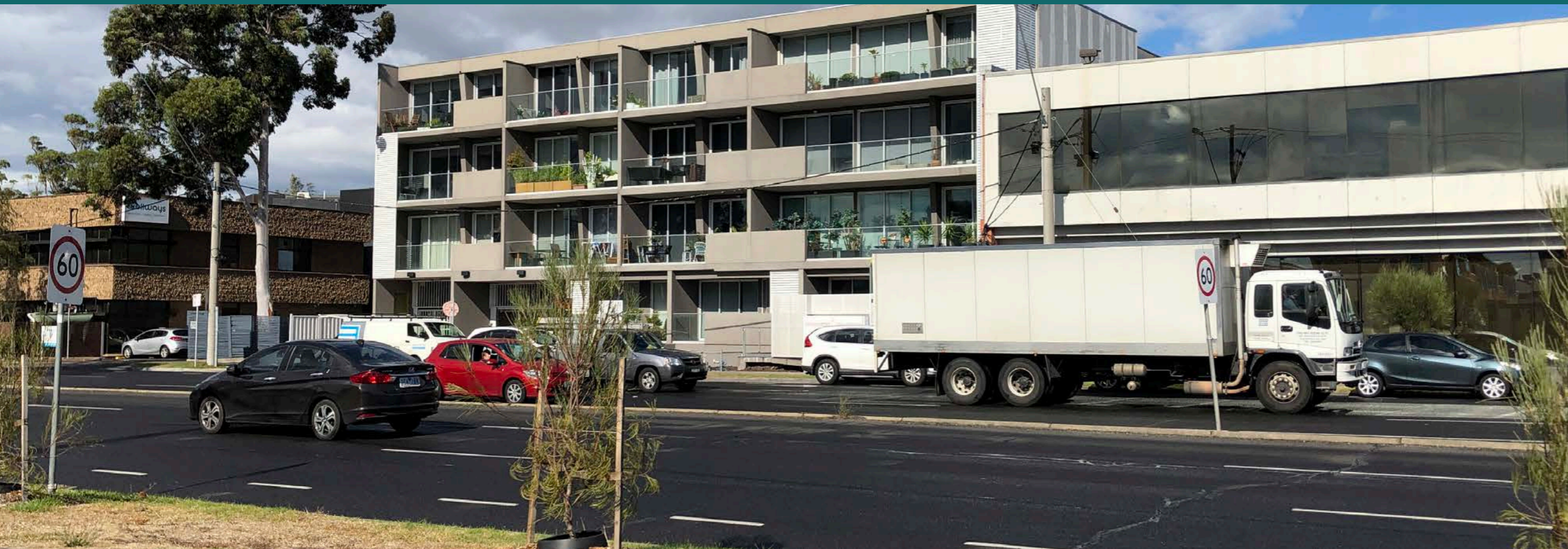


Part 2: Heidelberg Road Built Form Framework

DESIGN STRATEGY & RECOMMENDATIONS
PREPARED FOR THE CITY OF YARRA

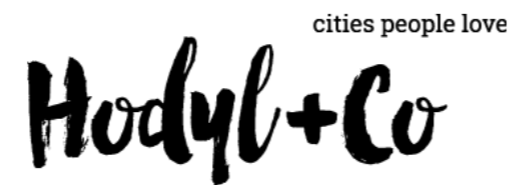


FINAL November 2019

This independent report has been prepared for the City of Yarra. All due care has been taken in the preparation of this report. Hodyl + Co, however, are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred within this report.

Prepared by Hodyl + Co
www.hodyl.co

Project team:
Leanne Hodyl
Huei-Han Yang
Bec Fitzgerald



November 2019

Version E

Contents

This is **Part 2** of the Built Form Framework prepared for the Heidelberg Road Corridor on behalf of the City of Yarra. It incorporates the development of an urban design strategy and specific built form recommendations for the commercial zoned land on the southern side of the road corridor in Fairfield and Alphington.

Part 1 incorporates the urban context analysis that informs the development of this strategy and provides further background to the recommendations included in this Part 2 Report.

Part 1 incorporates:

- The existing strategic planning context for the study area (Section 2)
- The existing local planning context (Section 3)
- The existing physical and character attributes of each precinct (Section 4).

Part 2	1. Developing a built form framework	6
	1.1 Establishing strategic objectives	
	1.2 Determining design objectives & principles	
	1.3 Urban design strategy	
	2. Corridor-wide considerations	10
	2.1 Consideration 1 - Rear-interface controls	
	2.2 Consideration 2 - Front setback requirements	
	2.3 Consideration 3 - Building separation and side setback controls	
	3. Precinct-specific considerations	20
	3.1 Consideration 1 - Determining the preferred interface to Heidelberg Road	
	3.2 Summary of the key factors determining building envelopes	22
	Precinct 1 – Yarra Bend	36
	Precinct 2 – Fairfield Commercial	46
	Precinct 3A – Alphington West	57
	Precinct 3B – Existing Heidelberg Road Neighbourhood Activity Centre	
	4. Summary of recommendations	71
	4.1 Summary of proposed controls	
	4.2 Extent of mandatory controls	
	Appendix A - Overshadowing assessment	
	Appendix B - Visual impact assessment	
	Appendix C - Existing examples of front ground floor setbacks	

Overview

Delivering on strategic objectives

Heidelberg Road is a major arterial road that connects the suburbs of Fairfield and Alphington to the central city in the south-west and to the north-eastern suburbs. The road is dominated by heavy traffic and characterised by a generally poor public realm with indistinctive low-rise warehouses and commercial buildings lining the street.

The exception is found within the Heidelberg Road Neighbourhood Centre which includes intact shopfronts and a small number of heritage buildings, as well as the Porta site in the west, which includes a heritage warehouse and brick chimney which is an important landmark within the precinct.

The study area for this report includes three precincts:

- Precinct 1 - Yarra Bend
- Precinct 2 - Fairfield Commercial
- Precinct 3 - Heidelberg Road Neighbourhood Activity Centre

Strategic and design objectives have been established for the corridor. These have been applied and tested within this report to determine appropriate development controls within each precinct.

This study only considers land on the southern side of the street, within the City of Yarra.

The following strategic objectives have been established which guide the overall scale of development along the corridor.

1. Recognise that the development scale on the former Alphington Paper Mills site is strategically positioned as the highest scale of development intensification along the corridor.
2. Recognise the sites to the immediate east and west of the former paper mills site as strategic sites given the proximity to this urban renewal area, access to multiple street frontages and site size.
3. Recognise the Porta site as a strategic site due to its large size and capacity to support multiple buildings, housing diversity and new pedestrian connections to the park.
4. Support a 'moderate' scale of development intensification on all other sites within Precincts 1 and 3.
5. Support a 'moderate' scale of development intensification for commercial uses only in Precinct 2.
6. Deliver well-designed, durable and adaptable developments on all sites, including support for commercial uses in the lower floors of all buildings.

This is summarised in Figure 1.

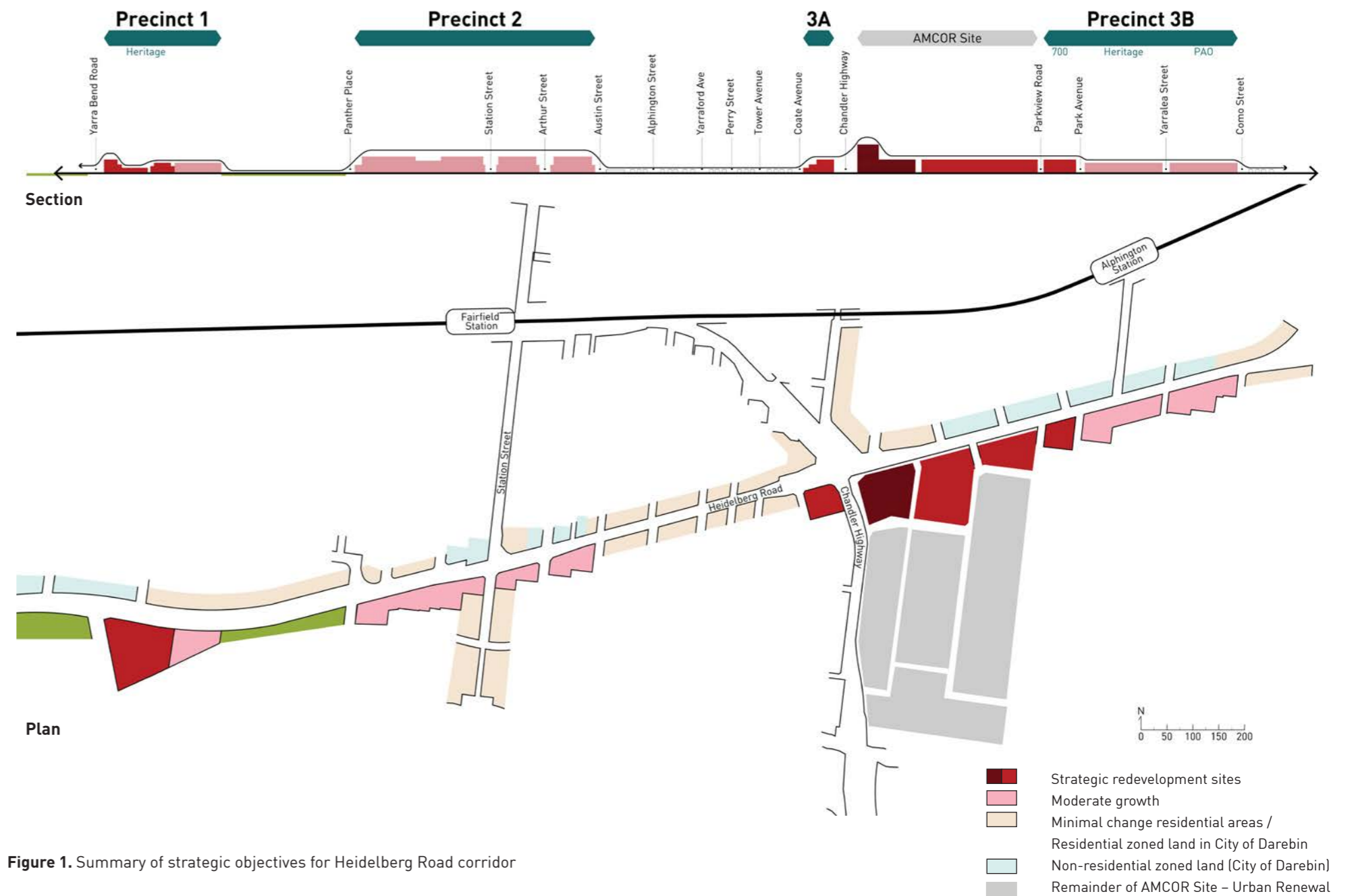


Figure 1. Summary of strategic objectives for Heidelberg Road corridor

Delivering good quality design outcomes

The following design objectives have been established which guide the form (heights and setbacks) and design quality of new buildings.

1. Improve the quality of the public realm through increased activation and enhancement of the pedestrian environment.
2. Establish a new preferred character for each precinct that responds to the existing context.
3. Carefully manage the impact of new development on sensitive land uses to the south.

These design objectives have been considered at two scales:

- Corridor-wide considerations where common attributes that occur along the whole corridor are assessed and proposed controls developed that can apply generally across all new development.
- Precinct-specific considerations where the locally specific context must be taken into account to determine appropriate development controls.

The range of considerations and the planning controls proposed to respond to them are articulated in Figure 2.

Precinct-specific considerations

Create a new **positive street character** by framing the street with high-quality buildings while maintaining a sense of openness, ensuring that buildings are not visually dominant when viewed from within the street.

This is achieved by applying **street wall height and upper level setback** controls that respond to specific conditions within each precinct, including the need to respond to the scale and design of existing heritage buildings and street widths.

Recommended street wall heights vary from **2 to 6 storeys**. Above this a **6 metre setback** is proposed (with additional upper levels setback at a 45 degree angle in Precinct 3B).

Corridor-wide considerations which generally apply to all development across the study area.

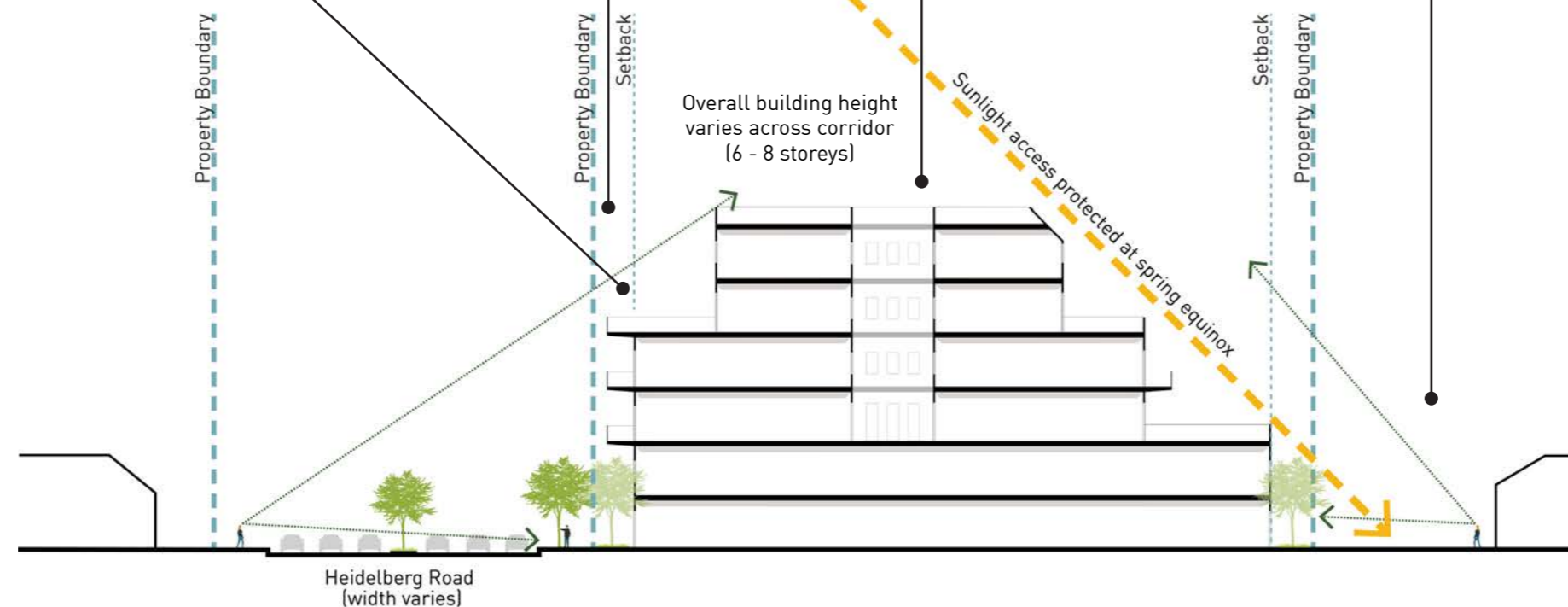
Create a more **welcoming and attractive street** through the inclusion of a **front setback control**. This requires developers to setback new buildings from the street to create more pedestrian space, opportunities for additional tree planting and more street-based activity.

A **3 metre setback** is recommended for the majority of the corridor.

Create **liveable apartments and office buildings** with good levels of natural light, outlook and privacy. **Building setback and separation controls** ensure that there is adequate distance between buildings on the same or adjacent properties. Setback distances are related to the building height and internal use, with primary living spaces and balconies requiring greater separation.

Protect the **amenity of adjacent residential areas**, addressing potential impacts from overshadowing, visual bulk and reductions in privacy, through the inclusion of a **rear interface control**. This designates the form of new buildings (heights and setbacks) along the property boundary that directly interfaces with existing residential sites to the south.

A maximum **2 storey building** height on the boundary is proposed. Where the existing house is less than 15 metres from the property boundary, a minimum **3 metre setback** is required within the new development to support the provision of landscaping.



What determines overall building heights?

Overall building heights are determined by the integration of the strategic objectives and design objectives (corridor-wide and precinct-specific design considerations) including:

- Supporting the preferred overall scale of development (based on strategic planning context).
- Establishing a preferred character within Heidelberg Road.
- Mitigating the visual impact of upper levels when viewed from adjacent residential sites.

A significant amount of built form testing has been included within this report. The following building heights are proposed for each development scale:

- Strategic redevelopment sites - 8 storeys.
- Moderate growth sites - 6 storeys.

Figure 2. Summary of design objectives and recommended planning controls.

1. Developing a built form framework

1.1 Establishing strategic objectives

The study area is a linear corridor of single-depth sites that front directly to Heidelberg Road¹. It includes three precincts:

Precinct 1 – Yarra Bend

Commercial 1 zoned (CZ1) land that is immediately adjacent to large parklands which front the Yarra River. The site includes the Porta construction site which includes a large heritage industrial warehouse and distinctive brick chimney.

Precinct 2 – Fairfield Commercial

Commercial 2 zoned (CZ2) land in relatively close proximity to the Fairfield Neighbourhood Activity Centre. The areas to the immediate south are zoned Neighbourhood Residential and include predominantly 1-2 storey, detached housing.

Precinct 3 – Encompasses the Heidelberg Road Neighbourhood Activity Centre and is in close proximity to the Alphington train station. The precinct has two distinct sub-areas:

- **Precinct 3A – Alphington West**

A single, large site to the west of the former Alphington Paper Mill site on the corner of Chandler Highway and Heidelberg Road. The site is zoned Commercial 1 and interfaces directly with Neighbourhood Residential zoned areas to the west and south. The Yarra Housing Strategy identifies this site as the western extension of the Neighbourhood Activity Centre.

- **Area 3B – Existing Heidelberg Road Neighbourhood Activity Centre**

This includes a number of heritage, narrow-fronted buildings. It is also affected by an existing Public Acquisition Overlay (PAO) that requires front setbacks from the road reserve in the order of 12 metres.

The Heidelberg Road corridor is located in relatively good proximity to public transport, community facilities and the Yarra River recreational corridor. The redevelopment of the former paper mill site will significantly transform the character of the area, bringing a significant number of new residents and expanding the extent of and overall activation within the Heidelberg Road Neighbourhood Activity Centre.

The Commercial 1 zoned precincts (Precincts 1 and 3) are therefore suitably zoned and located to support a greater level of development intensification, in particular for mixed-use developments that incorporate commercial or retail uses at the Heidelberg Road ground floor interface with apartments above.

The Commercial 2 zoned precinct (Precinct 2) supports a greater intensification of commercial uses.

All precincts are relatively undeveloped with 1-3 storey large format showrooms, offices and warehouses. There are two existing 4-storey residential apartment buildings (one in Precinct 1 and one in Precinct 3).

Planning context

There are a number of relevant planning policies and decisions that influence the context of this study.

Clause 21.05 – Built form in the Yarra Planning Scheme

Clause 21.05 provides guidance on the preferred urban design outcomes sought in the municipality, including building heights. Specifically it includes:

- Objective 17 – To retain Yarra’s identity as a low-rise urban form with pockets of higher development. Within this objective is included:
 - Strategy 17.1 – Ensure that development outside of activity centres and not on Strategic Redevelopment Sites reflects the prevailing low-rise urban form.
 - Strategy 17.2 – Development on strategic redevelopment sites or within activity centres should generally be no more than 5-6 storeys unless it can be demonstrated that the proposal can achieve specific benefits.

Commercial and residential zoning interfaces

It is an established position through VCAT decisions that residential properties next to commercial or industrial zones cannot expect the same level of residential amenity as properties which are located in the middle of a residential zone. Similarly, owners of commercial or industrial properties immediately adjacent to residential properties have to take into consideration amenity impacts on

residential properties.

The **City of Yarra’s Housing Strategy (2018)** supports the delivery of a ‘moderate’ scale of housing within the Commercial 1 Zoned precincts. This includes support for increased residential densities and housing diversity through a mix of infill and shop-top apartment developments.

Of specific relevance to the Heidelberg Road Corridor the study notes:

- Heidelberg Road is anticipated to take a significant amount of residential growth. The majority of this will be concentrated within the former Alphington Paper Mill site.
- The former paper mill site is identified as a ‘High change area’ on the Strategic Housing Framework Plan.
- The CZ1 land is identified as ‘Moderate change area’.
- The CZ2 area is designated a ‘Non-residential area’.
- The residential zoned areas surrounding the corridor are noted as ‘Minimal change area’.

The **City of Yarra’s Spatial Economic and Employment Strategy (SEES)**, 2018, identifies the changing nature of the local economy as it shifts from a manufacturing and industrial hub to a knowledge, services and creative industries driven economy.

The strategy includes a strategic direction to retain Commercial 2 zoned land to support a diversity of business and employment opportunities.

Recent planning applications

Planning applications have recently been made for two mixed-use developments at 582 and 718 Heidelberg Road (both in Precinct 3). Both applications were considered at VCAT following Council’s objections. A range of issues were identified including that both buildings were considered too tall for the specific local context.

- The application at 718 Heidelberg Road, a site of approximately 3,000m² immediately to the east of the former Alphington Paper Mill site, was approved with a condition that it be reduced from 8 to 5 storeys. The relationship of the 8 storey building to the existing residential context was considered unacceptable as it ‘presents as overwhelming in scale and approaches too close to its neighbours to the south’². The VCAT decision also notes that Council’s condition to reduce the building to 5 storeys was ‘possibly too conservative’.
- 582 Heidelberg Road, a site of approximately 3,700m² immediately to the west of the former paper mill site, was refused a permit for a 13-storey high building. A taller building was supported on the corner of Chandler Highway and Heidelberg Road, however, the visual bulk of the proposed development was considered to detrimentally affect the ‘character and ‘feel’ of that neighbourhood’³.

In both cases, however, support for mixed-use developments and a degree of development intensification was supported.

Strategic Objectives

The overarching built form response to the corridor is therefore driven by the following objectives:

1. Recognise that the development scale on the former Alphington Paper Mills site is strategically positioned as the highest scale of development intensification along the corridor.
2. Recognise the sites to the immediate east and west of the former paper mills site as strategic sites given the proximity to this urban renewal area, access to multiple street frontages and each site size.
3. Recognise the Porta site as a strategic site due to its large size, and capacity to support multiple buildings, housing diversity and new pedestrian connections to the park.
4. Support a ‘moderate’ scale of development intensification on all other sites within Precincts 1 and 3.
5. Support a ‘moderate’ scale of development intensification for commercial uses only in Precinct 2.
6. Deliver well-designed, durable and adaptable developments on all sites, including support for commercial uses in the lower floors of all buildings.

The application of these objectives within all precincts is the core subject of this report and will determine the scale and form of new development.

¹ There is one property within the study area that fronts Park Avenue and not Heidelberg Road.

² Tribunal decision: Aleks Nominees Pty Ltd v Yarra CC VCAT 1315 [22 October 2018 - PLN17/0040]

³ The Churches of Christ Vic Tas v Yarra CC [2019] VCAT 842 - PLN17/0858. Disclosure: Leanne Hodyl provided expert urban design evidence to Yarra CC for this case.

1.2 Determining design objectives & principles

Design Objectives

The urban design approach is founded on 3 key objectives which respond to the analysis of the existing physical context which is included in the Part 1 report. These are:

1. Improve the quality of the public realm through increased activation and enhancement of the pedestrian environment.
2. Establish a new preferred character for each precinct that responds to the existing context.
3. Carefully manage the impact of new development on sensitive land uses to the south.

For each objective, the existing context is outlined and the design principles to deliver on the objective in response to these existing conditions are articulated.

These design principles guide the development of corridor-wide and precinct-specific design controls.

1. Improve the quality of the public realm through increased activation and enhancement of the pedestrian environment.

Existing context

The current quality of the public realm is poor across all three precincts due to the:

- Dominance of traffic along the corridor. At present, it is foremost a vehicular thoroughfare, with limited qualities that invite people to spend time in each precinct.
- Narrow footpaths in many locations that are unsuitable to support development intensification.
- Limited on-street parking which means pedestrians are often immediately adjacent to fast-moving vehicles.
- Limited street activation.
- Multiple vehicular crossovers which compromise pedestrian comfort and safety.
- Minimal street tree planting to mitigate the negative impacts of high traffic volumes and narrow footpaths.
- Limited pedestrian weather protection.

A number of sites have landscaped ground floor setbacks which do improve the pedestrian experience by providing some visual relief within the street, opportunities for planting and additional pedestrian circulation space.



Figure 3. Example of minimal street tree planting, limited weather protection and immediate proximity of footpaths to high traffic volumes.



Figure 4. Example of a landscape setback which provides some visual relief and opportunities for greening to improve the quality of the pedestrian experience.



Figure 5. Example of poor street activation - at grade car parks front directly onto street.

Design principles

Without a significant reduction in traffic volumes there are major constraints within the road corridor to improve the quality of the public realm. The following design approaches are therefore imperative to improve the quality of the public realm.

- Increase activation of Heidelberg Road by requiring active street edges in all precincts.
- Improve pedestrian comfort and accessibility through inclusion of ground floor setbacks to the street where the existing conditions for pedestrians are poor and heritage fabric is not compromised.
- Provide additional opportunities for greening of the street within the front setback.
- Incorporate weather protection at entrances within the front setback and continuous weather protection in the Heidelberg Road Neighbourhood Activity Centre.
- Locate all future carparking underground in basements.
- Locate vehicular crossovers from rear lanes or side streets where possible.
- Rationalise the number of existing crossovers to Heidelberg Road where multiple crossovers exist on single sites.
- No additional vehicular crossovers are supported on Heidelberg Road.

2. Establish a preferred character along Heidelberg Road for each precinct that responds to the existing context.

Existing context

Heidelberg Road is fronted by predominantly 1-3 storey commercial buildings, including large format retail, warehouses and offices. There are two, four-storey residential buildings. The lot sizes and shapes vary significantly along the corridor. They include rows of narrow, traditional 'shopfront' sites as well as wide, larger sites that accommodate large format commercial and industrial uses.

The Heidelberg Road Neighbourhood Activity Centre includes traditional fine-grain shopfronts which is distinct from the remainder of the study area.

There are a small number of heritage buildings located within Precincts 1 and 3.

The existing character of the corridor varies within each precinct, however common attributes include:

Positive attributes

- Leafy residential side-streets which provide attractive green street views at intersections.
- Some sites have ground floor setbacks which include landscape treatments such as paving, understorey planting and small trees.

Negative attributes

- Poorly defined street edges, with generally low-scale development and inconsistent street setbacks.
- Sites with at-grade car parking directly fronting the street.
- Generally low-medium quality building design and materials, including a lack of articulation and visual interest.



Figure 6. Example of leafy side street that interfaces with Heidelberg Road (Precinct 2).



Figure 7. Example of a positive attribute - landscape setbacks that create more room for pedestrian movement and landscape treatments, as well as negative attributes - low-medium quality building materials with low levels of street activation and visual interest.



Figure 8. Traditional shop-fronts and heritage detailing in Precinct 3 which contribute to the positive character of the street.

Design Principles

In each precinct:

- Protect existing heritage buildings and support sensitive redevelopment where appropriate.
- Identify & enhance the specific existing valued attributes in each precinct while supporting a moderate level of development.
- Identify the preferred building typologies that align with the preferred new character area and the preferred future uses.
- Frame Heidelberg Road with high-quality development.
- Balance a sense of enclosure and openness within the street through appropriately scaled street wall heights and sufficient upper level setbacks. This will vary in each context.
- Transition buildings heights at corner sites from the Heidelberg Road frontage down to the existing residential side-streets.
- Separate upper level buildings sufficiently to deliver good levels of internal amenity (outlook, privacy and access to daylight and sunlight).
- On deep, narrow lots, party wall construction and the inclusion of generous light-wells are encouraged.

The preferred Heidelberg Road character is further articulated within each precinct proposal to achieve these design principles.

3. Carefully manage the impact on sensitive residential uses and parkland to the south.

Existing context

Precinct 1 immediately interfaces to large parkland areas.

All sites within Precincts 2 and 3 directly interface with residential properties to the south. These properties are within Neighbourhood Residential Zones where limited change in character is anticipated and where a maximum building height of 9 metres applies.

Design Principles

In Precinct 1 ensure development does not visually dominate or unreasonably overshadow the parklands to the south of Precinct 1.

In Precincts 2 and 3:

- Upper levels to be visually recessive when viewed from the private open space of adjacent dwellings.
- Sky-views from within the private secluded open space of dwellings to the south are provided above recessed upper levels.
- Ensure development does not visually dominate or unreasonably overshadow private open space in adjacent residential areas.

1.3 Urban design strategy

The following plan illustrates the application of the strategic and design objectives as an urban design strategy for the study area.

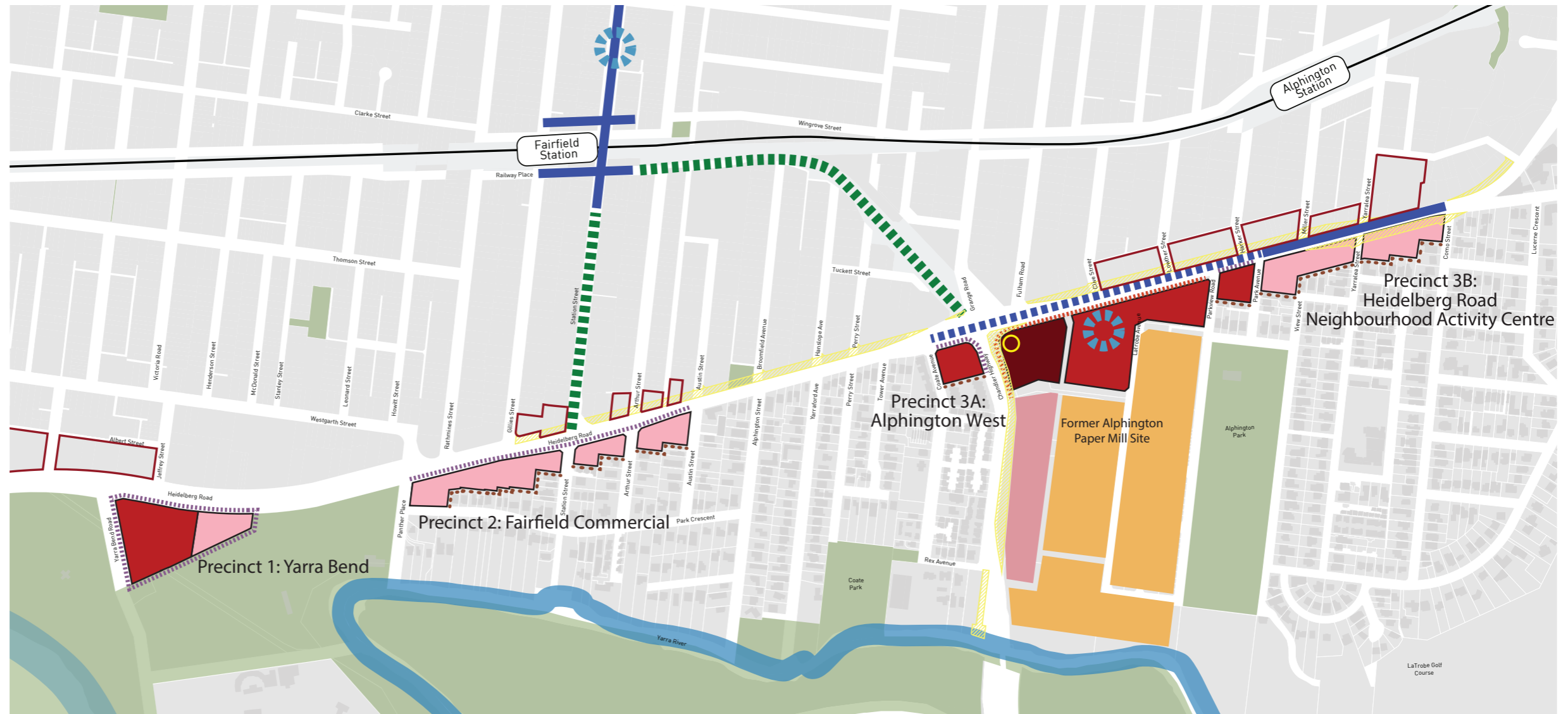
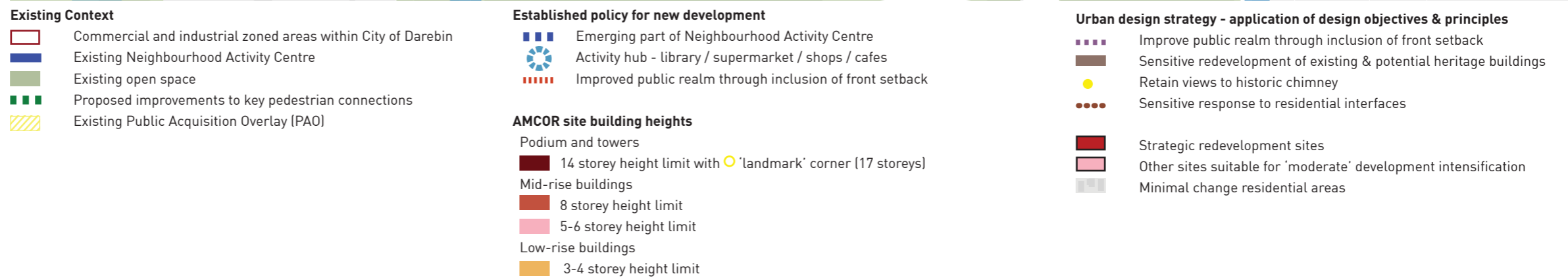


Figure 9. Urban design strategy



2. Corridor-wide considerations

The development of a Built Form Framework for Heidelberg Road can be considered in regards to:

- Corridor-wide considerations that are common along the corridor that occur within each precinct
- Precinct-specific considerations.

The corridor-wide considerations are considered in this chapter. They include:

1. Determining the appropriate standard rear-interface controls that are needed to protect the amenity of existing sensitive residential interfaces to the immediate south.
2. Determining front setback provisions that will improve the quality of the public realm in Precincts 1 and 2 and the western end of Precinct 3.
3. Determining appropriate building separation and upper side setback conditions that will ensure good levels of internal amenity for building occupants.

2.1. Consideration 1 - Rear-interface controls

The study area is defined by the single line of commercially zoned properties that front the southern side of Heidelberg Road and which interface directly with residential zoned properties to the south.¹

There is often tension created when planning policy objectives that support development intensification in commercial zoned areas seemingly conflict with other planning policies that support the protection of high levels of amenity within residentially zoned areas.

The east-west orientation of Heidelberg Road exacerbates this tension as overshadowing impacts will be more significant than in other orientations.

The key issues that must be addressed when determining appropriate design responses along this interface include:

- Mitigating the impacts of overshadowing
- Minimising the visual impact of bulky or tall buildings
- Ensuring reasonable levels of privacy are delivered.

This must be assessed for two types of interface arrangements:

- Rear to rear boundaries which is the typical condition for mid-block sites
- Rear to side boundaries which is the typical condition for corner sites.

The key building elements that impact the visual, overshadowing and privacy amenity impacts are:

- Height of walls on rear boundaries
- Requirement for ground level rear setbacks
- Setbacks of upper levels from the rear boundary
- Overall building heights.

These elements can be considered for the whole length of the study area as there is a generally consistent relationship between site orientation and interface conditions.

Mitigating the impacts of overshadowing

The Yarra Planning Scheme articulates the minimum sunlight access requirements for secluded private open space within a residential zone. These are defined in Clauses 54 and 55 which designate that 'at least 75 per cent, or 40 square metres with a minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9am and 3pm on 22 September'.

To test appropriate interface responses to existing sensitive uses to the south (parkland in Precinct 1 and residential uses in Precincts 2, 3A and 3B) detailed overshadowing modelling was undertaken to measure and assess that these minimum requirements can be met.

Boundary wall heights of 4 metres, 7.2 metres (4m commercial + 3.2 residential floor heights), 8 metres (2 commercial floors) and 12 metres (3 commercial floors) were tested. This modelling is illustrated in Appendix A.

The modelling demonstrates that boundary wall heights of up to 8 metres in height can generally meet the overshadowing requirements as specified in the planning scheme.

A summary of the overshadowing impacts of an 8 metre boundary wall height is demonstrated in Figure 10. This illustrates that due to the orientation of rear property boundaries to the direction of sunlight that the depth of shadow into the southern residential properties is generally consistent across the day.

This figure illustrates that adjacent sites that have a deep backyard greater than 11 metres (8 metres, plus the minimum 3 metre depth for sunlight access) can easily meet the minimum Clause 54/55 requirements.

On sites with shallow backyards, the sunlight requirements are either met through sunlight access to a large secluded side yard, or through a ground floor setback within the development site. This is necessary to ensure that the minimum 3 metre depth of sunlight is provided within the secluded private open space immediately adjacent to the dwelling.

In order to understand how upper levels above the boundary wall height might affect overshadowing it is necessary to consider the angle of the sun at the September equinox. There will be an additional overshadowing impact if development is constructed that intrudes into the direct line of the sun coming over the boundary wall height.

Figure 11 demonstrates the angle of the sun above the horizon at the September equinox (called the altitude). Between 11 and 2pm (which meets 3 hour minimum requirement) the lowest angle of the sun is 45 degrees (at 2pm).

Before 11am and after 2pm the altitude angle drops below 45 degrees however the direction of sunlight is coming from a more easterly direction (before 11am) and more westerly direction (after 2pm) with the longer shadows therefore falling on adjacent properties that front Heidelberg Road rather than the residential properties to the south.

¹ There is one property within the study area that fronts Park Avenue and not Heidelberg Road.

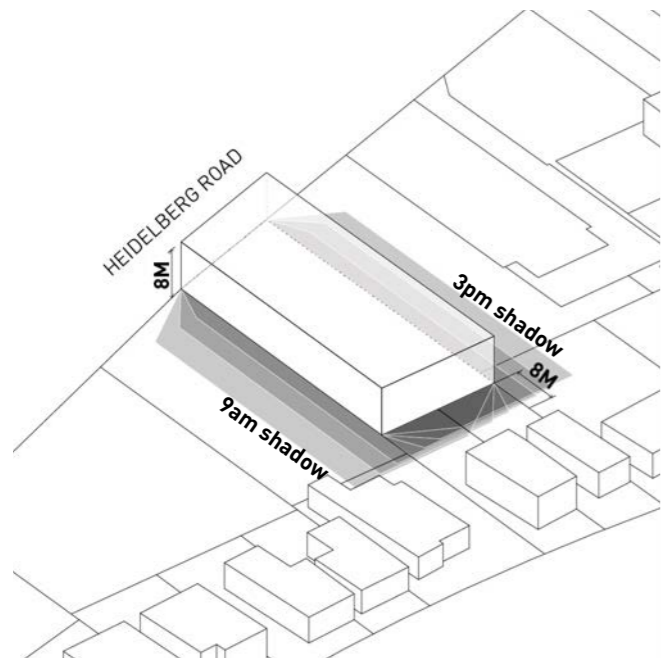


Figure 10. Extent of overshadowing of a 8 metre high wall on boundary at the September equinox. The cumulative overshadowing impacts between 9am and 3pm are demonstrated. The overshadowing impacts generally meet the minimum requirements of Clause 54 and 55 on all sites and interfaces.

Minimising the visual impact of bulky or tall buildings

There are two conditions that have been tested within the modelling:

- Condition 1 - where the adjacent dwelling is setback from the rear property boundary by 15 metres
- Condition 2 - where the adjacent dwelling is setback from the rear property boundary by 11 metres.

Condition 1 represents a small number of properties within the study area. Condition 2 is the more common condition.

Condition 1: Adjacent dwelling is setback 15 metres from the rear boundary.

The visual impact of boundary wall heights of 4 metres, 7.2 metres, 8 metres and 12 metres were assessed, together with three alternate setback provisions for upper levels:

- 6 metre setback
- 45 degree angle setbacks
- 12 metre setback.

Two overall height limits have been tested for each scenario - 5 storeys and 8 storeys. This modelling is included in Appendix B.

The modelling demonstrates and emphasises that the distance that the upper levels are setback and the overall height of the upper levels has a direct bearing on the visual amenity impact from within the private

secluded open space within the residential properties to the south.

Each scenario was considered against the proposed design principles (see section 1.2) that include:

- Upper levels are to be visually recessive when viewed from within the private secluded open space.
- Sky-views from within the private secluded open space of dwellings to the south are to be maintained above recessed upper levels.

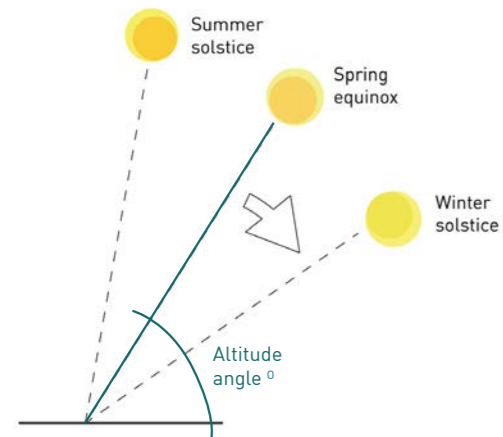
The following conclusions can be drawn from the modelling. For **5 storey** high buildings:

- A 6 metre setback above the boundary wall height is not considered acceptable as upper levels are too visually dominant. (This would also compromise

the maximum overshadowing requirements).

- A boundary wall height of 8 metres is not too visually dominant at this distance and meets the design principles.
- A 45 degree setback above an 8 metre boundary wall height does meet the design principles.
- A 12 metre setback for a five storey building does meet the design principles. This is a very similar outcome to the 45 degree angle setback.

Collectively they demonstrate that an overall 5 storey height limit is acceptable with either a 45 degree or 12 metre setback when considering the visual impact on adjacent sites.



Time	Azimuth [°]	Altitude [°]
9:00	61.8	32.2
10:00	47.4	41.9
11:00	28.6	49.2
12:00	5.3	52.7
13:00	34.1	51.2
14:00	320.1	45.4
15:00	304	36.6

Figure 11. Sunlight angles in Melbourne at the equinox. Between 11am and 2pm the sun altitude angle is above 45 degrees. This is when the direction of the shadow from the boundary wall height falls most directly on the adjacent residential properties (as shown in Figure 10)

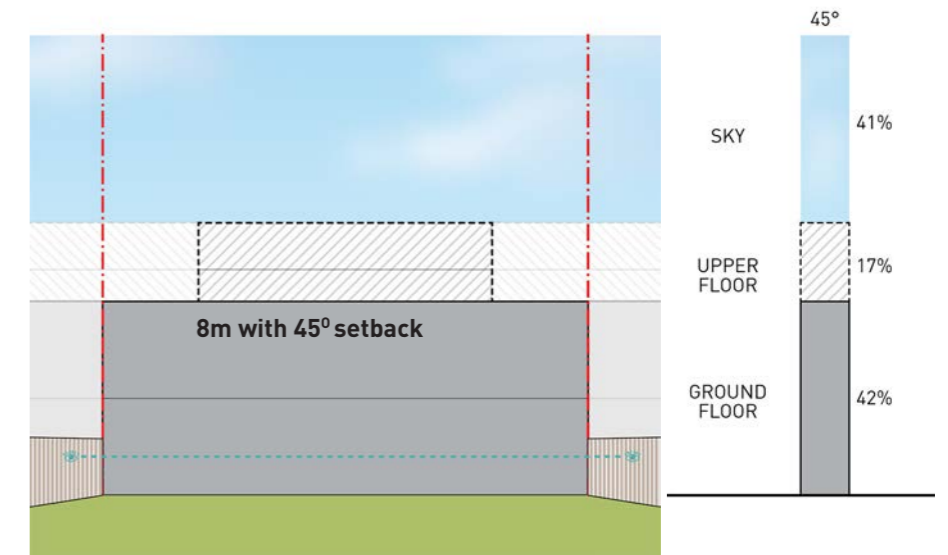
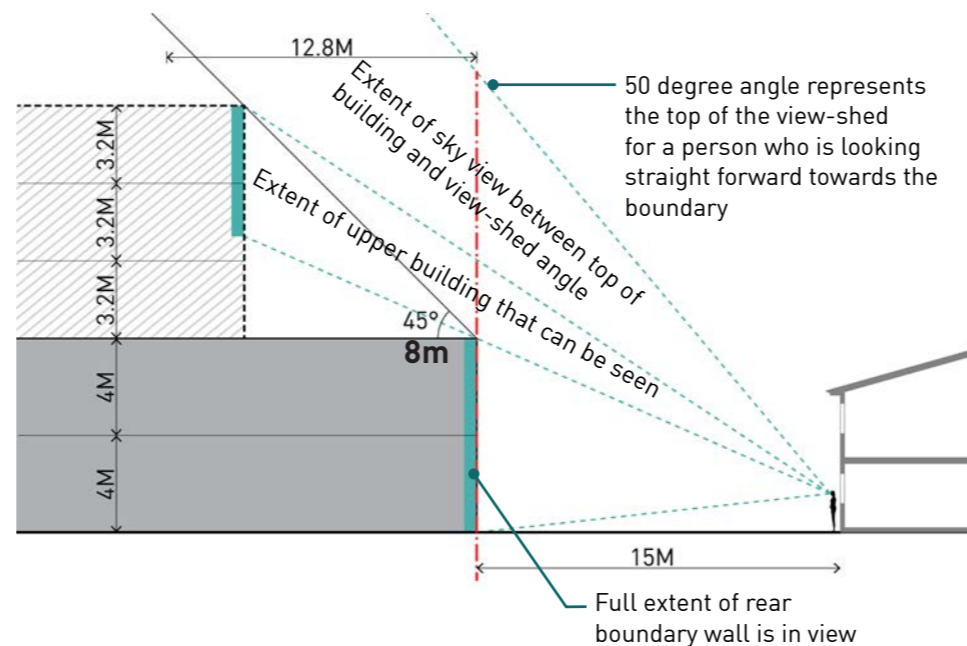


Figure 12. Acceptable degree of visual impact for 5 storey buildings where the adjacent dwelling is 15 metres from the boundary.

For **8 storey** high buildings only one condition met the design principles:

- An 8m boundary wall height with a 45 degree setback for all upper levels.

This is demonstrated in Figure 13.

Condition 2: Adjacent dwelling is setback 11 metres from the rear boundary.

The same scenarios were tested for condition 2. The following conclusions can be drawn from the modelling. For **5 storey** high buildings:

- A 6 metre setback above the boundary wall height is not considered acceptable and upper levels are too visually dominant. (This would also compromise the maximum overshadowing requirements).
- A boundary wall height of 8 metres is not acceptable as it is too visually dominant.
- A boundary wall height of 7.2

metres is only just acceptable. If the viewpoint was taken from any closer than 11 metres this would no longer be acceptable.

- A 45 degree setback above an 8 metre boundary wall height does meet the design principles.
- A 12 metre setback for a five storey building does meet the design principles.

The key difference between Condition 1 and 2 is the impact of the boundary wall height.

Recent VCAT cases highlight the effectiveness of mitigating the visual impact of the development at ground level through the inclusion of a landscape setback.

This approach was supported in the VCAT cases for 718 and 582 Heidelberg Road. In the case of 718 Heidelberg Road the following position was taken by the tribunal:

- Acceptance that a 3 metre setback could provide sufficient landscape buffer to adjacent dwellings as it

can accommodate canopy trees.

- Support for an increased buffer to improve the useability of the landscape space for occupants of the new development.

In the case of 582 Heidelberg Road a 4.5 metre landscape setback was proposed adjacent to a 2.5 storey building height and was generally supported by the applicant, Council, all expert witnesses and the VCAT panel.

Inclusion of a 3 metre setback has been tested in the modelling (see Figure 14) and illustrates the effectiveness of this in reducing the visual impact of the development.

Delivering good design

It is important that good architectural design is also achieved. Within the setback envelope, development should step back in a maximum of two steps to avoid 'wedding cake' outcomes.

Key recommendation

The following rear interface development controls are proposed for all developments sites with direct residential interface. These ensure that overshadowing, visual impact of the boundary wall and upper levels are taken into consideration.

Condition 1 - Rear to rear boundary condition where the adjacent dwelling is sited 15 metres from the boundary:

- Maximum boundary wall height of 8 metres.
- Above this, all upper levels to be setback at a 45 degree angle.

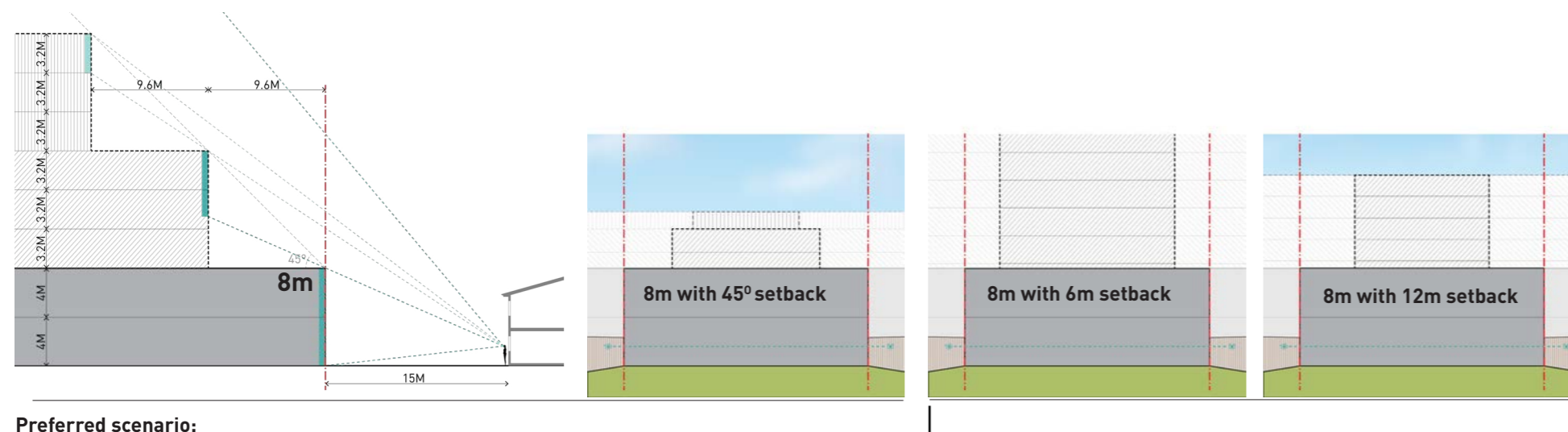
Condition 2 - Rear to rear or rear to side boundary conditions where the adjacent dwelling is sited less than 15 metres from the boundary:

- Minimum 3 metre ground floor setback from the boundary.
- Maximum building height located at the setback distance of 8 metres.
- Above this, all upper levels to be setback at a 45 degree angle.

On all sites, the minimum sunlight access requirements as stipulated in Clause 54 and 55 apply to adjacent secluded private open space and must be considered.

These controls are demonstrated in Figure 15.

For comparative purposes only, the setback requirements of Clause 54 and 55 are also illustrated.



Preferred scenario:
Maximum 8 metre high wall on boundary with upper levels setback at 45 degree angle

Unacceptable scenarios: Maximum 8 metre high wall on boundary with upper levels setback only 6 (left) or 12 (right) metres

Figure 13. Visual impact of 8 storey height limit with different upper level setbacks applied. Note: All views are drawn in one point perspective.

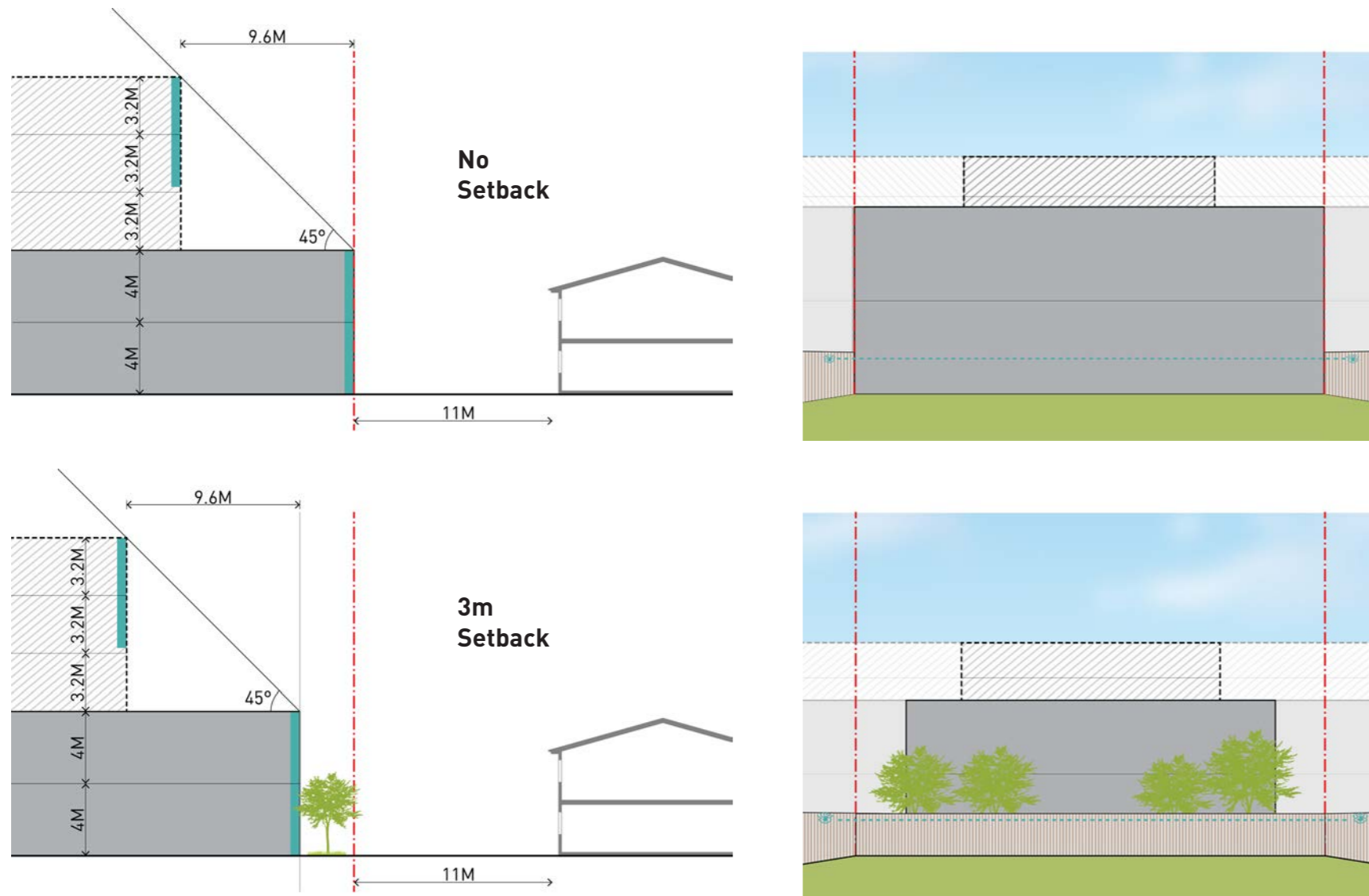
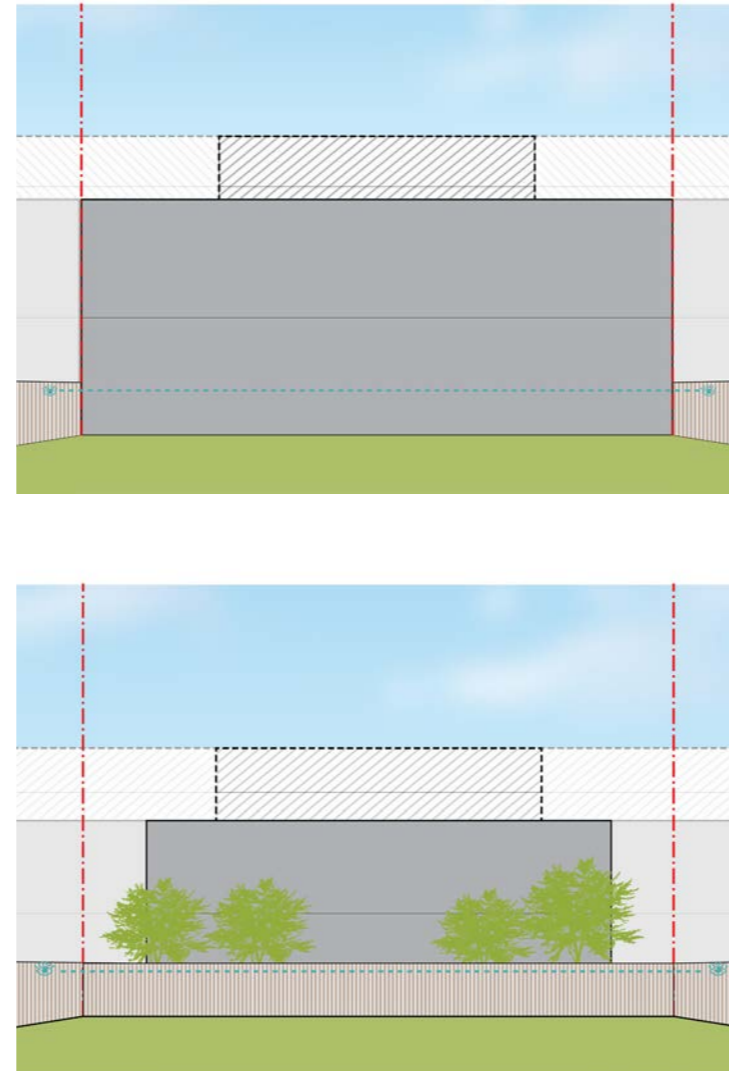
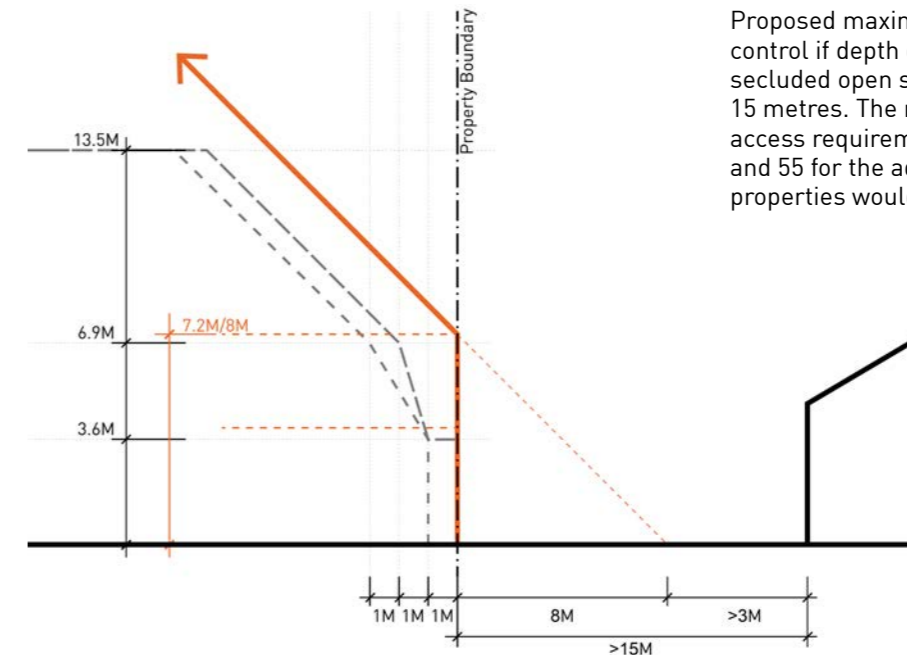


Figure 14. View from 11 metres - no ground level setback (above) and a 3 metre ground level setback (below)



Condition 1 Rear interface building envelope controls

Proposed maximum rear envelope control if depth of adjoining private secluded open space is greater than 15 metres. The minimum sunlight access requirements of Clause 54 and 55 for the adjacent residential properties would also still apply.



Condition 2 Rear interface building envelope controls

Proposed maximum rear envelope control if depth of adjoining private secluded open space is 15 metres or less. The minimum sunlight access requirements of Clause 54 and 55 for the adjacent residential properties would also still apply.

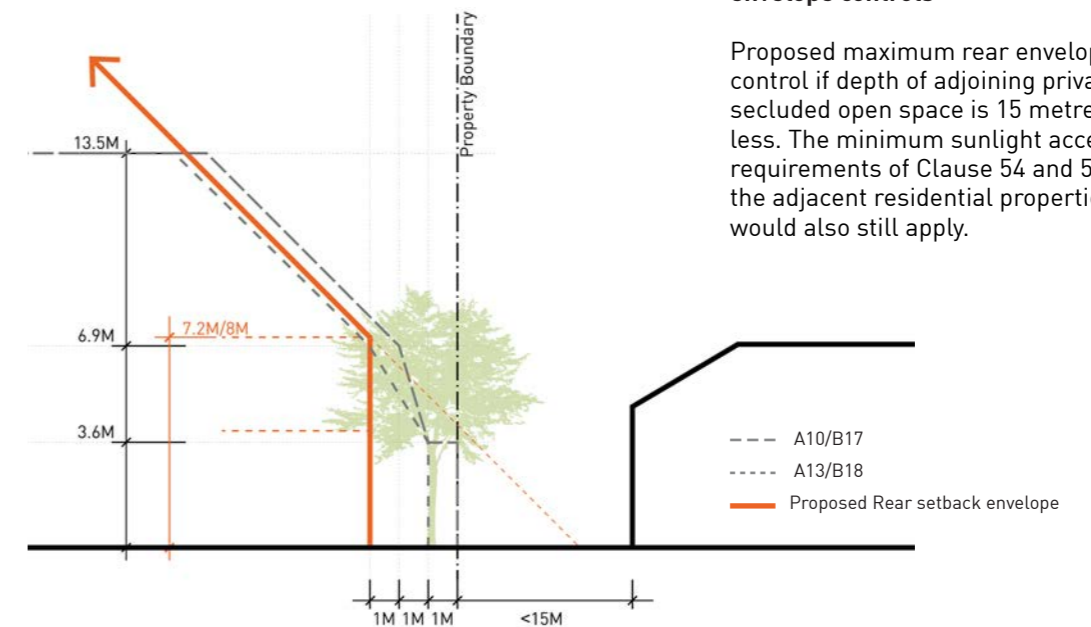


Figure 15. Proposed rear interface controls for Condition 1 and Condition 2. These are proposed as mandatory on all sites.

2.2 Consideration 2 - Front setback requirements

Existing conditions

There are three different footpath and setback conditions across the study area:

- 1-3 metre wide footpaths within Precincts 1, 2 and 3A (with varied building setbacks). There is little opportunity to improve the quality of the public realm within the road reserve as traffic volumes (and therefore carriageways) are unlikely to be reduced.
- The existing fine-grain shopfront area with 1.5-4m wide footpaths and not setbacks in Precinct 3. A setback is not desirable as it will compromise existing valued character and the retention of heritage buildings.

- The areas within Precinct 3 that are affected by the existing Public Acquisition Overlay (PAO) which requires a building setback in the order of 12 metres (east of Yarralea Street) and which narrows west of Yarralea Street.

The existing setback conditions are illustrated in Figures 16 - 29.

Determining appropriate ground floor setbacks in Precincts 1 & 2.

The existing footpath widths in Precincts 1 and 2 vary from 1 to 3 metres. The continuous clear pathway is in the order of 1-2m (clear from tree planting and other street furniture). This is considered too narrow considering the scale of development intensification that is anticipated on the street, and the increased pedestrian volumes that this will introduce.

The poor pedestrian conditions and environment is exacerbated by the high traffic volumes and the lack of on-street parking which means pedestrians are walking immediately adjacent to fast-moving traffic (60km/hr).

Inclusion of a front ground floor setback provides the opportunity to significantly improve this interface as well as provide for better internal amenity, which will support greater development intensification.

The setback distance should be informed by providing sufficient depth to:

- Support further activation of the street through inclusion of outdoor seating space and trading & display space.
- Improve pedestrian access into and out of building entrances and along Heidelberg Road.
- Opportunities to introduce greening into the front setback to soften the streetscape environment.

A modest setback of 3 metres is considered appropriate to achieve these aims (refer Figure 30).

Examples of landscape setbacks are demonstrated through existing developments within the study area (refer Appendix C). While they vary significantly in design quality, they do illustrate an improvement to the pedestrian experience through the creation of more space at the ground floor interface.

Support for ground floor setbacks have also been considered in two of the recent VCAT case:

- Support for a ground floor setback was included in the VCAT decision for 582 Heidelberg Road.
- The VCAT decision for 718 Heidelberg Road noted that a setback could be considered and could add value however would need to be considered through more detailed re-design.

Precinct 1 Existing interface to street



Figure 16. Section location plan

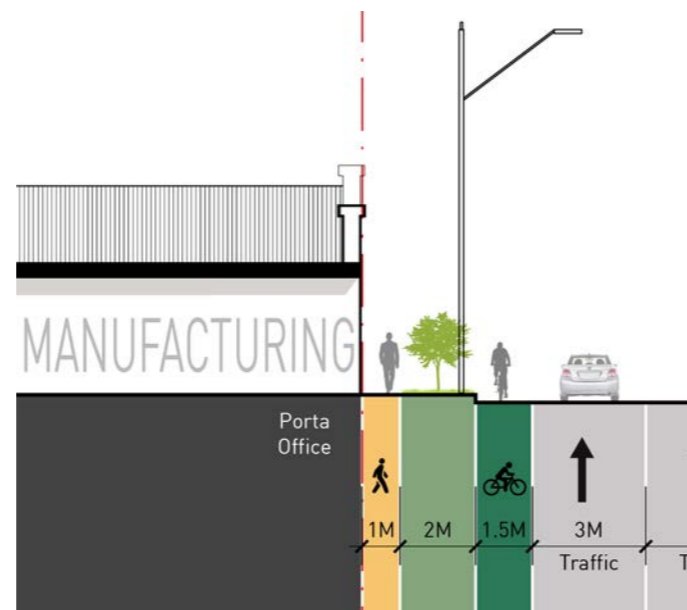


Figure 17. Existing street interface at location 1

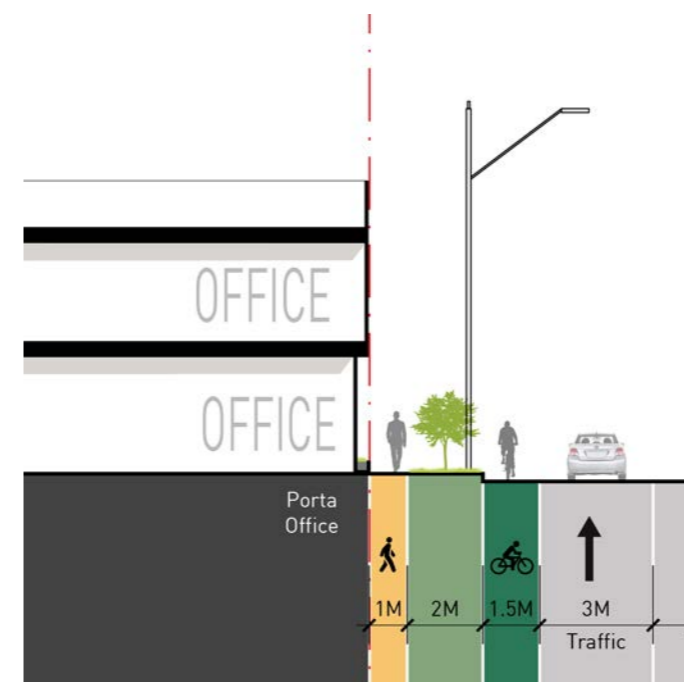


Figure 18. Existing street interface at location 2

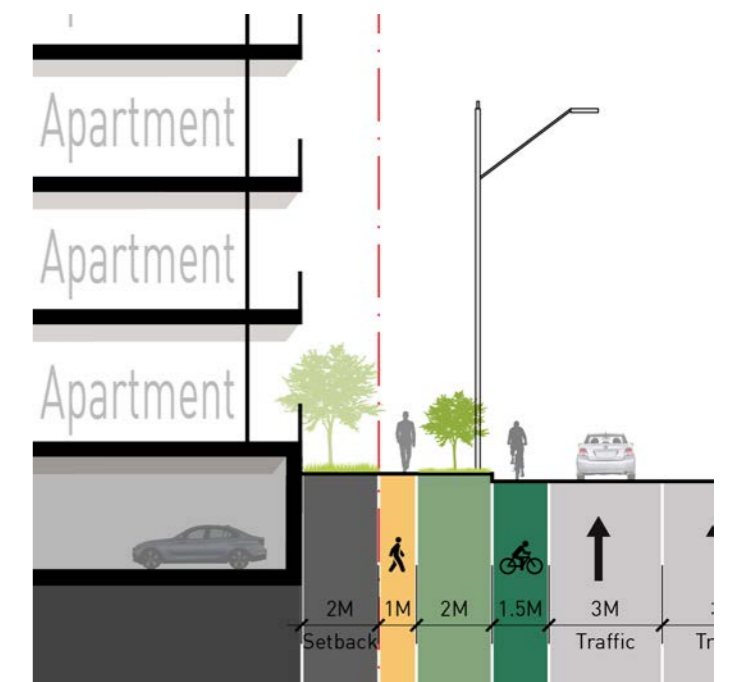


Figure 19. Existing street interface at location 3

Precinct 2 Existing interface to street



Figure 20. Section location plan

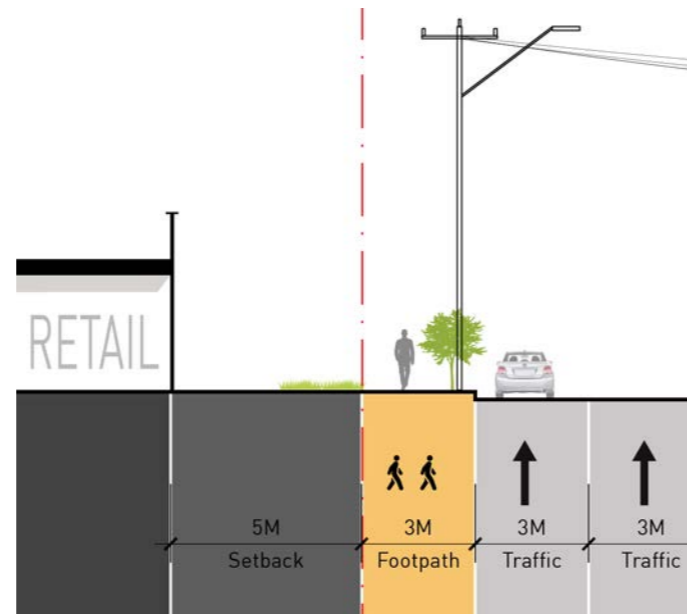


Figure 21. Existing street interface at location 1

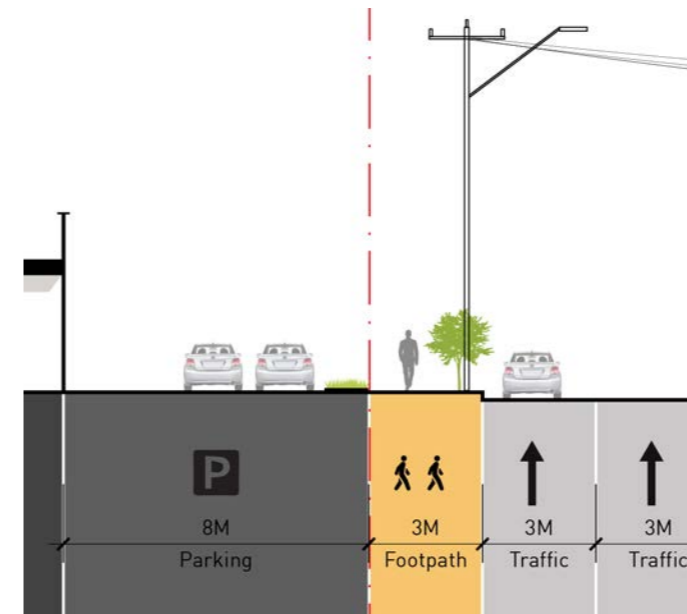


Figure 22. Existing street interface at location 2

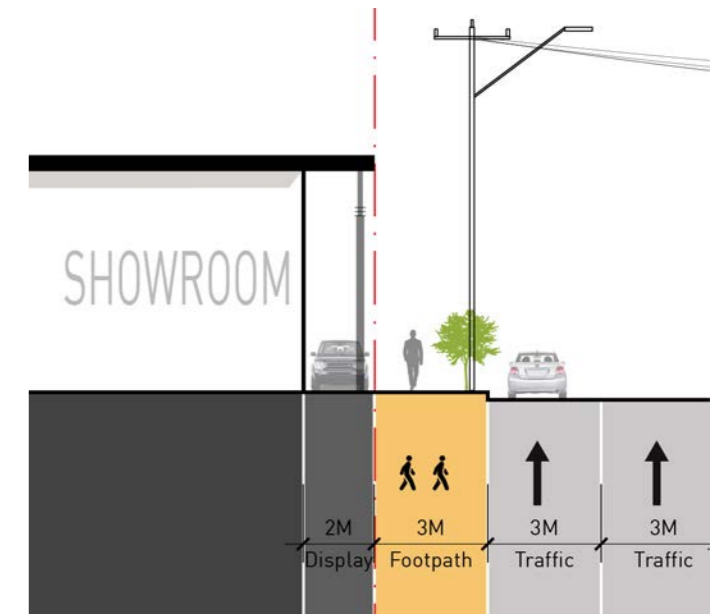


Figure 23. Existing street interface at location 3

Precinct 3A Existing interface to street

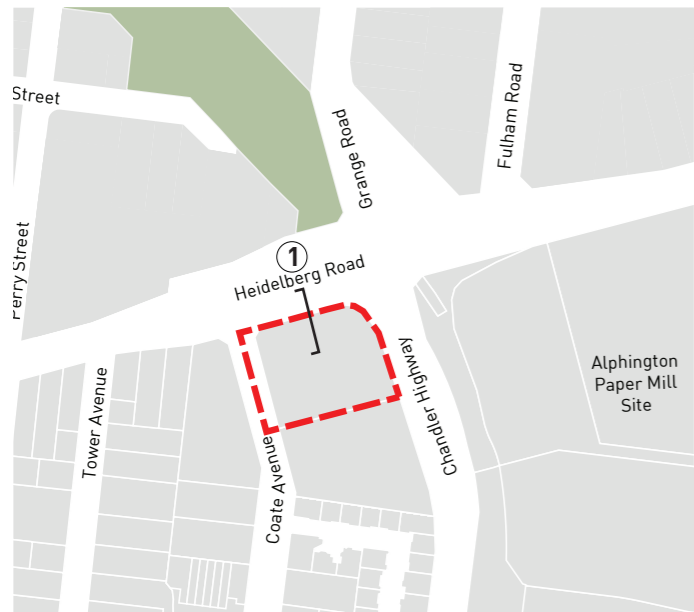


Figure 24. Section location plan

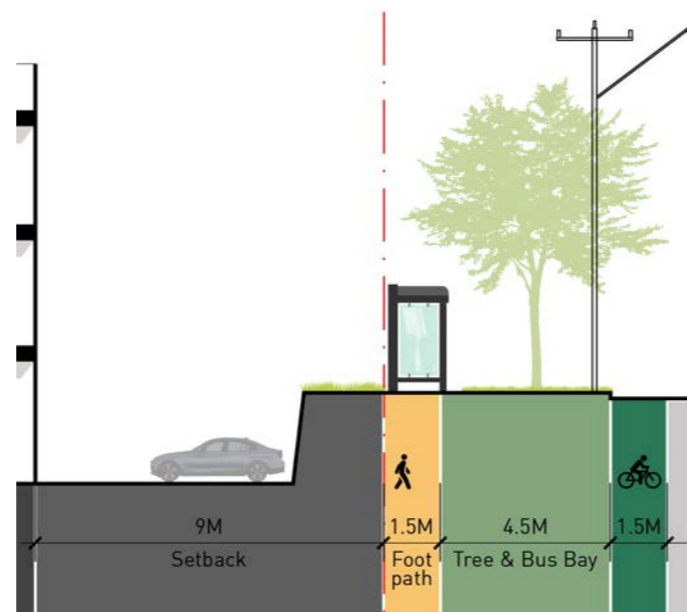


Figure 25. Existing street interface at location 1



Precinct 3B Existing interface to street



Figure 26. Section location plan

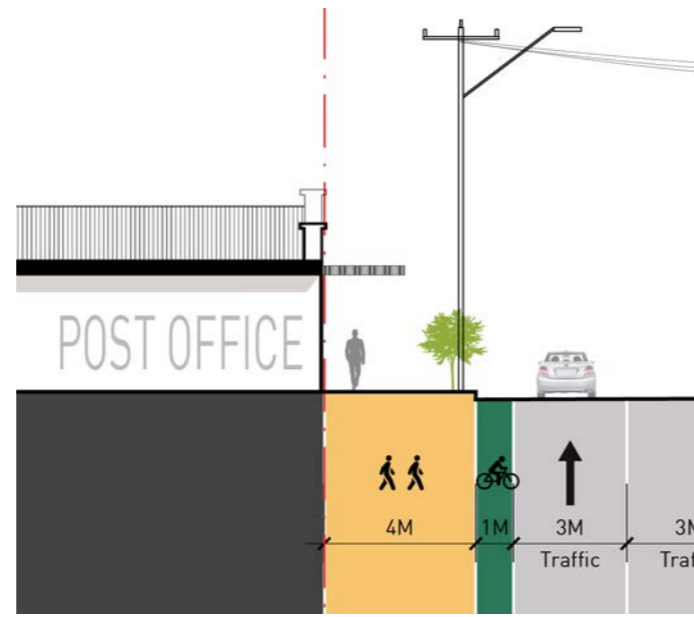


Figure 27. Existing street interface at location 1

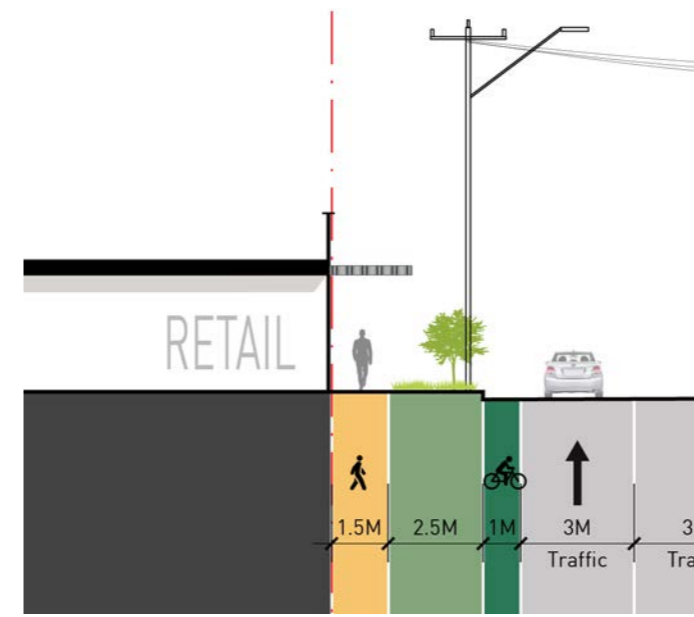


Figure 28. Existing street interface at location 2

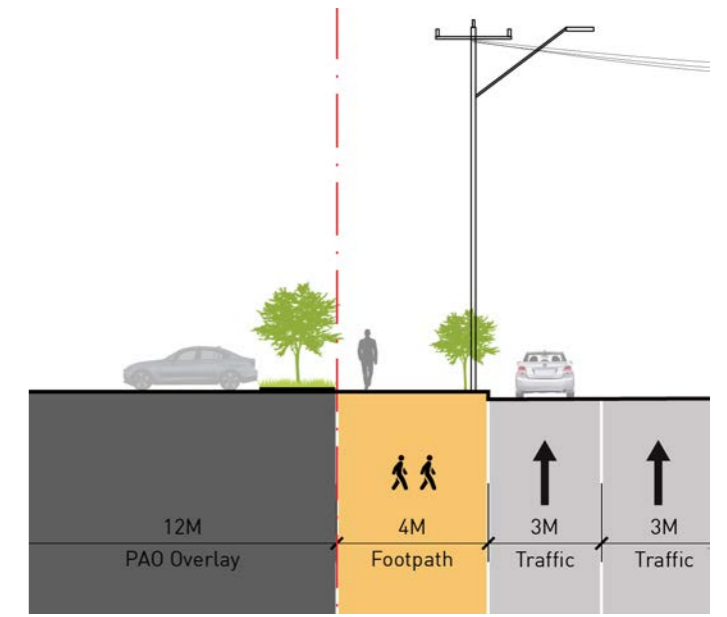


Figure 29. Existing street interface at location 3

Examples of opportunities to improve street quality and activation through the front setback.

Inclusion of a 3 metre setback will widen the amount of space for public and semi-public use to 4-4-5 metres on the road corridor in Precincts 1 and 3A and to 6 metres in Precinct 2.

This creates a more comfortable balance between the space dedicated to making the street more attractive, comfortable and safe and the space committed to the traffic requirements of the arterial corridor.

A 3 metre setback will only have a modest impact on development potential while the positive impacts to the public realm will be significant. At upper levels balconies and other building protections can protrude into this space and still achieve the design objective.

Importantly, the setback should be consistent to create a continuous street wall alignment that will support the creation of an active commercial street. This will also address the current poor character outcomes that are created by the existing diversity of setbacks and street interfaces.

Key recommendation

Adopt a consistent 3 metre building setback from the front boundary within Precincts 1, 2 and 3A where the existing public realm conditions are poor and there are limited heritage constraints.

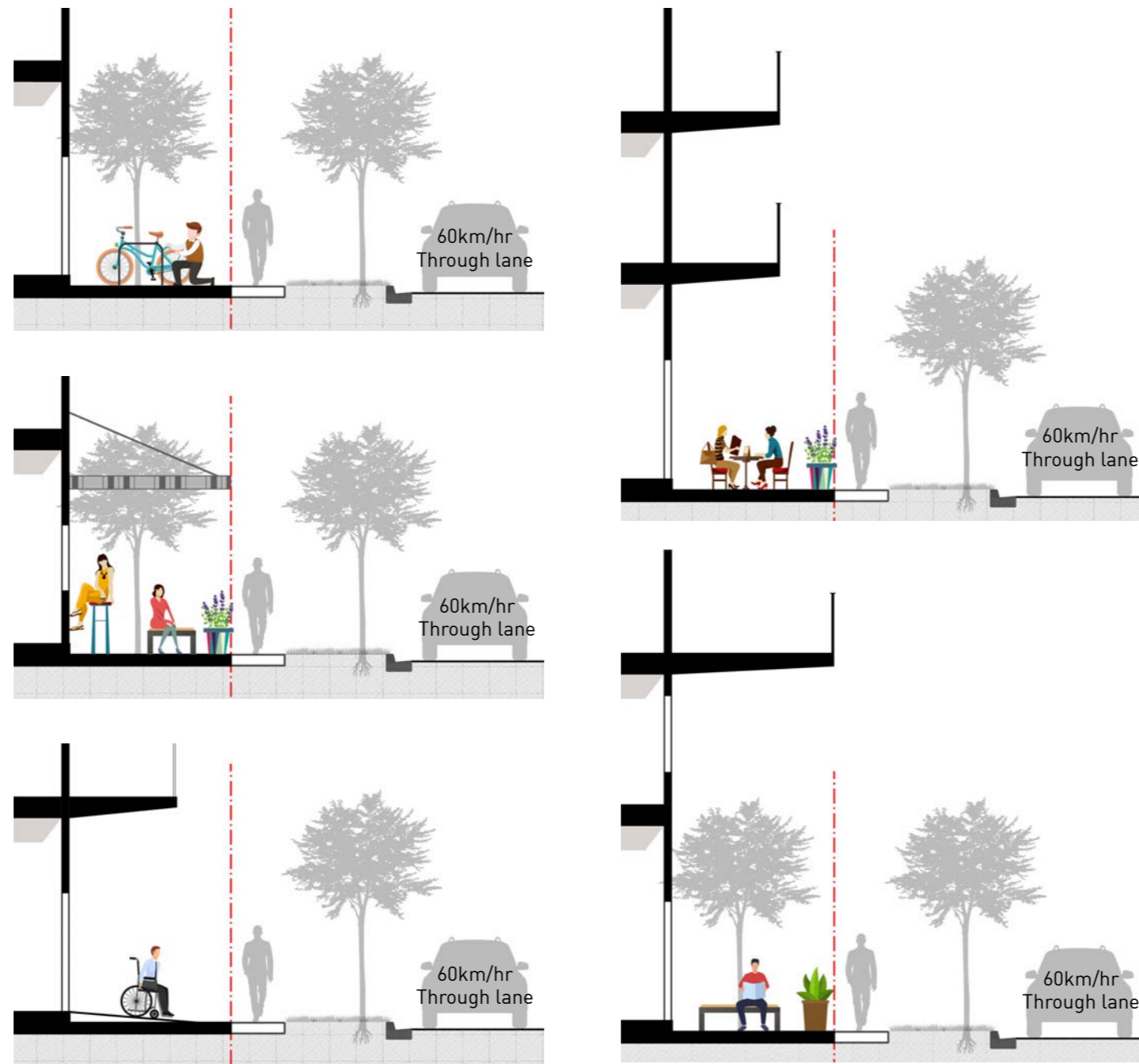


Figure 30. Illustration of 3 metre setback within the context of existing conditions on Heidelberg Road

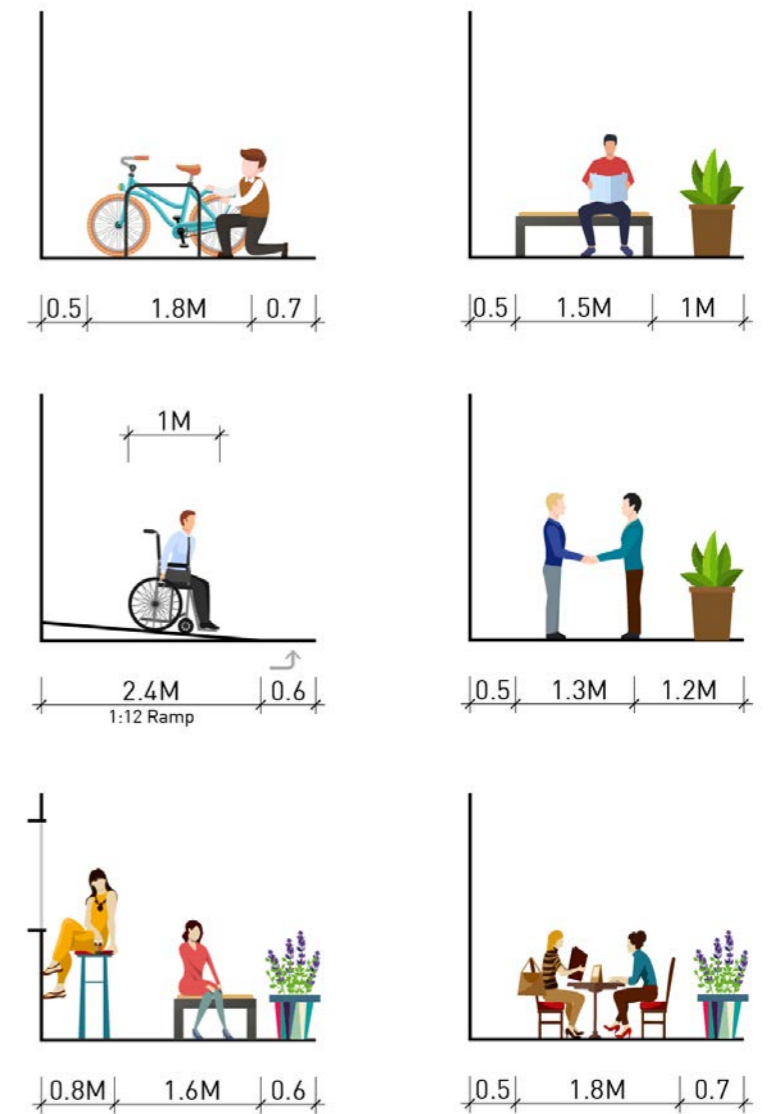


Figure 31. Dimensions for improving activation and access within 3 metre setback.



Figure 32. Precedent of front landscaped setback for street activation



Figure 33. Precedent of front setback for street activation

Design guidelines for landscape setback

- External spaces to be at the same grade as the footpath.
- External spaces to be predominantly hard-paved areas with some planting opportunities.
- Paving materials to be complementary to the existing streetscape design.
- Unobstructed access should be provided, avoiding the use of steps and narrow spaces between planting areas.
- The inclusion of small canopy trees is encouraged.

2.3 Consideration 3 - Building separation and side setback controls

Preferred building typologies

Generally party walling is encouraged across the study area. This prioritises the provision of internal amenity (access to daylight, sunlight, outlook and privacy) from the street and rear boundaries.

On narrow and small-medium sites, a party wall outcome is strongly preferred - side setbacks will not be possible without significantly diminishing the amount of development that can be achieved on each site or creating poor amenity outcomes for building occupants.

On larger sites, where a party wall outcome is not adopted, setbacks from side boundaries will need to be carefully considered to ensure that development equity and good levels of internal amenity are provided.

Side/rear setbacks and building separation

The Better Apartment Design Standards emphasise the importance of good building separation to deliver good quality apartment living. They do not specify metrics for setback requirements to achieve this outcome.

A number of planning scheme amendments for a range of high-density urban contexts, however, have recently considered the appropriate minimum distances that provide a minimal acceptable standard in medium-high density contexts.

A key attribute of many of these amendments is the importance of linking building separation with building height. That is, as buildings become taller, they should be set further apart.

The distinction between the amenity required from a residential primary living space/balcony to other internal uses, including commercial buildings as well as to bedrooms, kitchens and bathrooms in apartments is also considered.

The following proposed setbacks from side boundaries draw on these recent amendments and are proposed for the study area. These apply if buildings are not built on the side boundary.

Building height	Preferred separation (Suitable if there is a primary living space/balcony facing the boundary)	Minimum separation (Suitable when the use is not a primary living space or balcony facing the boundary)
Up top 4 storeys	4.5m	3m
5-8 storeys	6m	3m

Within sites, these setback distances are doubled to achieve sufficient building separation.

3. Precinct-specific considerations

3.1 Consideration 1 - Determining the preferred interface to Heidelberg Road

The preferred scale of development on Heidelberg Road is driven by the design principles to:

- Protect existing heritage buildings and support sensitive redevelopment where appropriate.
- Identify & enhance the specific existing valued attributes in each precinct while supporting a moderate level of development.
- Identify the preferred building typologies that align with the preferred new character area and the preferred future uses.
- Frame Heidelberg Road with high-quality development.
- Balance a sense of enclosure and openness within the street through appropriately scaled street wall heights and sufficient upper level setbacks. This will vary in each context.
- Support the design of well-proportioned buildings where the lower and upper levels form a well-balanced massing composition.
- Transition buildings heights at corner sites from the Heidelberg Road frontage down to the existing residential side-streets.

Street wall heights

This can be achieved through the introduction of a street wall height that:

- Steps down to existing single storey heritage buildings (Precinct 1)
- Street wall heights that align with existing valued heritage street character (relevant to Precinct 3B)
- Creates a well-defined street edge but which does not visually dominate. This is related to the overall street width.

Considering the poor quality of the street environment this balance is particularly important to achieve. Buildings that are visually overwhelming will exacerbate the impact of heavy traffic on the pedestrian experience.

To determine appropriate street wall heights, modelling of street views from the opposite side of the street was tested to consider various scenarios.

Overall building heights

The following criteria are to be met:

- Overall building heights do not visually dominate within the street.
- Upper levels above the street wall are setback to mitigate the visual impact of upper levels.
- Integration of overall heights with existing heritage buildings and streetscapes.

The design response to Heidelberg Road needs to be considered within each precinct as the conditions vary along the length of the corridor.

Additional assessment

This study does not consider the wind impacts from new developments. The scale and design of each development should ensure that negative wind impacts are not created that reduce the safety and comfort of pedestrians within the street.

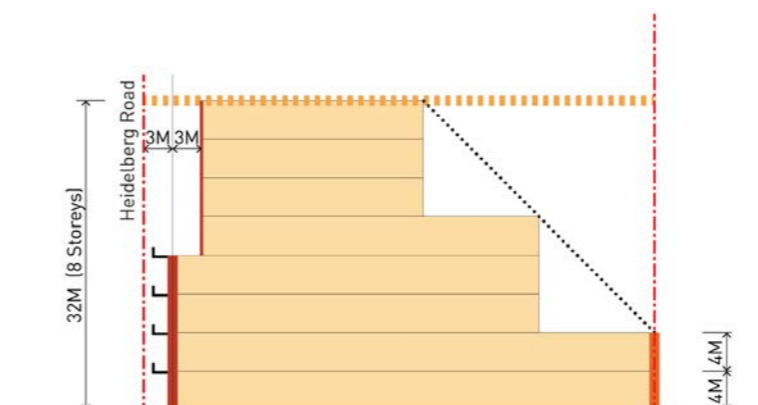
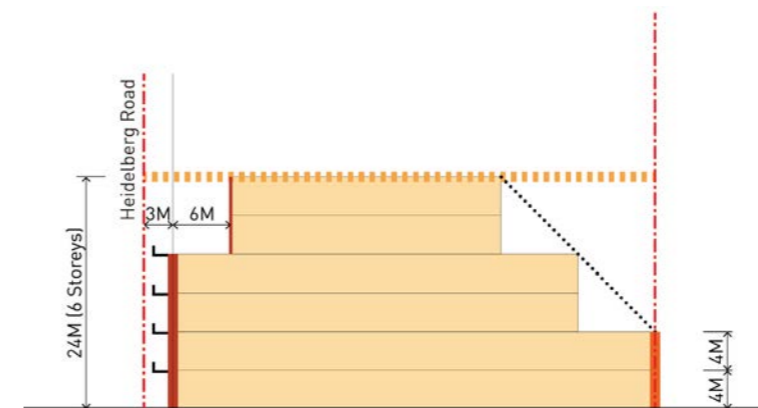


Figure 34. Examples of Heidelberg Road built form testing which considers alternate street and rear interface conditions

3.2 Summary of the key factors determining the preferred building envelope in each precinct

A summary of the key drivers determining the preferred built form controls is illustrated below.

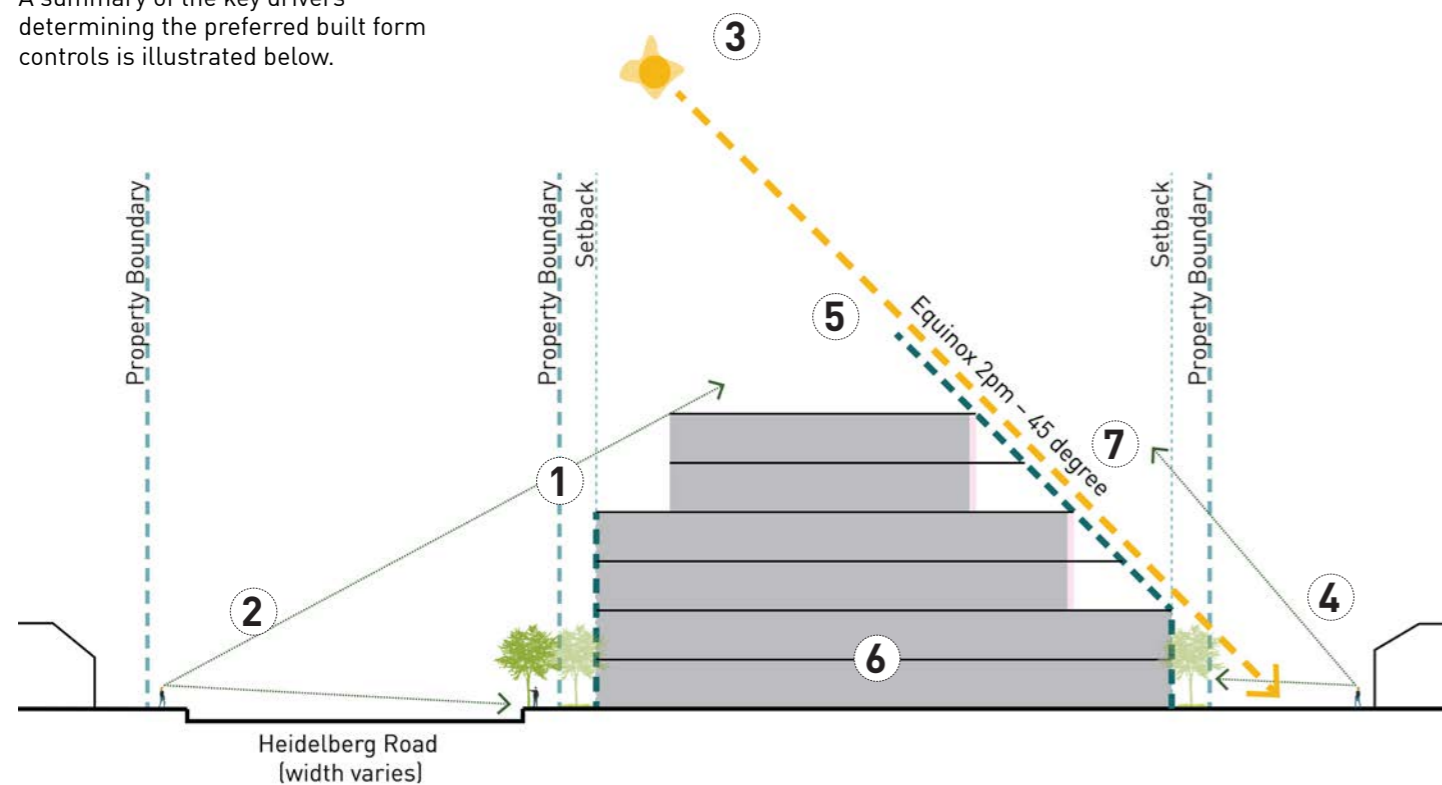


Figure 35. Summary of key drivers determining the development of the built form framework

- Opportunities to improve the quality of Heidelberg Road for pedestrians identified with proposals to include ground level setbacks.
- Street wall heights determined by consideration of the experience of the pedestrian in Heidelberg Road. Proposed controls balance the desire to improve street enclosure and definition without creating a 'canyon' effect. This is particularly critical considering the poor quality of the street environment created by the heavy traffic conditions.
- Sunlight access to private open space protected at the equinox to meet Clause 54 and 55 of the Yarra Planning Scheme.
- Visual bulk and privacy concerns addressed by two-storey boundary wall height, upper levels setbacks and ground level setbacks (where adjacent dwellings are within 15 metres of the site boundary).
- Overall building height determined by:
 - Preferred overall scale of development (based on strategic planning context).
 - Preferred character within Heidelberg Road.
 - Mitigating impact of upper levels when viewed from residential sites.
- Ensure commercial development is supported in the lower two floors of buildings in Commercial 1 Zone and all floors in Commercial 2 zone.
- Within the rear setback envelope a maximum of 2 steps within the building massing to avoid a 'wedding cake' architectural response.

Built form testing was undertaken for representative sites within each precinct to test the effectiveness of the controls and to illustrate the potential design of new buildings.

Built form testing

The following assumptions have been used to develop and test the built form proposals in this project.

Residential building design

Building depth

Minimum building depth of 10m.

Preferred maximum of 18m. This aligns with the construction of a double-loaded corridor and good provision of natural light to apartments.

Maximum of 24m. This is based on meeting the Better Apartment Design Standards which allows a living room depth (including a kitchen) of 9m and allows for a central corridor (approx. 1.5-2.5 metres) and balconies (min. depth of 1.8m).

Building length

A maximum length of 50m has been adopted to avoid wide, visually dominant or bulky buildings.

Floor to floor heights
4m bottom two floors, 3.2m above.

Floorplates

Minimum of 600sqm to reflect development feasibility (unless site size is smaller, or the floor is the top floor which 'caps' a building)

Maximum floorplates are related to building height to ensure that large towers floorplates are not visually dominant or too bulky.

- Buildings up to 10 storeys - No maximum applied, building designs determined by building depth and length requirements. For example, a L-shaped building could be 50 x 50 metres with a 10-24m building depth.
- Buildings greater than 10 storeys - Not applicable

Floor to floor heights

4m ground floor
3.2m upper levels

Office building design

Building depth

Minimum depth of 10m.

Preferred maximum of 30m to enable good natural daylight to all floors.

Maximum of 50m to avoid wide, visually dominant or bulky buildings.

Building length

A maximum length of 50m has been adopted to avoid wide, visually dominant or bulky buildings.

Floor to floor heights

4m all floors

Development feasibility is considered through assumptions for minimum floorplates and building depths.

Precinct 1 - Yarra Bend

A. Key valued character attributes



Figure 36. Precinct 1 - Aerial image with precinct-specific character attributes identified

1. 262 Heidelberg Road (view from park) - 4 storey interface to the park creates a building scale that is diminutive to the large, existing canopy trees.
2. 262 Heidelberg Road (view from road) - 4 storey interface setback from street by a landscape buffer enhances sense of street definition without creating overly dominant built form. Additional upper floors set back above this height could be accommodated without compromising this outcome.
3. View along Heidelberg Road - existing landscape design is of varying quality, however provides visual relief and additional space for pedestrians within the heavily trafficked street.

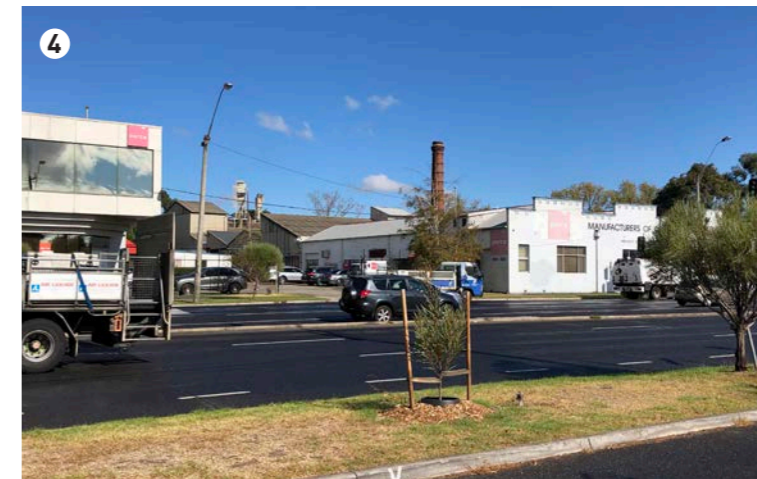


Figure 37. Key character attributes

4. Existing industrial heritage building (Porta), including single storey warehouses and brick chimney.
5. Precinct is surrounded by significant parkland setting, including existing landscape along Yarra Bend Road and expanses of open space.
6. Existing easement which precludes development above.
7. Existing 1970s office building.

B. Precinct specific design strategy

Creation of a mid-rise precinct that frames Heidelberg Road and steps down towards the adjacent parks to maintain the prominence of the landscape setting. The Porta heritage building is retained, views to the brick chimney are enhanced through sensitive redevelopment and a new north-south pedestrian connection links Heidelberg Road to the park.

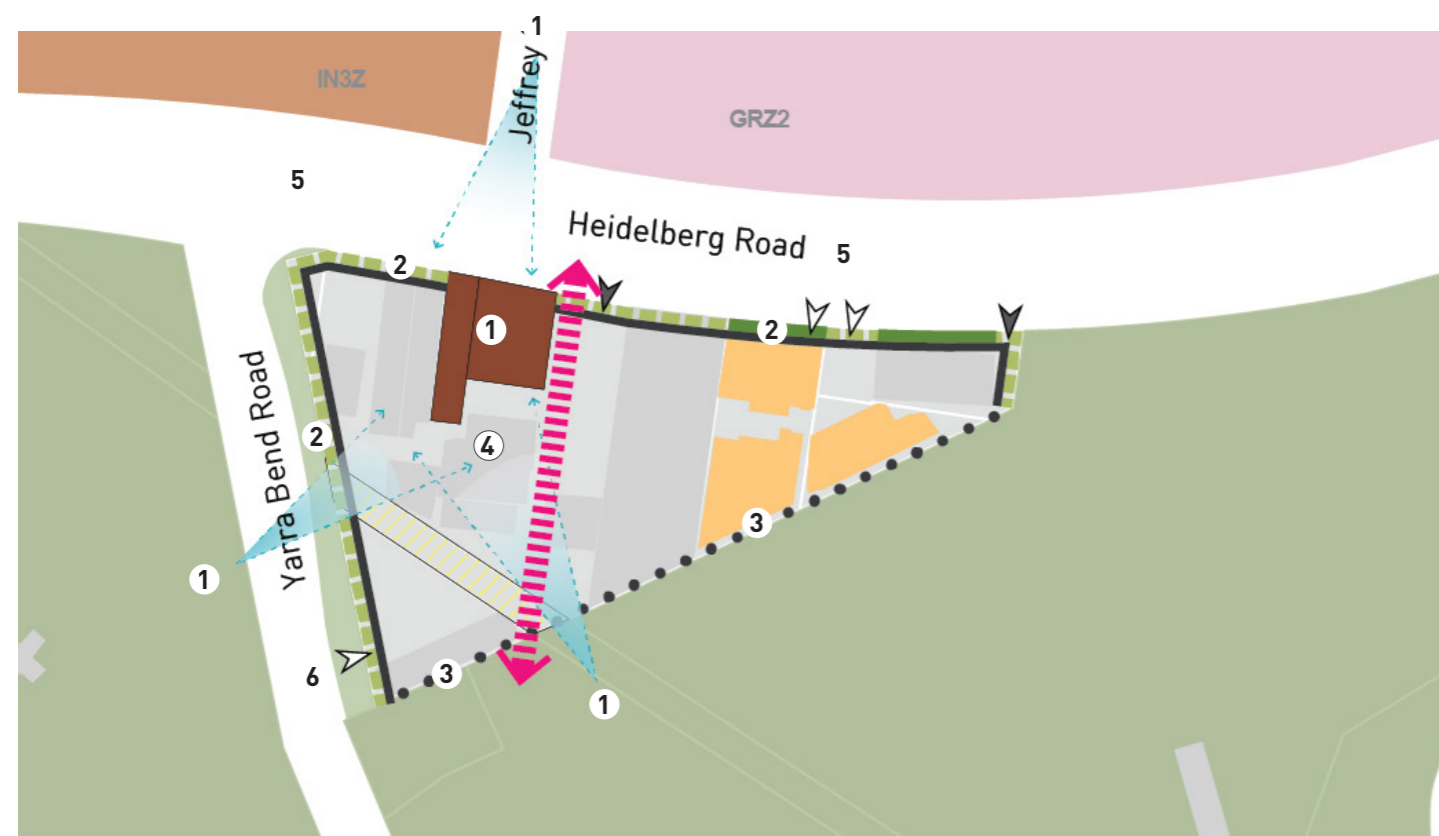


Figure 38. Design Strategy

- Existing heritage buildings
- Existing medium-density, mid-rise housing
- Existing vehicular access (retained/consolidated)
- Vehicular access (removal preferred)
- Existing landscape character and landscape setback (retained)
- Proposed 3m landscape setback
- Proposed 4 storey building height at interface to park
- Create urban street wall and activated edges along Heidelberg Road
- Proposed future public pedestrian link
- Yarra Valley Water easement
- View lines to chimney from Jeffrey Street & adjacent parks

Precinct-specific design objectives

Respect and enhance the setting of the Porta heritage building and brick chimney by framing the building with mid-rise development (4-8 storeys) - Location 1.

The Porta site includes a significant heritage warehouse building and a brick chimney which is an identifiable landmark in the precinct viewed from within the park and from Jeffrey Street. These are important attributes of the existing character, providing a connection to the social and economic history of the area and should be retained and adapted for re-use.

Views to the chimney from within Jeffrey Street and the park should be provided to maximise opportunities for the broader public to view and enjoy the heritage attributes of the site. Sufficient separation distances from the chimney to other new buildings should be provided to ensure that the chimney remains a prominent feature within the site. The overall scale of new development respects these existing heritage qualities and responds to the scale and features of the existing heritage building (refer to Figure 48).

Improve the pedestrian experience on Heidelberg Road and Yarra Bend Road through a 3 metre front setback - Location 2.

The existing landscape setback within the front of some properties improves the quality of the pedestrian experience by greening the otherwise largely asphalt landscape and by providing additional sense of openness/relief for pedestrian movement.

Provide a positive interface (visual interest and passive overlooking) to the park edges in a building scale that does not visually dominate or unreasonably overshadow TH Westfield Reserve and Yarra Bend Park Oval - Location 3.

Precinct 1 is located directly onto TH Westfield Reserve and new development must not unreasonably overshadow the park. The park area is significant in size and the area immediately to the south of the private land is currently an asphalt car park (i.e. a less sensitive use).

The existing 4 storey developments at 262 & 264 Heidelberg Road are successful demonstrations of an appropriately scaled building to the park edge.

A four-storey high building creates a positive interface to the park - it doesn't visually dominate the landscape setting - large canopy trees and open grassed areas retain their prominence - and the inclusion of balconies and doors to the park provides visual interest and improves safety.

Additional upper levels above 4 storeys should not increase overshadowing impacts onto the park.

Provide a diverse range of housing types on the strategic development site (Porta site) - Location 4.

The Porta site provides the opportunity to deliver a greater diversity of housing than is possible on other sites in the study area, many of which have significant site constraints. The inclusion of multiple buildings with internal communal courtyards to support high quality mid-rise developments is strongly encouraged.

Improve the character of Heidelberg Road by creating a comfortable sense of enclosure and definition to the street - Location 5.

This can be achieved through the introduction of a street wall height that provides a positive interface to the street but which does not visually dominate. This balance is particularly important to achieve considering the poor quality of the street environment. Buildings that are visually overwhelming will exacerbate the impact of heavy traffic on the pedestrian experience.

Minimise the impact of vehicular crossovers to Heidelberg Road and Yarra Bend Road - Location 6.

Vehicular access to most sites is provided from Heidelberg Road. This includes shared access for a number of sites. No additional vehicular crossovers are supported.

Precinct 1 - Yarra Bend

C. Determining Heidelberg Road development scale

Heidelberg Road varies in width along its length. In Precinct 1 it is in the order of 40 metres wide.

Precinct 1 includes a strategic site (the Porta site) and areas where a 'moderate scale' of development is supported through existing planning policy. The existing four-storey apartment building demonstrates the benefit of increasing the street wall height to provide greater definition to the street.

A range of scenarios for potential street wall and overall building heights have been tested, including:

8 storey developments with:

- 4 storey street wall and 3 metre upper level setback.
- 6 storey street wall with 3 metre setback.
- 6 storey street wall with 6 metre setback.
- 8 storey street wall height

6 storey developments with:

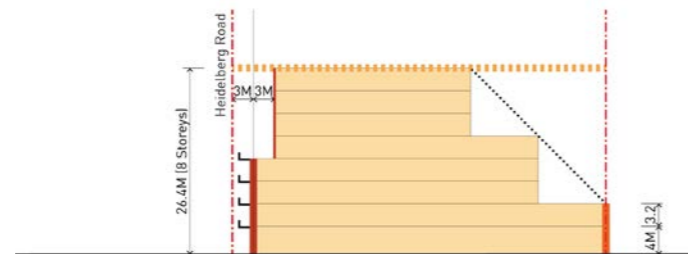
- 4 storey street wall and 3 metre upper level setback.
- 6 storey street wall with 3 metre setback.
- 6 storey street wall with 6 metre setback.

In each option, the 3 metre ground level front setback has been adopted.

An assessment of each option is provided against the design principles. The scenario that best delivers the design principles is the 8 Storey high building - Option 3. This includes a varied 4 - 6 storey street wall with upper 2 storeys set back by 6 metres.

8 Storeys - Option 1

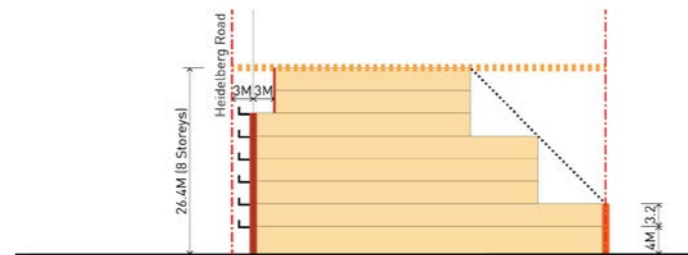
Street wall: 4 storeys
Upper level setback: 3 metres



- Effectively frames Heidelberg Road with the potential for high-quality development.
- Provides an improved sense of enclosure within the street due to upper levels. The four-storey street wall could be considered too low considering the wide road width.
- Creates an uncomfortably proportioned building where the lower and upper levels are of equal heights.

8 Storeys - Option 2

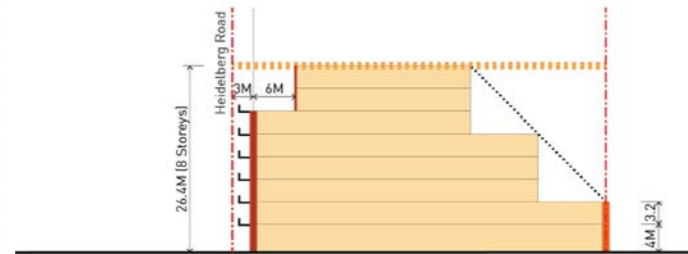
Street wall: 6 storeys
Upper level setback: 3 metres



- Effectively frames Heidelberg Road with the potential for high-quality development.
- The six-storey street wall provides a more balanced street wall height against the wide street.
- Supports the design of well-proportioned buildings where the upper levels are a recessed, lighter element above a stronger base building form.

8 Storeys - Option 3

Street wall: 4-6 storeys
Upper level setback: 6 metres



Preferred development outcome

- Effectively frames Heidelberg Road with the potential for high-quality development.
- The six-storey street wall provides a more balanced street wall height against the wide street.
- Including 4 storey elements provides better integration with existing apartment building.
- Supports the design of well-proportioned buildings where the upper levels are a recessed, lighter element above a stronger base building form. The increased upper level setback to 6 metres provides a marginal improvement on the 3 m setback as the base building form becomes more prominent and the upper levels less visible.

Figure 39. Testing of 8 storey developments with varied street wall heights and upper level street setbacks.

Precinct 1

8 Storeys - Option 4

Street wall: 8 storeys
Upper level setback: N/A

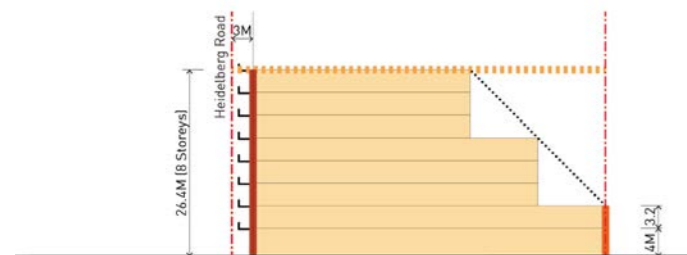
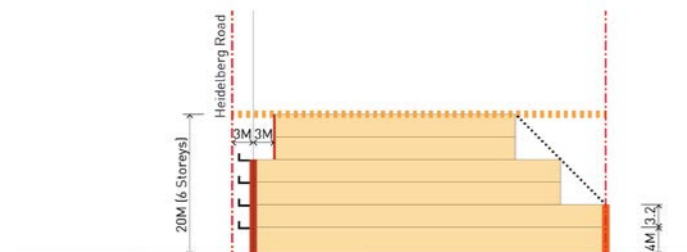


Figure 40. Testing of 8 storey developments with varied street wall heights and upper level street setbacks.

6 Storeys - Option 1

Street wall: 4 storeys
Upper level setback: 3 metres



6 Storeys - Option 2

Street wall: 6 storeys
Upper level setback: N/A

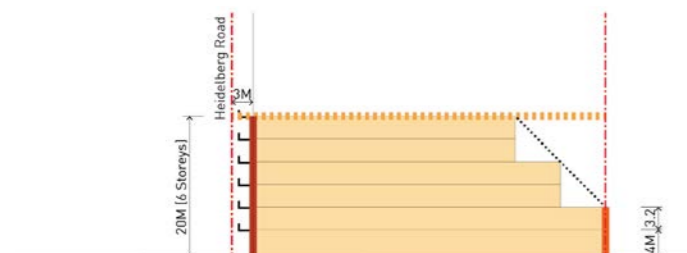


Figure 41. Testing of 6 storey developments with varied street wall heights and upper level street setbacks.

- The eight-storey street wall is too visually dominant. Together with the high levels of traffic this could create a poor quality public realm.

Key recommendation

Introduce an 8 storey building height control in Precinct 1 with a varied 4 - 6-storey street wall height and upper levels to be setback 6 metres.

The sites at 274 - 276 cannot achieve an 8 storey height as the sites are too shallow. The application of the rear interface control mean that a six storey height can be achieved and is therefore proposed for these two sites.

- Effectively frames Heidelberg Road with the potential for high-quality development.
- Provides an improved sense of enclosure within the street due to upper levels. The four-storey wall and overall six storey building height could be further increased on the 40m wide road corridor.
- Supports the design of well-proportioned buildings where the upper levels are a recessed, lighter element above a stronger base building form.

- Effectively frames Heidelberg Road with the potential for high-quality development.
- The six-storey street wall provides a more balanced street wall height against the 40m wide street.
- Additional upper levels could be included and support the design of well-proportioned buildings as long as the base building remained prominent to support the delivery of a mid-rise building character.

Precinct 1 - Yarra Bend

C. Determining Heidelberg Road development scale

The proposed relationship to Heidelberg Road of the proposed built form outcome is illustrated below.

This demonstrates a balanced degree of enclosure to the 40 metre wide street, without creating visually dominant buildings. It also illustrates the benefit of the 3 metre front setback in improving the composition of the street and the quality of the pedestrian environment at ground level.

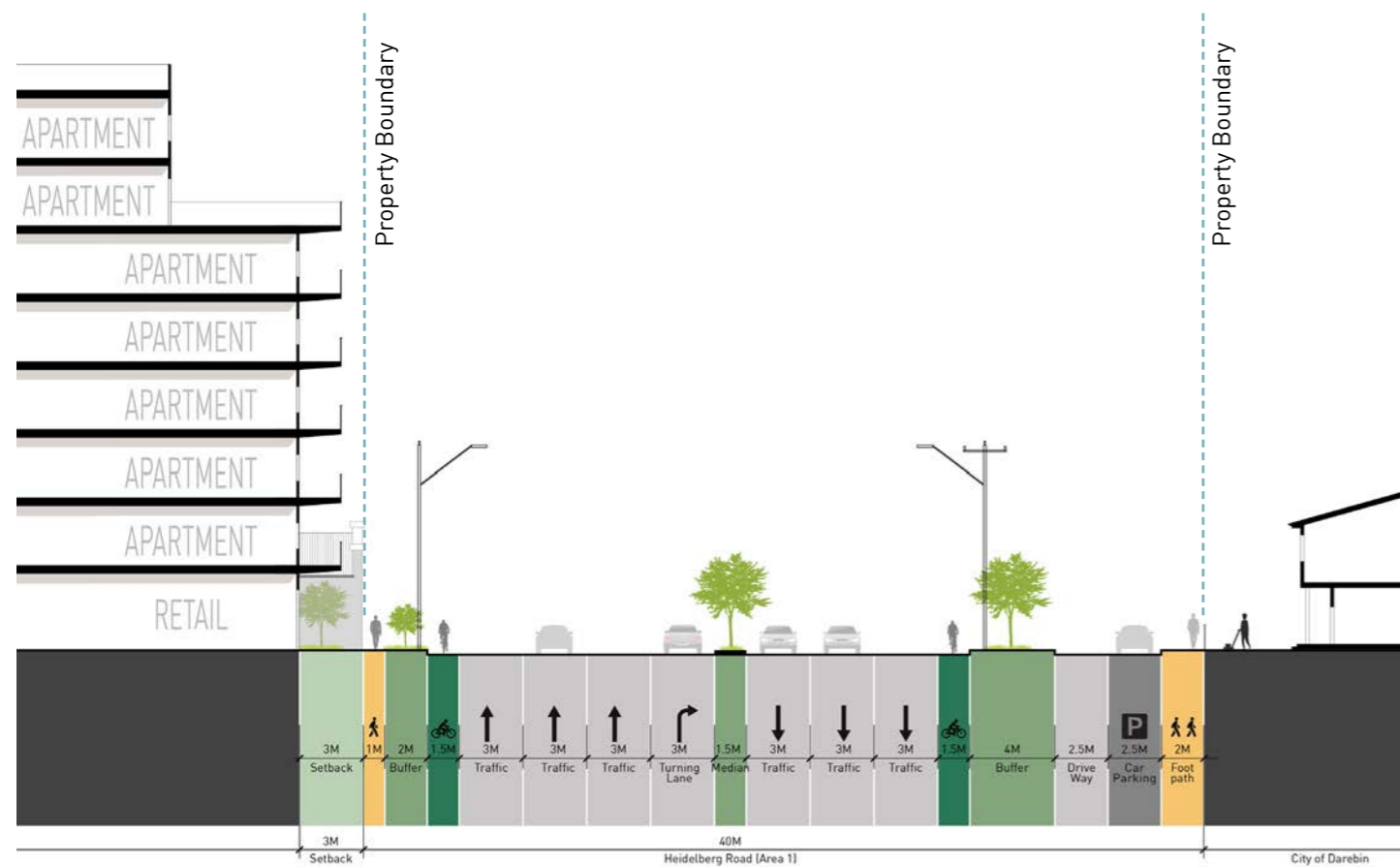


Figure 43. Proposed interface to Heidelberg Road - full street section

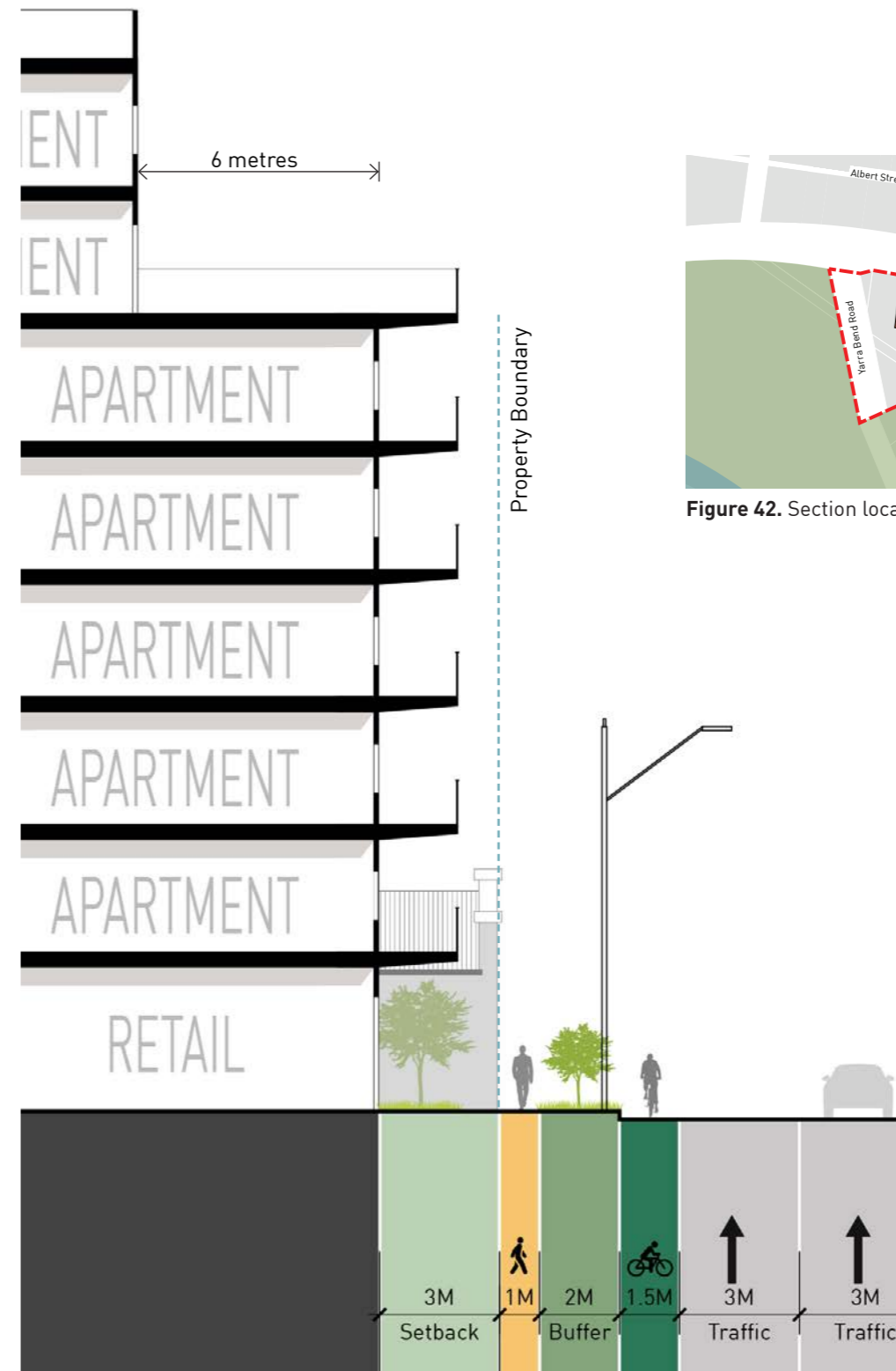


Figure 44. Proposed interface to Heidelberg Road - detailed street section



Figure 42. Section location plan

D. Determining development scale to park interface

The following outcomes are considered acceptable to meet the design principles and precinct-specific design objective:

- Overshadowing falls predominantly on the car park to the south and Yarra Bend Road reserve (see Figure 45).
- An appropriate balance between providing an urban edge and activation and overlooking of the car park area and ensuring that the buildings are set within the landscape and are not the dominant feature - this is demonstrated effectively by the existing four-storey apartment development which sits within the scale of the large canopy trees.

The preferred development scale that achieves this outcome is:

- A 4 storey building height along the park interface
- Above 4 storeys, upper level setbacks are determined by a 45 degree angle.

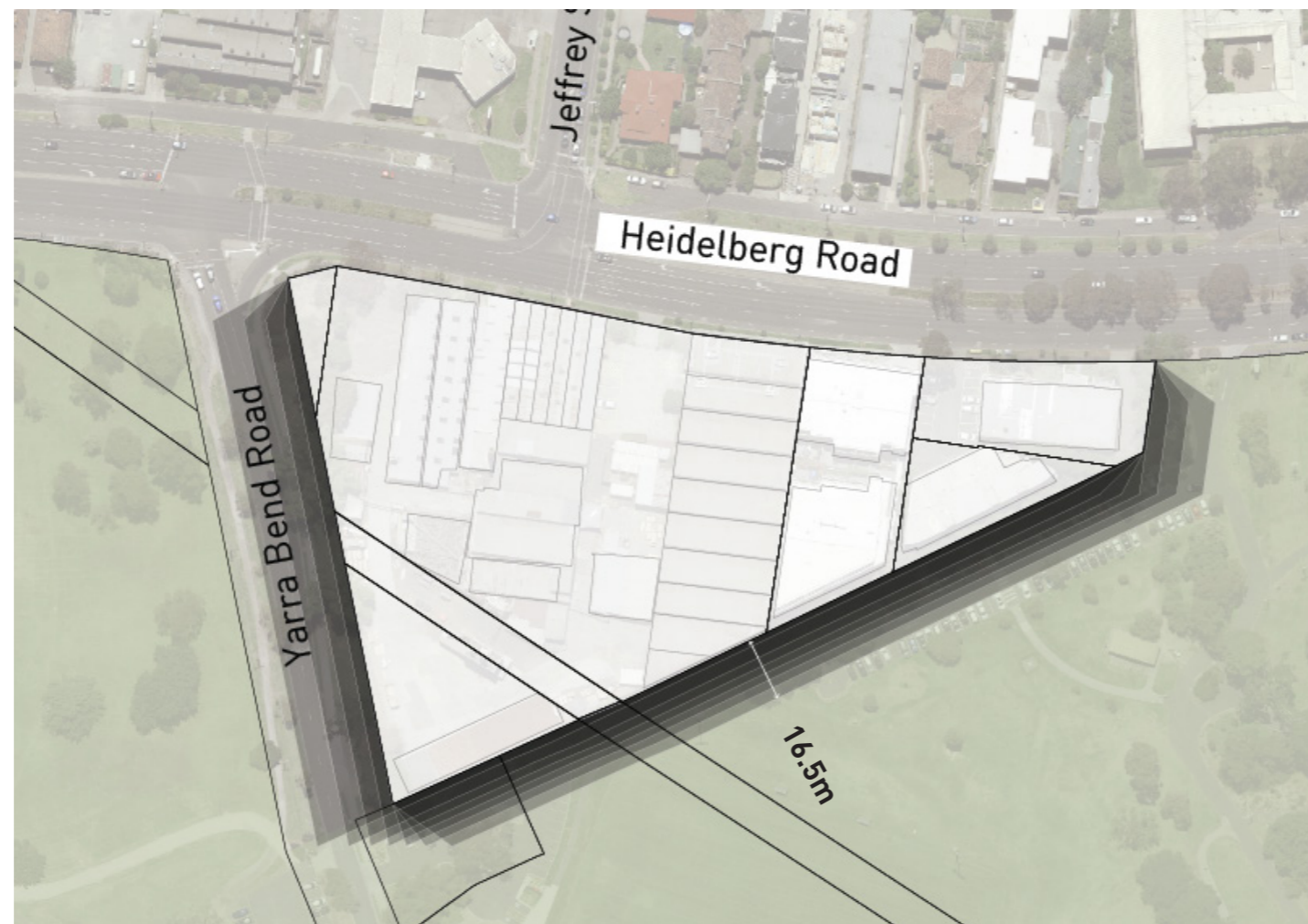


Figure 45. Extent of shadow for a 4 storey high building.

Precinct 1 - Yarra Bend

E. Building envelope controls

The following building envelopes are proposed for Precinct 1.

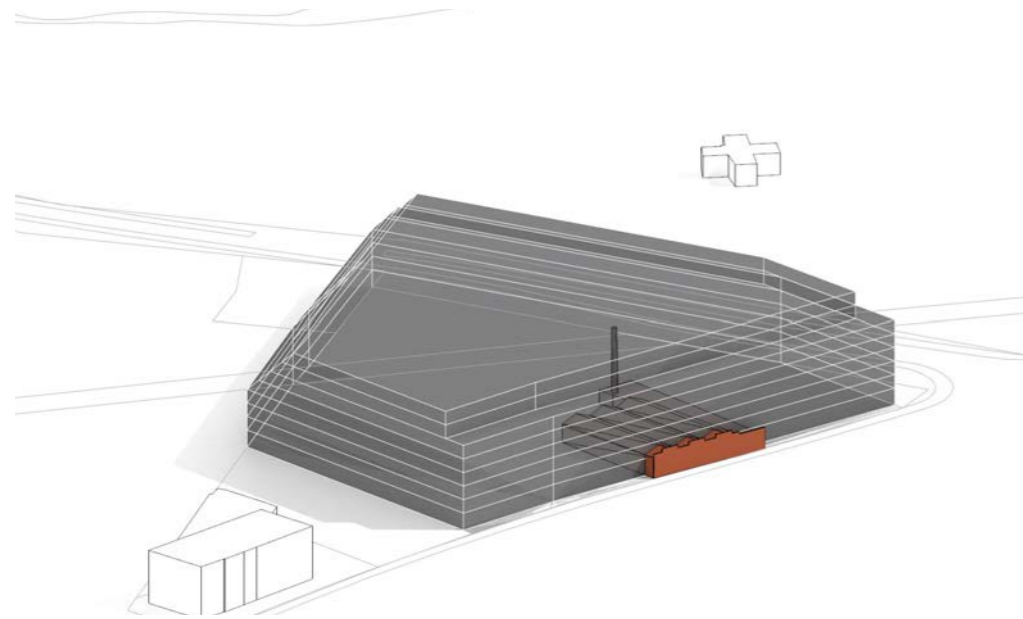


Figure 46. Demonstration of the 3d building envelope controls applied to the Porta site
 *Note: the full heritage building is to be retained. Envelope for the whole site shown for illustrative purposes only.

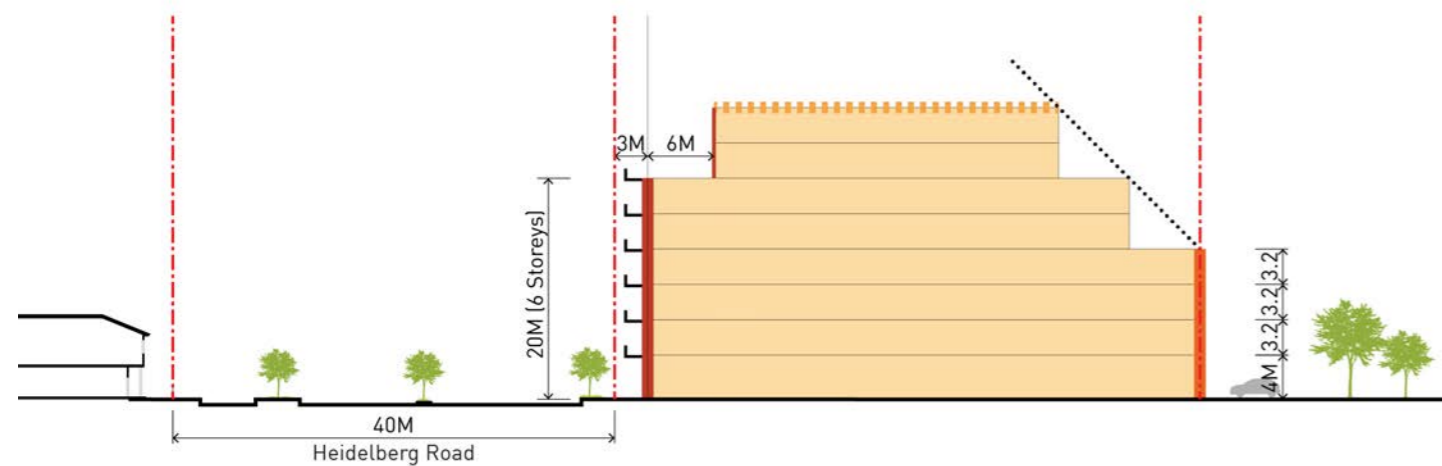


Figure 47. Proposed built form envelope controls (section)



The building envelope controls have been determined considering the overall precinct conditions. The existing heritage building warrants a more tailored response to the street wall condition to ensure that any proposed new development respects the existing qualities and presence of the heritage building. A step down in street wall height and introduction of a new public pedestrian link through the site will give the heritage building more prominence.

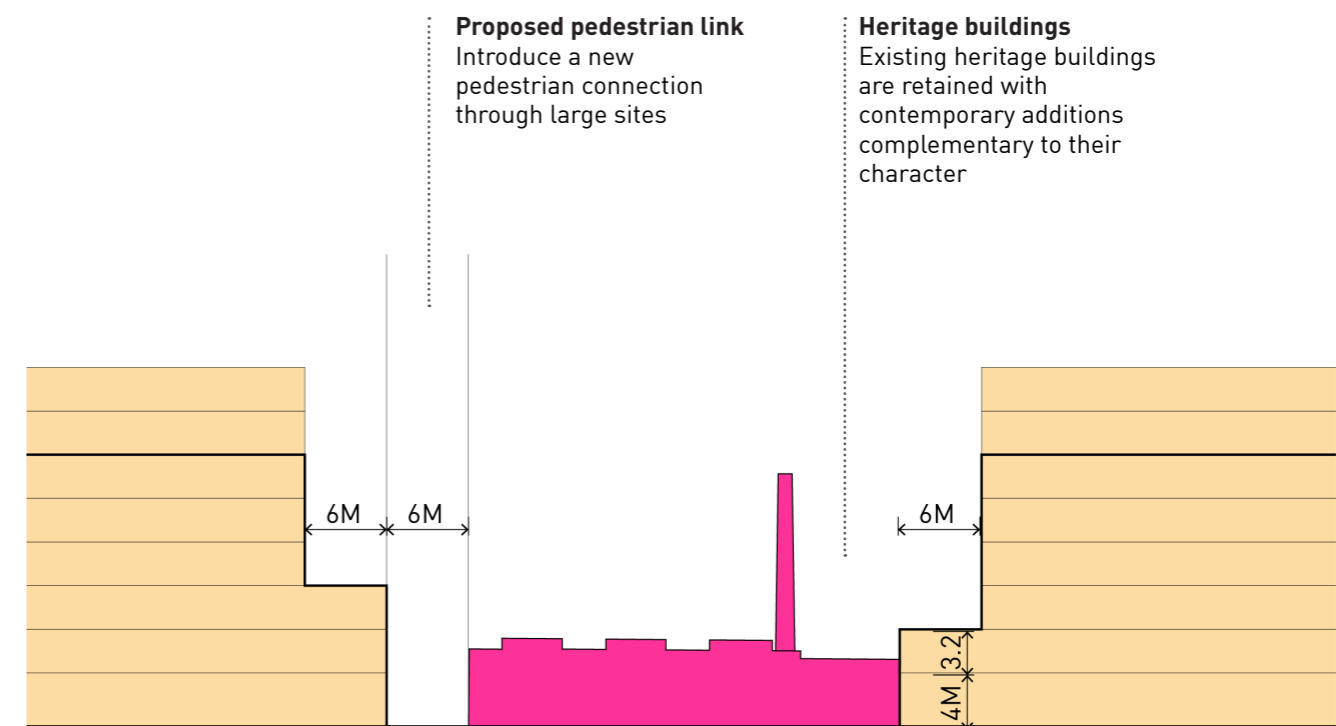


Figure 48. Proposed built form envelopes (elevation) in response to existing heritage building

F. Precedent examples - Precinct 1



Figure 49. Proposal for 342-348 Victoria Street - Brunswick (Source: Fieldworks Architects)



Figure 50. Proposal for 342-348 Victoria Street - Brunswick (Source: Fieldworks Architects)

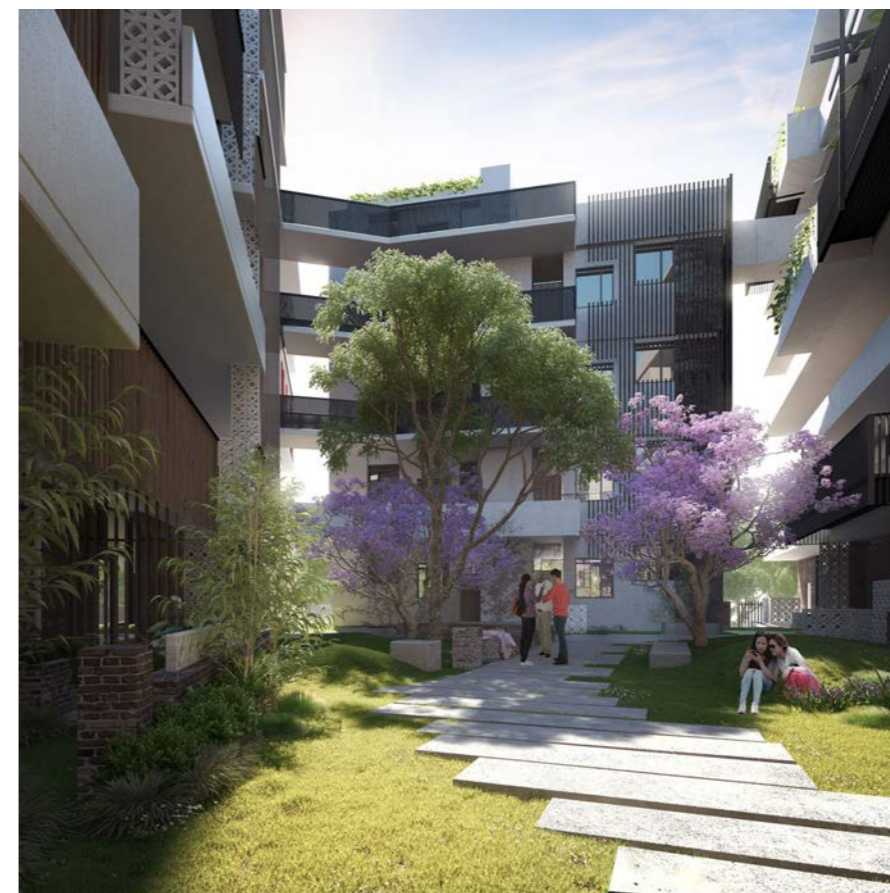


Figure 51. Hawke & King Street development, North Melbourne (Source: Six Degrees Architects)

Precinct 1 - Yarra Bend

G. Built form testing of proposed building envelopes

Testing site

Built form testing has been undertaken for the Porta site to both assess and communicate the proposed built form controls.

Additional sensitivity testing of taller forms were also assessed (see figures 57 - 65). Taller forms above 8 storeys are considered to be too visually dominant adjacent to the existing heritage chimney. 10 storey buildings become too visually dominant when viewed from within Heidelberg Road.

Location:
224-256 Heidelberg Road

Site area:	Lot width:	Lot depth:	Characters:
11,725m ²	125M	40-135M	Heritage overlay Include easement

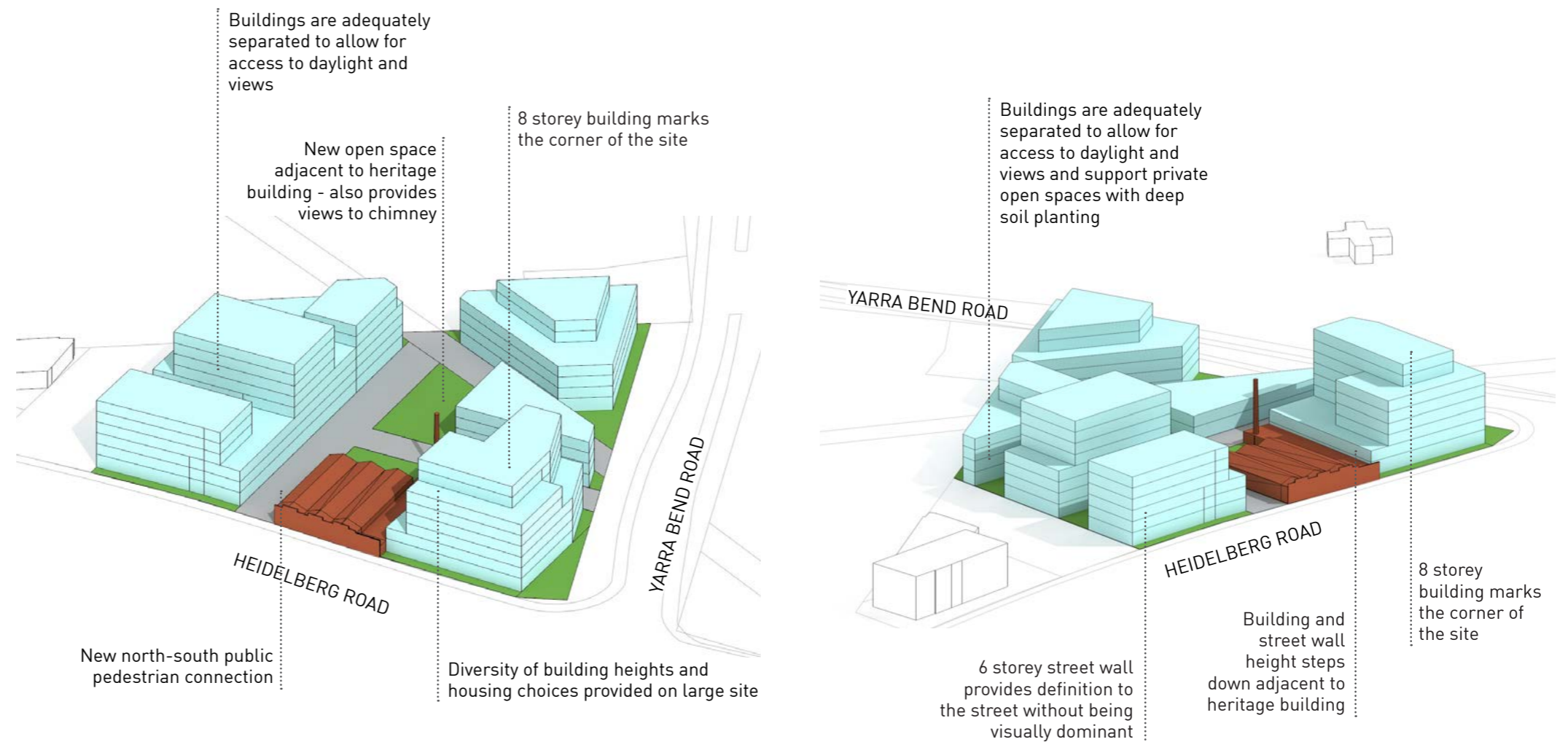


Figure 52. Built form testing - perspective views

Precinct 1

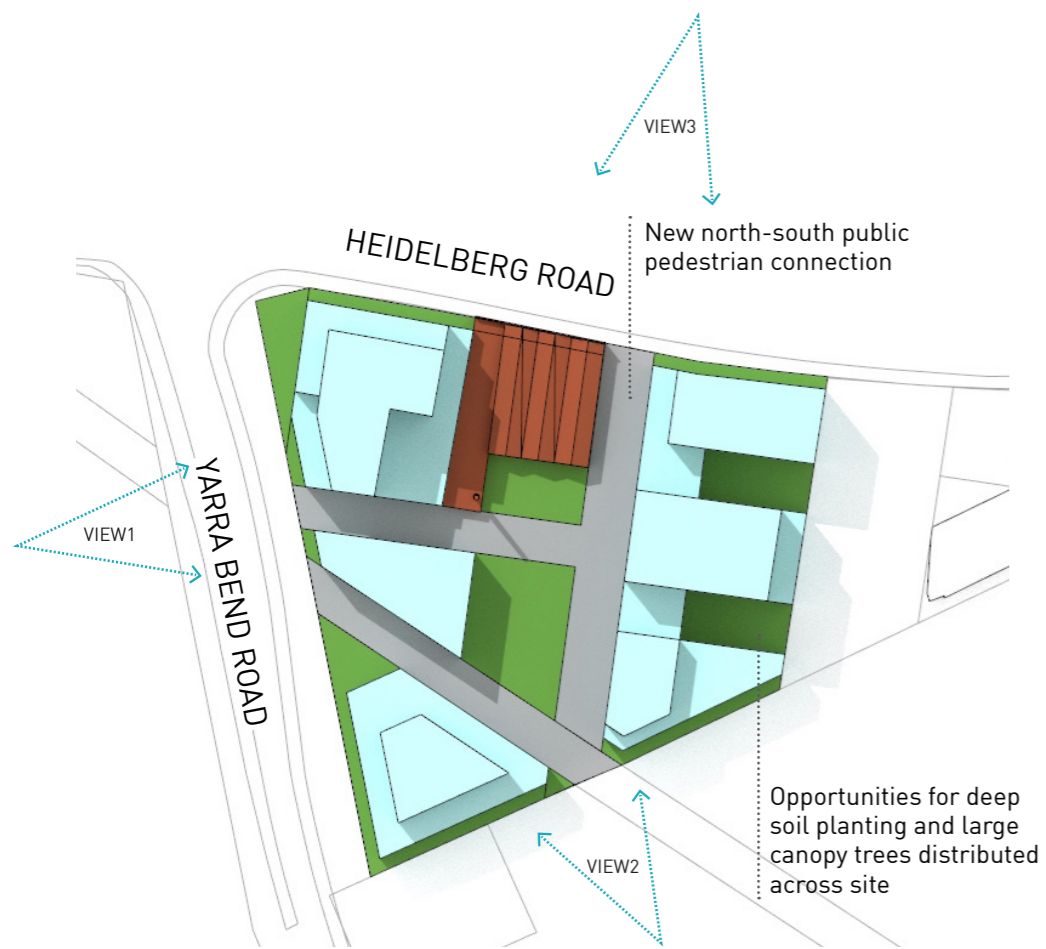


Figure 53. Built form testing - plan view with 2pm shadow at the equinox

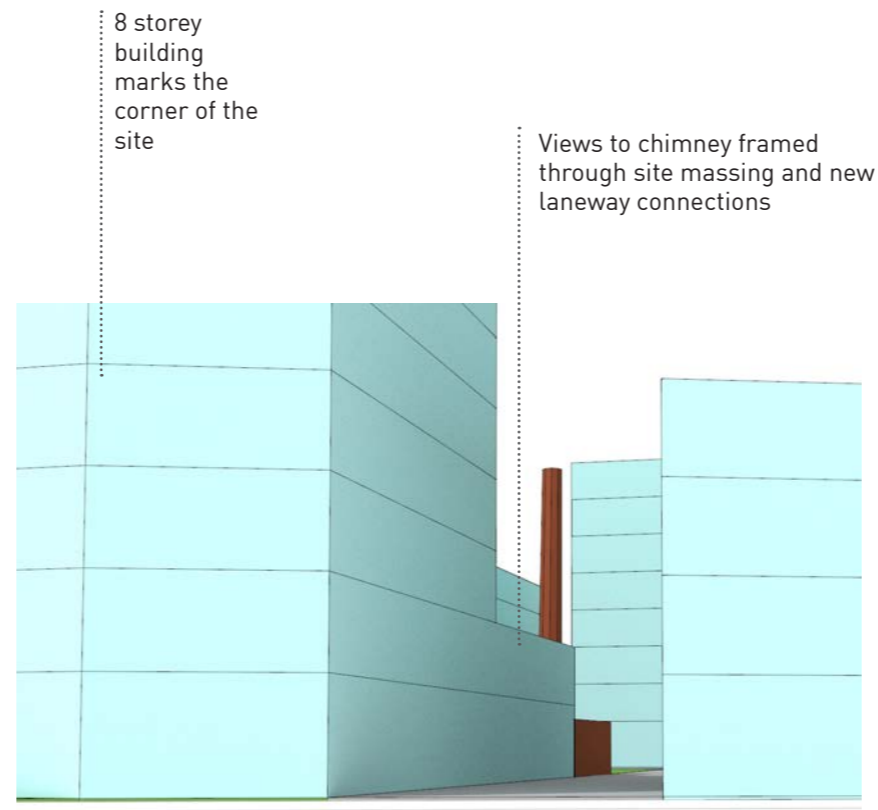


Figure 54. View 1 - View to chimney from TH Westfield Reserve

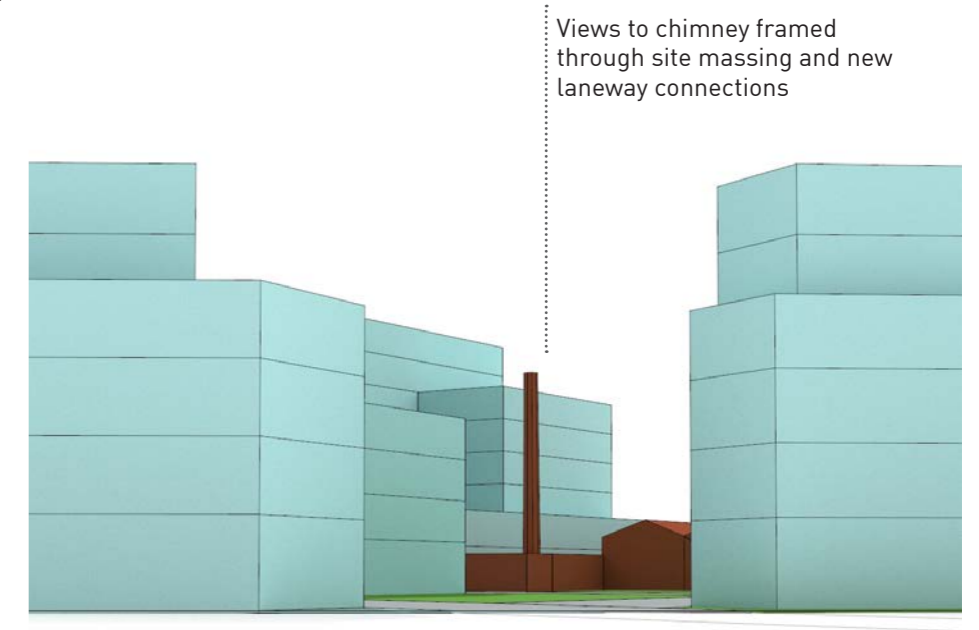


Figure 55. View 2 - View to chimney from Yarra Bend Park



Figure 56. View 3 - View to chimney from Jeffrey Street retains prominence

Precinct 1 - Yarra Bend



Figure 57. Perspective view

Composition of heritage building and surrounding new development is in balance.

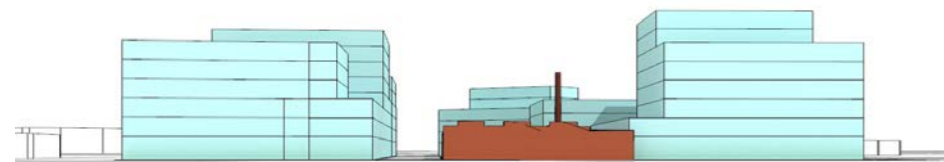


Figure 58. View A - View from Jeffrey Street



Figure 59. View from location B

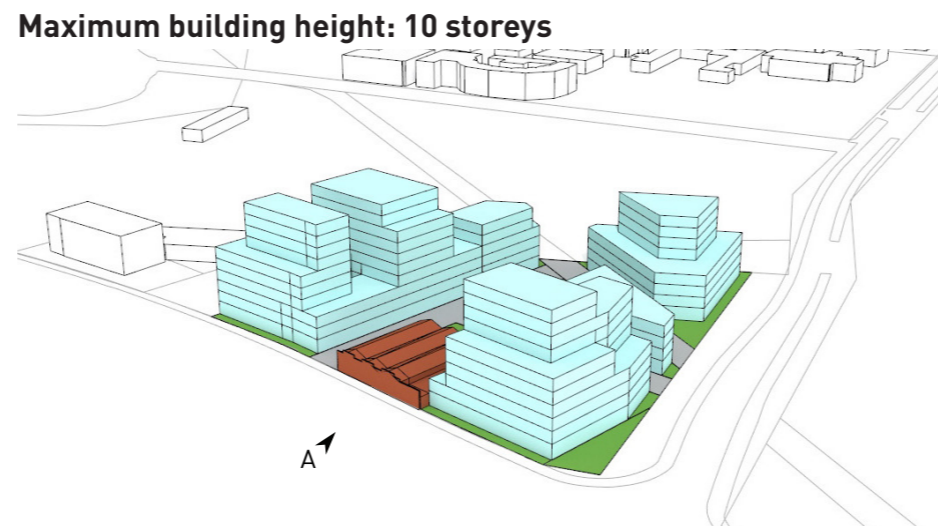


Figure 60. Perspective view

New development is visually dominant over the heritage building.

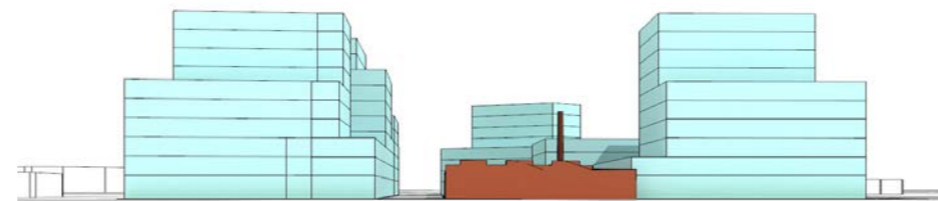


Figure 61. View A - View from Jeffrey Street



Figure 62. View from location B



Figure 63. Perspective view

New development is visually dominant over the heritage building.

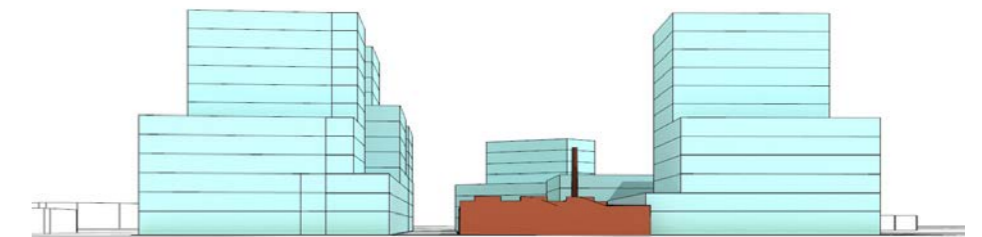


Figure 64. View A - View from Jeffrey Street



Figure 65. View from location B

H. Proposed built form controls

The proposed building envelope controls for Precinct 1 are illustrated in the following plans.

Considering the unique site attributes and the need to support design flexibility with certainty that minimum amenity standards are met, a mix of mandatory and discretionary controls are proposed as follows:

Discretionary

- Overall height limits
- Street wall heights to Heidelberg Road and Yarra Bend Road
- Upper level setbacks from Heidelberg Road and Yarra Bend Road

Mandatory

- 3 metre front setback to Heidelberg Road, Yarra Bend Road and the park.
- 4 storey building height at the park interface with all upper levels setback with a 45 degree angle.

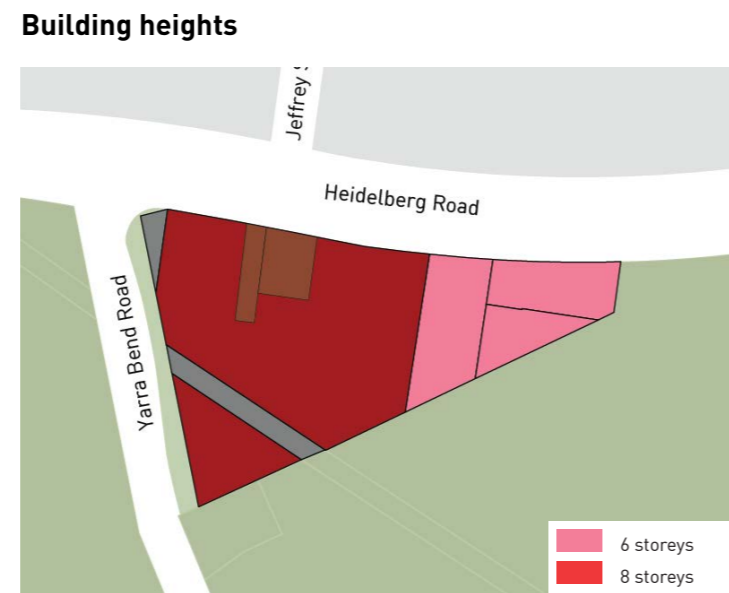


Figure 66. Precinct 1 - Proposed overall building heights



Figure 67. Precinct 1 - Proposed street wall heights / building heights along park interface boundaries



Figure 68. Precinct 1 - Proposed ground floor setbacks

Precinct 2 - Fairfield Commercial

A. Key valued character attributes



Figure 69. Precinct 2 - Aerial image

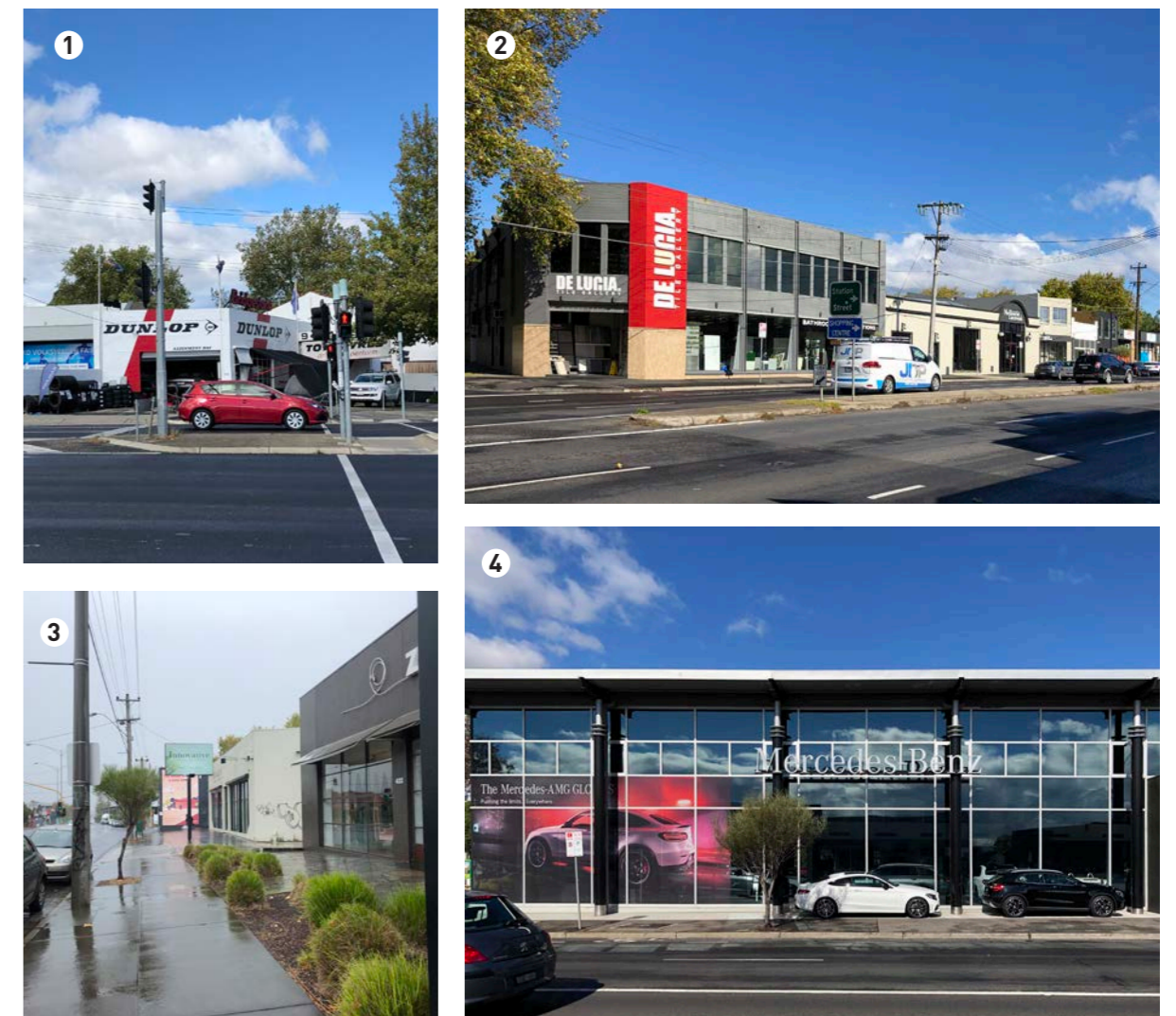


Figure 70. Key character attributes

The Commercial 2 zone area along Heidelberg Road plays an important economic role within the City of Yarra. The existing businesses include large format retail outlets, automotive businesses and warehouses. The existing character reflects this pattern of use.

1. Potential heritage building (including automotive business).
2. Large format showrooms which support the cluster of restricted retail outlets.
3. View along Heidelberg Road - existing landscape design is of varying quality, however provides visual relief and additional space for pedestrians within the heavily trafficked street.
4. Large format showrooms which incorporate large glass shopfront areas and contemporary building design.
5. Residential side streets, including large mature trees and significant setbacks.

B. Design Strategy

Creation of a mid-rise, commercial precinct that frames Heidelberg Road with active uses and additional greening opportunities.

Design Objectives

Improve the pedestrian experience on Heidelberg Road through a 3 metre front setback - Location 1.

The existing landscape setback within the front of some properties improves the quality of the pedestrian experience by greening the otherwise largely asphalt landscape and by providing additional sense of openness/relief for pedestrian movement.

Improve the character of Heidelberg Road by creating a comfortable sense of enclosure and definition to the street - Location 2.

This can be achieved through the introduction of a street wall height that provides a positive interface to the street but which does not visually dominate. This balance is particularly important to achieve considering the poor quality of the street environment. Buildings that are visually overwhelming will exacerbate the impact of heavy traffic on the pedestrian experience.

Ensure development does not visually dominate or unreasonably overshadow private open space in adjacent residential areas - Location 3.

The neighbouring residential properties all incorporate private open space at the rear of each dwelling. Sunlight should be provided at the equinox according to the current level of provision required in Clause 54 and 55 of the planning scheme.

Minimise the impact of vehicular crossovers to Heidelberg Road and Yarra Bend Road - Location 4.

Vehicular access to most sites is provided from Heidelberg Road. This includes shared access for a number of sites. No additional vehicular crossovers are supported. Where possible vehicular access from residential side streets should be provided.



Figure 71. Design Strategy

- Potential heritage buildings
 - Existing vehicular access (retained/consolidated)
 - Vehicular access (removal preferred as alternate access is available)
 - Existing landscape setback (retained)
 - Proposed 3m landscape setback
 - Create urban street wall and activated edges along Heidelberg Road
- Minimise visual bulk, overshadowing and privacy on the sensitive interface:
- Rear to rear boundary condition
 - Rear to side boundary condition
 - Side to side boundary condition

Precinct 2 - Fairfield Commercial

C. Determining Heidelberg Road development scale

Heidelberg Road varies in width along its length. In Precinct 2 it reduces to approximately 27 metres in width.

A 'moderate scale' of development is supported through existing planning policy.

The potential street wall and overall building heights are tested. This demonstrates the following scenarios:

8 storey developments with:

- 4 storey street wall and 3 metre upper level setback.
- 6 storey street wall with 3 metre setback.
- 6 storey street wall with 6 metre setback.
- 8 storey street wall height.

6 storey developments with:

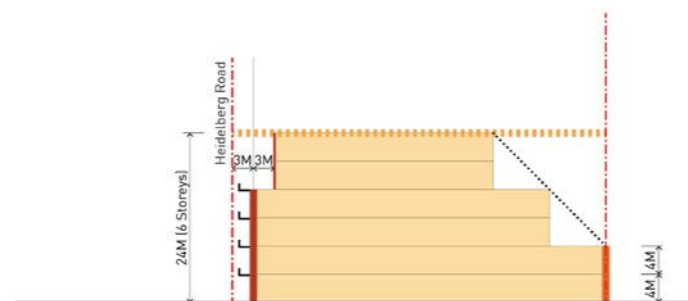
- 4 storey street wall and 3 metre upper level setback.
- 4 storey street wall with 6 metre setback.
- 6 storey street wall height.

In each option, the 3 metre ground level front setback has been adopted.

An assessment of each option is provided against the design principles. The scenario that best delivers the design principles is 6 Storey - Option 2. This includes a 4 storey street wall with upper 2 storeys set back 6 metres.

6 Storeys - Option 1

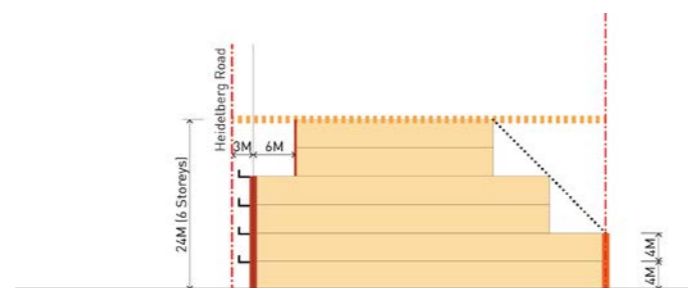
Street wall: 4 storeys
Upper level setback: 3 metres



- Effectively frames Heidelberg Road with the potential for high-quality development.
- The 4-storey street wall provides a balanced street wall height against the street width.
- The 3 metre setback provides a negligible improvement on reducing the upper level dominance.

6 Storeys - Option 2

Street wall: 4 storeys
Upper level setback: 6 metres

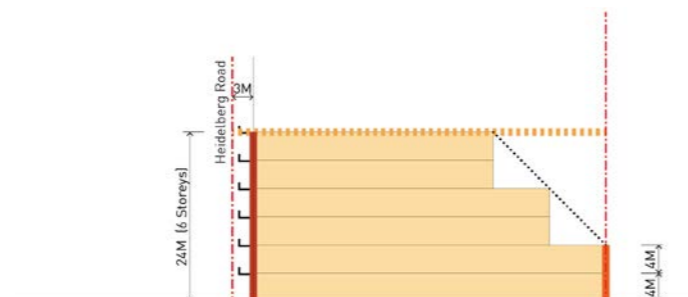


Preferred development outcome

- Effectively frames Heidelberg Road with the potential for high-quality development.
- The 4-storey street wall provides a balanced street wall height against the street width.
- Supports the design of well-proportioned buildings where the upper levels are a recessed, lighter element above a stronger base building form. The increased upper level setback to 6 metres provides a marginal improvement on the 3 m setback as the base building form becomes more prominent and the upper levels less visible.

6 Storeys - Option 3

Street wall: 6 storeys
Upper level setback: N/A

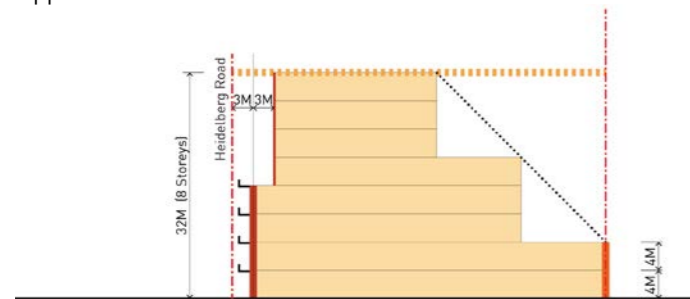


- The 6-storey street wall is too visually dominant. Together with the high levels of traffic this could create a poor quality public realm.

Figure 72. 6 storey built form testing to Heidelberg Road

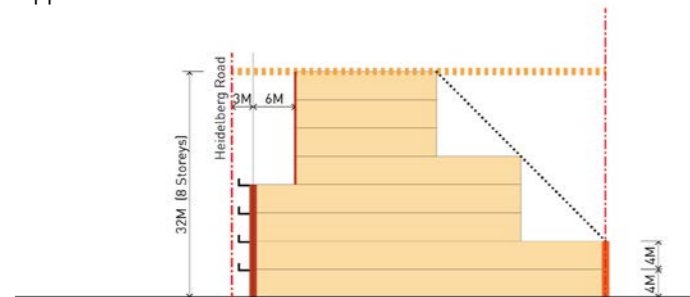
8 Storeys - Option 1

Street wall: 4 storeys
Upper level setback: 3 metres



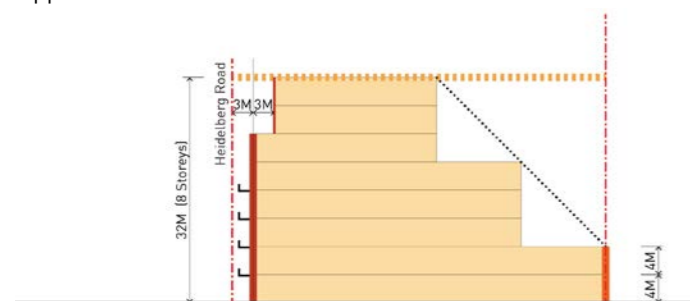
8 Storeys - Option 2

Street wall: 4 storeys
Upper level setback: 6 metres



8 Storeys - Option 3

Street wall: 6 storeys
Upper level setback: 3 metres



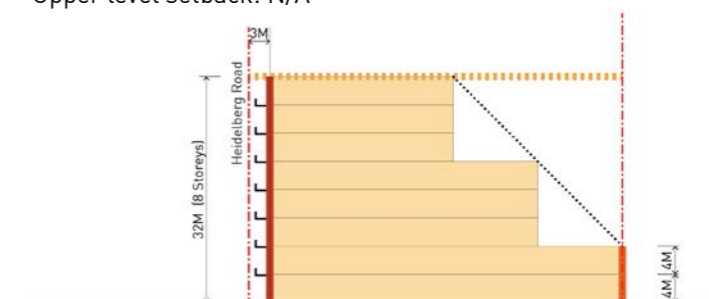
- 8 storey buildings are visually dominant, creating a wall of development.
- Creates an uncomfortably proportioned building where the lower and upper levels are of equal heights.

- 8 storey buildings are visually dominant.
- The 6 metre setback provides a negligible improvement on reducing this dominance.
- Creates an uncomfortably proportioned building where the lower and upper levels are of equal heights.

- The 6-storey street wall is too visually dominant. Together with the high levels of traffic this could create a poor quality public realm.

8 Storeys - Option 4

Street wall: 8 storeys
Upper level setback: N/A



- The eight-storey street wall is too visually dominant. Together with the high levels of traffic this could create a poor quality public realm.

Key recommendation

Introduce a 6-storey building height control in Precinct 2 with a 4-storey street wall height and upper 2 levels to be setback 6 metres.

Figure 73. 8 storey built form testing to Heidelberg Road

Precinct 2 - Fairfield Commercial

The proposed relationship to Heidelberg Road of the proposed built form outcome is illustrated below.

This demonstrates a balanced degree of enclosure to the 27 metre wide street, without creating visually dominant buildings, and the benefit of the 3 metre front setback on improving the composition of the street and the quality of the pedestrian environment at ground level.

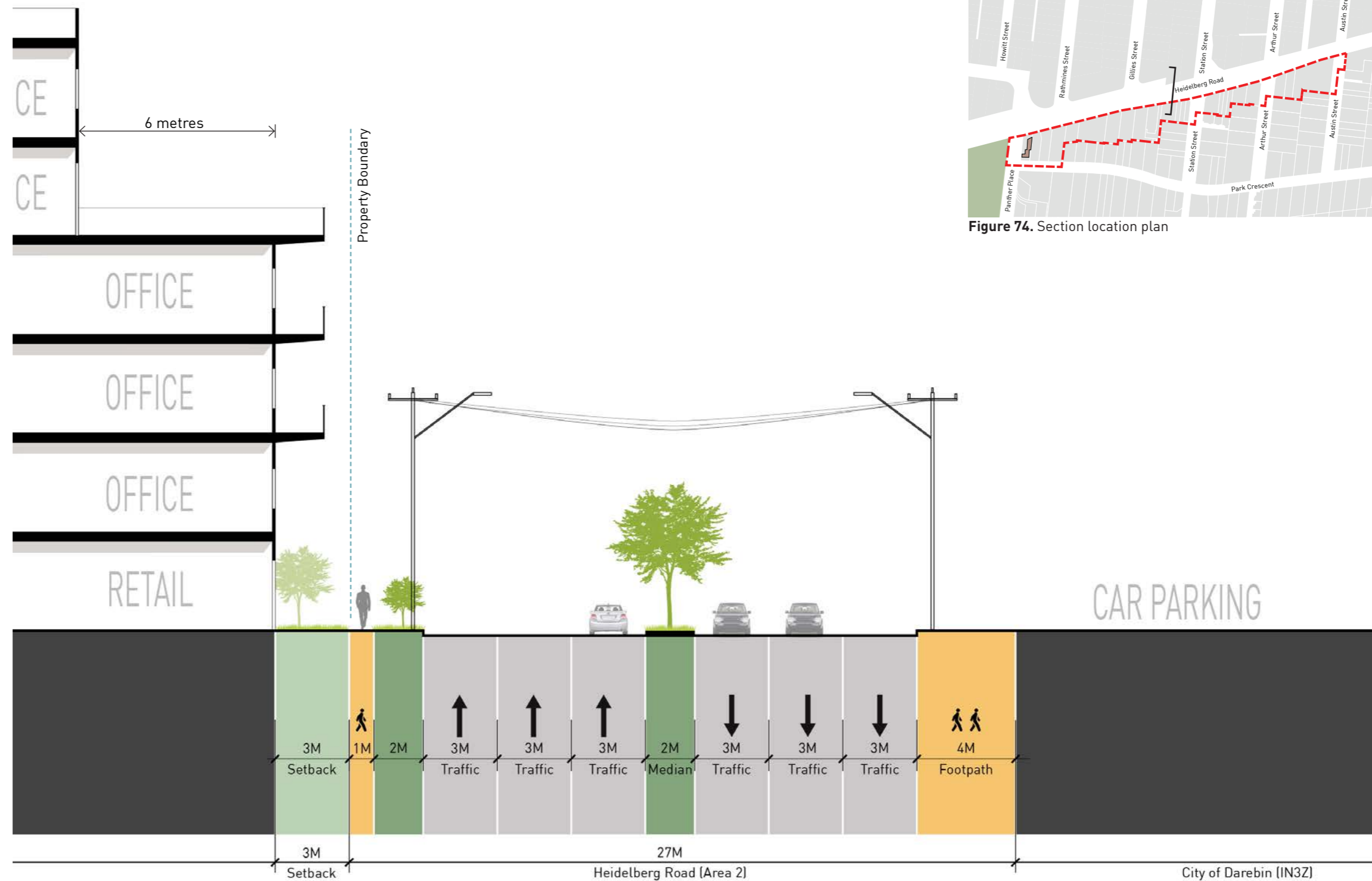


Figure 75. Proposed street section - full street section



Figure 74. Section location plan

D. Confirming overshadowing requirements

Figure 76 illustrates how the introduction of an 8 metre high boundary wall condition at the rear interface of new development will enable the overshadowing requirements of Clause 54 and 55 to be met.

Note, that this does not mean that the visual impact requirements are also met (refer Chapter 2 which provides detailed guidance on rear interface conditions).



Figure 76. Cumulative shadow impact of 8 metre high boundary wall condition

- Private open space has more than 5 hours sunlight between 9 am and 3 pm on 22 September
- Shadow between 9 am and 3 pm on 22 September

Note: Assessment utilises the building footprints that are documented in Council's GIS mapping.

Precinct 2 - Fairfield Commercial

E. Building envelope controls

The following building envelope is proposed for Precinct 2.

The application of the rear interface and the Heidelberg Road interface result in a maximum 5-6 storey building height.

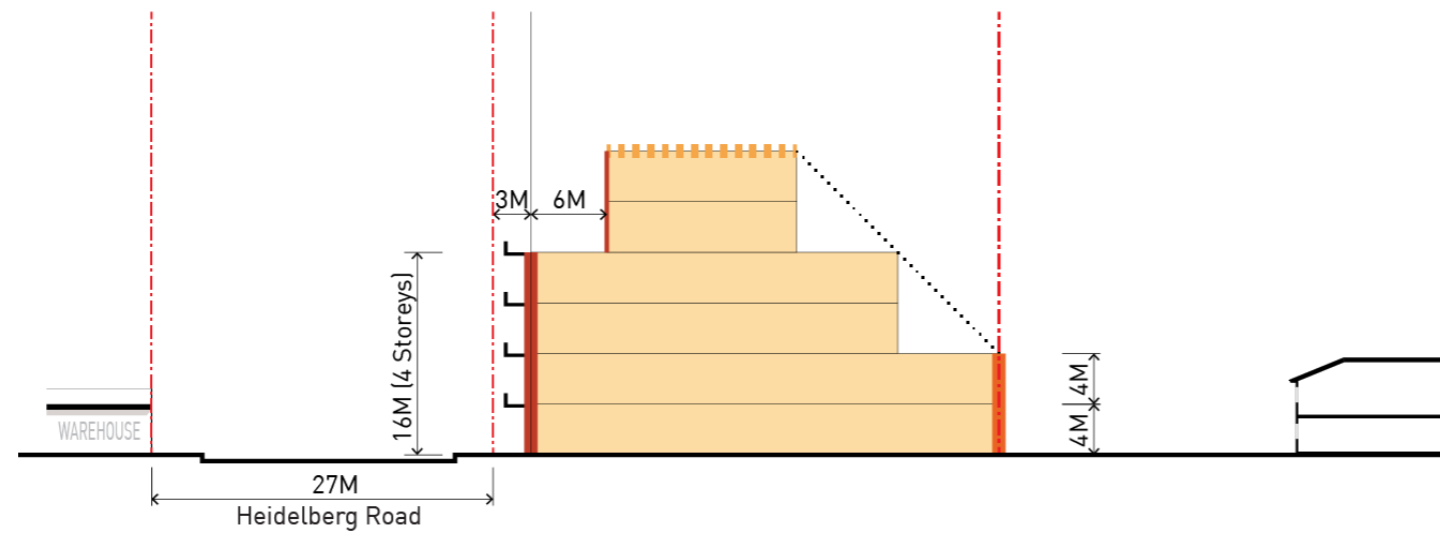
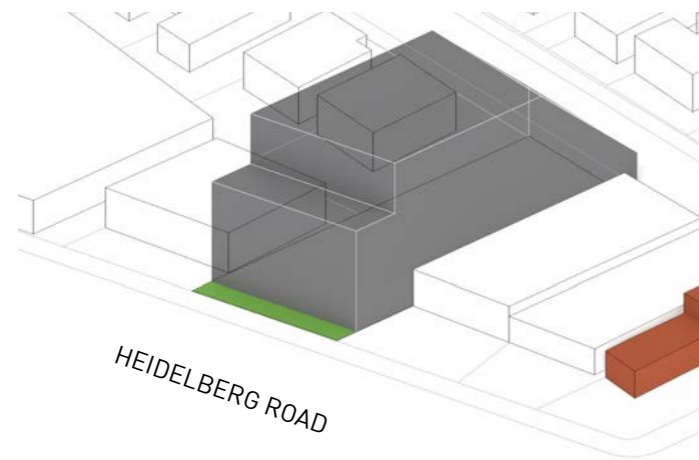


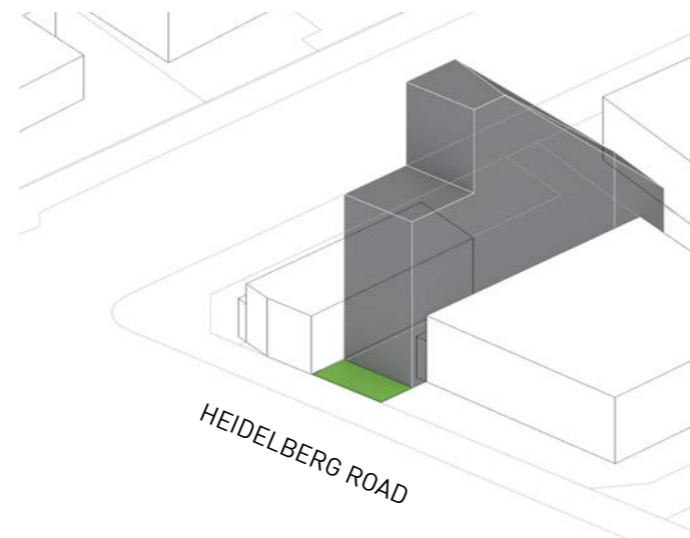
Figure 77. Proposed building envelope controls in Precinct 2

Note: Ground level setback to rear boundary may be required depending on relationship to existing dwelling location (refer to Figure 15 on page 13)

Testing site 2-1



Testing site 2-2



Testing site 2-3

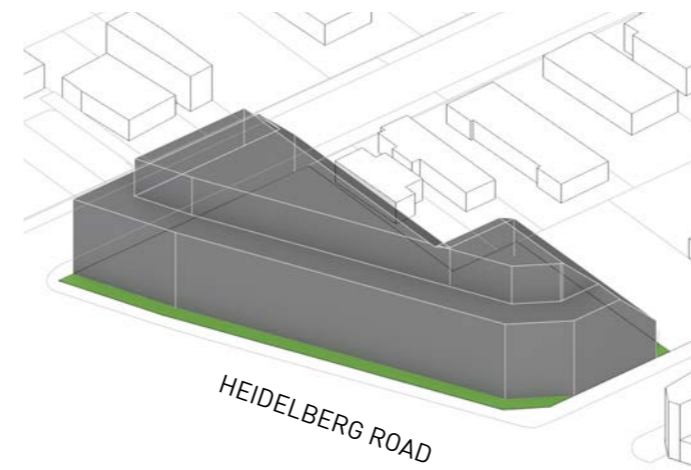


Figure 78. Demonstration of the 3d building envelope controls applied to the selected testing sites (refer over page)

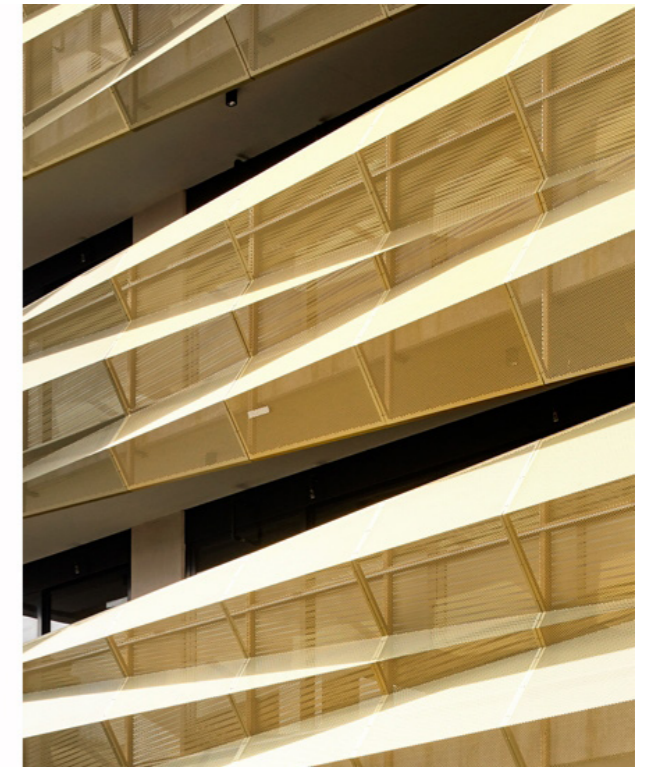
F. Precedent examples - Precinct 2



Figure 80. 9-15 Inkerman Street, St Kilda (Source: Neometro)



Figure 79. Commercial development in Cremorne (Source: EAT Architects)



Precinct 2 - Fairfield Commercial

G. Built form testing of proposed building envelopes

Testing site

Built form testing has been undertaken for three sites in Precinct two to both assess and communicate the proposed built form controls.

This includes a range of site sizes and mid-block and corner sites.

Testing site 2-1

Location:
376 Heidelberg Road

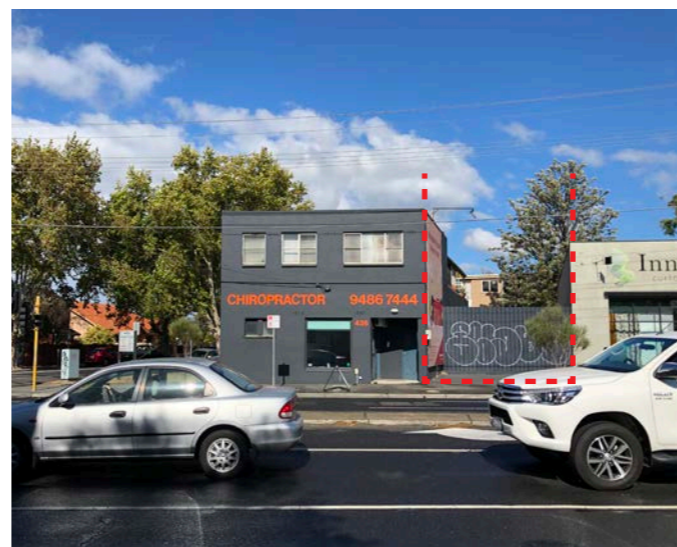
Site area:	Lot width:	Lot depth:	Character/use:
1,080m ²	21.9M	50M	Large format retail Vehicular access



Testing site 2-2

Location:
434 Heidelberg Road

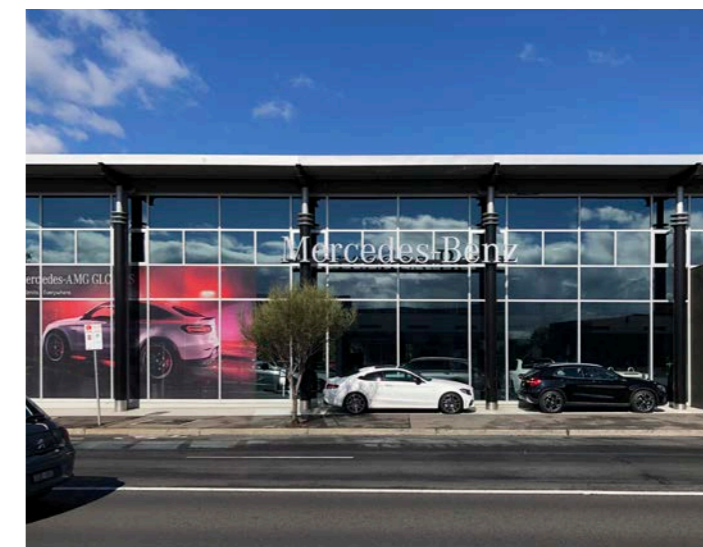
Site area:	Lot width:	Lot depth:	Character/use:
203m ²	6.5M	31.5M	Vacant



Testing site 2-3

Location:
484 Heidelberg Road

Site area:	Lot width:	Lot depth:	Character/use:
3,640m ²	90M	33-55M	3 Point Motors Large showroom



Testing site 2-1

376 Heidelberg Road

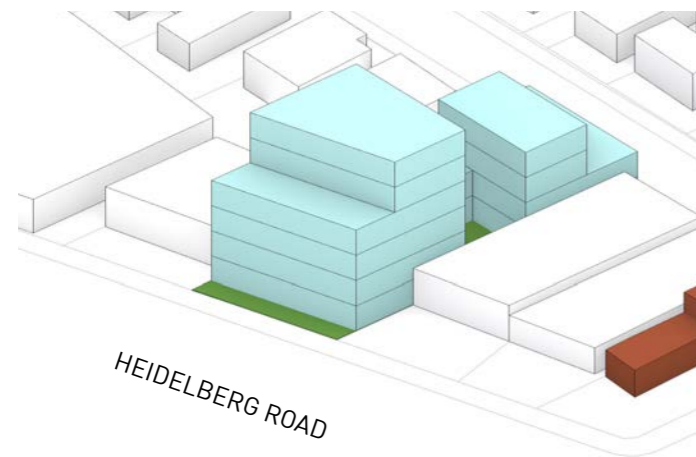
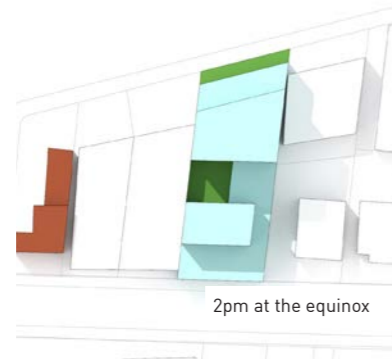


Figure 81. Built form testing – plan and perspective view

Key positive features:

- Buildings are adequately separated to allow for access to daylight and views within generous internal light well
- Building transitions to the lower residential areas to the south
- 4 storey street wall provides definition and enclosure to the street without being visually dominant.

This testing demonstrates that a height of 6 storeys is possible on this site due to rear interface and Heidelberg Road street wall height and setback requirements.

Testing site 2-2

434 Heidelberg Road

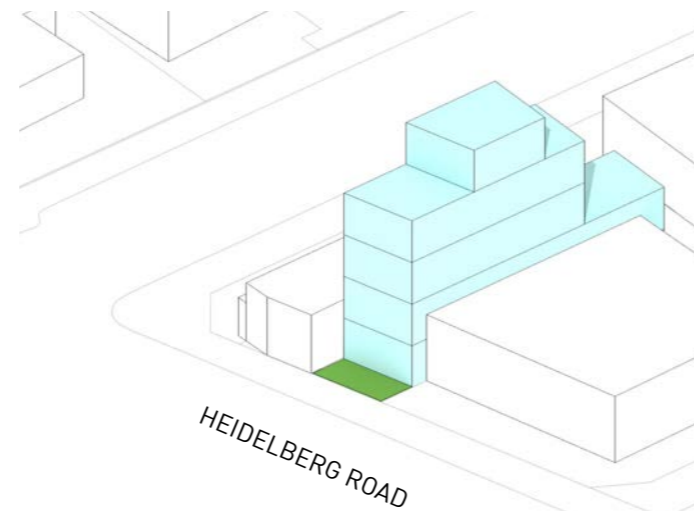
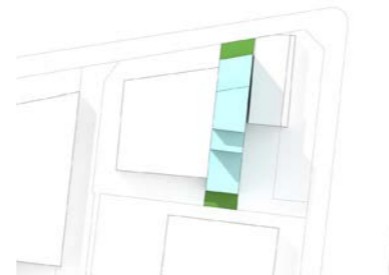


Figure 82. Built form testing – plan and perspective view

Key positive features:

- 3 metre ground floor setback at rear at interface to side boundary of existing dwelling.
- 4 storey street wall provides definition and enclosure to the street without being visually dominant.

This testing demonstrates that a height of 5 storeys is possible on this site due to rear interface and Heidelberg Road street wall height and setback requirements.

Testing site 2-3

484 Heidelberg Road

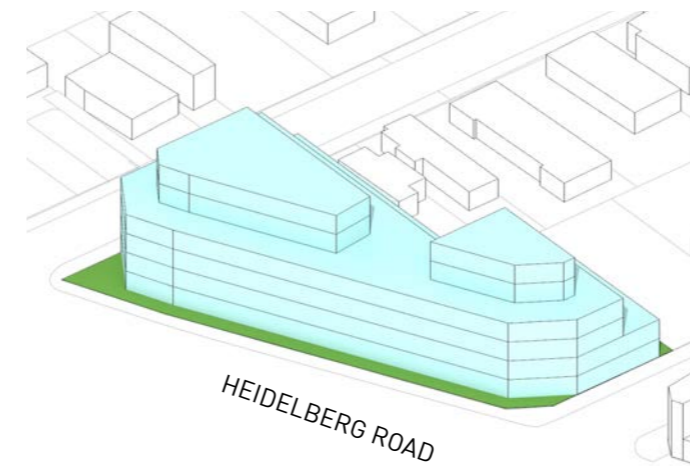
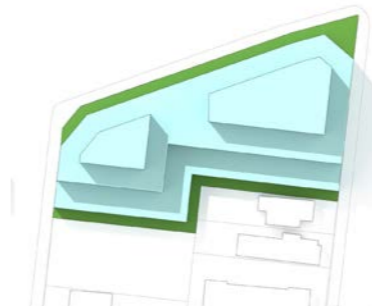


Figure 83. Built form testing – plan and perspective view

Key positive features:

- 3 metre ground floor setback at rear at interface to side boundary of existing dwelling.
- 4 storey street wall provides definition and enclosure to the street without being visually dominant.

This testing demonstrates that a height of 6 storeys is possible on this site due to rear interface and Heidelberg Road street wall height and setback requirements.

Precinct 2 - Fairfield Commercial

The study area is intersected by a number of side streets which are residential and low-scale in character. It is important that any taller buildings on the corners of Heidelberg Road and the side streets interface with these more sensitive, character environments appropriately. The requirement for a 45 degree angle above a two storey interface provides an appropriate transition in building scale (refer Figure 52).

Testing site 2-3

484 Heidelberg Road (rear view from Austin Street)

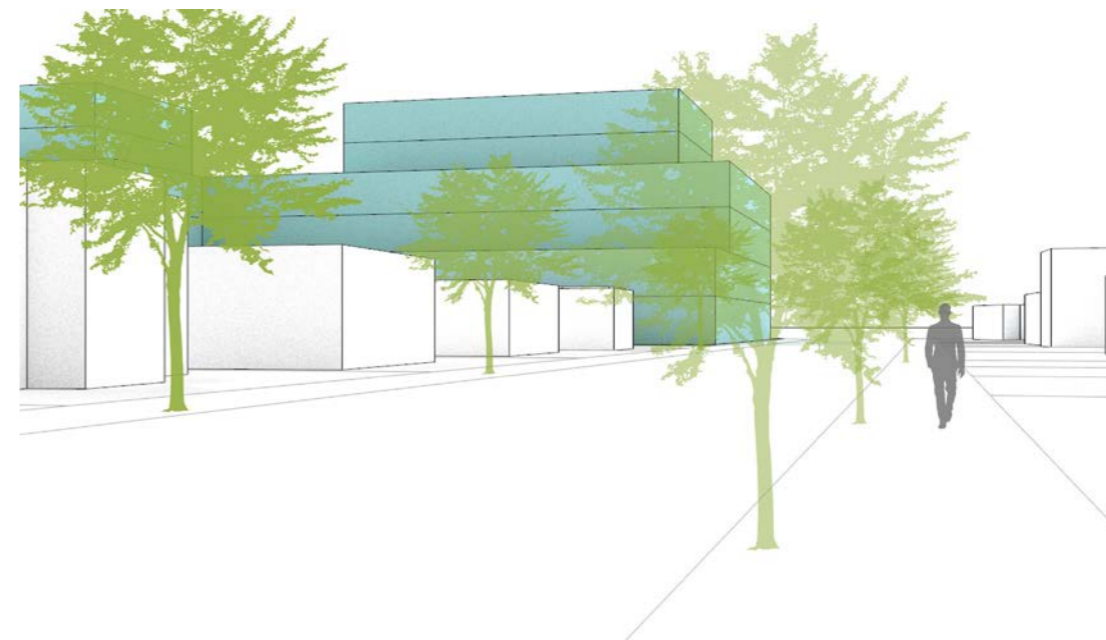


Figure 84. 3d modelling of the transition between a corner site and a low-scale residential side street. The transition from a 6-storey building height to a 2 storey interface is illustrated in a view from across the street (right) and on the same side of the street (left)

- Existing heritage buildings
- Potential heritage buildings

H. Proposed built form controls

The proposed building envelope controls are illustrated in the following plans.

Considering the consistent site attributes and constraints and a high degree of certainty that the proposed controls have been tailored to maximise development potential while considering the amenity of residential areas to the south, all development controls are proposed as mandatory.

Ground floor setbacks



Figure 87. Precinct 2 - Proposed ground floor setbacks

Building heights



Figure 85. Precinct 2 - Proposed overall building heights

Street wall heights

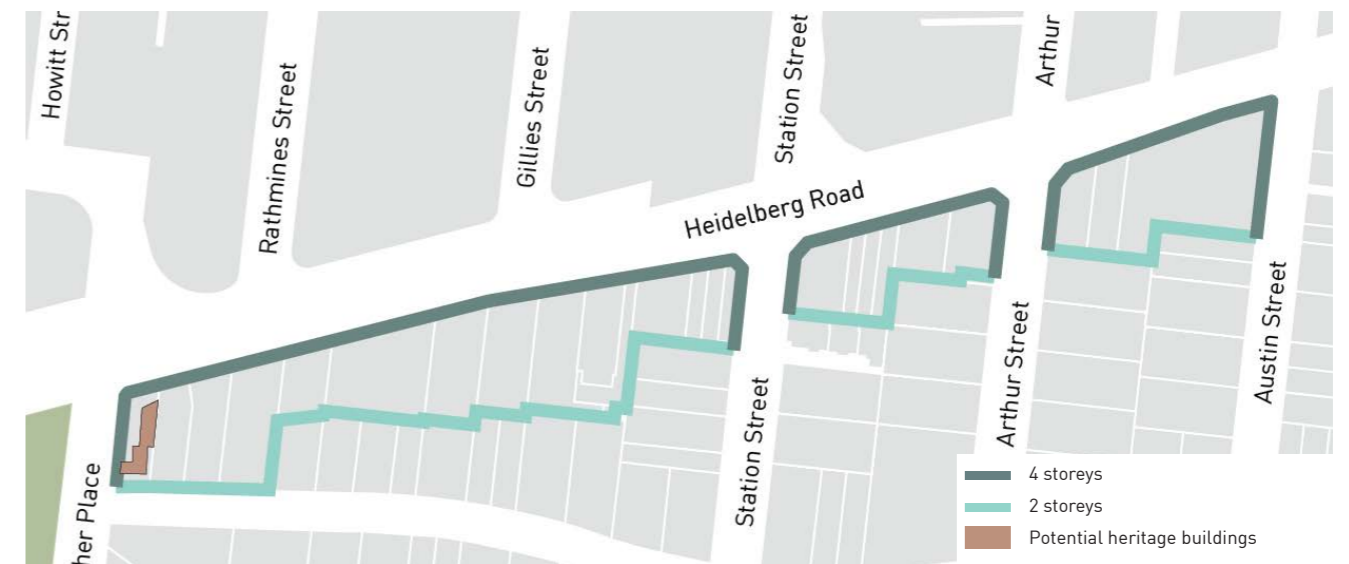


Figure 86. Precinct 2 - Proposed street wall heights / building heights along residential interface boundaries

Precinct 3A - Alphington West

A. Key valued character attributes



Figure 88. Precinct 3A - Aerial image

1. Prominent location on major road intersection provides the opportunity to introduce a taller building that holds the corner with a high quality, well-designed building. The site is immediately adjacent to the Alphington Paper Mills site - the opposite corner site has an approved permit for a 17 storey building.
2. Larger street trees along Heidelberg Road frontage provide greening of Heidelberg Road.
3. The site fronts Coate Avenue to the west, a quiet residential street that incorporates predominantly 1-2 storey buildings with front landscaped gardens.
4. The existing landscape setback to Heidelberg Road and Chandler Highway provides visual relief within the streetscape and a more pedestrian-friendly environment.



Figure 89. Key character attributes

B. Design Strategy

Provide a well-designed mid-rise, mixed-use building that marks the prominent corner location and respects the character of the neighbourhoods to the south and west. Incorporate a landscape setback to all boundaries to provide an attractive, garden setting to Coate Avenue and the southern boundary and to significantly improve the pedestrian experience to Heidelberg Road and Chandler Highway.



Figure 90. Design Strategy

- Existing vehicular access (retained/consolidated)
- ▬▬▬ Proposed 3m landscape setback
- ▬▬▬▬ Proposed 4.5m landscape setback to Coate Avenue and the southern boundary
- ▬ Create urban street wall and activated edges along Heidelberg Road
- Minimise visual bulk, overshadowing and privacy on the sensitive interface (Rear to side boundary condition)

Design Objectives

Improve the pedestrian experience on Heidelberg Road and Chandler Highway through a 3 metre front setback - Location 1

The existing landscape setback improves the quality of the pedestrian experience by greening the otherwise largely harsh, asphalt landscape and by providing additional sense of openness/relief for pedestrian movement.

Ensure the development integrates with the existing character of Coate Avenue through inclusion of a 4.5 metre setback and 3 storey street wall height - Location 2

Coate Avenue is fronted by 1-3 storey dwellings that incorporate a front garden setback of approximately 4.5 metres. This is a consistent and valued character.

Introducing a three storey street wall behind this setback will ensure that development integrates with the existing context. Upper levels above this height should be setback at a 45 degree angle from the rear neighbourhood boundary and 30 degree angle from Coate Avenue to minimise the impact of visual bulk above this height.

Respond to the prominent intersection with a taller form located at the corner that transitions in height down towards the west and south - Location 3

The tallest building element should be located on the intersection of Heidelberg Road and Chandler Highway and step down in height to the lower scale residential neighbourhoods.

The site needs to accommodate a transition from the 17 storey development context to the east and the single storey context to the west. A building height in the order of 8 storeys on the corner would provide this transition. This is a similar approach to transition that is adopted within the Paper Mill site which transitions from 14 storeys (the Heidelberg Road and Chandler Highway intersection), to 6-8 storeys and down to low-rise building (3 - 4 storeys) within the centre, eastern and southern portions of the Alphington Paper Mill site.

Ensure development does not visually dominate or unreasonably overshadow private open space in adjacent residential areas - Location 4

The neighbouring residential properties all incorporate a single private open space that is located at either the front or rear of each building. The primary outlook and main light/sunlight source for the main living spaces front these outdoor areas.

While sunlight is only required to be provided at the equinox according to the current level of provision required in Clause 54 and 55 of the planning scheme, inclusion of a 4.5 metre landscape setback and 2 storey building height on this interface will ensure that some winter sunlight reaches the northern dwellings.

Locate vehicular crossover from Coate Avenue - Location 5

Locate a singular vehicular access from Coate Avenue. The width of the vehicular entry should be minimised.

Precinct 3A - Alphington West

C. Determining appropriate development scale - all interfaces

Heidelberg Road varies in width along its length. In Precinct 3A it broadens to approximately 44 metres in width.

This site was recently considered at VCAT where acceptance of a taller built form on the corner of the Chandler Highway and Heidelberg Road interface was accepted. The need to step down in height from this intersection towards the west and south towards the existing residential areas was also supported. The lack of an appropriate transition and the visual dominance of the proposed 13 / 8 storey building when viewed from within Coate Avenue, however, was considered to have a negative impact on local, valued character and led to a VCAT decision that supported Council's refusal to grant a planning permit.

Figures 64-66 demonstrate the proposed development that was considered at VCAT, alternate proposal provided by the applicant's expert witness and the proposal supported by Leanne Hodyl as Council's expert witness.

Further testing has been undertaken to consider the appropriate scale of building transition to the west and south. The visual impact of different building proposals are illustrated in figures 97-100.

They confirm that an overall building height in the order of 8 storeys that steps down to 5, then 3 storeys at Coate Avenue provides a balance between supporting development intensification and managing the visual impact on local character.

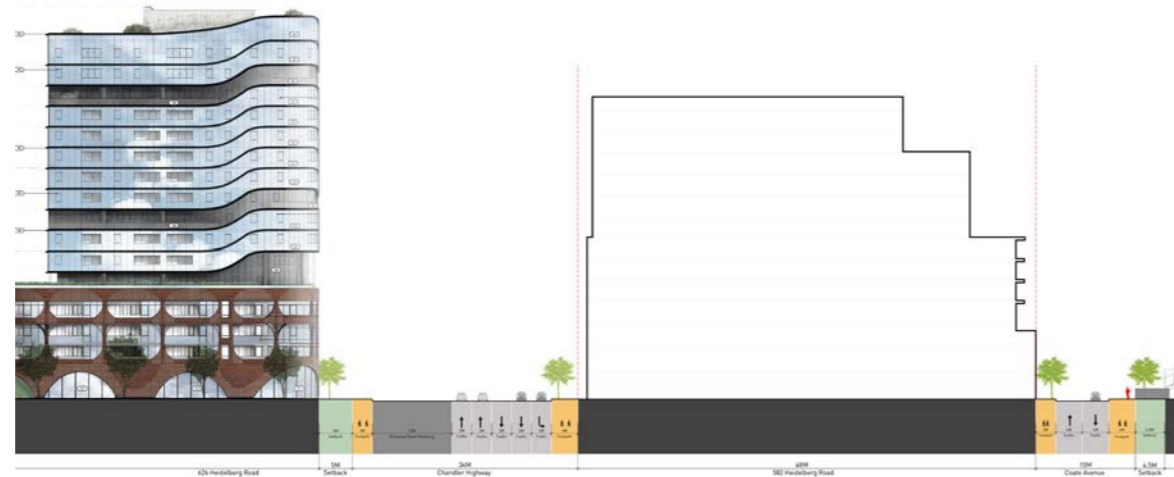


Figure 91. Building envelope of development proposal not supported at VCAT - An overall building height of 13 storeys that transitions to 11, 7 and then 3 storeys at Coate Avenue.



Figure 92. Alternate proposal supported by the applicant's expert witness for increasing the upper level setbacks on Coate Avenue to 5.5 metres

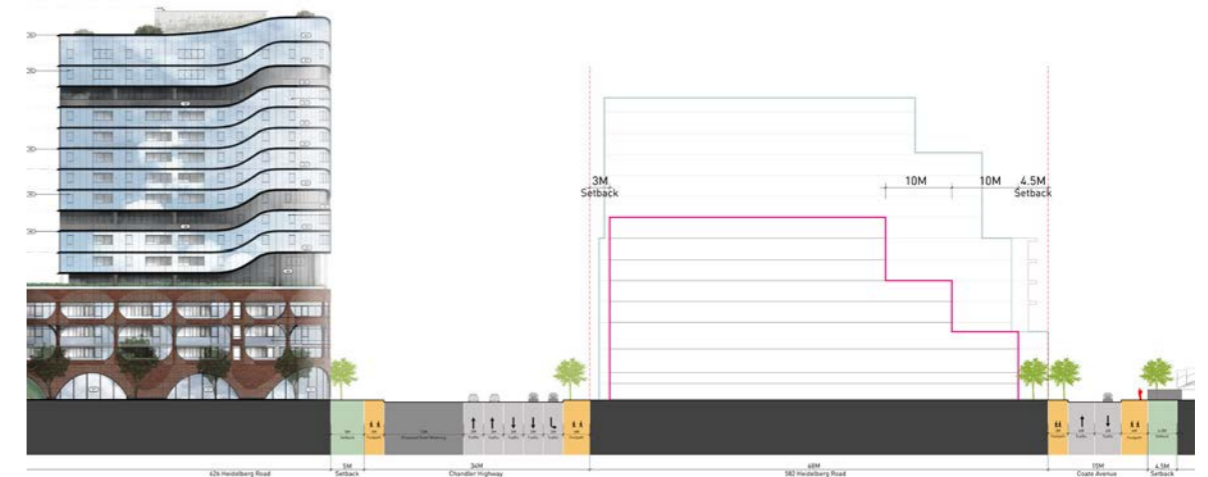


Figure 93. Alternate proposed supported by Leanne Hodyl (Council's expert witness) for reducing the overall building height and increasing the setbacks from Coate Avenue.

8 Storeys - Option 1

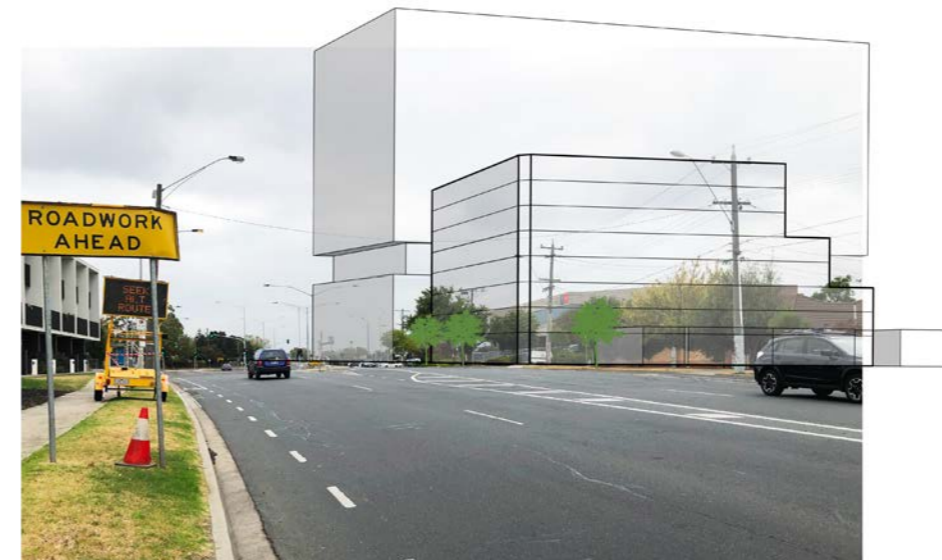
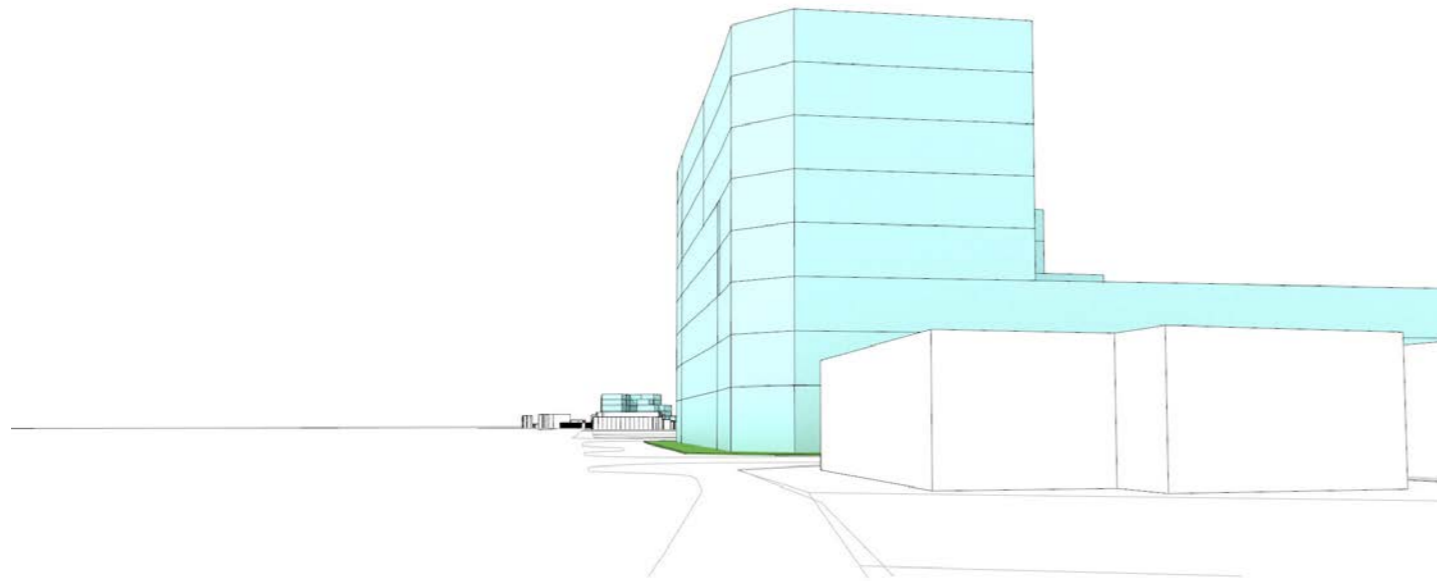


Figure 94. 8 storey street wall height along the full length of Heidelberg Road viewed from south side of street (left) and from across the street further to the west - looking east (right)

8 Storeys - Option 2

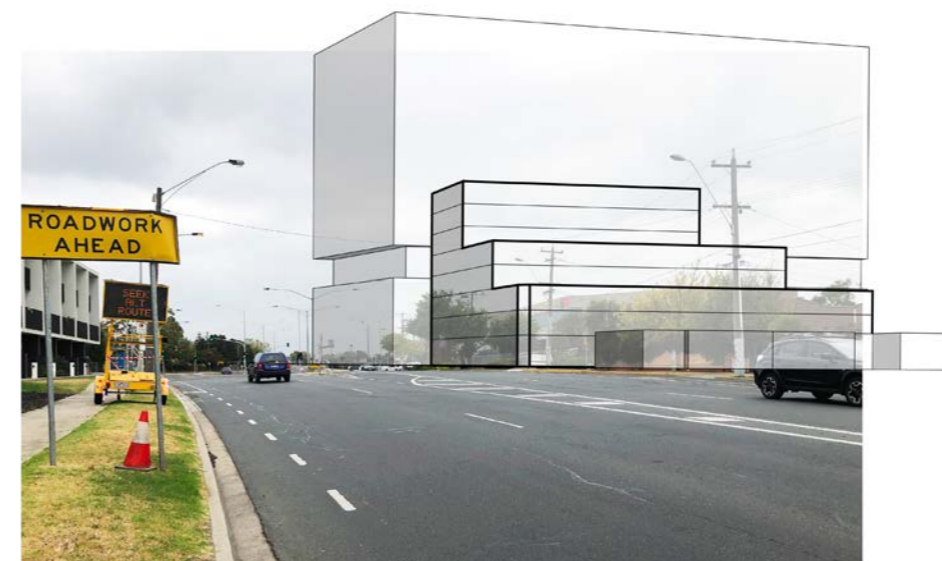
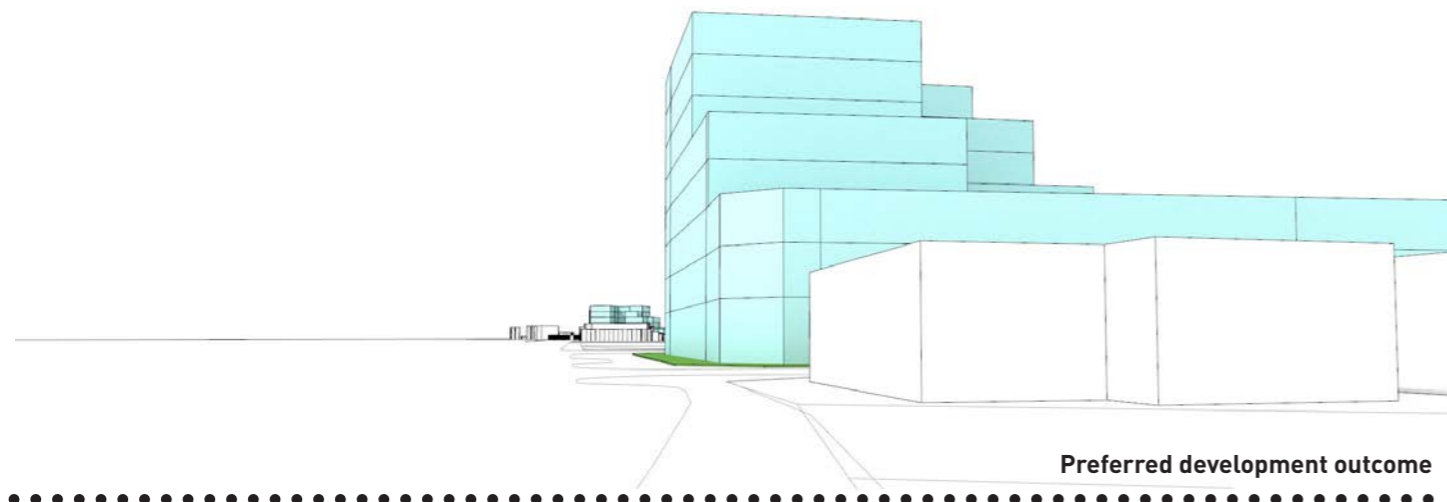


Figure 95. 8 storey street wall height stepping down to 5 then 3 storeys viewed from south side of street (left) and from across the street further to the west - looking east (right)

Precinct 3A - Alphington West

Upper level setback - 8 Storeys - Option 1

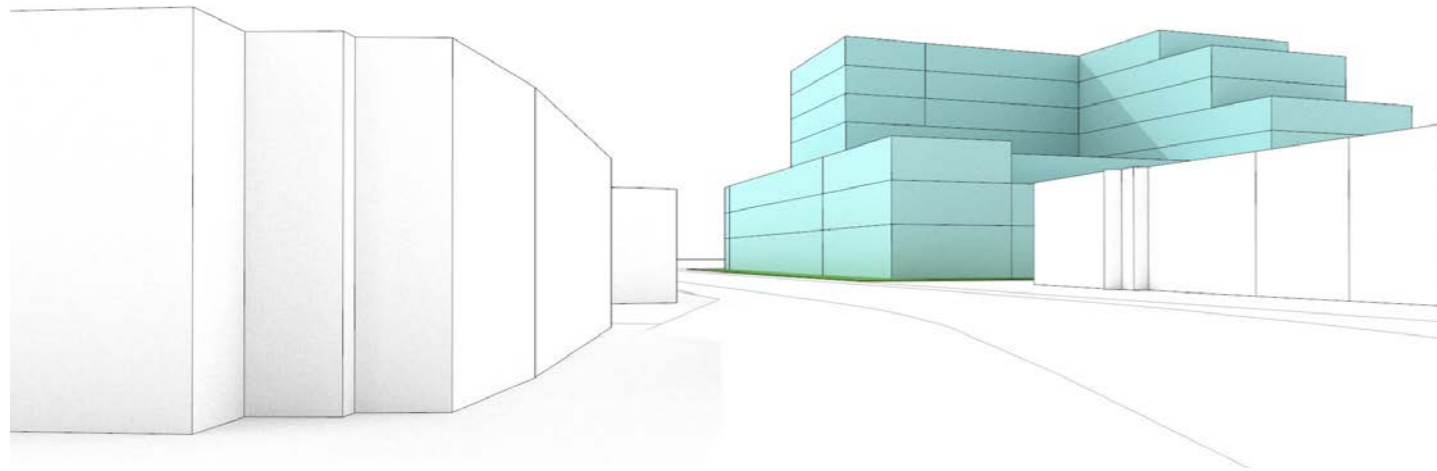


Figure 96. View from Coate Avenue - 8 storey development stepping directly to a 3 storey interface at Coate Avenue. The upper levels of the building become visually dominant in the street.

Upper level setback - 10 Storeys - Option 3

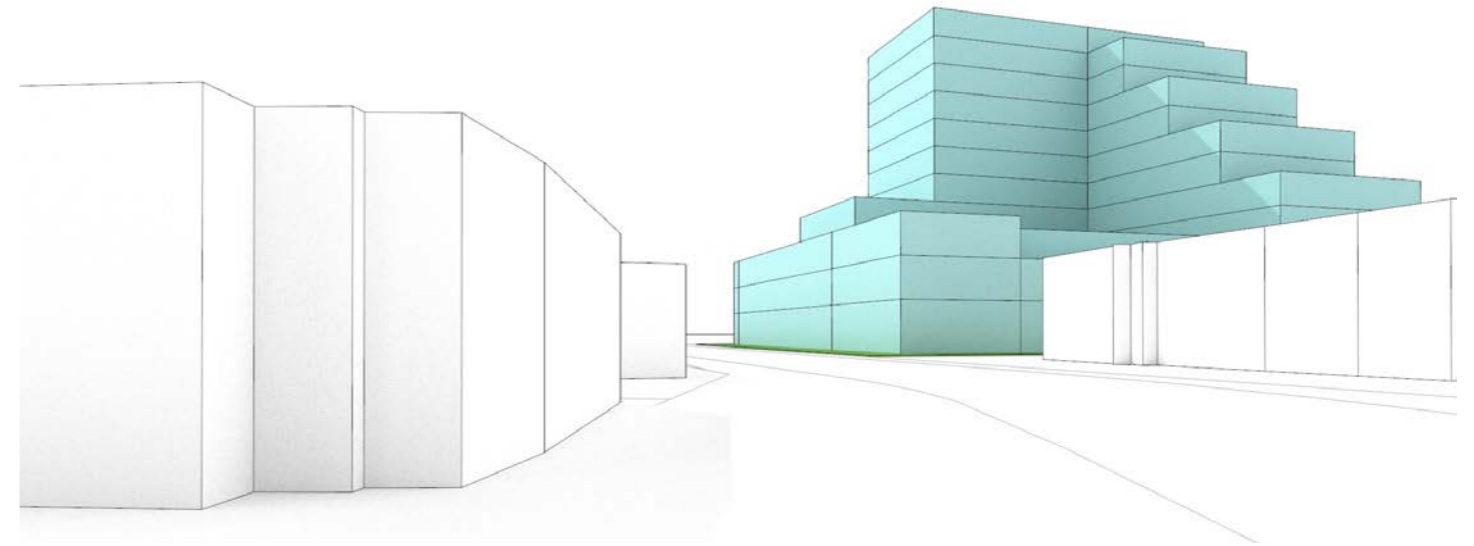
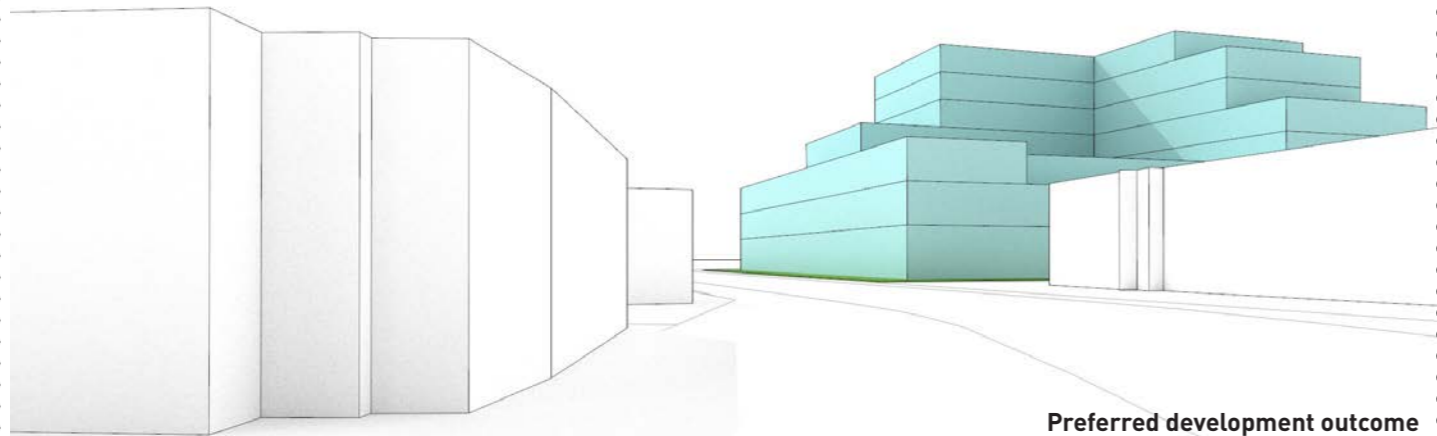


Figure 98. View from Coate Avenue - 10 storey development stepping to 5, then 3 storeys at Coate Avenue. The upper levels of the building become visually dominant in the street.

Upper level setback - 8 Storeys - Option 2



Preferred development outcome

Figure 97. View from Coate Avenue - 8 storey development stepping to 5, then 3 storeys at Coate Avenue. The upper levels of the building become part of the overall building composition and are not visually dominant.

Upper level setback - 10 Storeys - Option 4

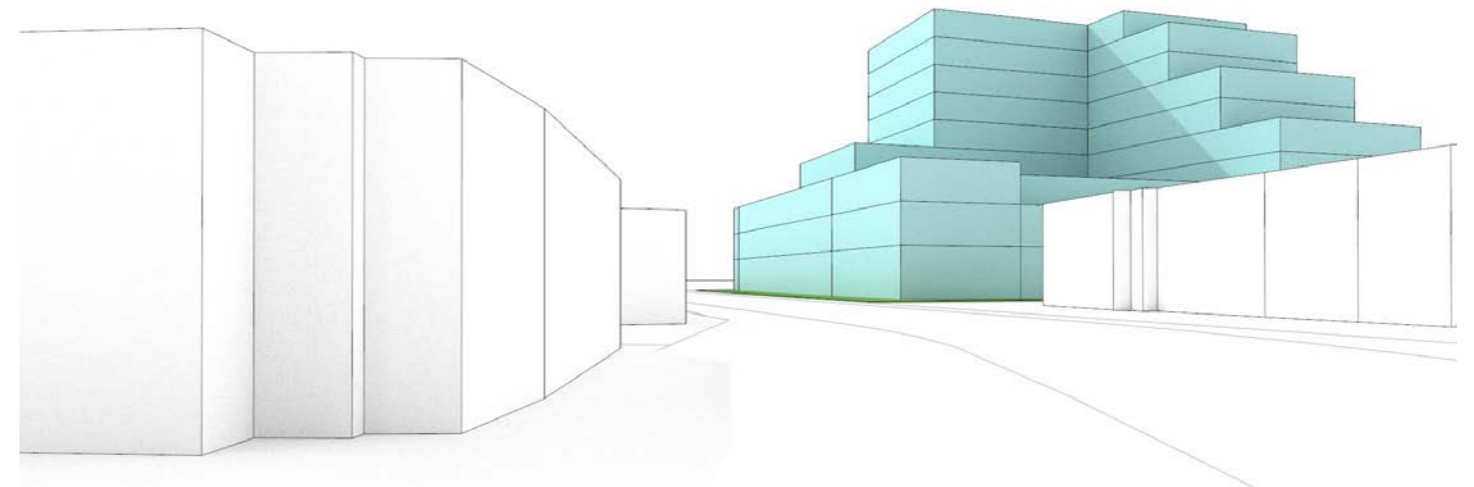


Figure 99. View from Coate Avenue - 10 storey development stepping to 5, then 3 storeys at Coate Avenue. The upper levels of the building become visually dominant in the street.

Precinct 3A



Figure 100. Section location plan

Key recommendation

Introduce a discretionary 8 storey height control, requiring the building to step down to 3 storeys at Coate Avenue and to 2 storeys on the southern boundary.

Upper levels to be set back at a 45 degree angle from the southern boundary.

Upper levels to be set back 10 metres above the 3rd floor on Coate Avenue, with an additional setback of 10 metres about the 5th floor.

Interface to Heidelberg Road

The proposed relationship to Heidelberg Road (at the intersection with Chandler Highway) is illustrated below.

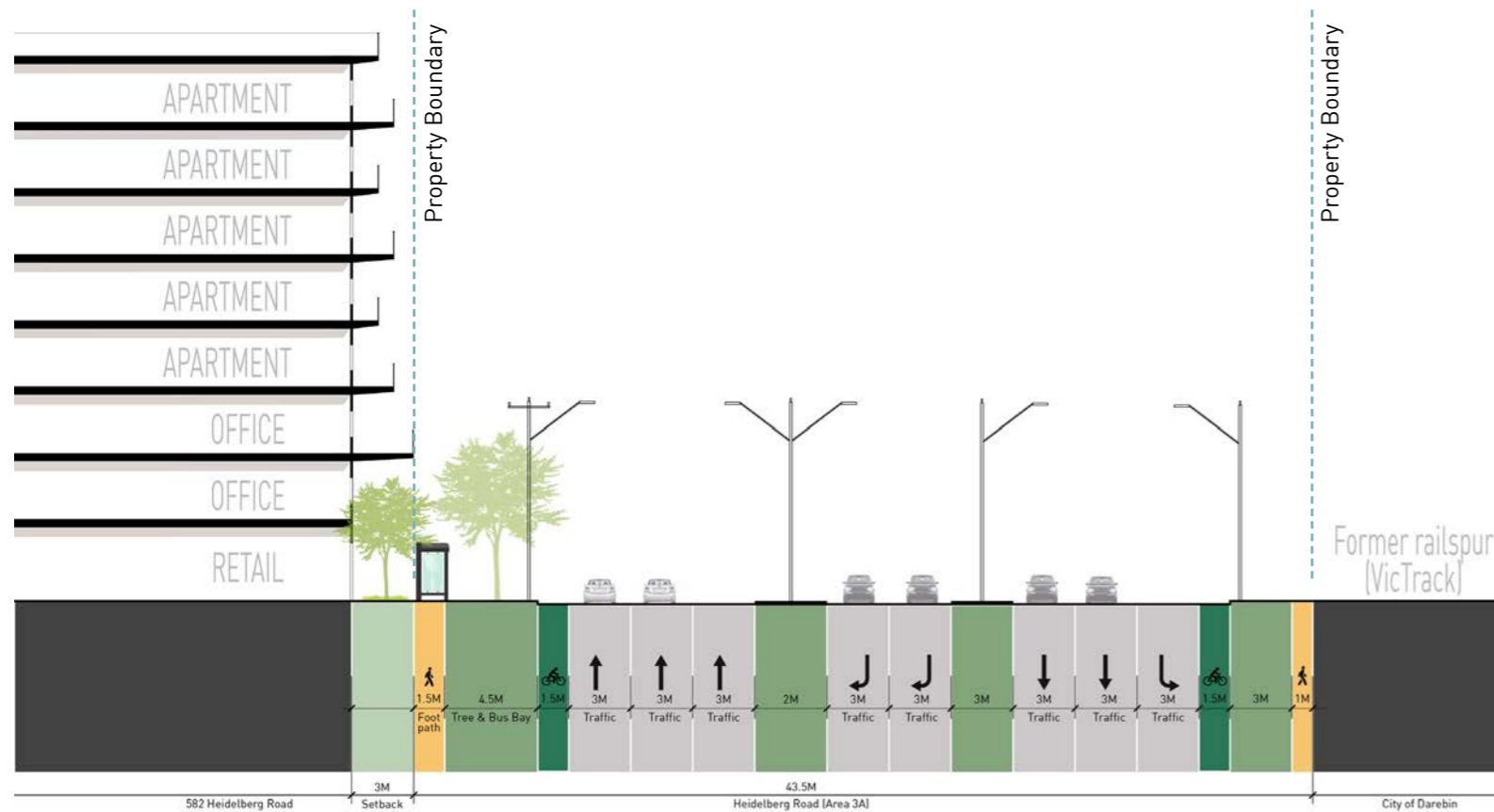


Figure 101. Proposed street section - full street section

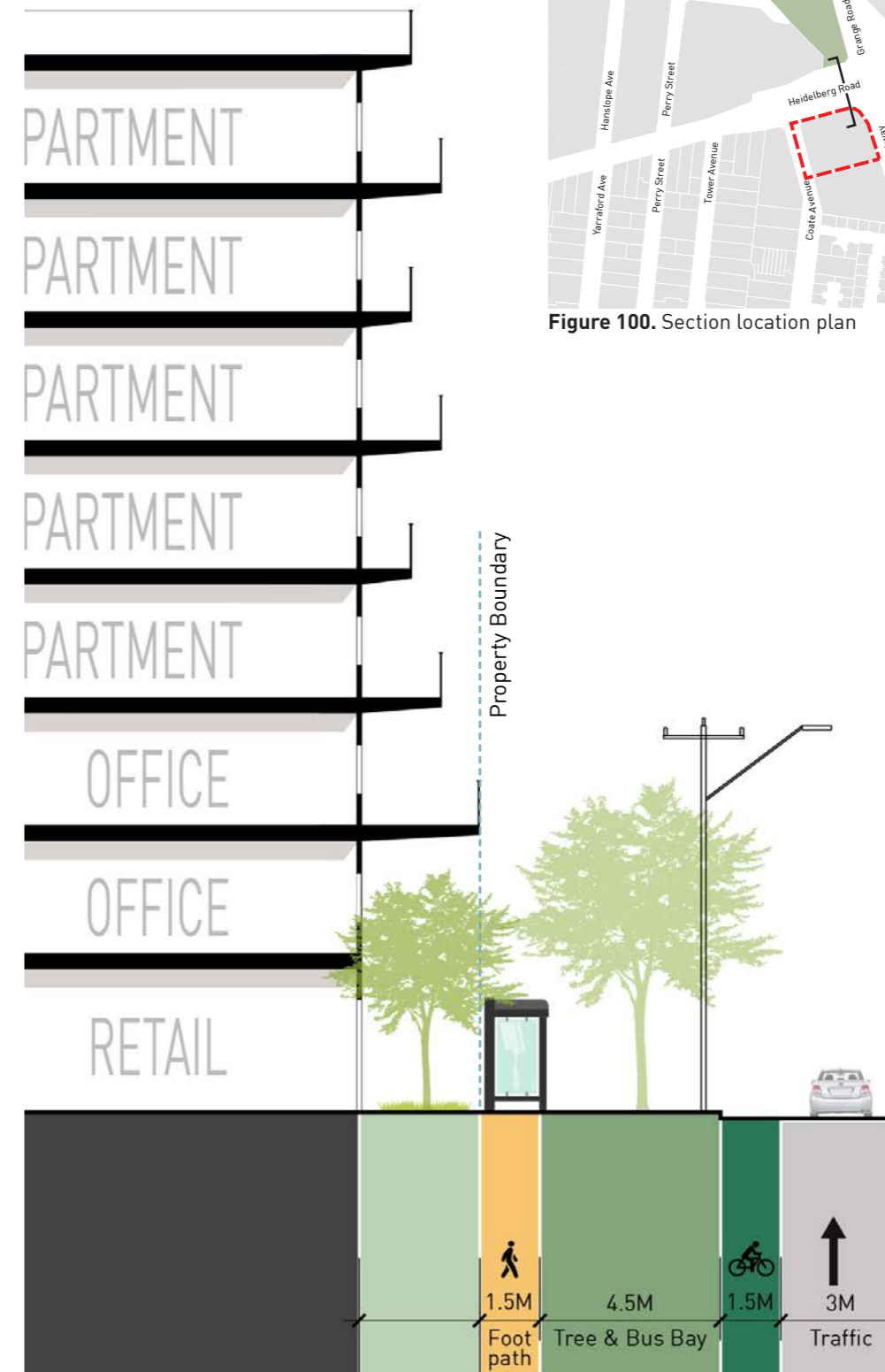


Figure 102. Proposed street section - detailed street section

Precinct 3A - Alphington West

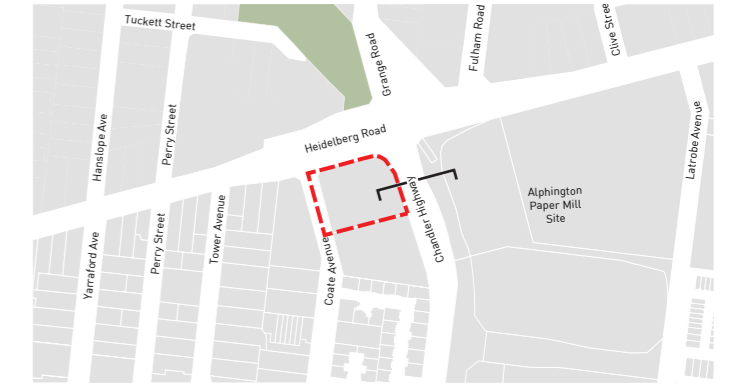
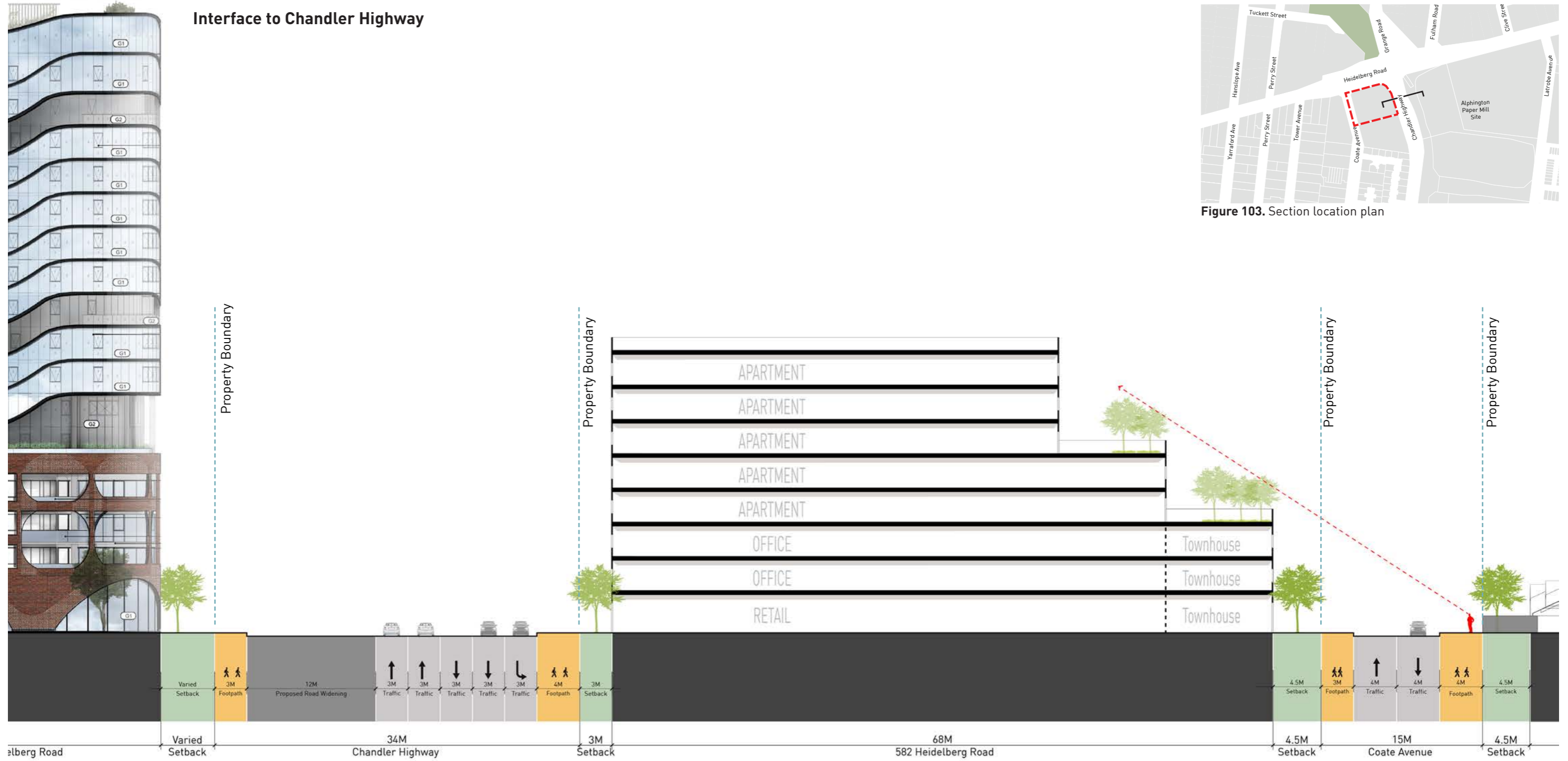


Figure 104. Proposed street section - full street section with indicative floor levels illustrated within this envelope for reference only. These are not intended to illustrate acceptable building designs.

D. Confirming overshadowing requirements



Figure 105. Cumulative shadow impact of 8 metre high boundary wall condition

■ Private open space has more than 5 hours sunlight between 9 am and 3 pm on 22 September
■ Shadow between 9 am and 3 pm on 22 September
 Note: Assessment utilises the building footprints that are documented in Council's GIS mapping.

E. Building envelope controls

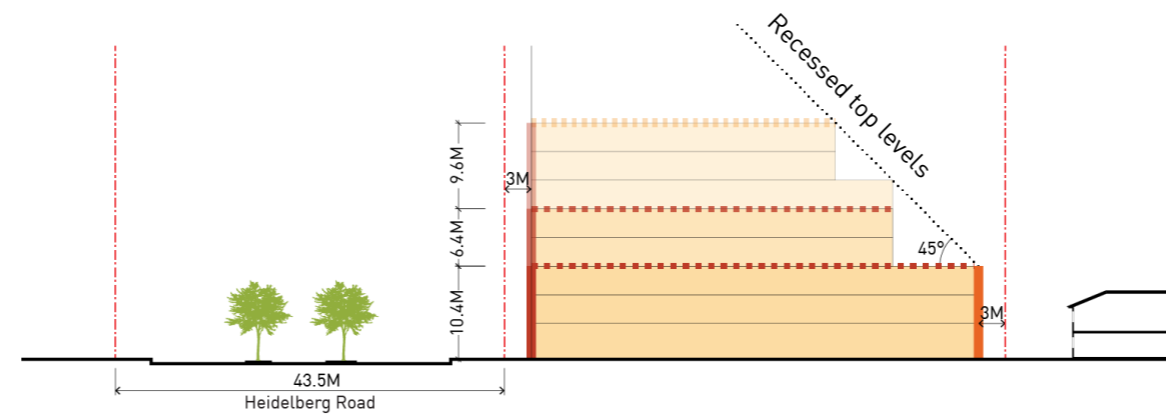


Figure 106. Proposed built form envelopes (section A-A) with indicative floor levels illustrated within this envelope for reference only. These are not intended to illustrate acceptable building designs.

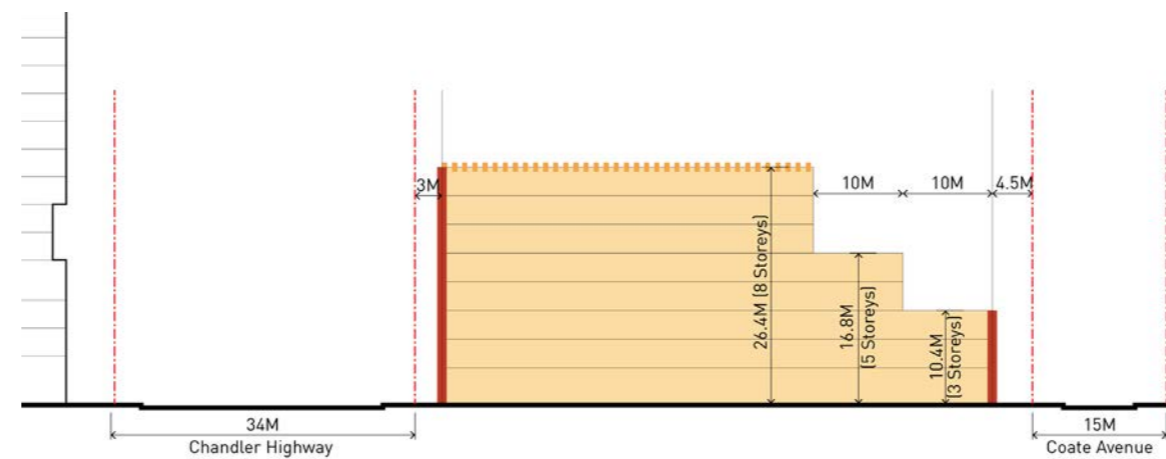


Figure 107. Proposed built form envelopes (section B-B) with indicative floor levels illustrated within this envelope for reference only. These are not intended to illustrate acceptable building designs.

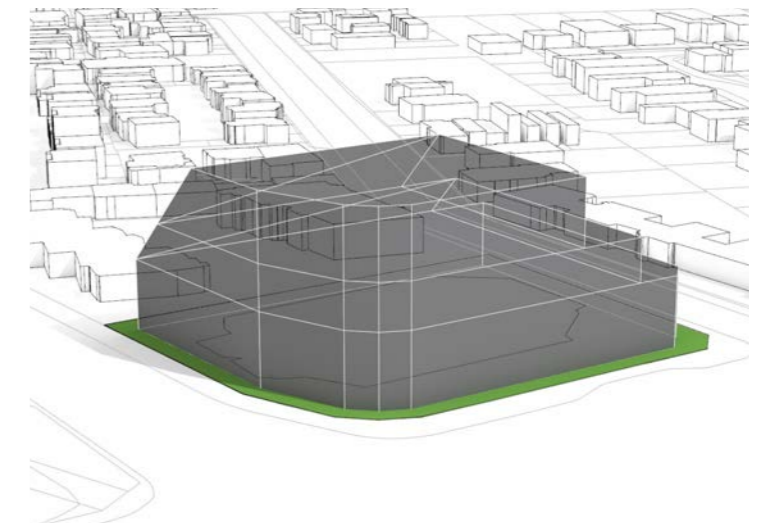


Figure 108. Demonstration of the 3d building envelope controls

Precinct 3A - Alphington West

F. Precedent examples - Precinct 3A



Figure 109. 80-ONCE Business & Living [Source: Sestral S.A]



Figure 111. Peel Street, Collingwood [Source: DKO Architecture]



Figure 110. Proposal for 342-348 Victoria Street - Brunswick [Source: Fieldworks Architects]

G. Built form testing of proposed building envelopes

Testing site 3A

Location: 582 Heidelberg Road			
Site area: 3,729m ²	Lot width: 68M	Lot depth: 56M	Characters: Singular site

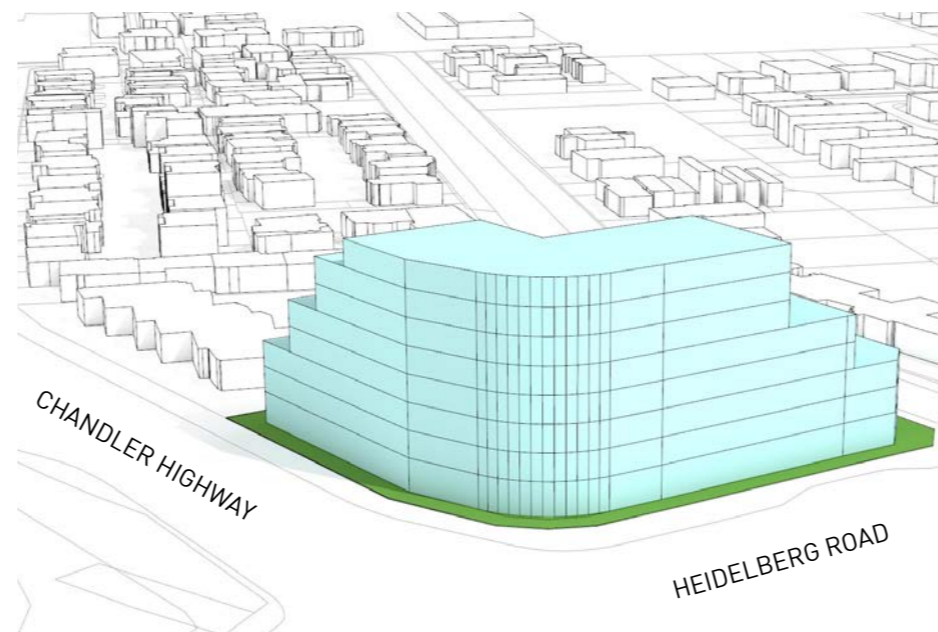


Figure 112. Built form testing - perspective view

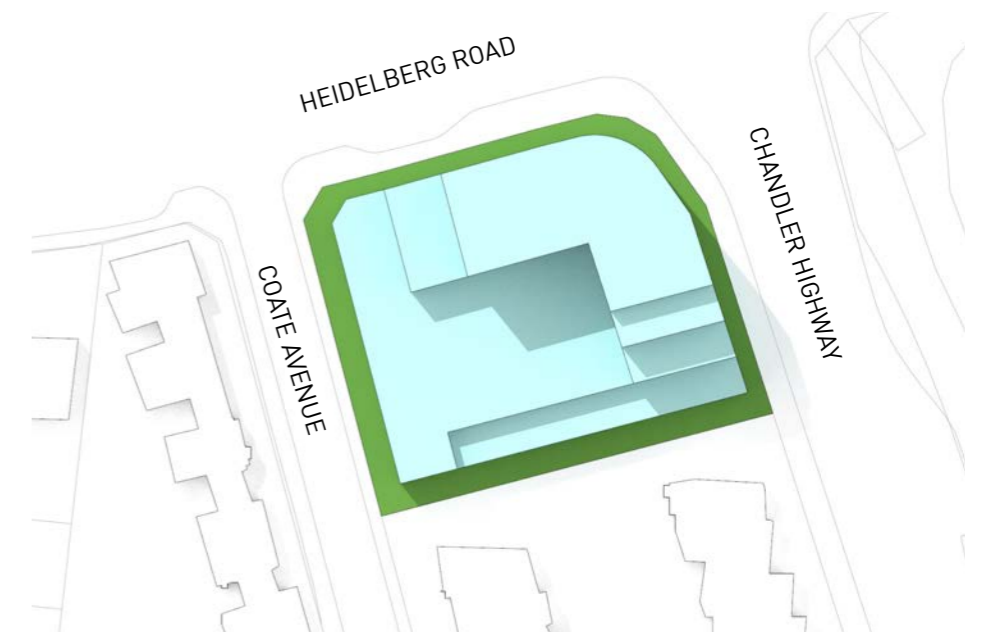


Figure 113. Built form testing - plan view



Figure 115. Existing building

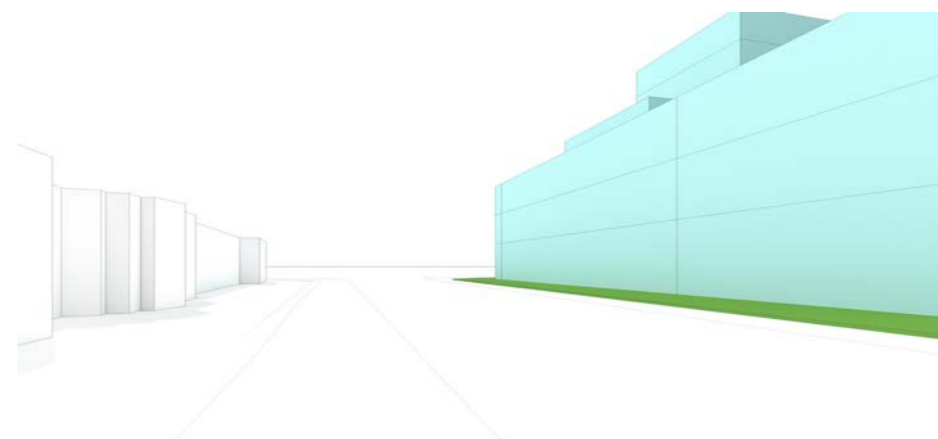


Figure 114. View from Coate Avenue illustrating the benefits of a three storey street wall height with significant upper level setbacks that ensure the building is not visually dominant in the street.

Precinct 3A - Alphington West

H. Proposed built form controls

The proposed building envelope controls are illustrated in the following plans.

- Rear interface controls (maximum rear interface heights, ground level and upper level setbacks)

Considering the unique site attributes and the need to support design flexibility with certainty that minimum amenity standards are met, a mix of mandatory and discretionary controls are proposed as follows:

Discretionary

- Overall height limits
- Street wall heights to Heidelberg Road, Chandler Highway and Coate Avenue
- Upper level setbacks from street

Mandatory

- Front setbacks to all streets

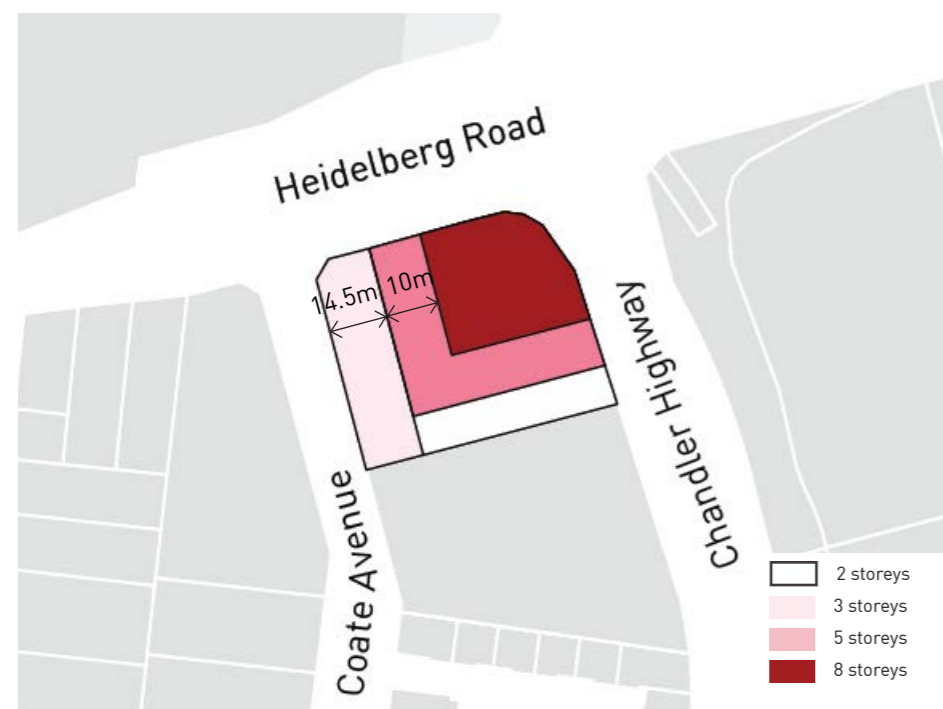


Figure 116. Precinct 3A - Proposed overall building heights



Figure 117. Precinct 3A - Proposed ground floor setbacks



Figure 118. Precinct 3A - Proposed street wall heights / building heights along residential interface boundaries

Precinct 3B - Heidelberg Road Neighbourhood Activity Centre

A. Key valued character attributes

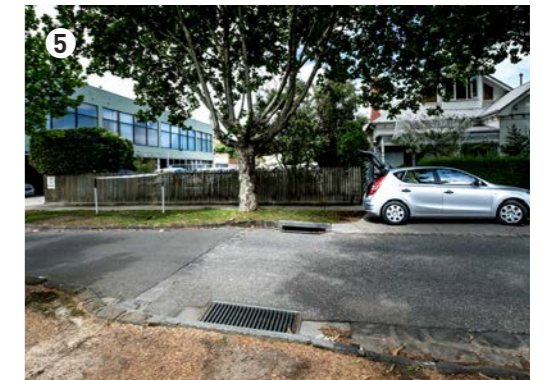


Figure 119. Precinct 3B - Aerial image



Figure 120. Key character attributes

1. Recent mixed-use development - the overall height and massing responds to the urban context. The significant setback incorporates large trees and low-storey planting and improves the quality of the pedestrian environment.
2. Existing fine-grain shopfronts provide a pedestrian-friendly environment. This occurs in the block bounded by Yarralea Street and Park Avenue.
3. Existing and potential heritage buildings are located within this block. PAO applies in the corner and overlays five sites including an existing heritage building.
4. Smaller frontages/shops, narrow footpath, and verandahs give more sense of traditional and enclosure.
5. Residential side streets, including large mature trees and significant setbacks.



Precinct 3B - Neighbourhood Activity Centre

B. Design Strategy

Develop a new mid-rise character for the existing neighbourhood centre which complements the scale and facilities in the former Alphington Paper Mills site. Enhance the setting of heritage buildings and the fine-grain development patterns through a low-street wall height.



Figure 121. Design Strategy

- Existing heritage buildings
- Potential heritage buildings
- Existing medium-density, mid-rise housing
- Existing vehicular access (retained/consolidated)
- Vehicular access (removal preferred)
- Existing landscape setback
- Proposed 3m landscape setback
- Create urban street wall and activated edges along Heidelberg Road
- PAO overlay
- Neighbourhood Residential Zone

Minimise visual bulk, overshadowing and privacy on the sensitive interface:

- Rear to rear boundary condition
- Rear to side boundary condition
- Side to side boundary condition
- Rear to laneway boundary condition

Design Objectives

Introduce a generous landscape setback in the block bounded by Como Street and Yarralea Street - Location 1.

The existing PAO in this location requires buildings to setback from the street in the order of 12m. This provides an opportunity to create a landscape setback that could provide opportunities for retail, cafes (outdoor dining) that is setback from the traffic of Heidelberg Road.

West of Yarralea Street this opportunity has not been pursued as the location of existing heritage buildings conflict with the PAO location.

Respond to existing valued character, including heritage buildings and fine-grain shopfronts on the block bounded by Yarralea Street and Park Avenue - Location 2.

There are potentially five sites of heritage significance that have a zero metre setback to the street. This character should be continued along this street interface.

Improve the quality of Heidelberg Road by creating a comfortable sense of enclosure and definition to the street - Location 3.

This can be achieved through the introduction of a street wall height that provides a positive interface to the street but which does not visually dominate. This balance is particularly important to achieve considering the poor quality of the street environment. Buildings that are visually overwhelming will exacerbate the impact of heavy traffic on the pedestrian experience.

Ensure development does not visually dominate or unreasonably overshadow private open space in adjacent residential areas - Location 4.

The neighbouring residential properties all incorporate private open space at the rear of each dwelling.

Sunlight should be provided at the equinox according to the current level of provision required in Clause 54 and 55 of the planning scheme.

Minimise the impact of vehicular crossovers - Location 5.

Vehicular access to most sites is provided from Heidelberg Road. This includes shared access for a number of sites. There are five existing crossovers where alternative access can be provided. No additional vehicular crossovers are supported.

C. Determining Heidelberg Road development scale

700-718 Heidelberg Road

8 Storeys - Option 1

Street wall: 4 storeys
Upper level setback: 3 metres

- 8 storey buildings are visually dominant, creating a wall of development.
- Creates an uncomfortably proportioned building where the lower and upper levels are of equal heights.



8 Storeys - Option 2

Street wall: 4 storeys
Upper level setback: 6 metres

- 8 storey buildings are visually dominant.
- The 6 metre setback provides a negligible improvement on reducing this dominance.
- Creates an uncomfortably proportioned building where the lower and upper levels are of equal heights.



8 Storeys - Option 3

Street wall: 4 storeys
Upper level setback: 45 degree angle

- Creates awkward building forms that are uncomfortably proportioned.



Figure 122. Built form testing on 718 Heidelberg Road

Preferred development outcome

7 Storeys - Option 4

Street wall: 4 storeys
Upper level setback: 6 metres

- The 4-storey street wall provides a balanced street wall height against the street width.
- The 6m setback reduces the visual dominance of upper levels and supports heights of 7 storeys.

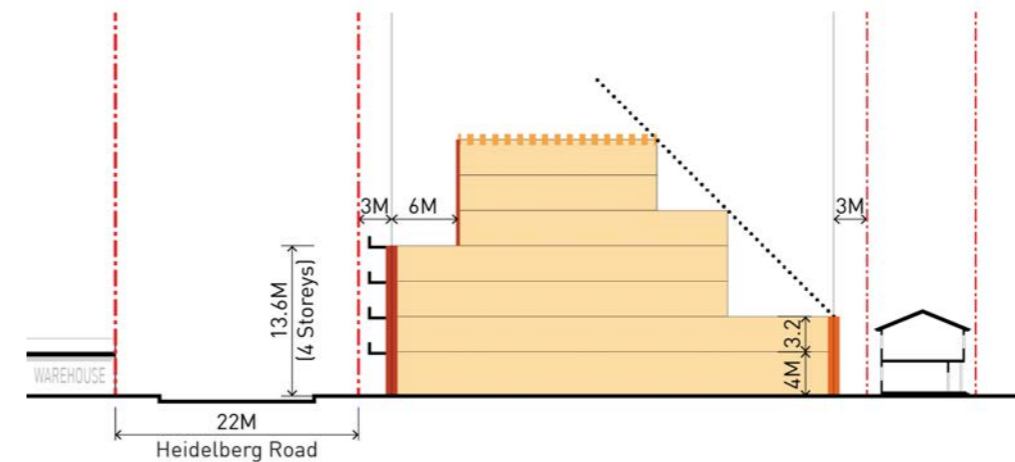


Figure 123. Proposed building envelope controls for Precinct 3B (718 Heidelberg Road)

Note: Ground level setback to rear boundary may be required depending on relationship to existing dwelling location (refer to Figure 15 on page 13)

Precinct 3B - Neighbourhood Activity Centre

Between Park Avenue and Yarralea Streets

6 Storeys - Option 1

Street wall: 1-2 storeys
Upper level setback: 3 metres

- 6 storey buildings are visually dominant, creating a wall of development.
- Upper levels are too dominant for the context.
- Creates an uncomfortably proportioned building above existing heritage buildings.



6 Storeys - Option 2

Street wall: 1-2 storeys
Upper level setback: 6 metres

- 6 storey buildings are visually dominant, creating a wall of development.
- Upper levels are too dominant for the context.
- Creates an uncomfortably proportioned building above existing heritage buildings.



6 Storeys - Option 3

Street wall: 1-2 storeys
Upper level setback: 45 degree angle

- Creates awkward building forms that are uncomfortably proportioned.



Figure 124. Built form testing on heritage block

Preferred development outcome

6 Storeys - Option 4

Street wall: 1-2 storeys
Upper level setback: 6 metres & 45 degree angle (above 5th floor)

- Overall 5 storey height frames the street without being overly visually dominant. The 6m setback creates a more distinctive street wall which enhances the existing character and heritage buildings.
- Creates a comfortably proportioned building where the lower levels support integration with the existing heritage buildings within the street.

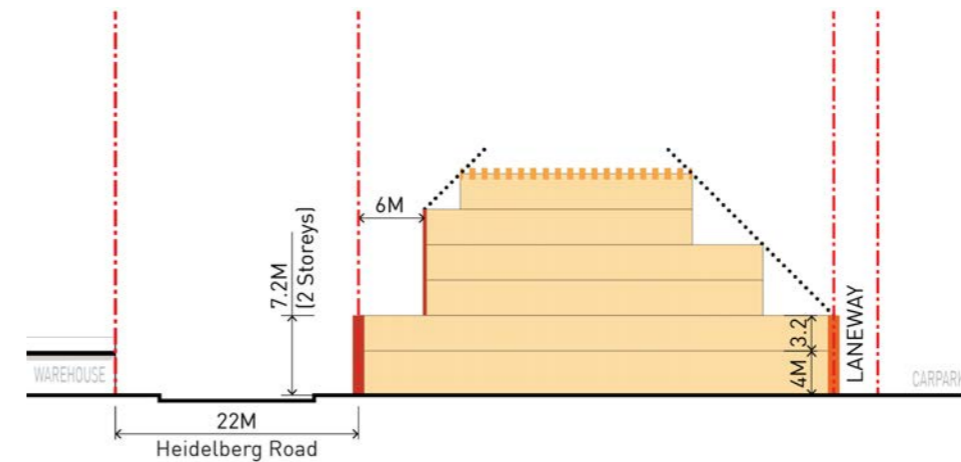


Figure 125. Proposed building envelope controls for Precinct 3B (heritage block)

Note: Ground level setback to rear boundary may be required depending on relationship to existing dwelling location (refer to Figure 15 on page 13)

Proposed built form envelopes (section) with indicative floor levels illustrated within this envelope for reference only. These are not intended to illustrate acceptable building designs.

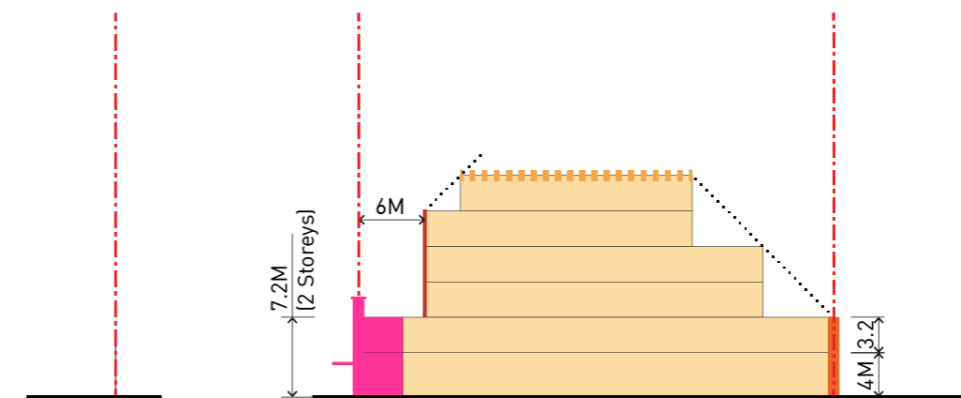


Figure 126. Proposed built form envelopes (section) in response to existing heritage building

Between Yarralea Street and Como Street (with PAO overlay)

6 Storeys - Option 1

Street wall: 4 storeys
Upper level setback: 3 metres

- Overall 6 storey height frames the street without being overly visually dominant.
- Creates a comfortably proportioned building where the lower levels support integration with the existing heritage buildings within the street.



Preferred development outcome

6 Storeys - Option 2

Street wall: 4 storeys
Upper level setback: 6 metres

- Overall 6 storey height frames the street without being overly visually dominant. The 6m setback creates a more distinctive street wall.
- Creates a comfortably proportioned building where the base of the building is prominent and upper levels are recessed.



6 Storeys - Option 3

Street wall: 6 storeys
Upper level setback: N/A

- Street wall height is too dominant for the context.



Figure 128. Built form testing for Precinct 3B (eastern block)

D. Building envelope controls

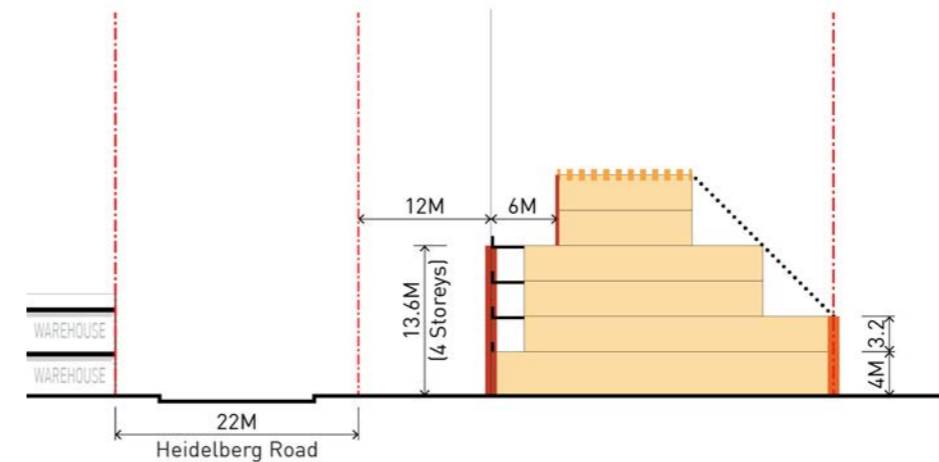


Figure 127. Proposed building envelope controls for Precinct 3B (eastern block)

Note: Ground level setback to rear boundary may be required depending on relationship to existing dwelling location (refer to Figure 15 on page 13)

Key recommendation

Precinct 3 - 700-718 Heidelberg Road

Introduce a 8-storey building height control in Precinct 3 (718 Heidelberg Road) with a 4 storey street wall and 6 metre setback. Above six storeys additional setbacks are required at a 45 degree angle.

Precinct 3 - Between Park Avenue and Yarralea Streets

Introduce a 5-storey building height control with a 2 storey street wall and 6 metre setback. Above five storeys additional setbacks are required at a 45 degree angle.

Precinct 3 - Between Yarralea Street and Como Street (with PAO overlay)

Introduce a 6-storey building height control with a 4 storey street wall and 6 metre setback.

Precinct 3B - Neighbourhood Activity Centre

Interface to Heidelberg Road – 718 Heidelberg Road

The proposed relationship to Heidelberg Road is illustrated below.

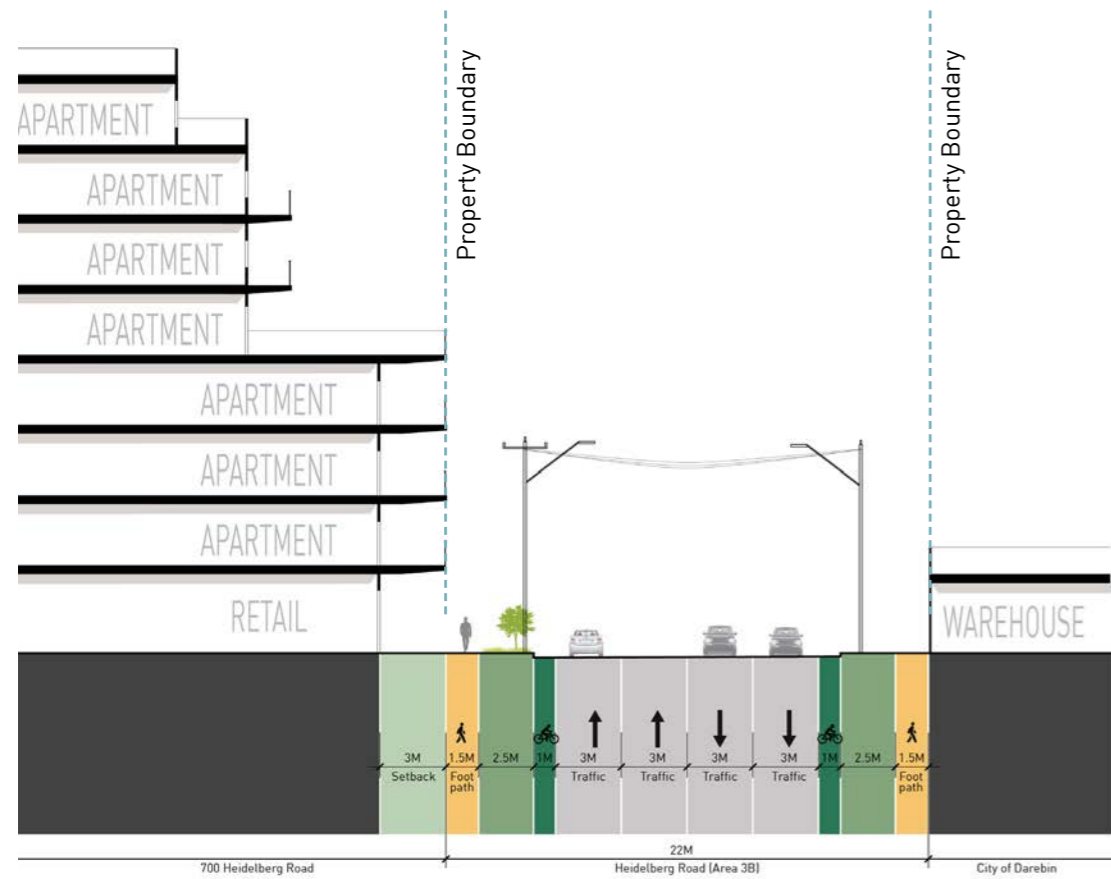


Figure 130. Proposed street section - full street section

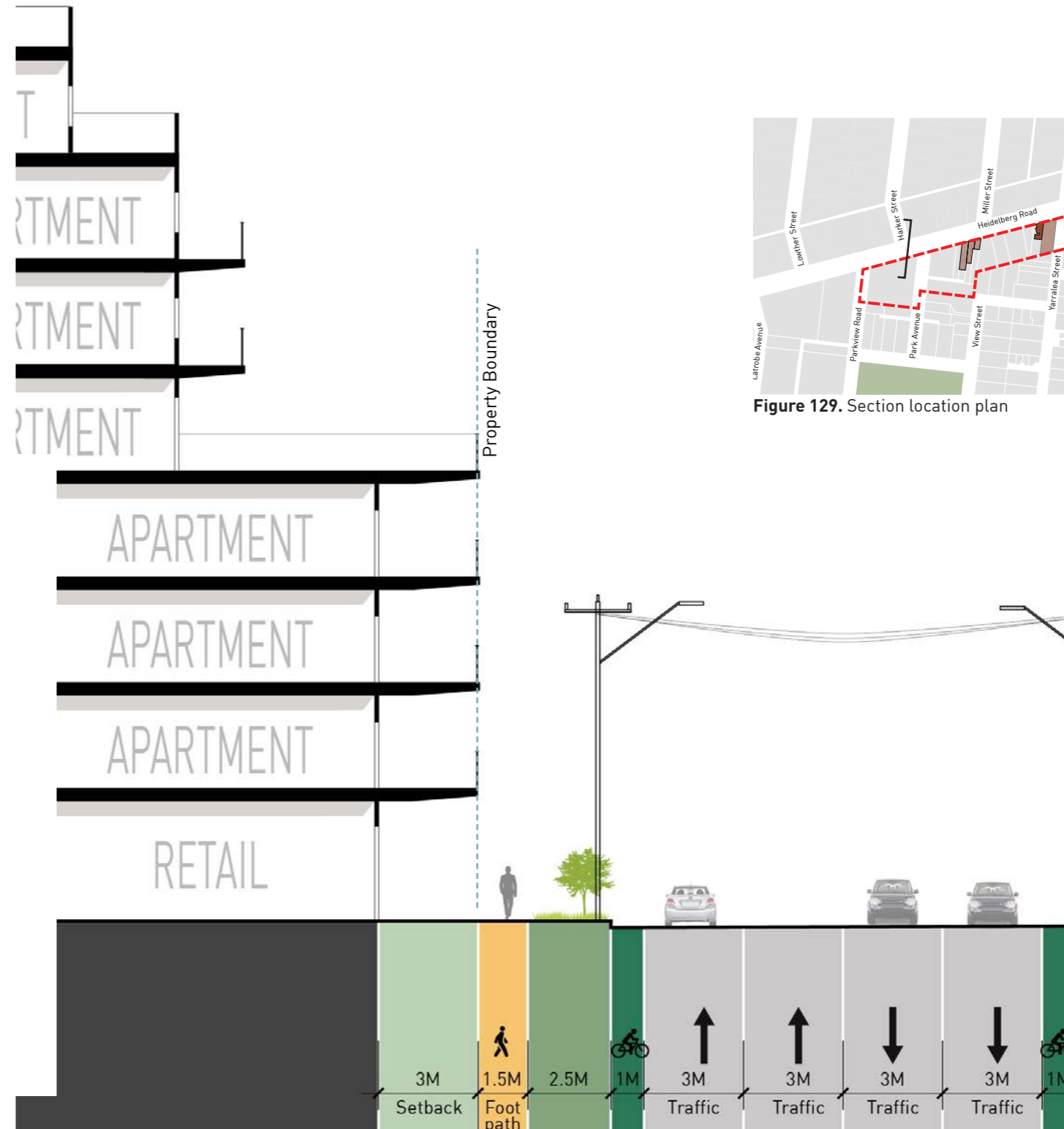


Figure 131. Proposed street section - detailed street section



Figure 129. Section location plan

Interface to Heidelberg Road – Between Park Avenue and Yarralea Street

The proposed relationship to Heidelberg Road is illustrated below.

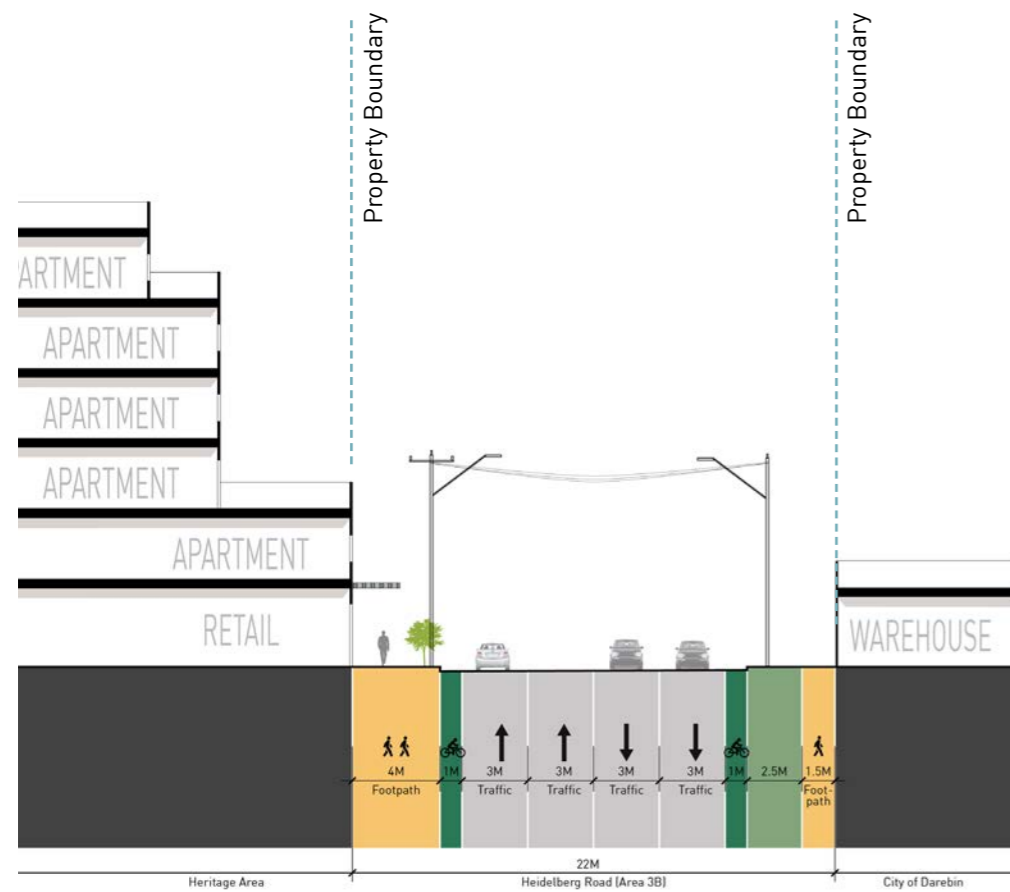


Figure 133. Proposed street section - full street section

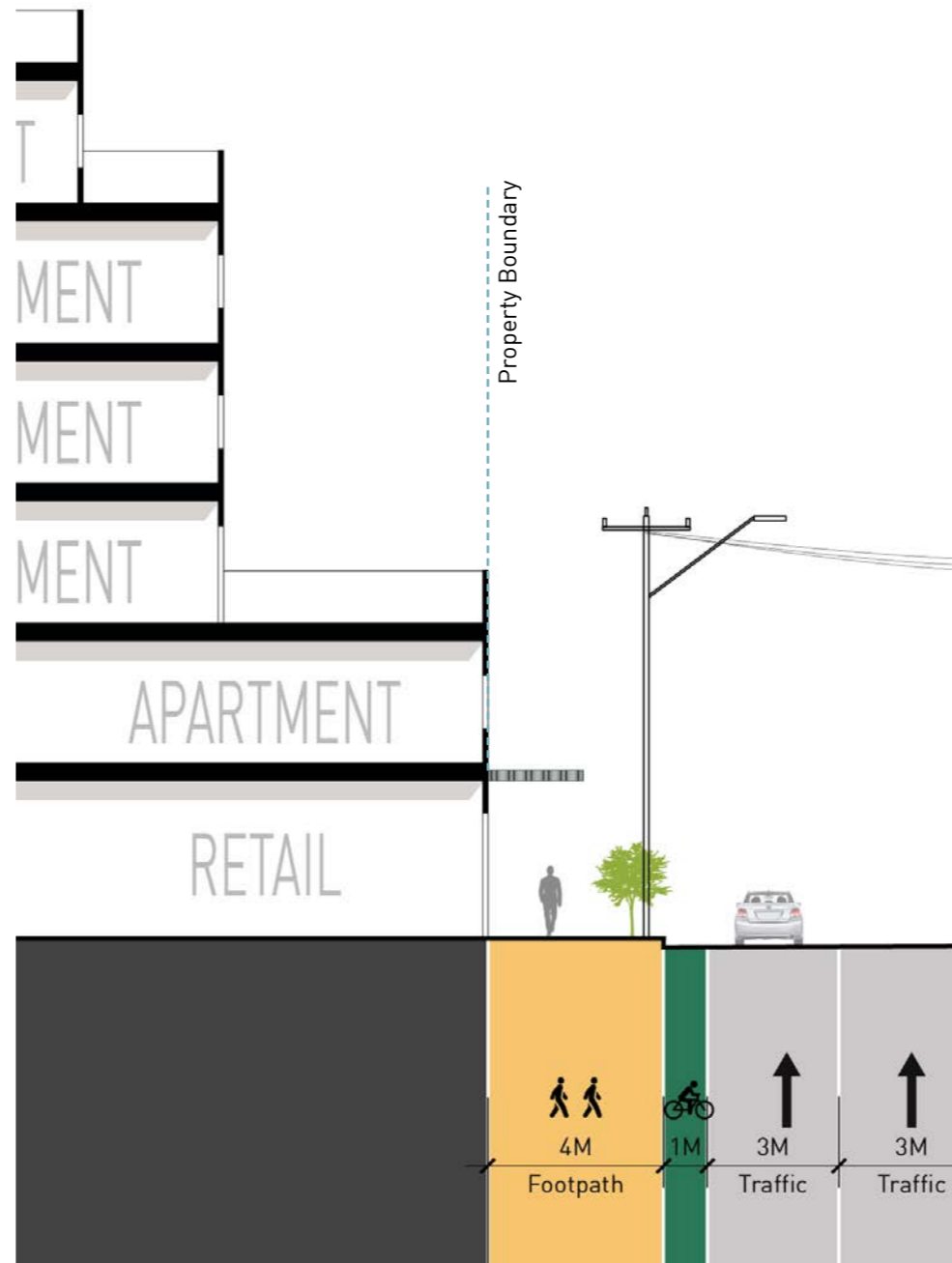


Figure 134. Proposed street section - detailed street section

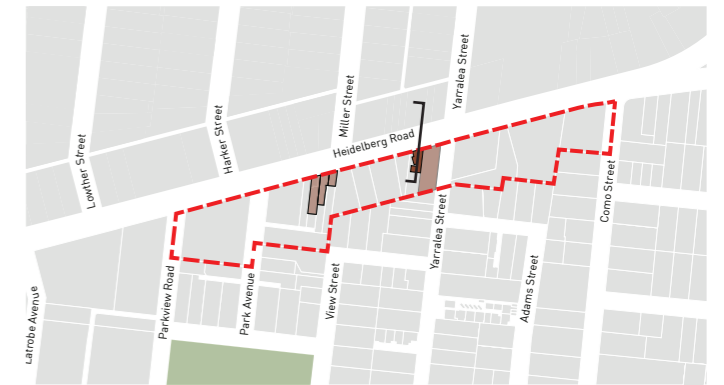


Figure 132. Section location plan

Precinct 3B - Neighbourhood Activity Centre

Interface to Heidelberg Road – East of Yarralea Street (PAO overlay)

The proposed relationship to Heidelberg Road is illustrated below.

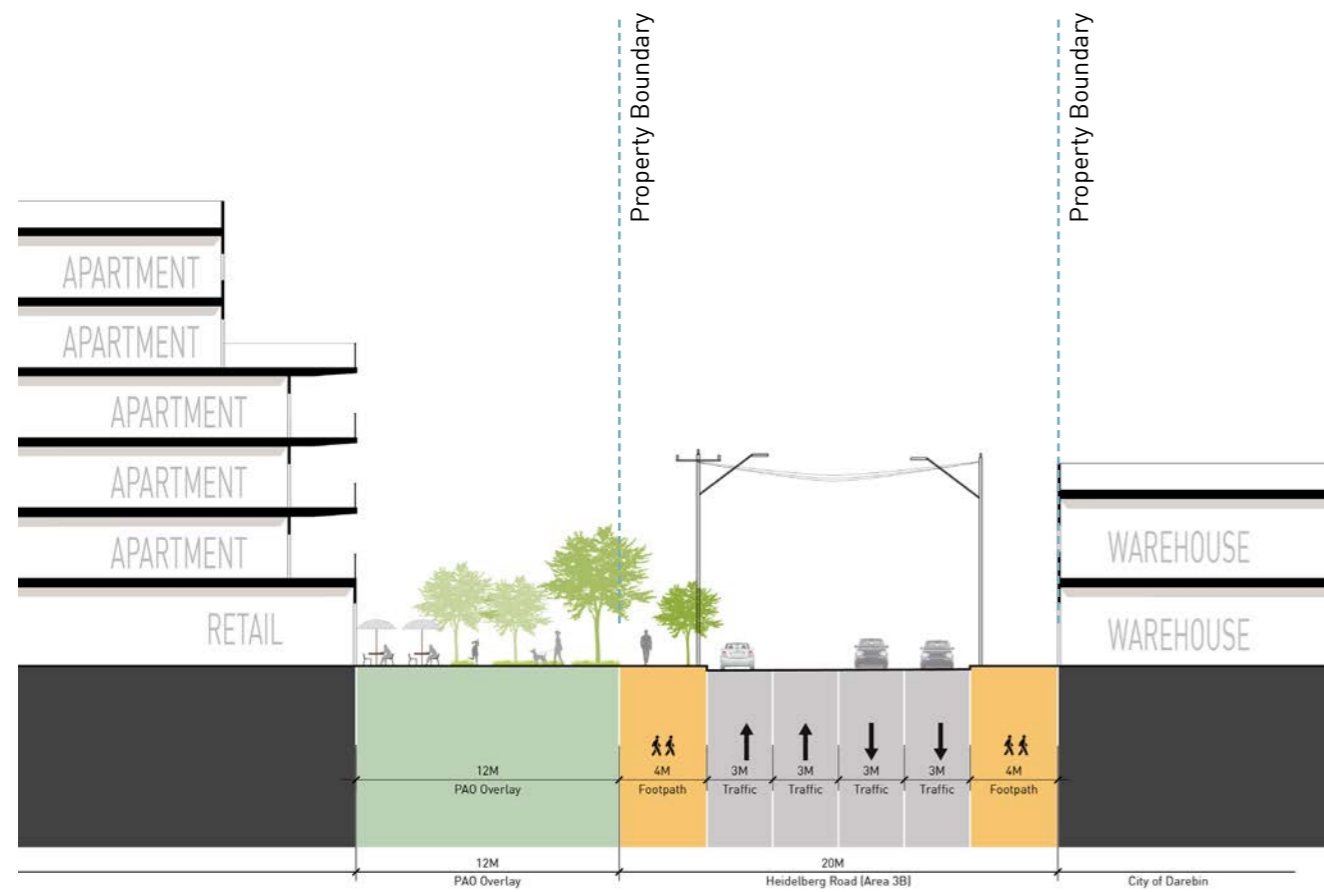


Figure 136. Proposed street section - full street section



Figure 135. Section location plan

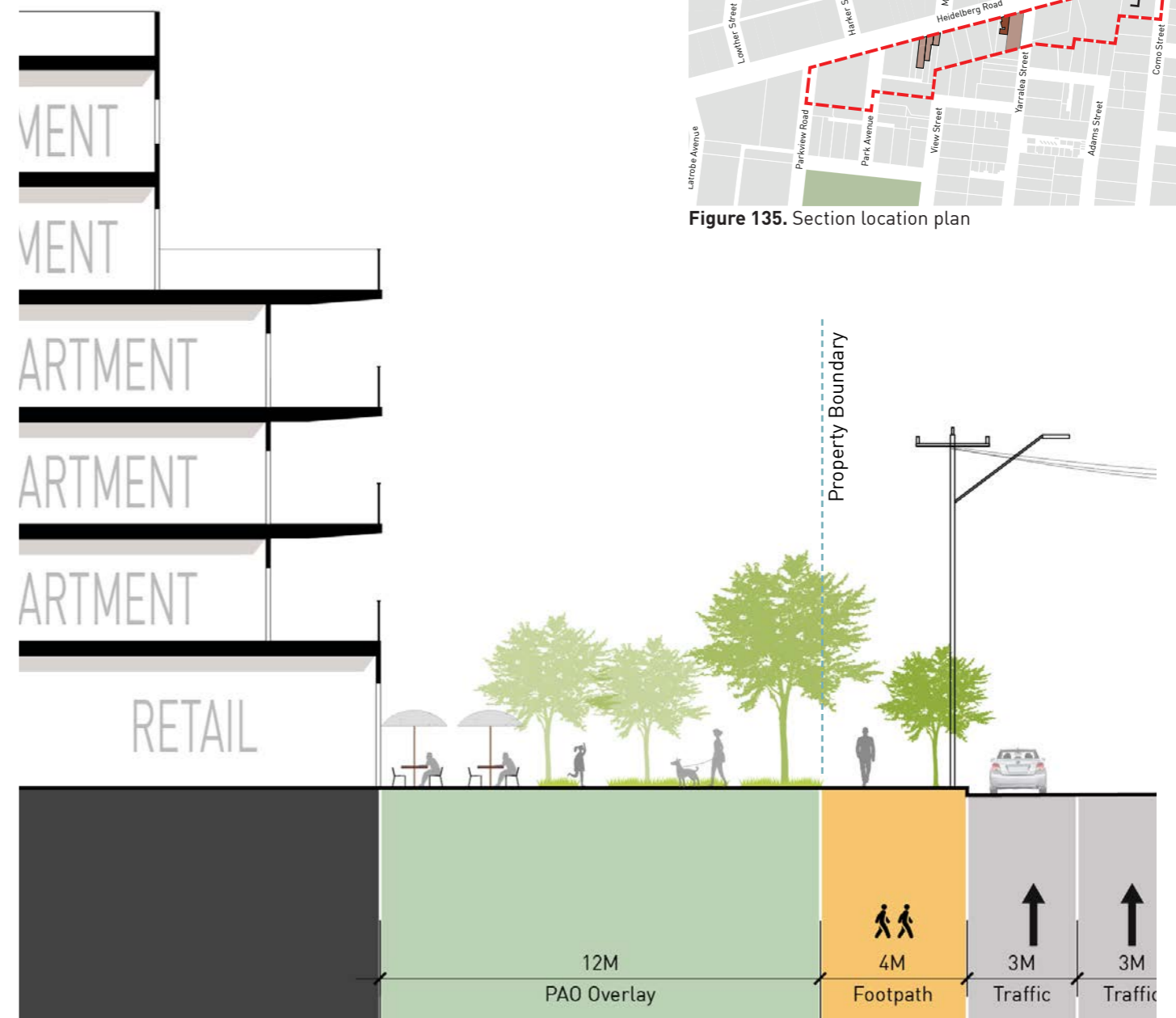


Figure 137. Proposed street section - detailed street section

E. Confirming overshadowing requirements



Figure 138. Cumulative shadow impact of 8 metre high boundary wall condition

- Private open space has more than 5 hours sunlight between 9 am and 3 pm on 22 September
- Shadow between 9 am and 3 pm on 22 September

Note 1: Assessment utilises the building footprints that are documented in Council's GIS mapping.

Precinct 3B - Neighbourhood Activity Centre

F. Precedent examples - Precinct 3B



Figure 139. Nine Smith St, Fitzroy (Source: Neometro)



Figure 140. George Corner, Fitzroy (Source: Neometro)

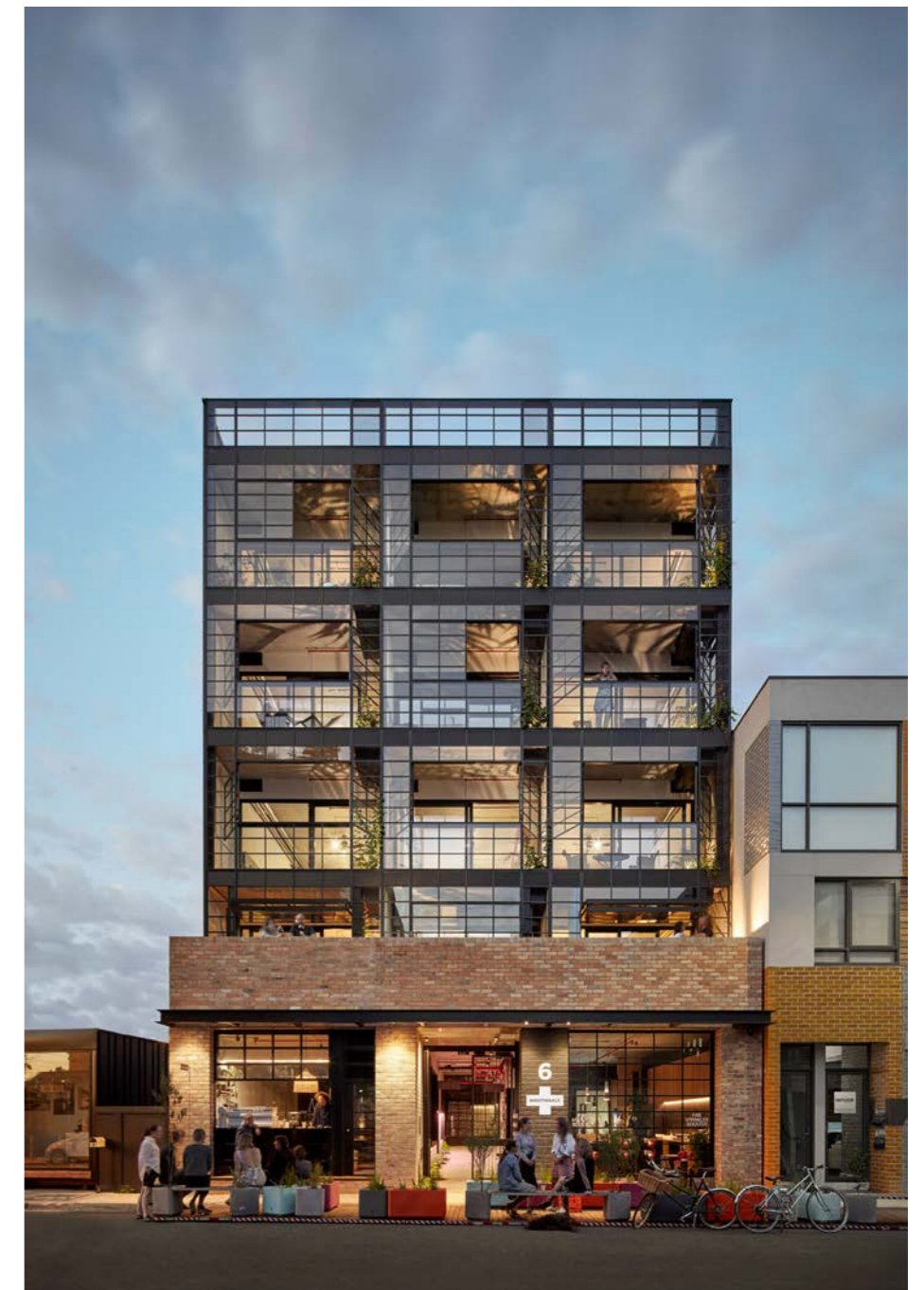


Figure 141. Nightingale 1, Brunswick (Source: Breathe Architecture)

G. Built form testing of preferred envelope controls

Testing site 3B-1 – the block between Yarralea Street and Parkview Avenue

Location: 730 Heidelberg Road			
Site area: 348m ²	Lot width: 6.4M	Lot depth: 50M	Character/use: Narrow and deep site Potential heritage site
Location: 732 Heidelberg Road			
Site area: 370m ²	Lot width: 8M	Lot depth: 53M	Character/use: Narrow and deep site Potential heritage site
Location: 734 Heidelberg Road			
Site area: 363m ²	Lot width: 7.3M	Lot depth: 56M	Character/use: Narrow and deep site Potential heritage site
Location: 736 Heidelberg Road			
Site area: 740m ²	Lot width: 12M	Lot depth: 38M	Character/use: Automotive service
Location: 738 Heidelberg Road			
Site area: 600m ²	Lot width: 16M	Lot depth: 38M	Character/use: Fitness
Location: 740 Heidelberg Road			
Site area: 864m ²	Lot width: 24M	Lot depth: 38M	Character/use: Warehouse
Location: 750 Heidelberg Road			
Site area: 316m ²	Lot width: 14M	Lot depth: 38M	Character/use: Electricity
Location: 756 Heidelberg Road			
Site area: 450m ²	Lot width: 12M	Lot depth: 38M	Character/use: Heritage overlay
Location: 760 Heidelberg Road			
Site area: 611m ²	Lot width: 16M	Lot depth: 38M	Character/use: Potential heritage site



Precinct 3B - Neighbourhood Activity Centre

Testing site 3B-1

732 Heidelberg Road

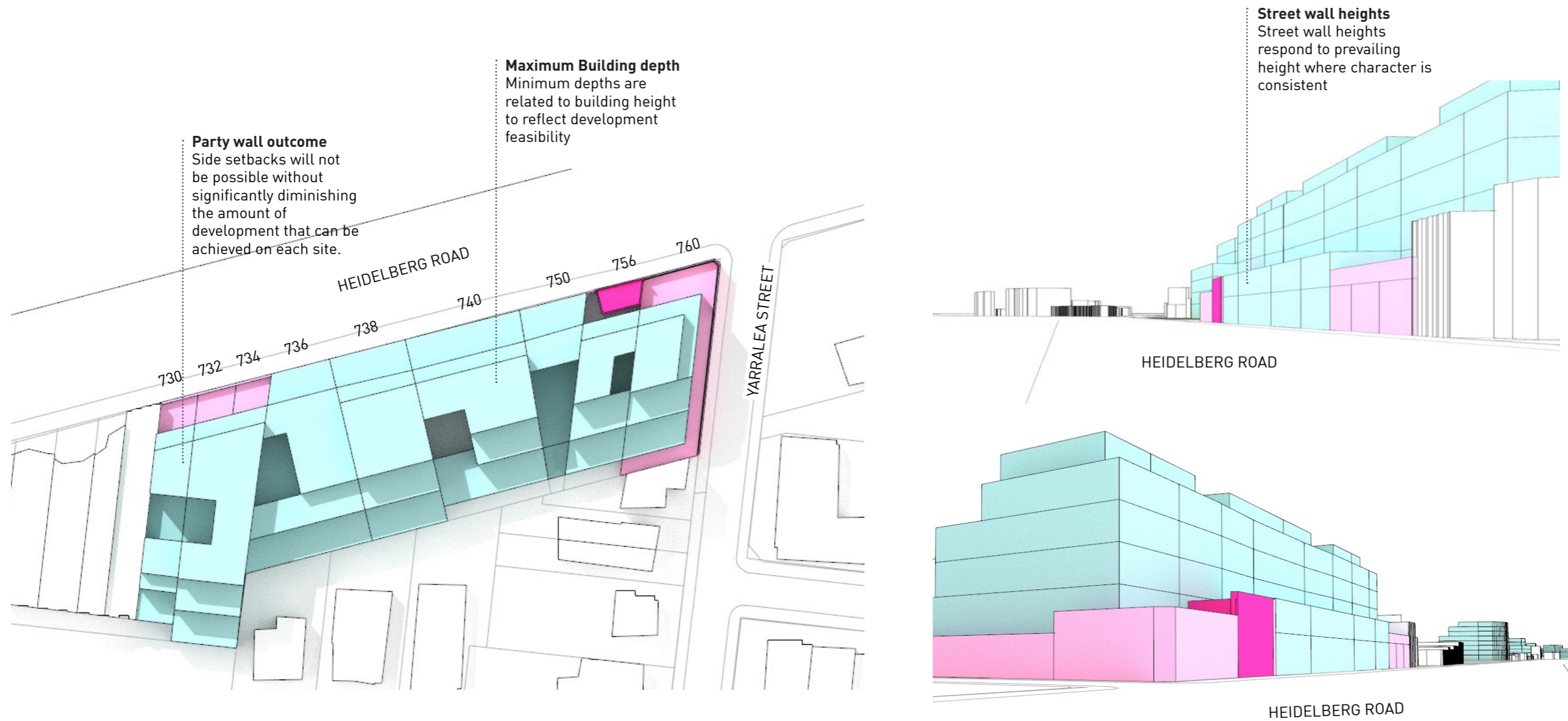


Figure 142. Built form testing – plan and perspective views

Testing site 3B-2 – PAO overlay site

Location: 800 Heidelberg Road			
Site area: 2,260m ²	Lot width: 53M	Lot depth: 55M	Characters: Red Rooster PAO overlay



Figure 143. Built form testing – plan, built form envelope and perspective view)



Precinct 3B - Neighbourhood Activity Centre

H. Proposed built form controls

The proposed building envelope controls are illustrated in the following plans.

700-718 Heidelberg Road

Considering the unique site attributes and the need to support design flexibility with certainty that minimum amenity standards are met, a mix of mandatory and discretionary controls are proposed on 718 Heidelberg Road which is identified as a strategic site as follows:

Discretionary

- Overall height limit
- Street wall heights
- Upper level setback to street

Mandatory

- Front setbacks to all streets
- Rear interface controls (maximum rear interface heights, ground level and upper level setbacks)

Remaining sites in Precinct 3B

On all other sites, mandatory controls are proposed for all envelope controls.



Figure 146. Precinct 3B - Proposed ground floor setbacks



Figure 144. Precinct 3B - Proposed overall building heights



Figure 145. Precinct 3B - Proposed street wall heights / building heights along residential interface boundaries

4. Summary of recommendations

4.1 Summary of proposed controls

The following development controls are recommended within this report:

- Maximum building heights (refer Figure 147 and Table 1)
- Minimum ground floor setbacks (refer Figure 148 and Table 1)
- Maximum street wall heights (refer Figure 149 and Table 1)
- Minimum upper level setbacks from street (refer Table 1)

- Maximum rear interface building height (refer Table 1)
- Minimum upper level setbacks above the rear boundary building height (refer Table 1)
- Minimum rear boundary ground level setback (refer Table 1)
- Overshadowing requirements to residential interfaces (refer Table 1)
- Upper level building setbacks from side boundaries (refer Table 2)

- Building separation within sites (refer Table 2)
- Design principles (refer Table 3).

Proposed building heights

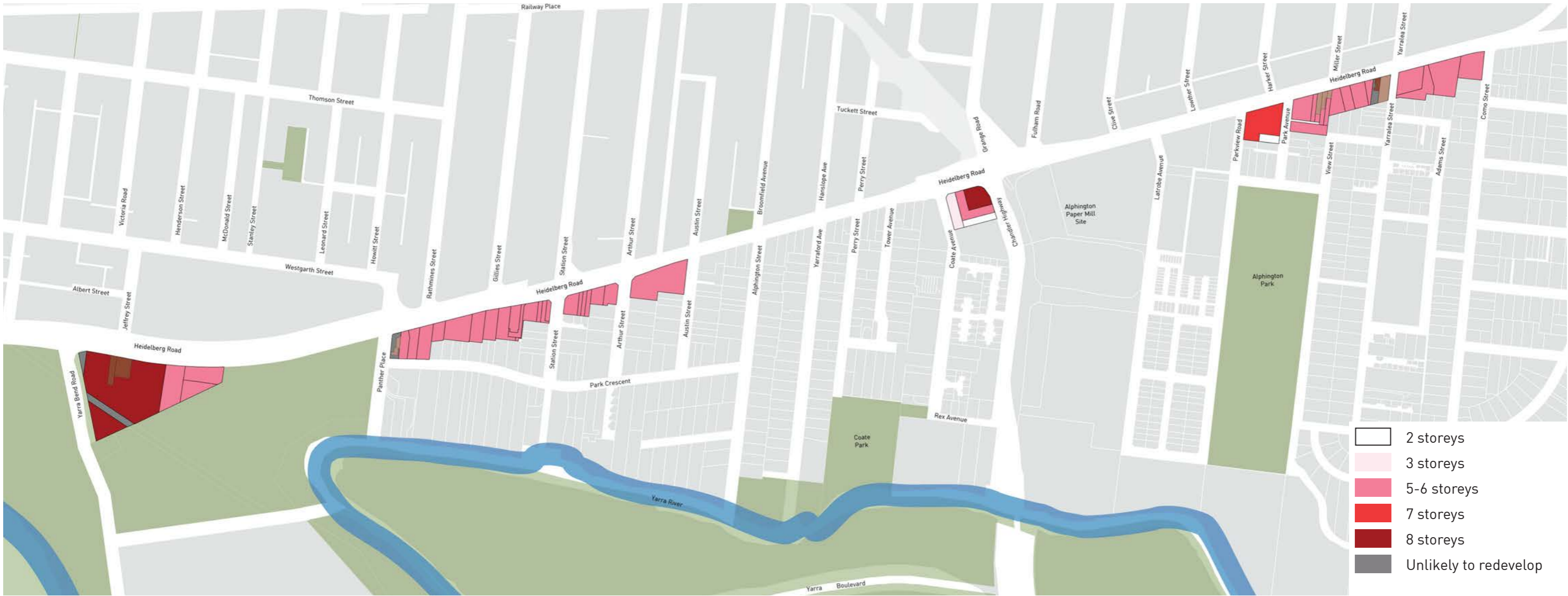


Figure 147. Proposed building heights (all precincts)

Proposed Ground Floor Setbacks



Figure 148. Proposed ground floor setbacks (all precincts)

Proposed street wall height and rear interface building heights



Figure 149. Proposed street wall heights (all precincts)

Summary of development controls (all precincts)

Precinct	Maximum building height	Preferred street wall height	Maximum street wall height	Ground floor setback to street(s)	Minimum upper level setback from street(s)	Maximum rear interface height	Upper level setbacks (above rear interface)	Minimum rear boundary setback	Overshadowing
Precinct 1	6 / 8 storeys (20m/27m)	4-6 storeys	6 storeys	3 metres	6 metres	4 storeys (park)	A setback of 45 degrees applies about the maximum rear interface building height. A maximum of two steps within the buildings are strongly encouraged.	3 metres (to park)	Overshadowing of adjacent residential properties to comply with Clause 54 and 55 of the Yarra Planning Scheme.
Precinct 2	6 storeys (20m)		4 storeys	3 metres	6 metres	2 storeys (8 metres)		0 metres (if adjacent dwelling is located 15m or more from the property boundary) 3 metres (if adjacent dwelling is located less than 15m from the property boundary)	
Precinct 3A	8 storeys (27m)		On Heidelberg Road, 3-8 storeys from Coate Avenue to Chandler Highway	3 metres to Heidelberg Road and Chandler Highway 4.5 metres to Coate Avenue	6 metres to Heidelberg Road and Chandler Highway 14.5 metres to Coate Avenue above 3rd storeys	2 storeys (8 metres)		4.5 metres	
Precinct 3B – 700-718 Heidelberg Road	7 storeys (24m)		4 storeys	3 metres	6 metres	2 storeys (8 metres)		0 metres (if adjacent dwelling is located 15m or more from the property boundary) 3 metres (if adjacent dwelling is located less than 15m from the property boundary)	
Precinct 3B – Between Park Avenue and Yarralea Street	6 storeys (20m)		2 storeys	0 metres	6 metres, with an additional 45 degree angle setback above level 5	2 storeys (8 metres)		0 metres (if adjacent dwelling is located 15m or more from the property boundary) 3 metres (if adjacent dwelling is located less than 15m from the property boundary)	
Precinct 3B – Between Yarralea Street and Como Street	6 storeys (20m)		4 storeys	12 metres	6 metres	2 storeys (8 metres)		0 metres (if adjacent dwelling is located 15m or more from the property boundary) 3 metres (if adjacent dwelling is located less than 15m from the property boundary)	

Table 1. Summary of building envelope controls for all precincts (excluding upper level building setbacks and building separation within a site)

Building height	Preferred separation (Suitable if there is a primary living space/ balcony facing the boundary)	Minimum separation (Suitable when the use is not a primary living space or balcony facing the boundary)
Up top 4 storeys	4.5m	3m
5-8 storeys	6m	3m

Table 2. Upper level building setbacks and building separation within a site - all precincts

Design principles

- Active ground floor frontages required to all sites fronting Heidelberg Road
- Multiple entrances to buildings on large sites is encouraged
- Weather protection at entrances to buildings within Precincts 1, 2 and 3A (within 3 metre ground floor setback)
- Continuous weather protection provided within Precinct 3B
- Incorporate weather protection at entrances within the front setback and continuous weather protection in the Heidelberg Road Neighbourhood Activity Centre.
- Locate all future carparking underground in basements.
- Locate vehicular crossovers from rear lanes or side streets where possible.
- Rationalise the number of existing crossovers to Heidelberg Road where multiple crossovers exist on single sites.
- No additional vehicular crossovers are supported on Heidelberg Road.

Table 3. Design principles - all sites

Discretionary controls
 Mandatory controls

4.2 Extent of mandatory controls

The role of mandatory controls is guided through planning practice notes 59 and 60 (refer call-out box).

The detailed testing within this report leads to a recommendation for a combination of discretionary and mandatory controls on strategic sites, and mandatory controls on all other sites.

This is considered appropriate as:

- The mandatory controls support strategic objectives for development intensification.
- The rear interface controls for all development have been rigorously tested, are appropriate for the majority of proposals and provide for the preferred balance between development intensification and protection of amenity.
- The mandatory controls provide an efficient outcome - considering the interface between commercial and sensitive residential precincts, without certainty there will continue to be a significant number of objections and lack of clarity on the preferred development outcome. This has already been demonstrated through 3 recent VCAT cases.
- The majority of proposals not in accordance with the mandatory provisions will be clearly unacceptable. Considering the combination of a poor quality, heavily trafficked arterial and sensitive residential interfaces, the detailed testing in this report demonstrates the limited range of circumstances that provide a positive outcome to both interfaces.

Planning practice note 59: The role of mandatory provisions in Planning Schemes

This practice note sets out the criteria that can be used to decide whether mandatory provisions may be appropriate in planning schemes in Victoria.

It acknowledges that Victorian planning schemes are predominantly performance-based, with schemes specifying a clear objective and often a preferred development outcome while providing a degree of flexibility on how the objective is achieved.

Mandatory provisions are noted as the exception, however in circumstances where a mandatory provision will provide certainty and ensure a preferable and efficient outcome they can be supported.

The criteria that must be addressed include:

- Is the mandatory provision strategically supported (is there strategic basis)?
- Is the mandatory provision appropriate to a majority of proposals?
- Does the mandatory provision provide for the preferred outcome?
- Will the majority of proposals not in accordance with the mandatory provision be clearly unacceptable?
- Will the mandatory provision reduce administrative costs?

Planning practice note 60: Height and setback controls for activity centres

This practice note provides guidance on the state government's preferred approach to the application of height and setback controls for activity centres. It has been updated in response to the preliminary findings from the recent Activity Centre Pilot program.

It acknowledges the need to support development intensification. It notes that 'height and setback controls can be appropriate so long as they are not aimed at restricting the built form, but at facilitating good design outcomes'. The application of height and setback controls must be 'soundly based on the outcomes of strategic research and background analysis that demonstrates consistency with state and regional policy and includes a comprehensive built form analysis.

The Practice Note states that a combination of discretionary and mandatory height and setback controls may be appropriate. Discretionary height and setback controls are preferred, with mandatory provisions supported when they are justified by robust and comprehensive strategic work, or where exceptional circumstances warrant their introduction.

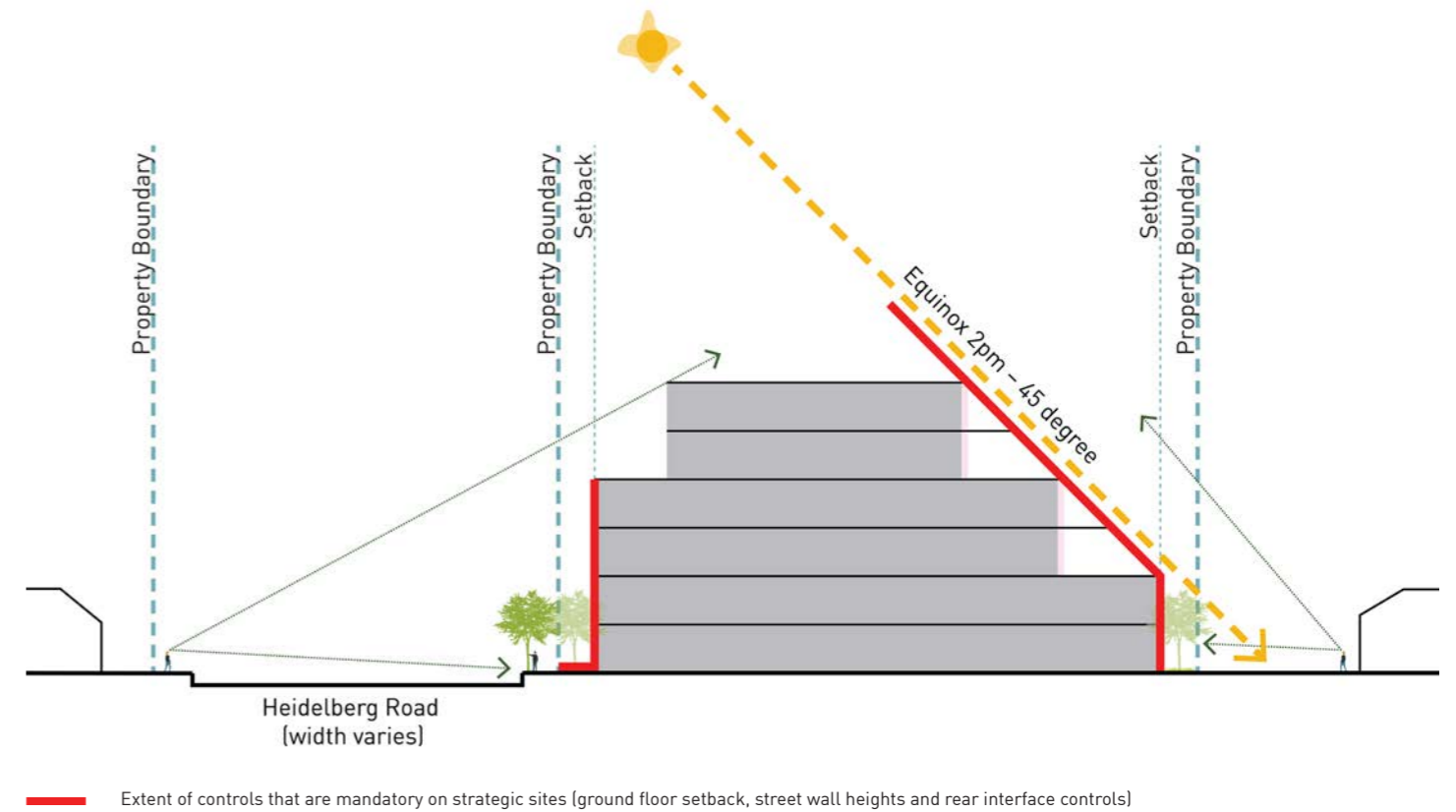


Figure 150. Summary of mandatory controls on strategic development sites. All controls are proposed as mandatory on all other sites

Appendix A - Overshadowing assessment

The overarching urban design strategy adopts the position that protecting existing secluded private open space to meet the requirements of Clause 54 and 55 is appropriate.

The following boundary wall heights have been tested to determine the maximum wall height that delivers this requirement.

- 4 metres
- 7.2 metres (4m commercial with one floor above)
- 8 metres (2 x 4m commercial floors)
- 12 metres (3 x 4m commercial floors)

The impact of these different boundary wall heights at the summer and winter solstice have been provided for illustrative purposes only.

Shadow study – Spring

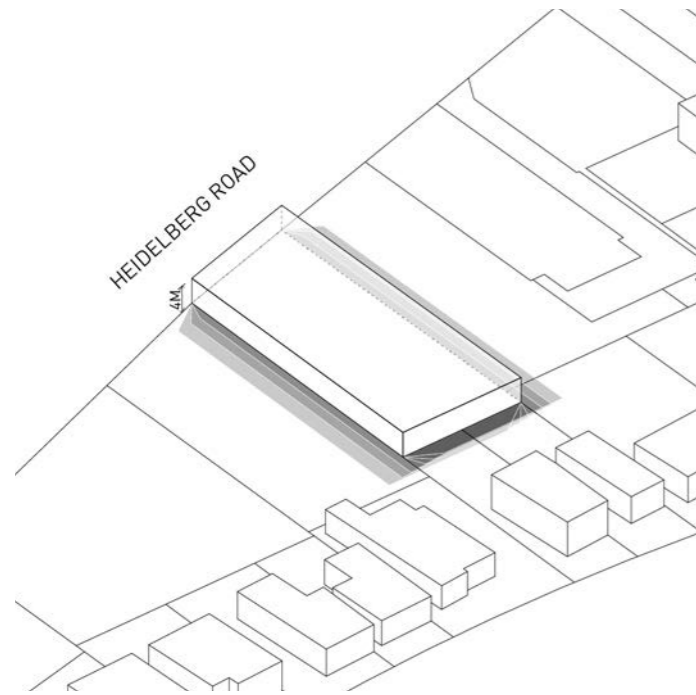


Figure 151. Extent of overshadowing of a 4 metre high wall on boundary. The overshadowing impacts are minimal.

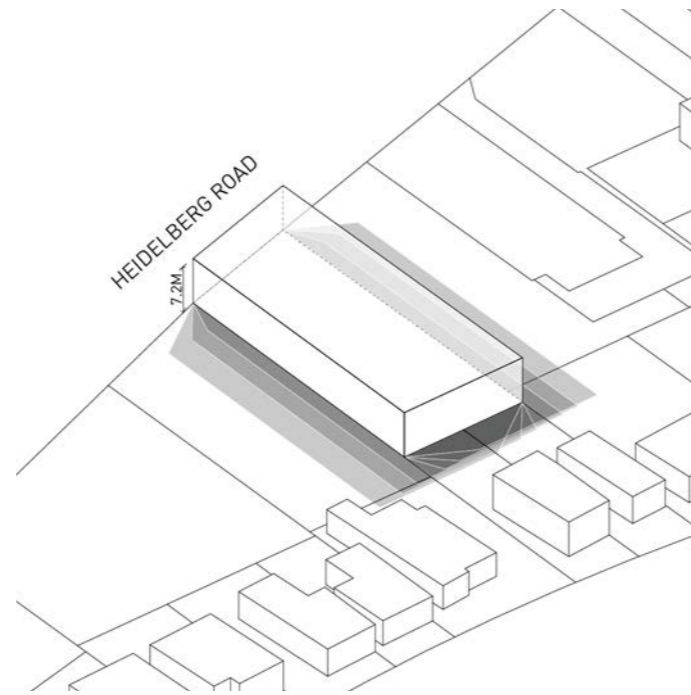


Figure 153. Extent of overshadowing of a 7.2 metre high wall on boundary. The overshadowing impacts are increased, however the minimum requirements of Clause 54 and 55 can be met.

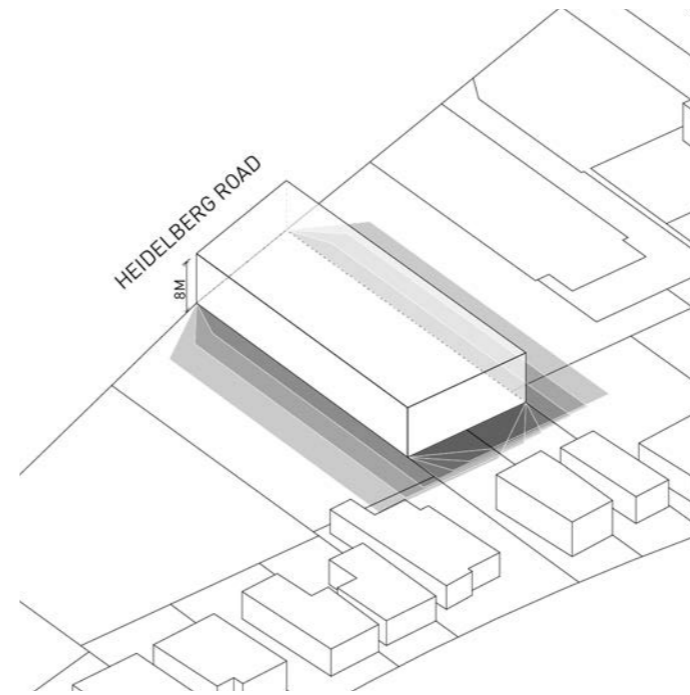


Figure 152. Extent of overshadowing of a 8 metre high wall on boundary. The overshadowing impacts are increased, however the minimum requirements of Clause 54 and 55 can be met.

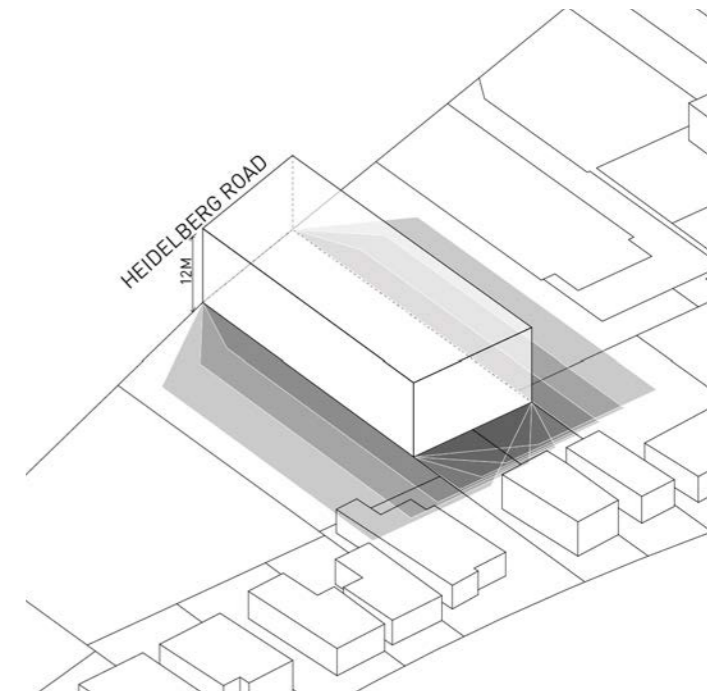


Figure 154. Extent of overshadowing of a 12 metre high wall on boundary. The overshadowing impacts are increased and the minimum requirements of Clause 54 and 55 can no longer be met.

Shadow study - Winter

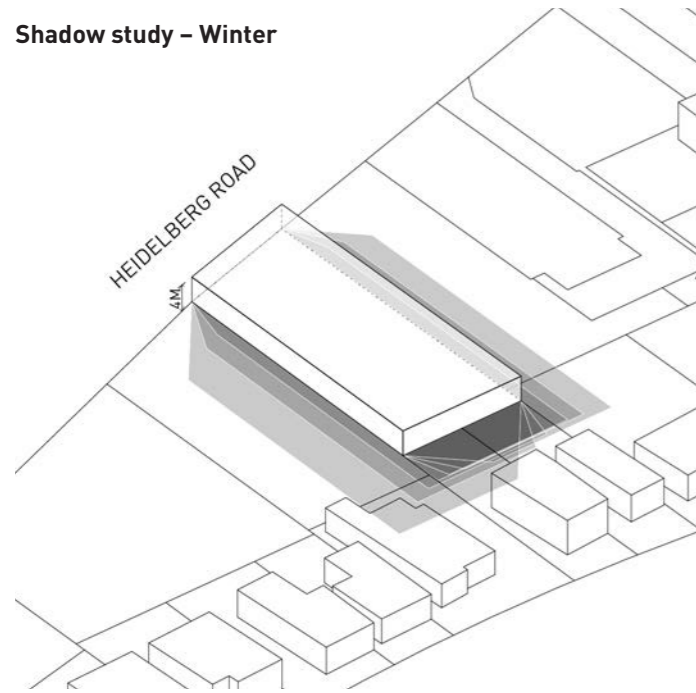


Figure 155. 4 metre high boundary wall

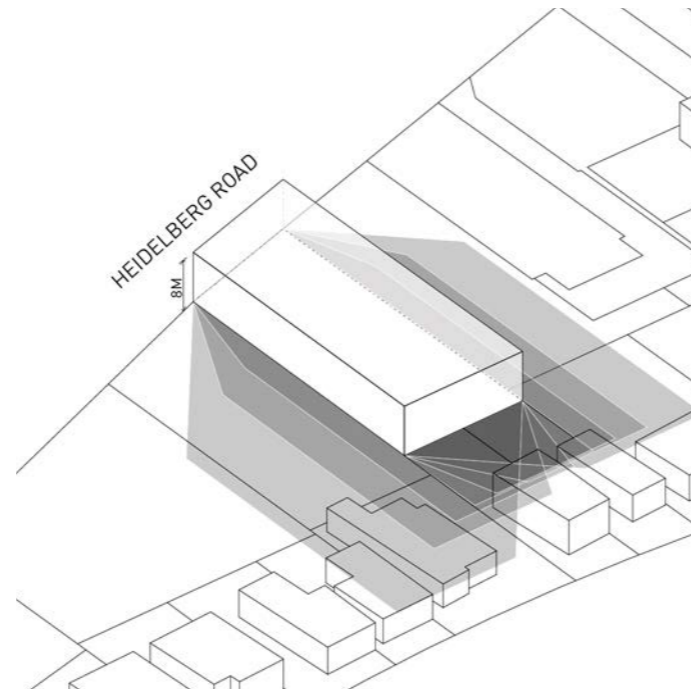


Figure 156. 7.2 metre high boundary wall

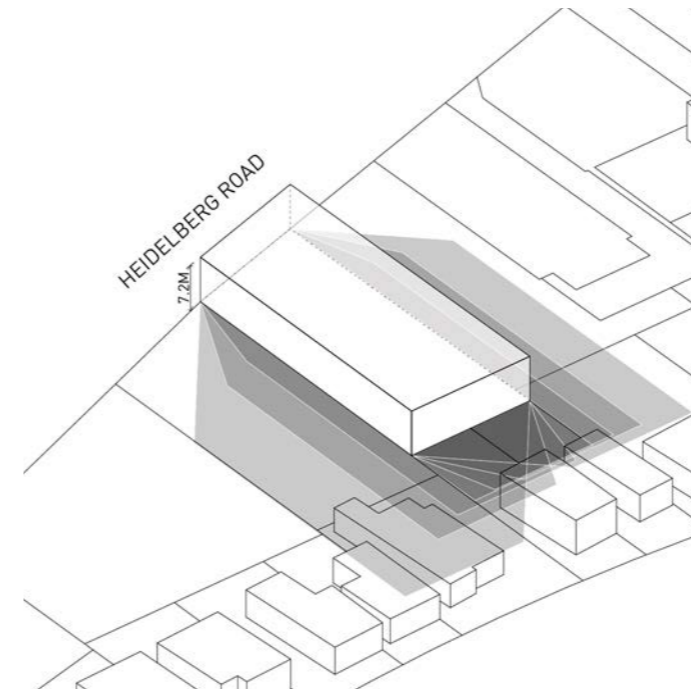


Figure 157. 8 metre high boundary wall

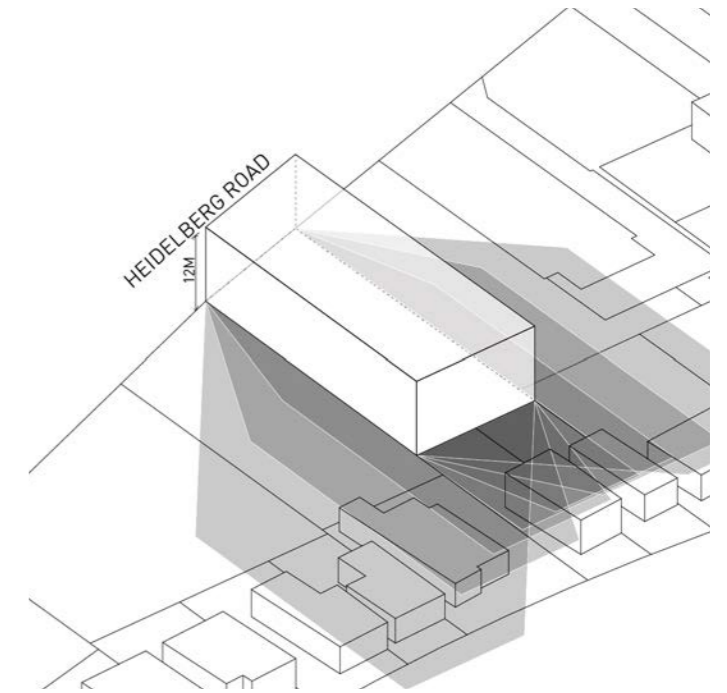


Figure 158. 12 metre high boundary wall

Shadow study - Summer

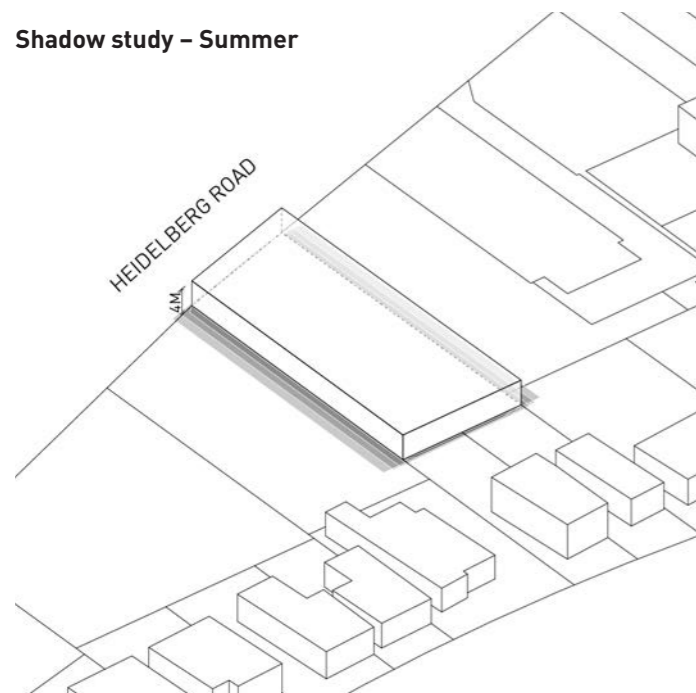


Figure 159. 4 metre high boundary wall

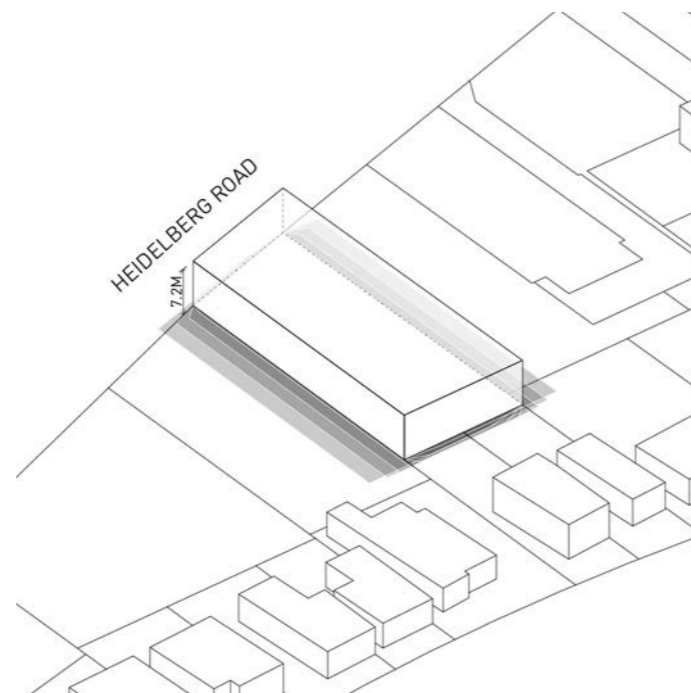


Figure 161. 7.2 metre high boundary wall

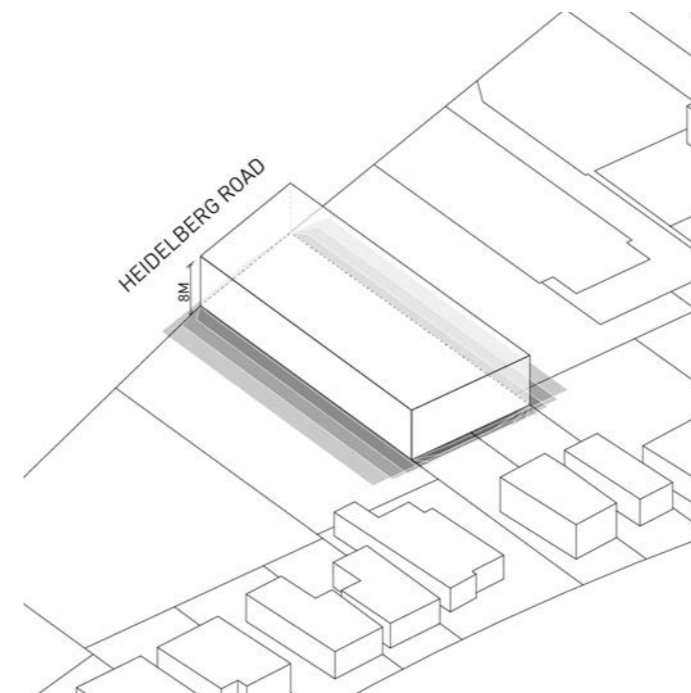


Figure 160. 8 metre high boundary wall

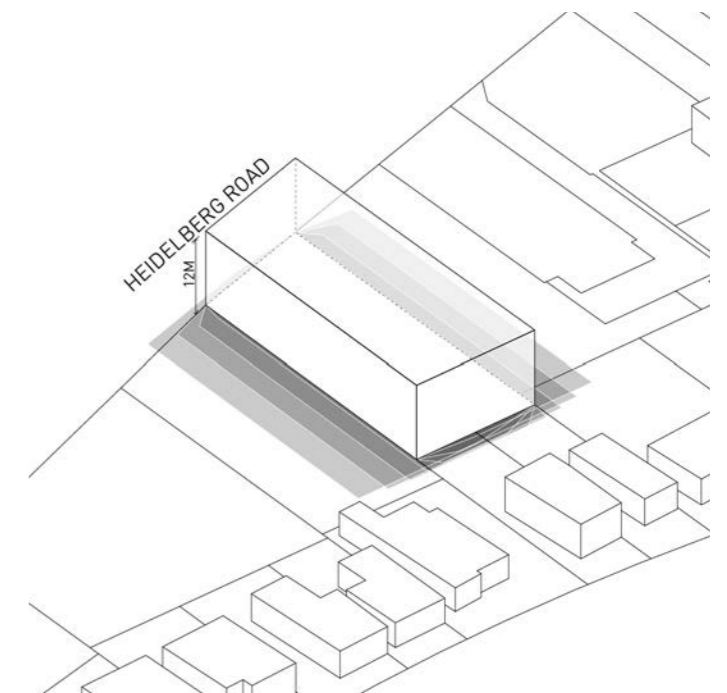


Figure 162. 12 metre high boundary wall

Precinct 1

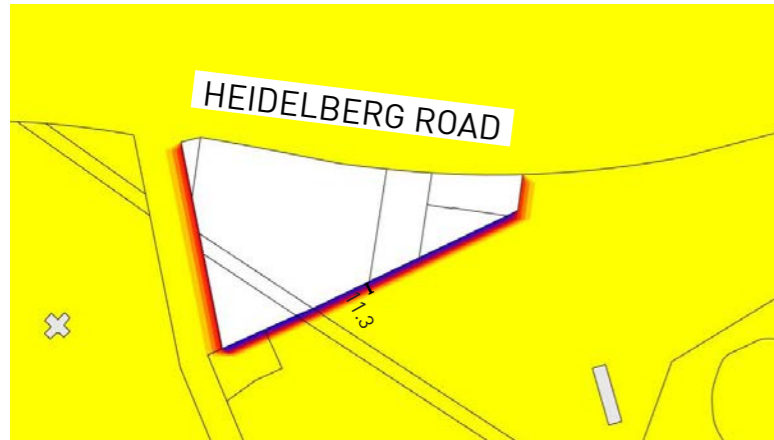


Figure 166. 7.2 metres rear street wall height

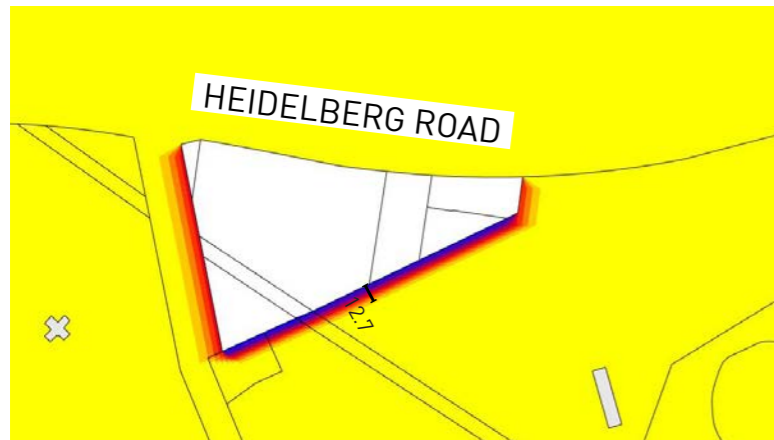


Figure 167. 10.4 metres rear street wall height

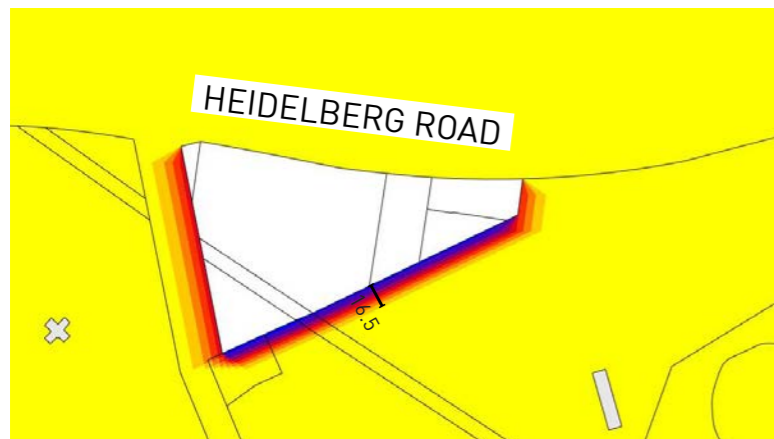


Figure 168. 13.6 metres rear street wall height

Precinct 3B



Figure 163. 4 metres rear street wall height



Figure 164. 7.2 metres rear street wall height with setback

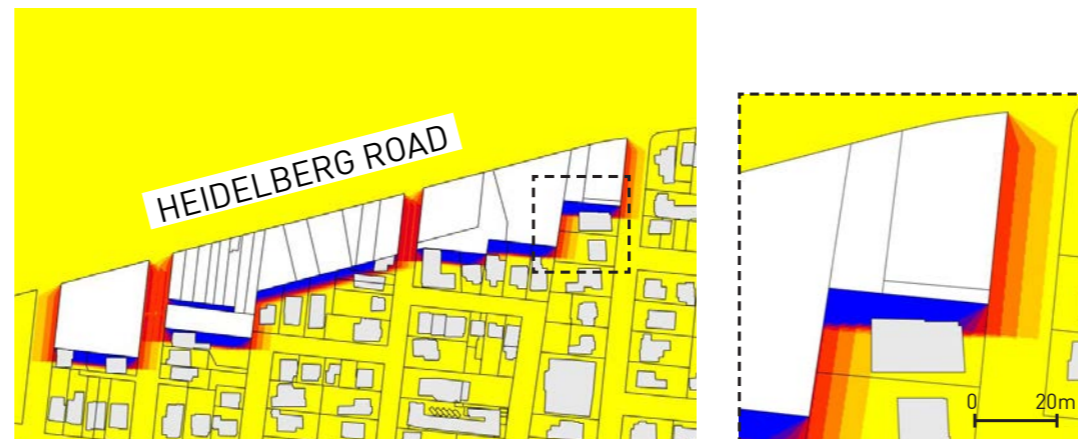


Figure 165. 10.4 metres rear street wall height



Precinct 2



Figure 171. Sunlight hours analysis against Clause 54/55 requirements - 8 metres rear boundary wall height (D=7.7 metres)

Floor heights:
Ground floor - 4M (Commercial)
Upper floors - 4M (Commercial)

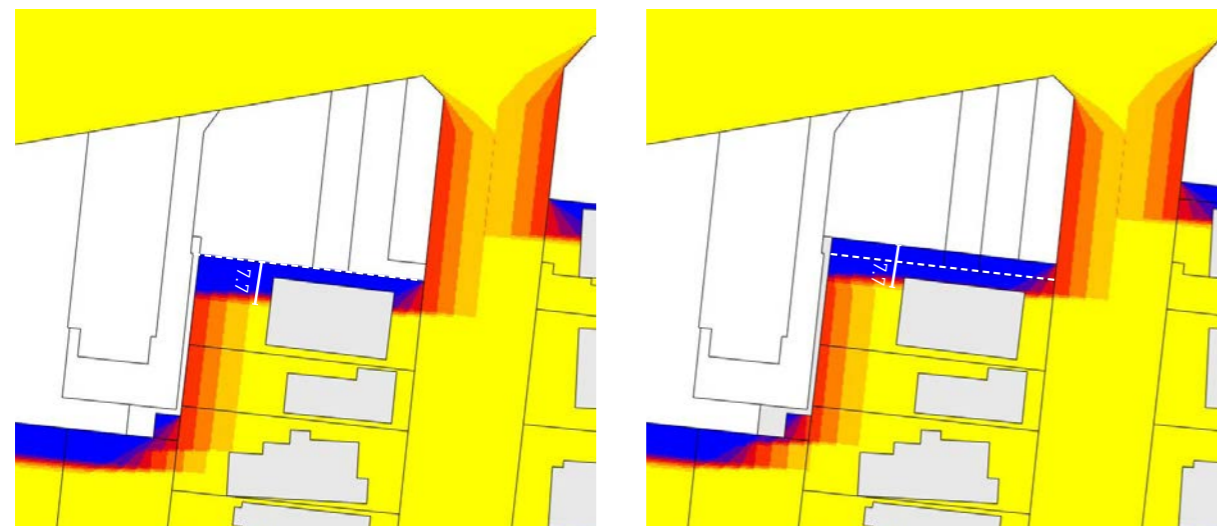


Figure 172. Comparison setback option on rear to side boundary - no setback (left) & 3 metres setback (right)



Figure 169. 4 metres rear street wall height (D=3.9 metres)



Figure 170. 12 metres rear street wall height (D=11.6 metres)

Precinct 3A

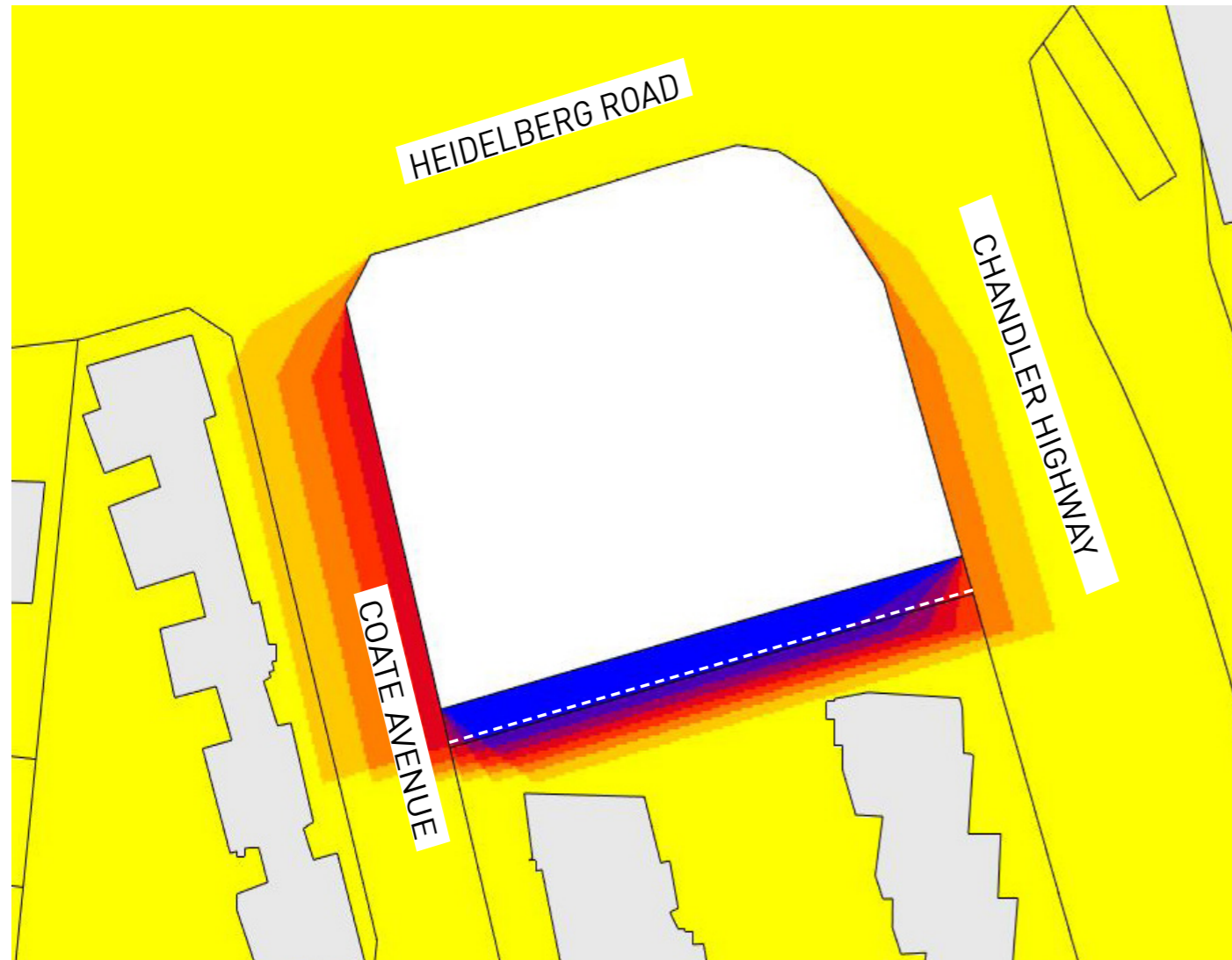


Figure 176. Sunlight hours analysis - 10.4 metres rear street wall height with 4.5m setback

Floor height:
 Ground floor - 4M (Commercial)
 Upper floors - 3.2M (Residential)

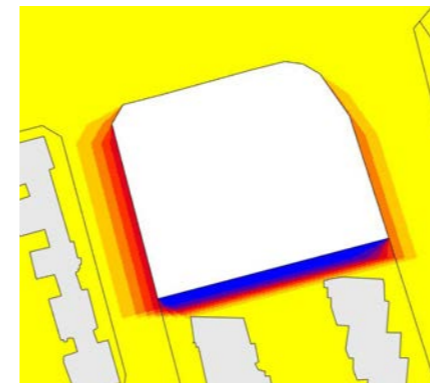


Figure 173. 7.2 metres rear street wall height

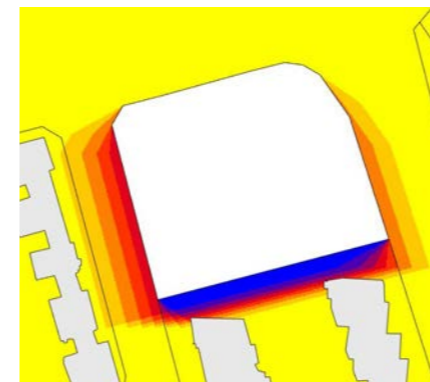


Figure 174. 10.4 metres rear street wall height

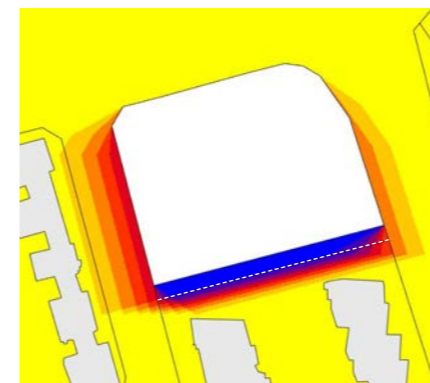
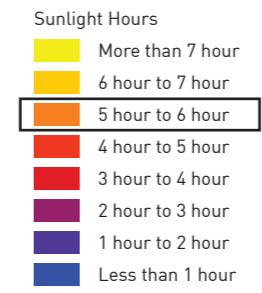


Figure 175. 10.4 metres rear street wall height with 3m setback



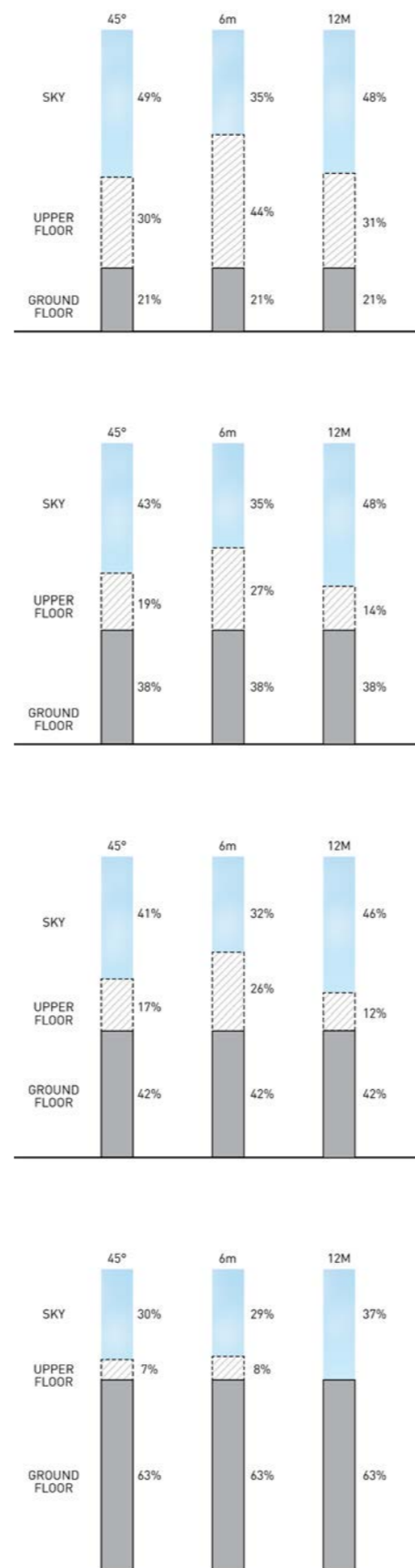
Appendix B - Visual Impact Assessment

Visual impact – 5 storeys (view from 15m)

Table 4. Visual impact assessment of each scenario (5 storeys - view from 15m)

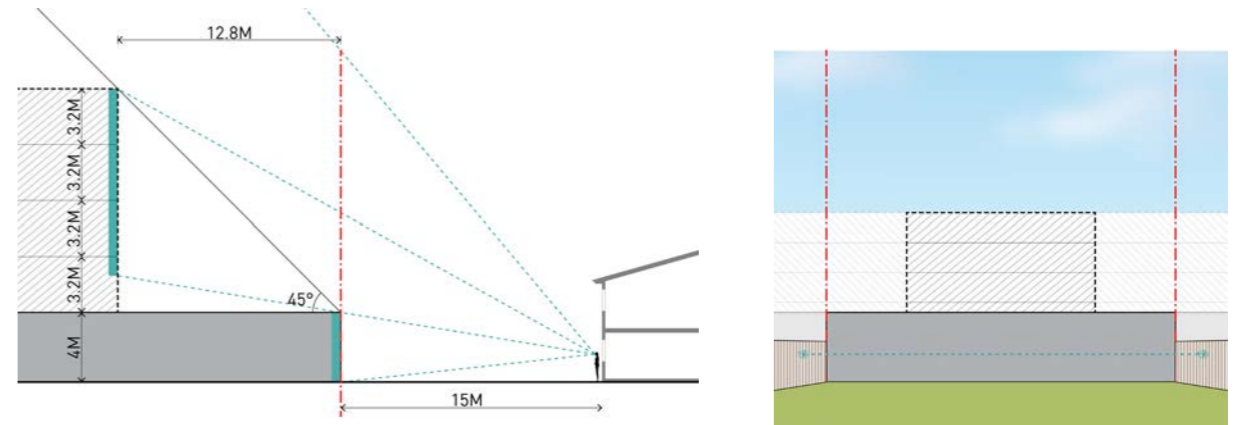
	45 degree angle	6 metre setback	12 metre setback
Urban Design Principle	4m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Achieved	Achieved	Achieved
Urban Design Principle	7.2m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Achieved	Achieved
Urban Design Principle	8m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Achieved	Achieved
Urban Design Principle	12m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Achieved

Comparison

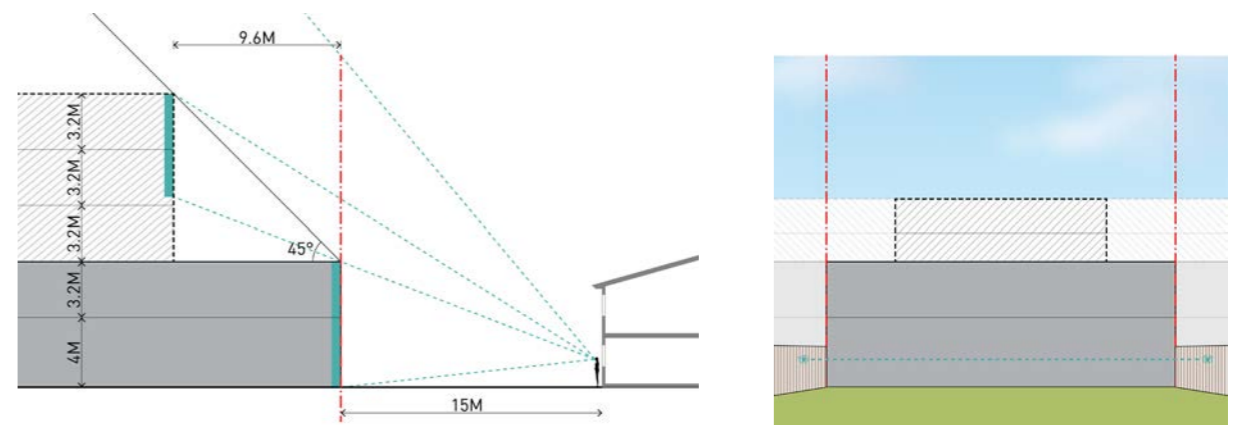


Upper level rear setback: 45 degree angle

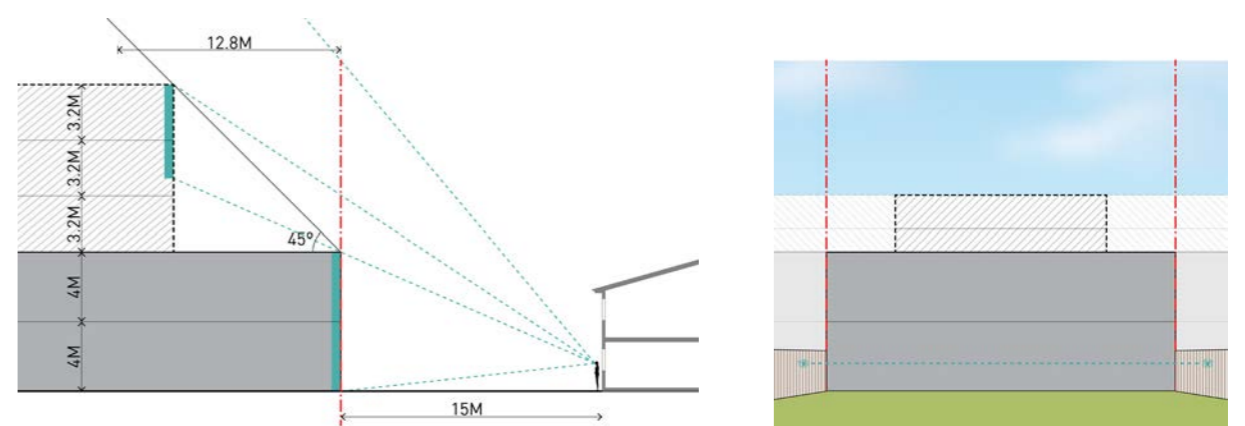
4m



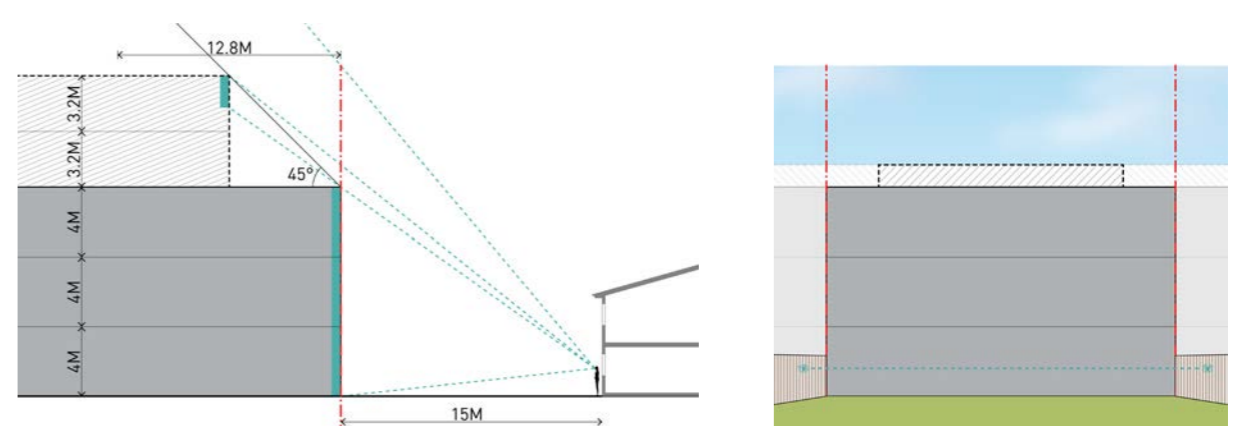
7.2m



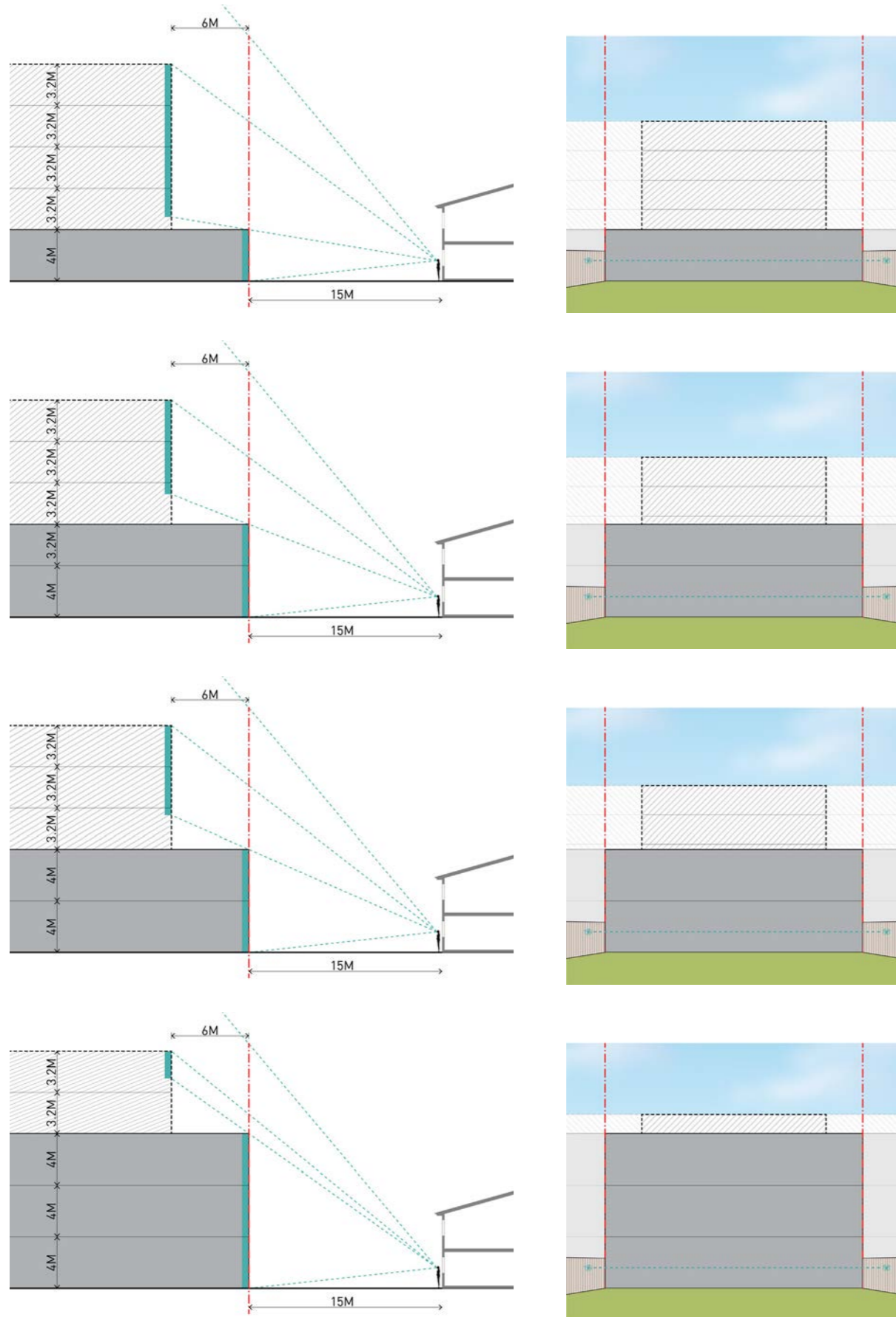
8m



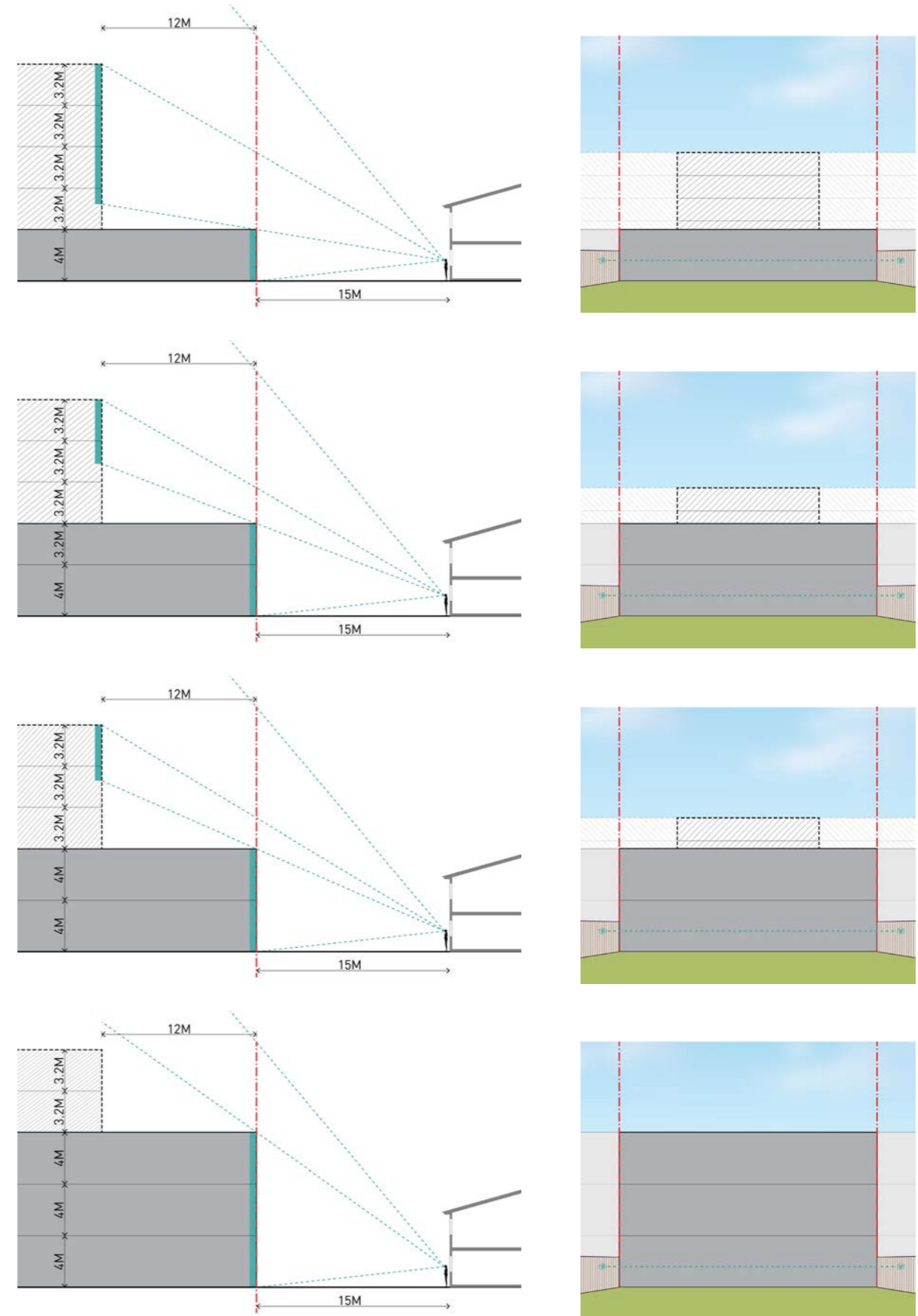
12m



Upper level rear setback: 6 metres



Upper level rear setback: 12 metres



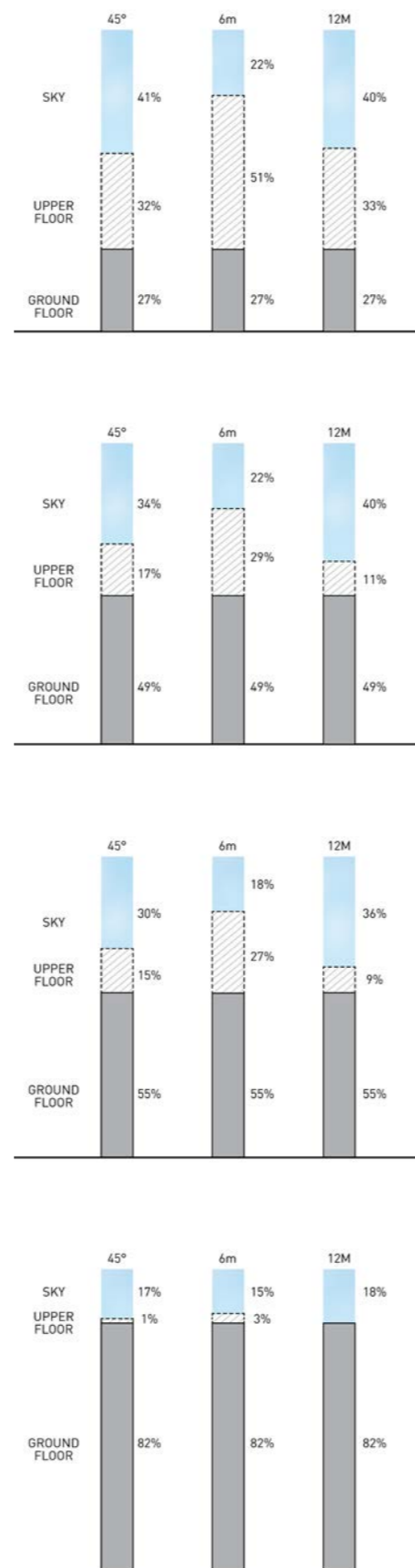
Appendix B - Visual Impact Assessment

Visual impact – 5 storeys (view from 11m)

Table 5. Visual impact assessment of each scenario (5 storeys - view from 11m)

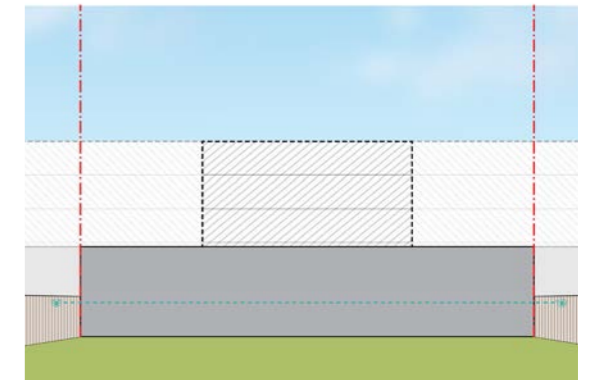
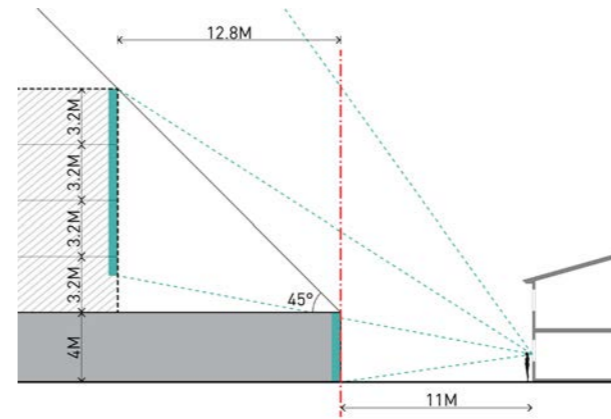
	45 degree angle	6 metre setback	12 metre setback
Urban Design Principle	4m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Not achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Achieved
Urban Design Principle	7.2m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Not achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Achieved
Urban Design Principle	8m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Achieved
Urban Design Principle	12m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Not achieved	Not achieved	Not achieved

Comparison

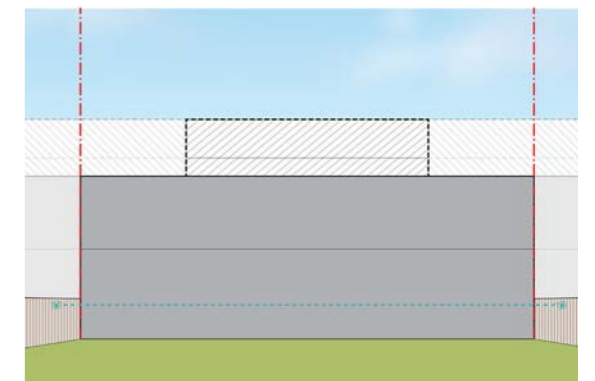
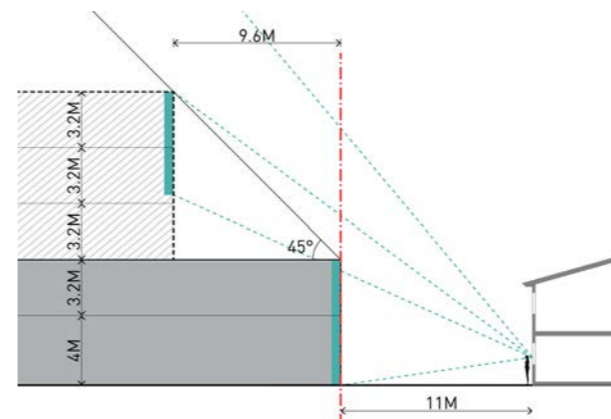


Upper level rear setback: 45 degree angle

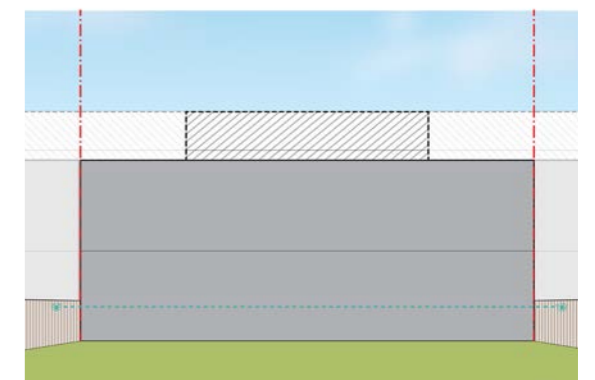
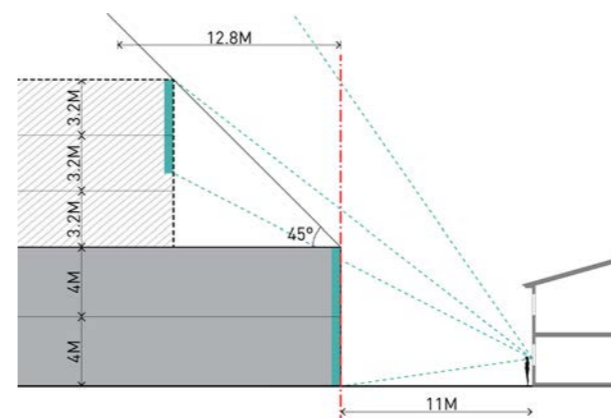
4m



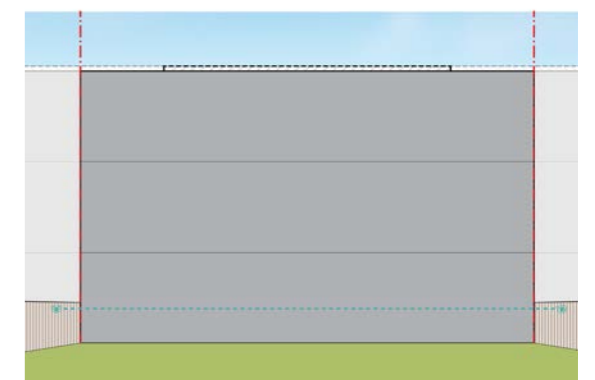
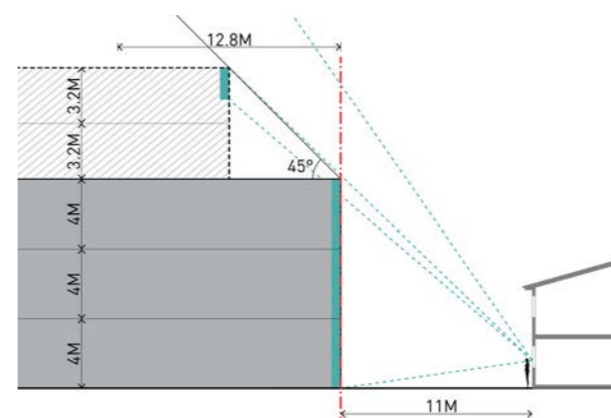
7.2m



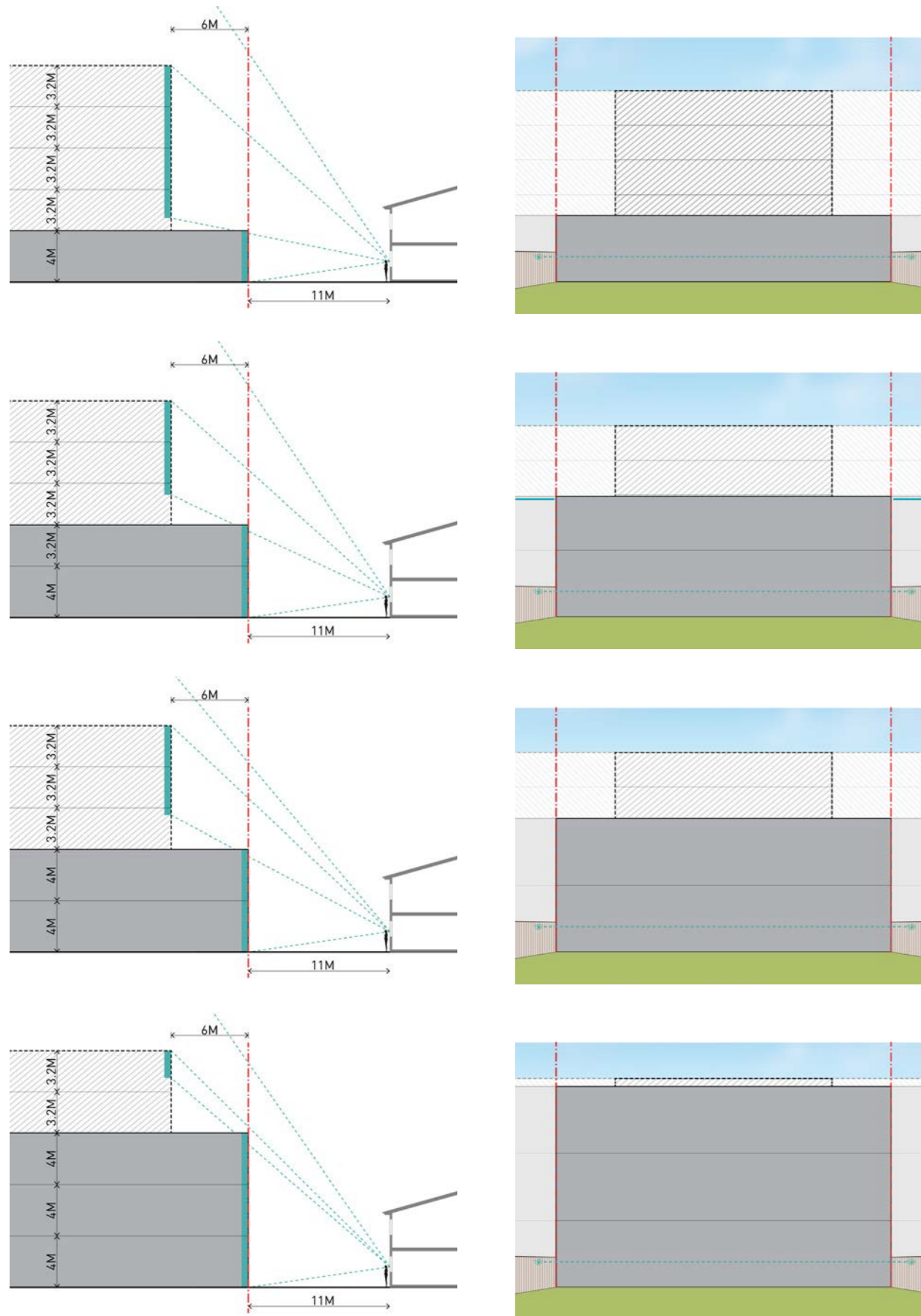
8m



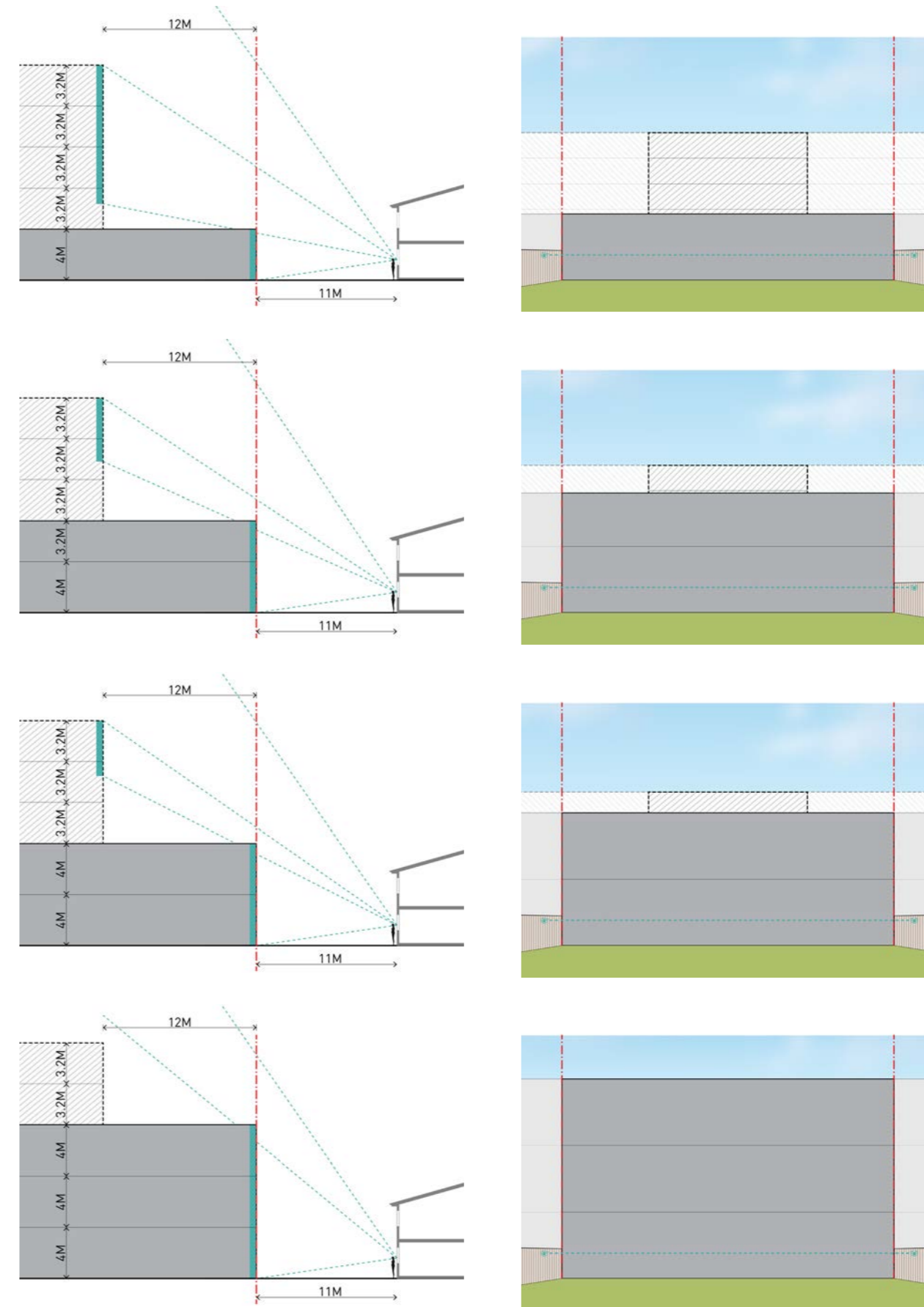
12m



Upper level rear setback: 6 metres



Upper level rear setback: 12 metres

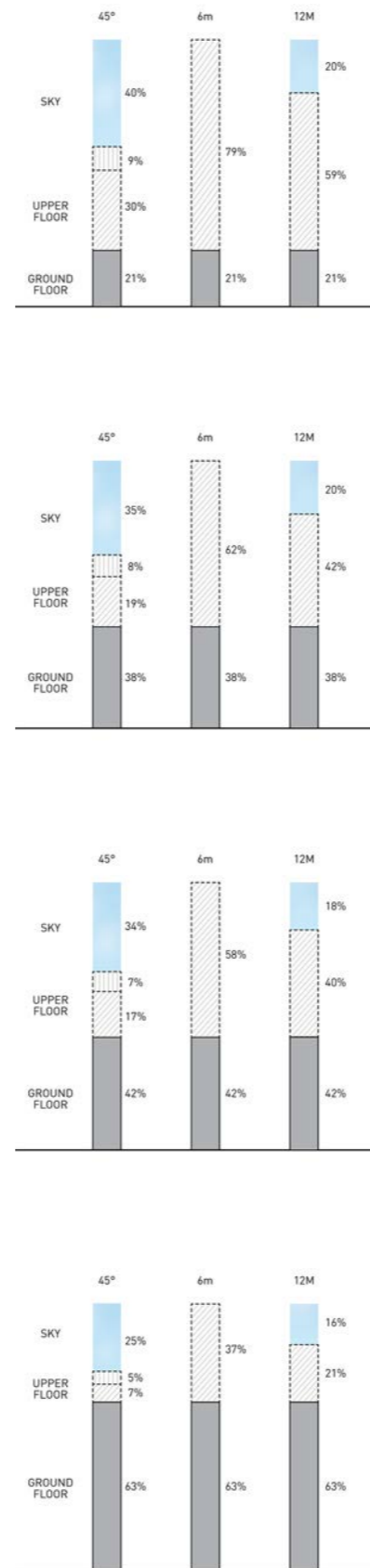


Visual impact – 8 storeys (view from 15m)

Table 6. Visual impact assessment of each scenario (8 storeys - view from 15m)

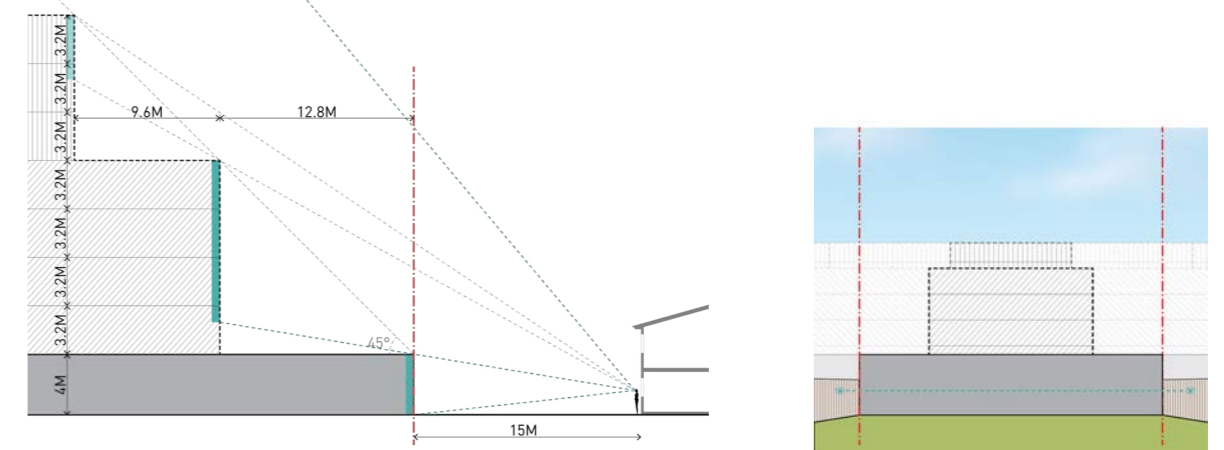
	45 degree angle	6 metre setback	12 metre setback
Urban Design Principle	4m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Not achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Not achieved
Urban Design Principle	7.2m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Not achieved
Urban Design Principle	8m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Not achieved
Urban Design Principle	12m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Achieved
Reasonable sky views (30% or more)	Not achieved	Not achieved	Not achieved

Comparison

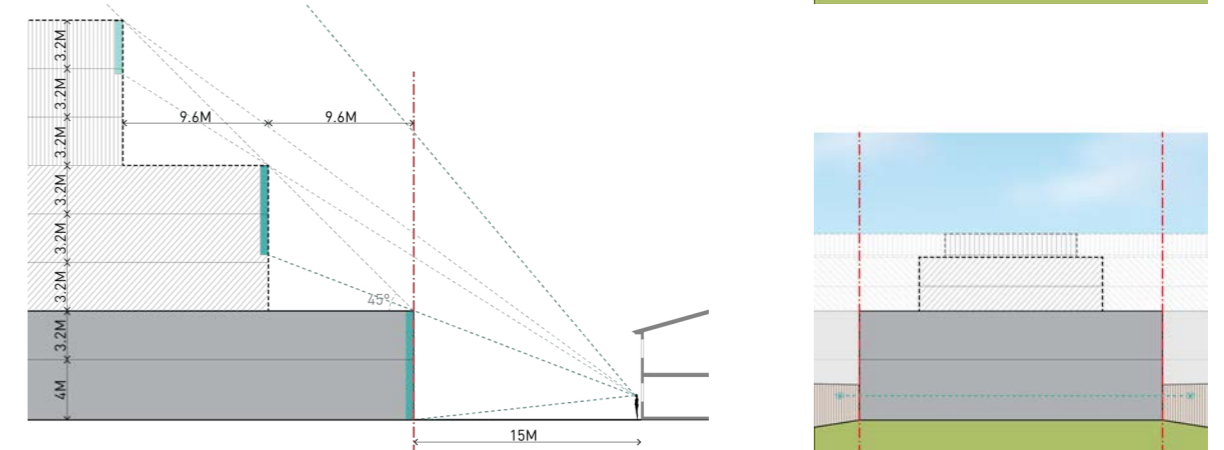


Upper level rear setback: 45 degree angle

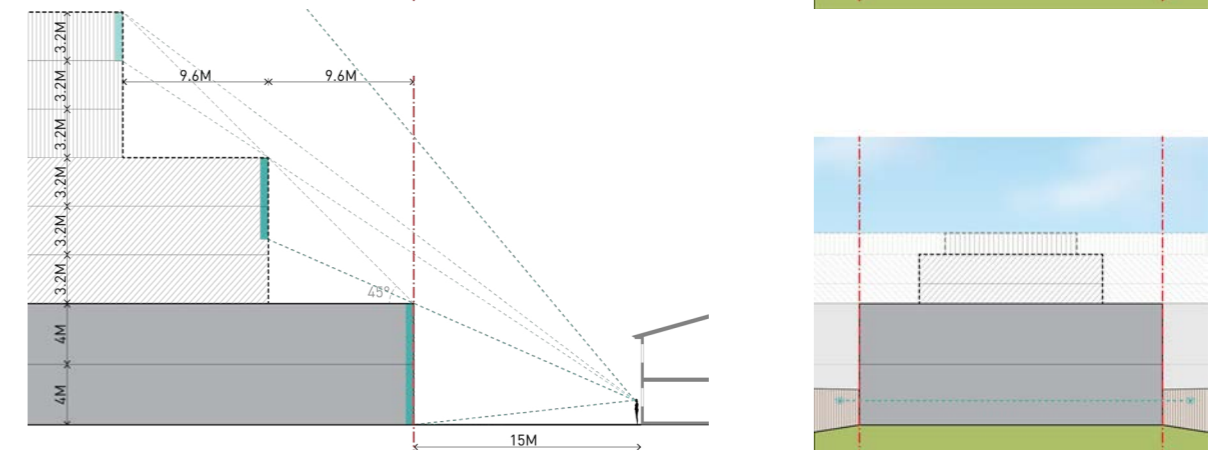
4m



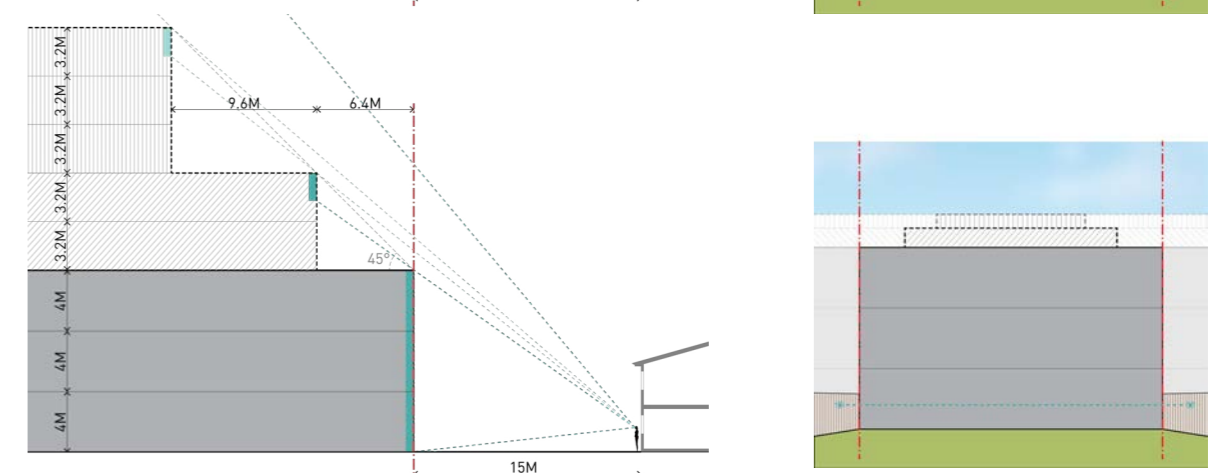
7.2m



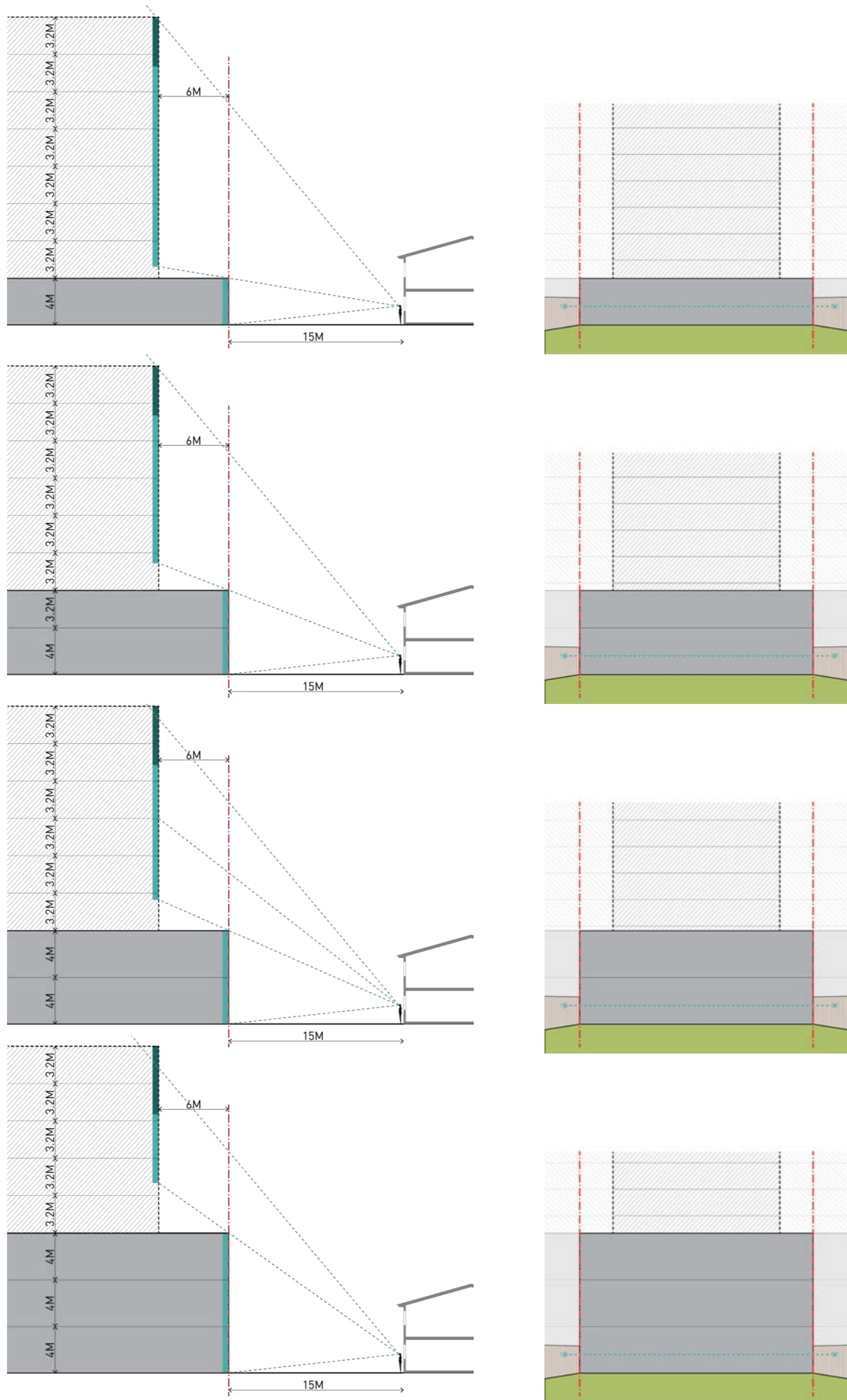
8m



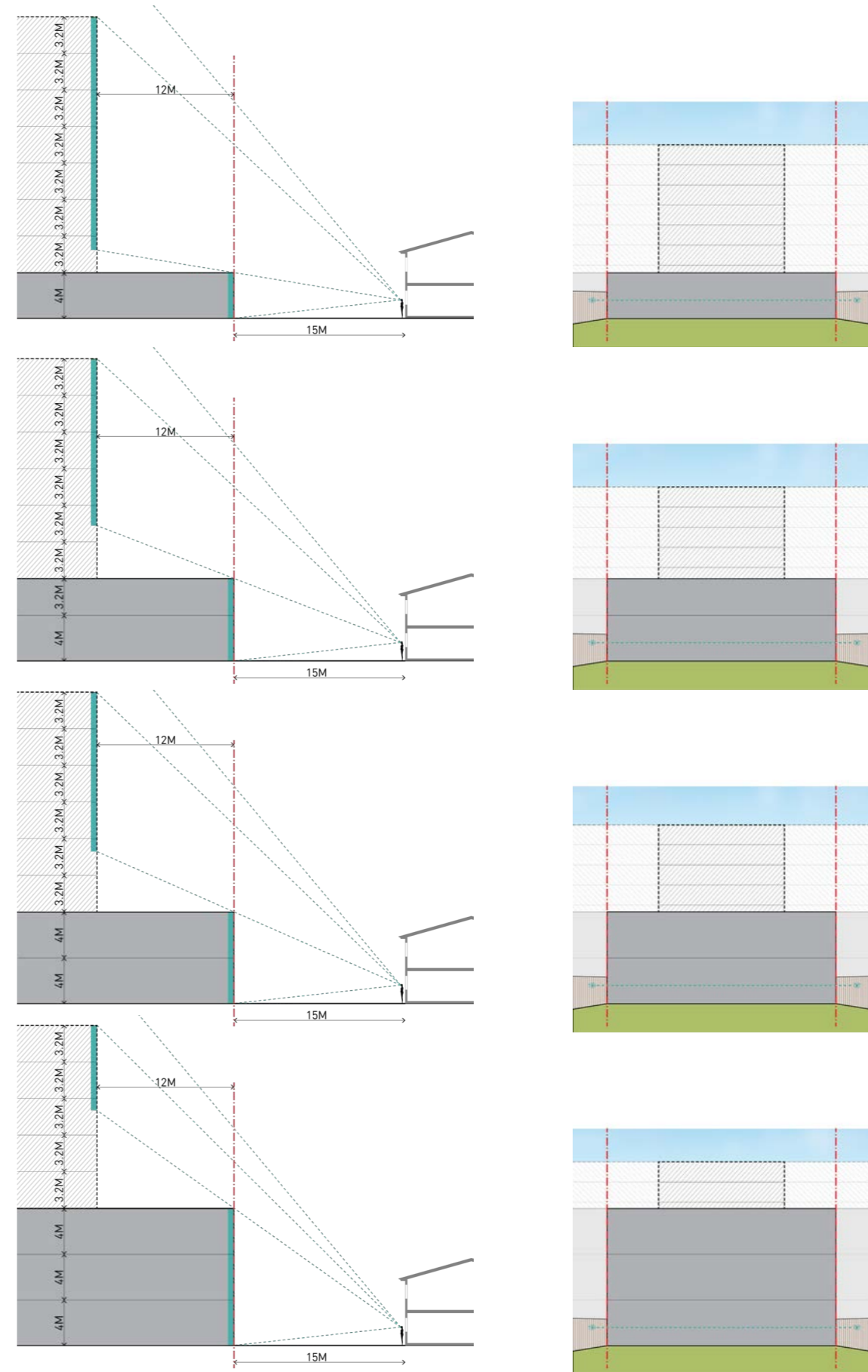
12m



Upper level rear setback: 6 metres



Upper level rear setback: 12 metres

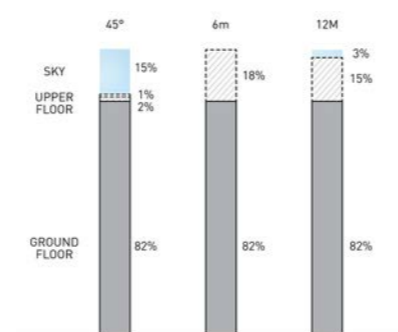
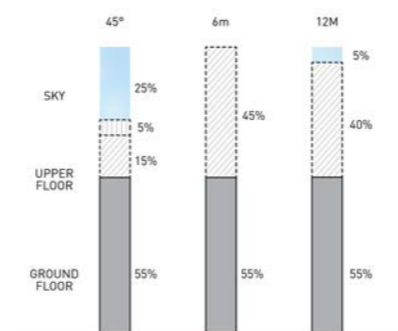
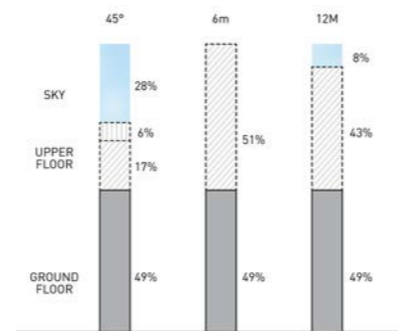
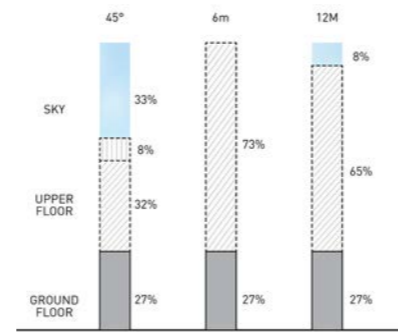


Visual impact – 8 storeys (view from 11m)

Table 7. Visual impact assessment of each scenario (8 storeys - view from 11m)

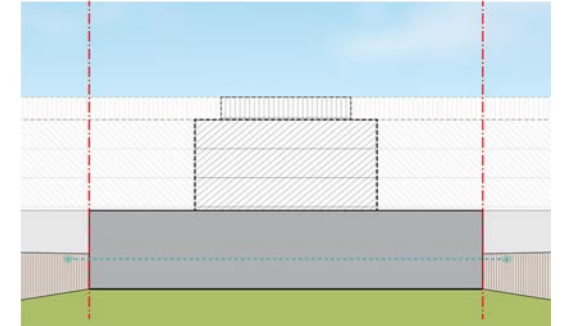
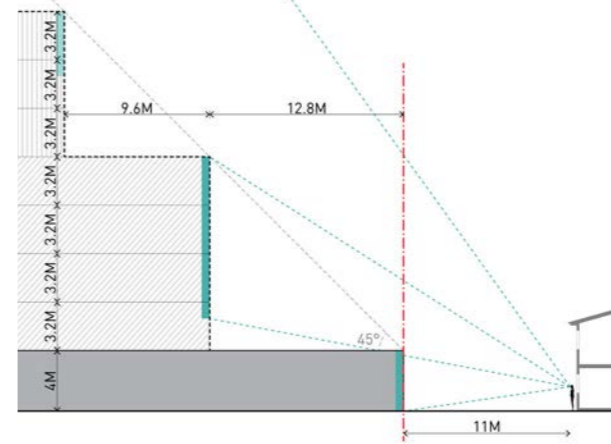
	45 degree angle	6 metre setback	12 metre setback
Urban Design Principle	4m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Not achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Achieved	Not achieved	Not achieved
Urban Design Principle	7.2m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Achieved	Achieved	Achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Not achieved	Not achieved	Not achieved
Urban Design Principle	8m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Not achieved	Not achieved
Reasonable sky views (30% or more)	Not achieved	Not achieved	Not achieved
Urban Design Principle	12m boundary wall height condition		
Boundary wall height is not too visually dominant (50% or less)	Not achieved	Not achieved	Not achieved
Upper levels are recessive (30% or less)	Achieved	Achieved	Achieved
Reasonable sky views (30% or more)	Not achieved	Not achieved	Not achieved

Comparison

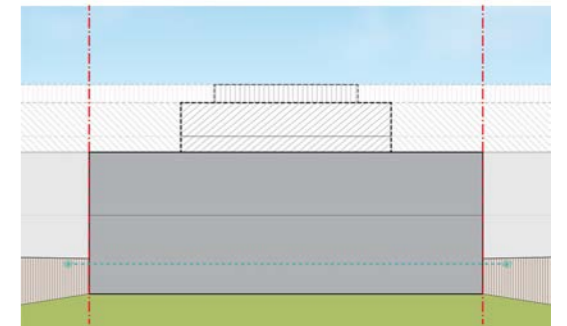
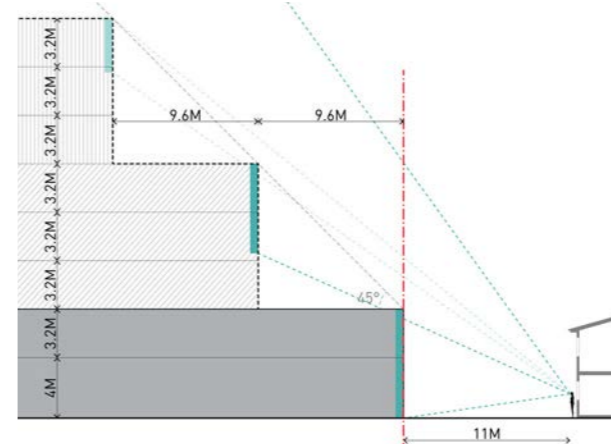


Upper level rear setback: 45 degree angle

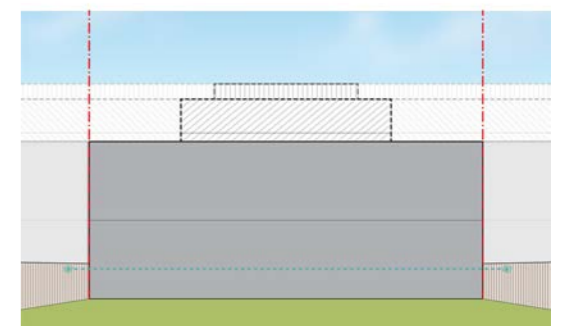
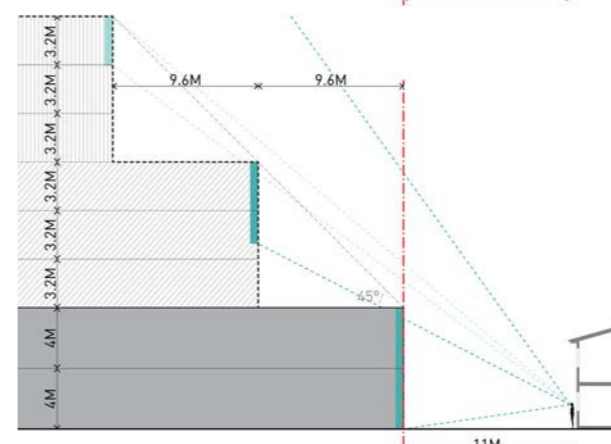
4m



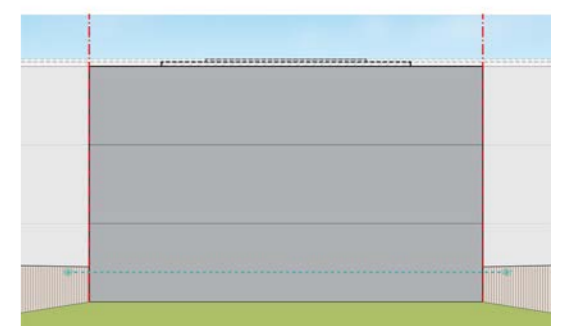
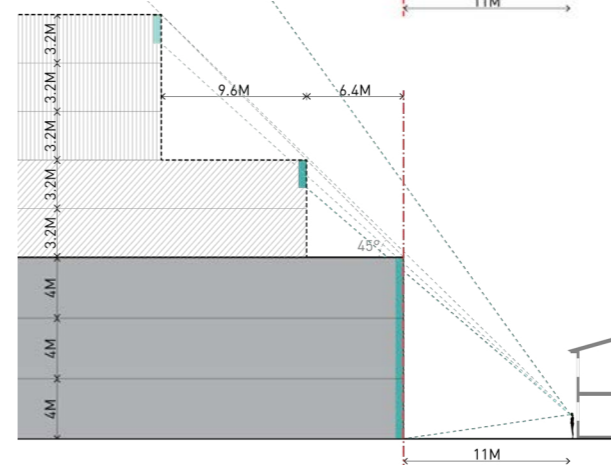
7.2m



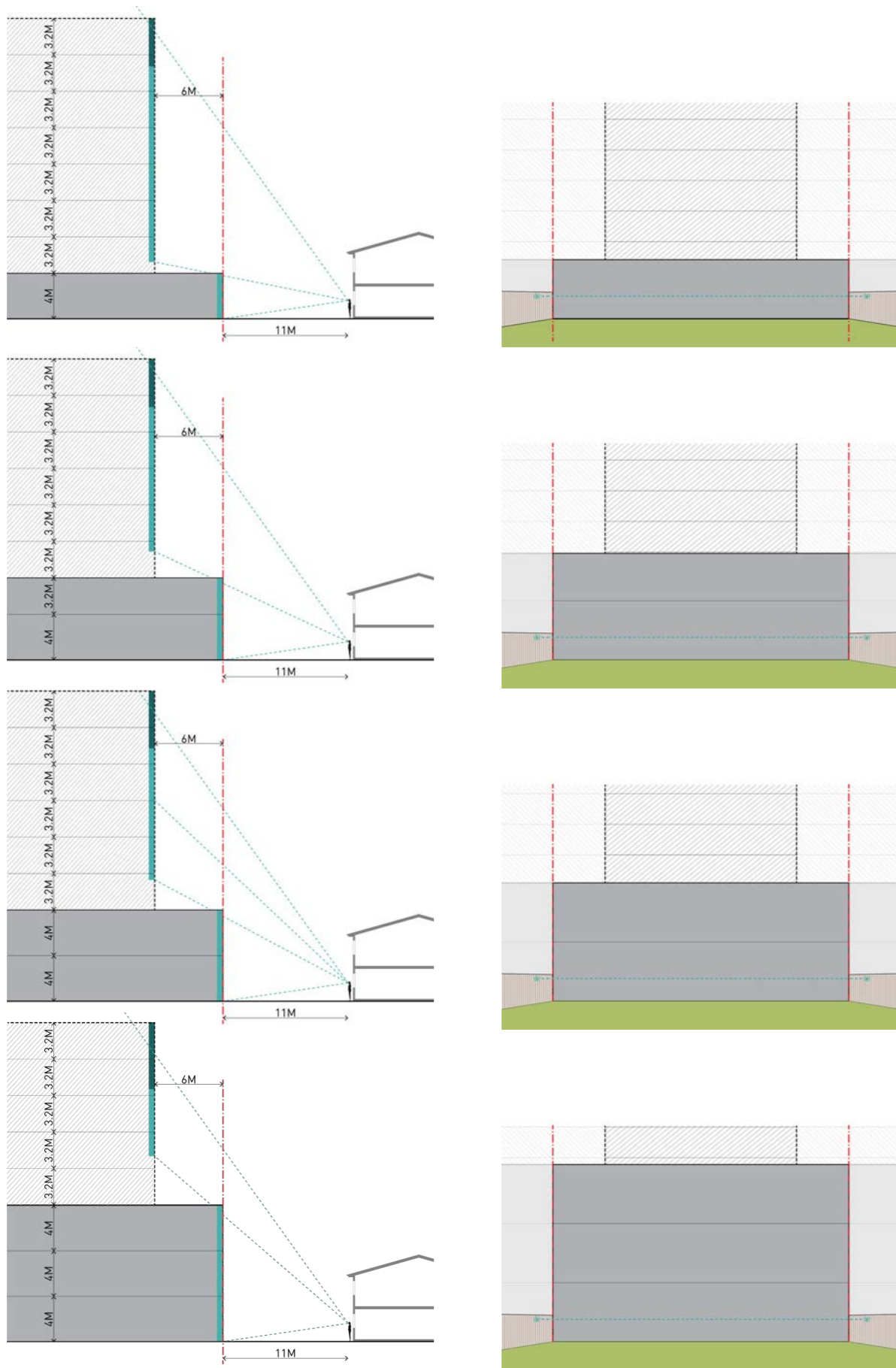
8m



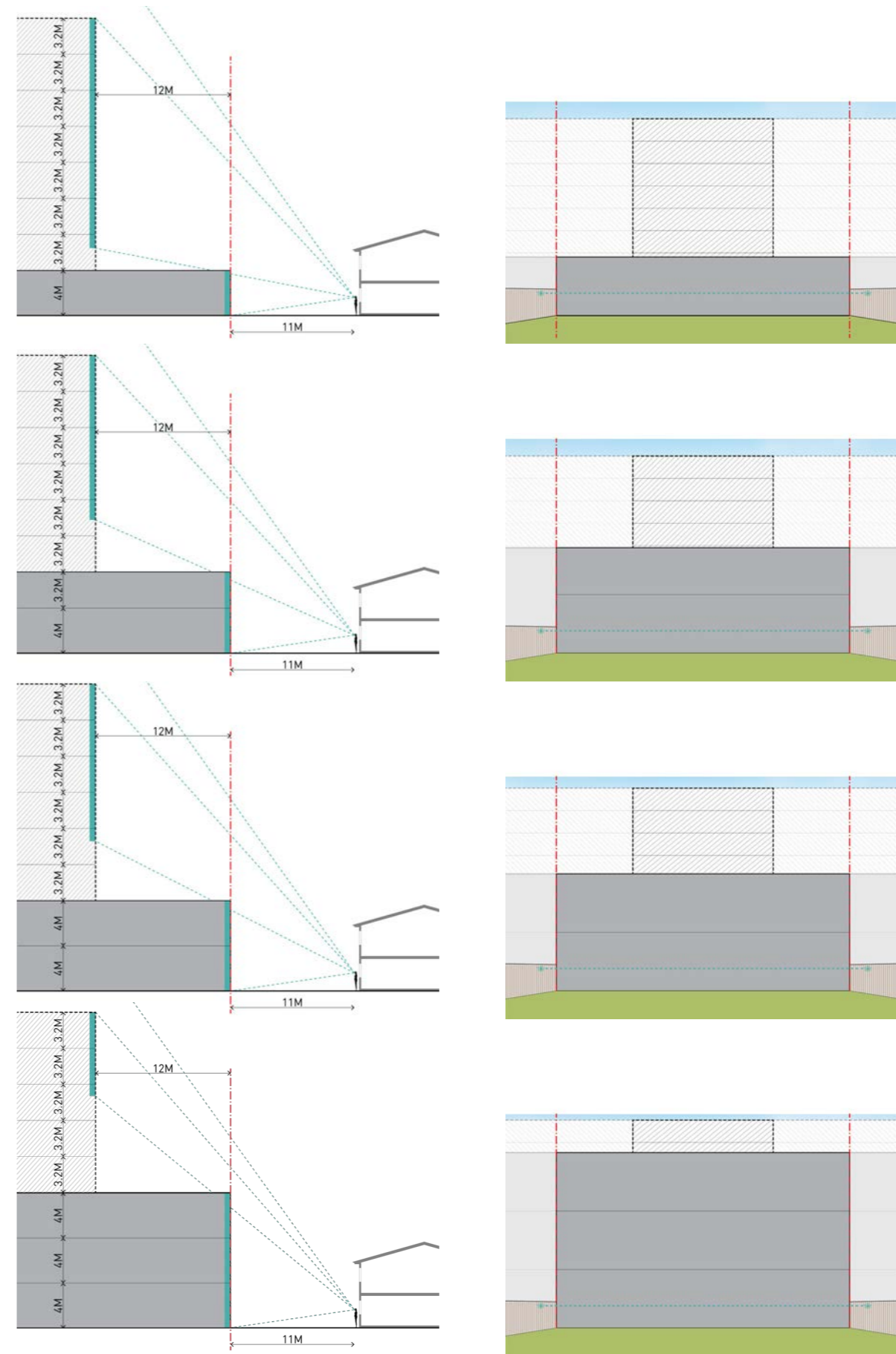
12m



Upper level rear setback: 6 metres

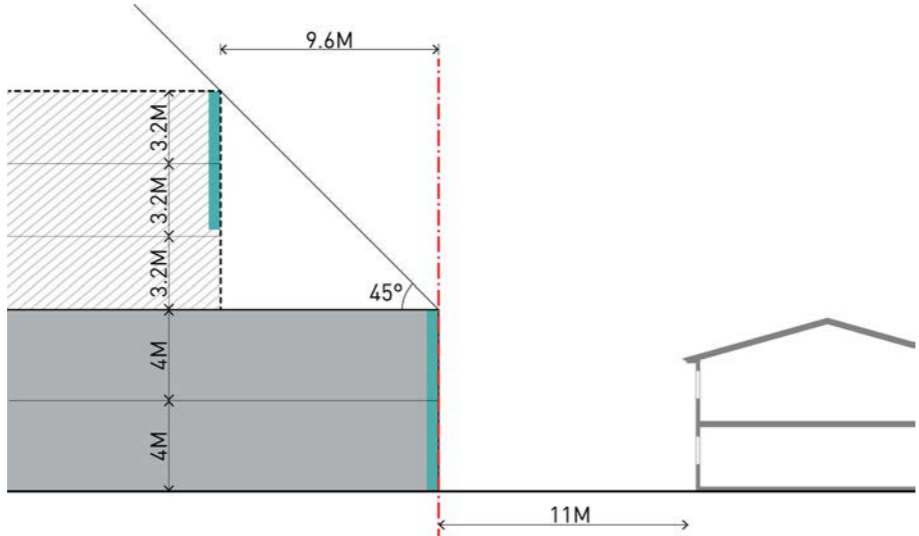


Upper level rear setback: 12 metres

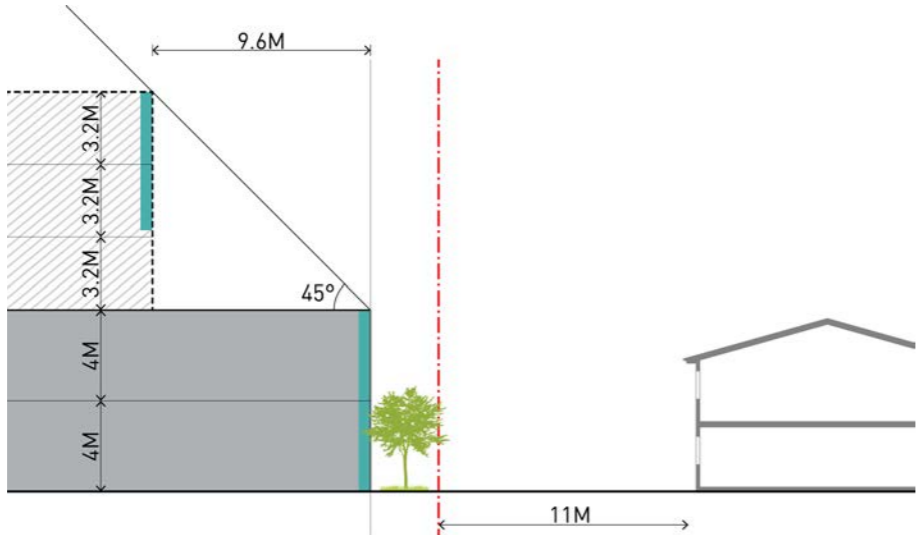


Visual impact – Introduction of a 3 metre setback

No Setback



3m Setback



View from 11 metres

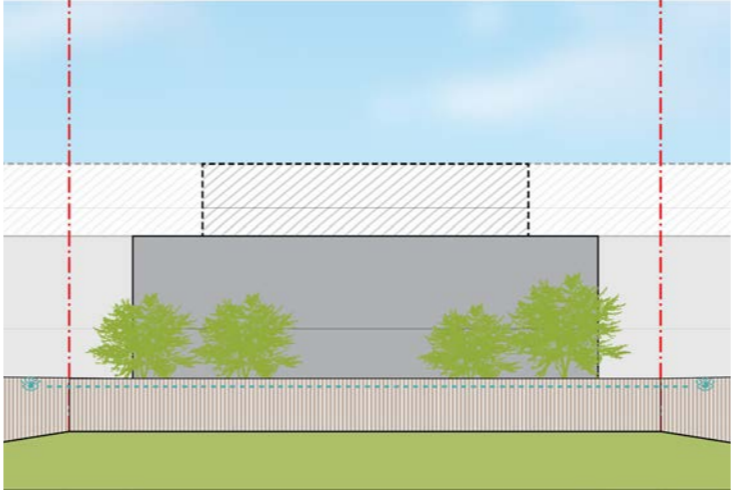
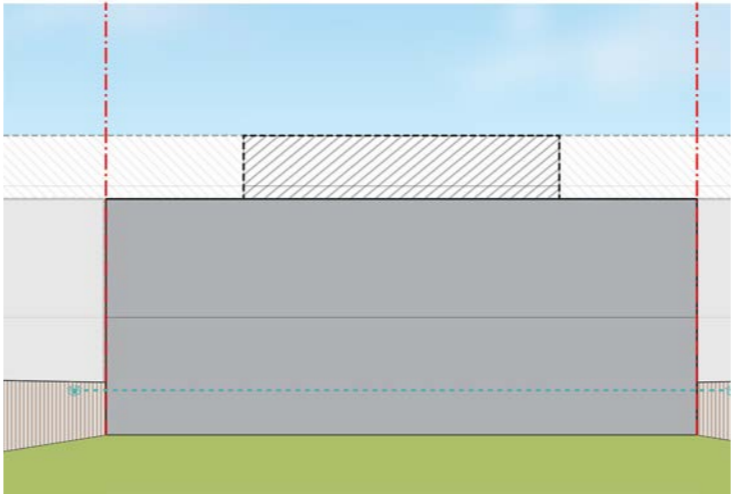


Figure 177. Impact of no setback at ground floor and introduction of a 3m setback

Appendix C - Existing examples of front ground floor setbacks

The existing range of setback conditions provides guidance on the appropriate landscape setback that should be incorporated into private development to improve the quality of the streetscape.

On balance, a 3 metre setback provides the opportunity for sufficient volume of landscape (in depth and height) to make a meaningful contribution to the street while also provide a 'hard' urban edge to provide overall street definition.



2 METRES

This example demonstrates that a 2 metre setback can provide meaningful amount of landscape, however the opportunity to plant medium sized trees is compromised by the insufficient depth with the street canopy intruding into the footpath space to a great degree.

Increasing this to 3 metres will improve the volume of space available for a tree planting.

4 METRES

Increasing the setback to approximately 4 metres starts to diminish street definition as the building is located too far from the footpath edge.



5 METRES

The loss of an defined edge to the street is further exacerbated by increasing the setback to 5 metres.



9/12 METRES

Larger setbacks create the opportunity for semi-public open space that can be utilised for more active uses such as outdoor eating, socialising or community events. These examples include at grade car parking which is not desirable in the street frontage.

0 METRE

Appropriate to align with heritage buildings and existing shopfronts in Precinct 3.

All setbacks distances are approximate, rounded to the nearest metre.

cities people love
Hodyl+Co

www.hodyl.co