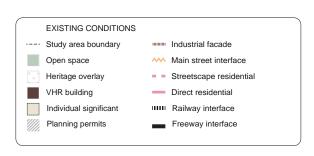
Figure 81. Bryant & May design objectives map



Figure 82. Bryant & May aerial









534 Church Street is designed to complement the Bryant and May Complex to the south. A series of contemporary buildings between 6 and 10 storeys are set within a network of publicly accessible streets and laneways. Buildings are designed and spaced to create a visually interesting skyline and streetscape, whilst also being distinguishable as a coherent sub-precinct.

Building massing is carefully located to maintain the prominence of the Bryant and May building as viewed from Balmain Street and Chestnut Street.

534 CHURCH STREET	
Maximum boundary wall	6 storeys (24m)
Street wall height	3-4 storeys (12m-16m)
Upper-level setbacks	3-5m
Solar access controls	No overshadowing of the adjacent footpath (minimum of 3m) of Church Street between 10am and 2pm at the spring equinox.
Heritage sites	Specific heritage advice is included in the Heritage Review and Recommendations Report prepared by Trethowan.

- Buildings range in height with the highest scale buildings to Church Street interface transitioning down to the lower-scale character of the Chestnut Street Heritage Overlay and Yarra (overshadowing).
- Walnut Street is extended through the site and an additional north-south laneway is provided to the east of the site. These links are publicly accessible and used for servicing.
- A new publicly accessible open space is delivered within the site that integrates landscape and seating.
- A well-designed solid podium creates a human-scale, active interface to Church Street, Adelaide Street and William Street. The Church Street interface is the primary interfaces and incorporates awnings, inset building entrances and integrated seating.

 Overshadowing of the western footpath of Church Street is minimised.
- Building massing is located to ensure that the Bryant & May clocktower and chimney remain prominent when viewed from Balmain Street and Chestnut Street.





Figure 84. 534 Church Street aerial

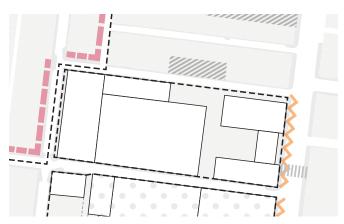
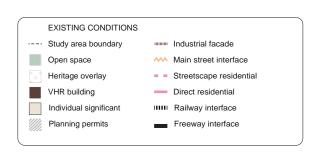


Figure 85. 534 Church Street existing conditions





Birrarung Sub-Precinct existing conditions

The Birrarung Sub-precinct is located in the south of Cremorne. The sub-precinct is made up of 3 key strategic sites; Rosella Complex, 658 Church Street and 167 Cremorne Street. These sites are all located along the Yarra River, bordering the freeway. Across these sites there are various buildings of heritage significance.

Rosella Complex

The Rosella site is a business park-style development directly adjacent to the railway line. The complex spans across both sides of Balmain Street and is bound by Gwynne Street in the west. There are a number of significant heritage buildings interspersed with non-heritage buildings on the site.

There is a large north-south oriented building to the south of the complex that directly interfaces the freeway. The existing building is surrounded by trees and at-grade carparks. There is a site within the Rosella Complex (to the north Balmain Street) that is currently under construction. This is a contemporary addition to the existing factory building.

658 Church Street

658 Church Street is a business park style development which sits alongside the railway line to the west and the freeway to the south. The site includes the Richmond Power Station which is a building of Victorian Heritage Significance. Other buildings within the site are of a mixed scale and character. Existing buildings are up to 5 storeys in height and more recent proposed buildings are up to 9 storeys in height.

The buildings within 658 Church Street are set within the landscape with significant tree coverage along most of the internal streets and within the carparks. There is a central linear open space along the primary internal street (Dale Street Reserve) which has two rows of established trees and a small courtyard green space to the north-west of the site.

167 Cremorne Street

167 Cremorne Street is a large warehouse with three street interfaces - Dover Street to the east, Bent Street to the north and Cremorne Street to the west. The freeway forms the southern interface of the site. The southern facade of the existing building is highly visible from the Main Yarra Trail on the southern side of the Yarra River.

The eastern interface of the site is predominantly fine-grain residential dwellings with landscaped setbacks. To the northeast of the site is a series of townhouses and to the north-west is a hybrid development with a series of buildings of varying heights situated around a courtyard. The hybrid development steps up in height to the west of Cremorne Street. The Maltings site to the west is a large-scale high-rise development of varying heights up to a maximum of 21 storeys.



Image 46. Adapted heritage building within the Rosella Complex site as viewed from Balmain Street.



Image 47. Existing buildings within the Rosella Complex looking south along Palmer Parade.



Image 48. 658 Church Street, looking south along Church Street.



Image 49. 658 Church Street, looking west along Dale Street.



Image 50. Existing building at 167 Cremorne Street along Dover Street (to the left) with adjacent low-scale residential buildings (to the right).



Image 51. Existing building at 167 Cremorne Street looking west along Bent Street.



The Rosella Complex is an exemplary collection of industrial buildings recontextualised in a contemporary commercial setting. Additions to heritage buildings allow key heritage features to be retained and remain prominent.

A legible street network and a new publically accessible open space welcomes people into the site. High quality facades to the railway and river corridors create a positive image of Cremorne at key interfaces.

New infill buildings provide visual interest at the ground level and have forms and materials that are complementary to the heritage context.

ROSELLA COMPLEX	
Maximum boundary wall	6 storeys (24m)
Street wall height	3 storeys (12m)
Upper-level setbacks	3-5m

- Buildings range in height with the highest scale of buildings to the railway corridor and lower scale buildings to the west at the Gwynne Street interface. Overshadowing of the Yarra River is minimised in line with DDO1.
- A publicly accessible open space is delivered that is colocated with heritage buildings within the complex.
- Contemporary buildings sit alongside carefully restored heritage buildings. Additions to existing heritage buildings are setback to allow heritage features to remain prominent.
- The legibility of the internal street network is improved and Palmer Parade is redesigned as a pedestrian oriented street.
- Buildings that interface the railway and river corridors are designed to enhance the setting at these interfaces and contribute to a positive image of Cremorne.

 Overshadowing of the Yarra River is minimised in line with DD01.



Figure 86. Rosella Complex design objectives map



Figure 87. Rosella Complex design aerial

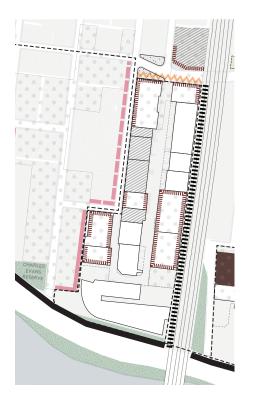
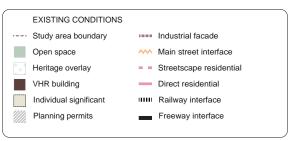


Figure 88. Rosella Complex existing conditions





658 Church Street is a collection of contemporary office buildings within a landscape setting. The street network is legible, welcoming and well-connected to the surrounding streets.

Carparking is consolidated within the site to facilitate opportunities for an expanded public space network. Public spaces are sunny and comfortable places for people to gather outdoors.

Public realm interventions enhance the setting of The Richmond Power Station within the site.

658 CHURCH STREET	
Maximum boundary wall	6 storeys (24m)
Street wall height	3-4 storeys (12m-16m)
Upper-level setbacks	3-5m

- Buildings range in height with the highest scale buildings to the south of the site transitioning down to a lower-scale to the north of the site.
- The legibility of the street network is improved and streets are redesigned to prioritise pedestrians.

 Carparking is consolidated within the site to reduce negative impacts on the public realm and facilitate opportunities for an expanded public space network.
- New publicly accessible open spaces are delivered that expand on the existing quality of spaces. Buildings are set within the landscape and mature trees are retained and integrated where possible.
- The public realm is upgraded to enhance the setting of The Richmond Power Station. Building massing is carefully located to ensure that the building remains prominent when viewed from Green Street and Dale Street.
- A well-designed podium creates a human-scale, active interface to Church Street. The Church Street interface is the primary interfaces and incorporates landscape, inset building entrances and integrated seating.

 Overshadowing of Church Street is minimised.
- Buildings that interface the railway and river corridors are designed to enhance the setting at these interfaces and contribute to a positive image of Cremorne.

 Overshadowing of the Yarra River is minimised in line with DDO1.

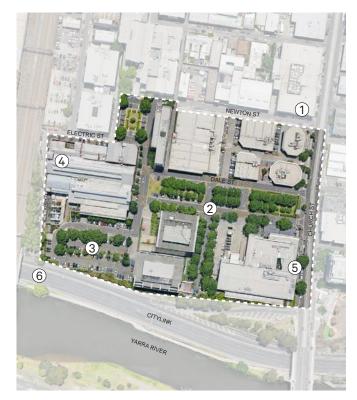


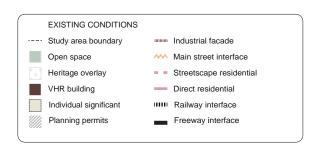
Figure 89. 658 Church Street design objectives map



Figure 90. 658 Church Street aerial



Figure 91. 658 Church Street existing conditions





167 Cremorne Street is a collection of buildings that are designed to respond to the different conditions at the north, east, south and west interfaces through suitable changes in form and materiality.

Buildings range in height and decrease in height to the east to respond to the low-scale context and the Dover Street Heritage Overlay. The landscape character of Dover Street is enhanced through the provision of a landscaped ground floor setback at this interface.

Buildings to the south of the site are designed to enhance the setting of the river corridor. A new publically accessible open space is delivered within the site that serves residents and the broader community.

167 CREMORNE STREET	
Maximum boundary wall	
Street wall height	3-4 storeys (12m-16m)
Upper-level setbacks	3-5m
Ground floor setbacks	A minimum of 3m at the Dover Street interface.

- Buildings range in height with the highest scale to the south-west and the lowest scale at the Dover Street interface.
- A lower-scale, fine-grain interface is provided at the Dover Street interface that responds to the low-scale residential context and the Dover Street Heritage Overlay.
- A ground floor setback on Dover Street integrates landscape, generous entrance spaces and seating and contributes to a sense of openness.
- New publicly accessible laneways are delivered through the site that improve connectivity to the Maltings site in the west.
- A new public open space is delivered to the northeast of the site that serves residents and the broader community. The space is designed to have a public interface and provide passive surveillance of neighbouring streets.
- 6 Cremorne Street and Bent Street are the primary interfaces to the site and are designed with active interfaces at the ground floor and lower levels.
- Buildings to the south of the site are designed to enhance the setting of the river corridor and contribute to a positive image of Cremorne. Overshadowing of the Yarra River is minimised in line with DDO1.



Figure 92. 167 Cremorne Street site design objectives map



Figure 93. 167 Cremorne Street aerial

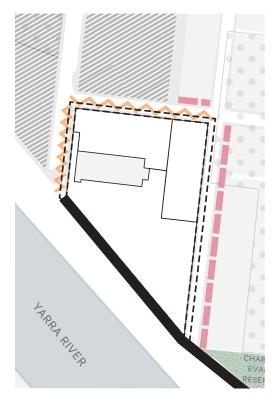


Figure 94. 167 Cremorne Street existing conditions.

