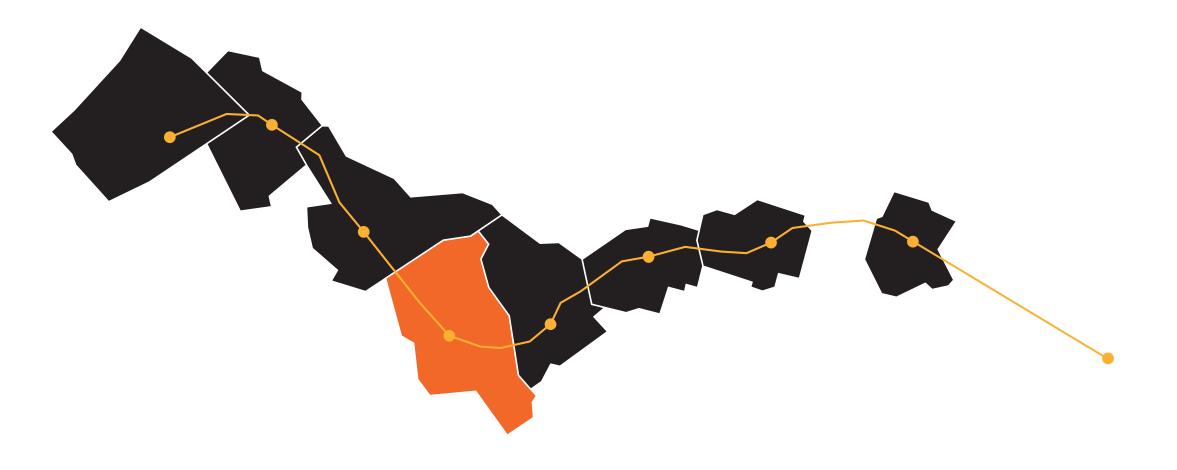
North West Rail Link Bella Vista Station Structure Plan

A Vision for Bella Vista Station Surrounds







Bella Vista Structure Plan Table of Contents

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1. Introduction

1.1 CONTEXT

The North West Rail Link (NWRL) is a priority transport infrastructure project for the NSW Government. The NWRL will include eight new stations and services as part of a 23 kilometre link, running from Epping to Cudgegong in north west Sydney, connecting with the Epping to Chatswood Rail Link (ECRL) and Sydney's wider rail network.

The north west of Sydney is expected to experience high growth with the need for new dwellings and additional jobs to meet demand. To sustainably manage this growth, metropolitan planning aims to provide for a more compact, accessible city, capable of supporting more jobs, homes and lifestyle opportunities within close proximity of public transport.

The delivery of a new rail line in the North West is a significant investment in public infrastructure and represents an opportunity to carefully consider the wider implications of rail and to comprehensively plan for the future. The North West has great potential to become a major transport-oriented corridor, delivering a significant amount of employment, high levels of self-containment and an unrivalled level of amenity and lifestyle within a desirable residential community.

The NWRL will meet the challenge of future growth, by:

- **Providing rail access** between North West Sydney and Epping, Macquarie University, Macquarie Park, Chatswood, St Leonards, North Sydney and the Sydney Central Business District (CBD), including new rail services to existing centres in the Hills District, such as Castle Hill, Rouse Hill and Norwest Business Park.
- **Reducing vehicle trips**, when rail is introduced to the North West all modes of public transport will become a more attractive and accessible alternative to the private motor vehicle.
- **Improving travel times** from, to and within the North West and delivering a reliable, dependable service which far surpasses that of the bus or car.

1.2 REPORT STRUCTURE

This study has determined the challenges and opportunities a new station will present to the Bella Vista locality, culminating in a collective vision and Structure Plan for the station precinct, to guide the future character of the study area and to reinforce the delivery of the NWRL and a new station at Bella Vista. In preparing the Structure Plan, consideration has been given to the following:

- 1. Role of the Study Area in the NWRL corridor. Consideration is given to the role the Study Area will perform within the rail corridor and the North West. Please refer to Section 1: Introduction, 1.1 Context.
- 2. Analysis of the physical characteristics. A comprehensive site analysis has been undertaken to ascertain the natural and physical opportunities and constraints of the Study Area. Please refer to Section 2: Opportunities & Constraints Analysis.
- 3. Analysis of the existing planning controls in the **Study Area.** The key planning controls that apply to the Study Area have been examined to determine their ability to respond to a new rail link and station. Please refer to Section 3: Current Planning Controls.
- 4. Identification of Opportunities for Growth. Sites that may contribute to the growth of the Study Area in response to a new rail link and station have been identified. Please refer to Section 4: Opportunities for Growth.
- 5. Vision for the Study Area. The overall vision for the Study Area is informed by the above analysis. This vision is to be realised through the Structure Plan which provides an overall guide to the future character of the Study Area. Please refer to Section 5: Vision and Structure Plan.
- **6.** Actions and Implementation. To achieve the overall vision for the Study Area, a series of actions to be undertaken, have been identified. Please refer to Section 6: Actions and Implementation

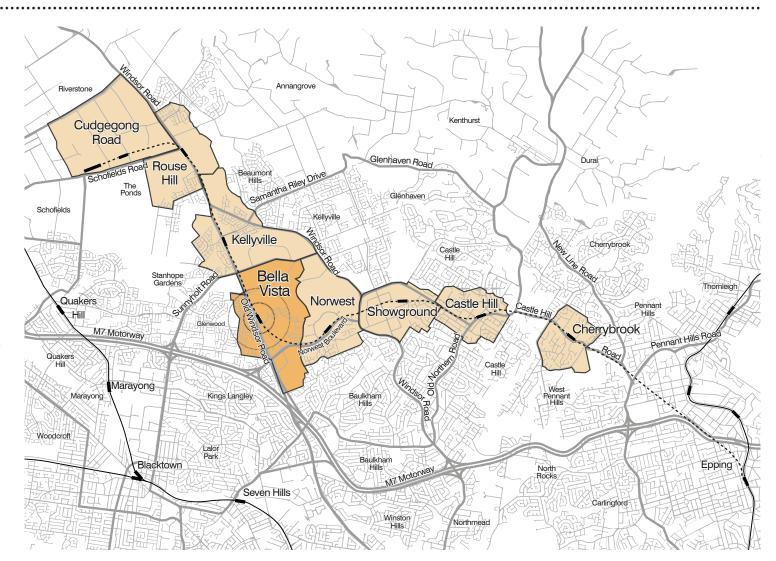


Figure 1: Bella Vista Study Area, in the context of the North West Rail Link.



1.3 STUDY AREA LOCALITY & CHARACTER

The NWRL includes a new station at Bella Vista. The new train station will be located on an extension of Lexington Drive, north of Celebration Drive in Bella Vista within the area currently used by Totally Home and other retail outlets.

The boundary of the Study Area is based on the nearest road boundary within a radius of 800m from Bella Vista Station, which is a distance normally considered to reflect a 10 minute walking trip. The boundary has also been defined by taking into account the existing character, predominant land uses, built form and natural elements of the area.

The Bella Vista study area has an area of 472 hectares, and is located within the Hills Shire and Blacktown Local Government Areas (LGAs).

The Study Area extends to Memorial Avenue in the north, along Old Windsor Road. Glenwood Park Drive and Meurants Lane to the west, Prestige Avenue to the south and Westwood Way, Edgewater Drive and Fairway Drive to the east.

The south western portion of Bella Vista is essentially an extension of Norwest Business Park, as it contains a large number of bulky goods and commercial uses. The northern part of the study area is largely undeveloped.

Lands immediately north and south of Norwest Boulevard comprise large floor plate business park and bulky goods developments with generous setbacks and high quality landscaping.

The Study Area also includes Norwest Private Hospital, a shopping centre and Bella Vista Farm, an historical property set amid large grounds. Lands north of Norwest Boulevard contain business park uses, up to 7 storeys in height, with high quality landscaping, setbacks and high rates of surface car-parking.

The residential areas in the east of the Study Area comprise 'executive' detached housing, which is a key attraction for professional employees of the nearby business park. To the north and north west of the proposed station is very low density housing, including detached dwellings on very large blocks with strong landscaped settings and extensive vegetation, incorporating Norwest Hilltop Park. The area currently lacks an adequate local street network, as most dwellings are arranged in a street layout that is dominated by culsde-sac.

The Study Area contains the Anglican Technical College of Western Sydney on the western side of the station, a number of parks and proposed park sites.

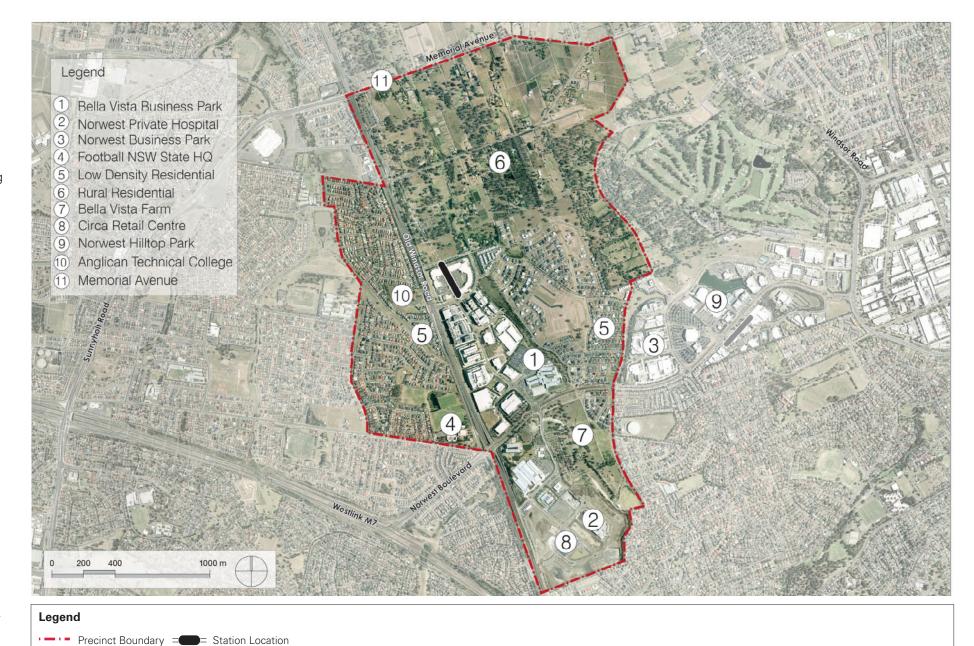


Figure 2: Bella Vista Station Study Area, showing station location and Study Area boundary and key land uses Source: Google Maps 2012

2. Opportunities & Constraints Analysis

2.1 INTRODUCTION

This section assesses the opportunities and constraints within the Study Area. The physical characteristics of the Study Area have been mapped and analysed. The characteristics include; transport, traffic and accessibility; open space networks and ecology; topography and landslip; drainage and hydrology; bushfire risk; and infrastructure easements. Constraints related to recent development, heritage, strata-title and community-title have also been examined.

The combination of these elements reveal the overall level of constraint within the Study Area and highlight those sites which have the opportunity to change in response to a new rail link and station at Bella Vista.

The analysis of the information contained within sections 2, 3 and 4 of this report have been drawn from a number of sources including;

- The Hills Shire Council;
- Blacktown City Council;
- Department of Planning and Infrastructure;
- Land and Property Information Division of NSW; and
- Transport for NSW









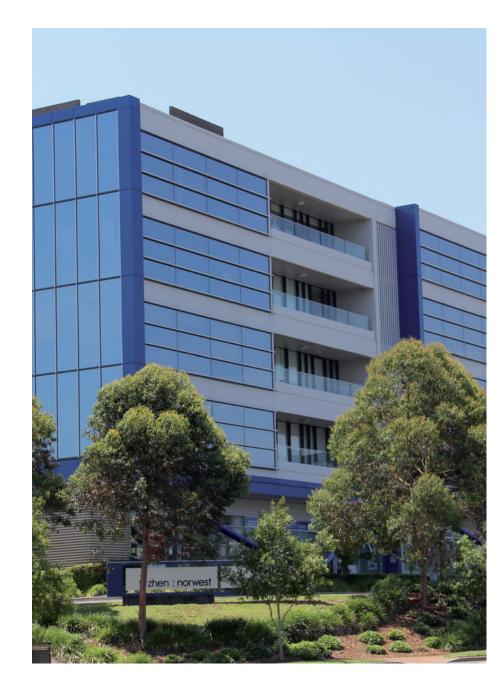


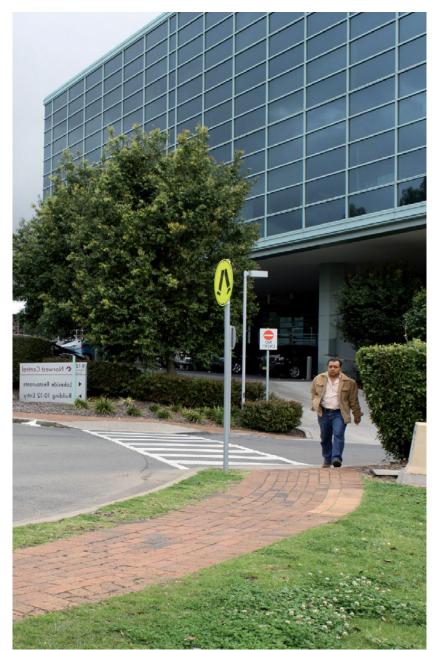




Figure 3: Images illustrating the existing built form and character within the Study Area Source: TfNSW









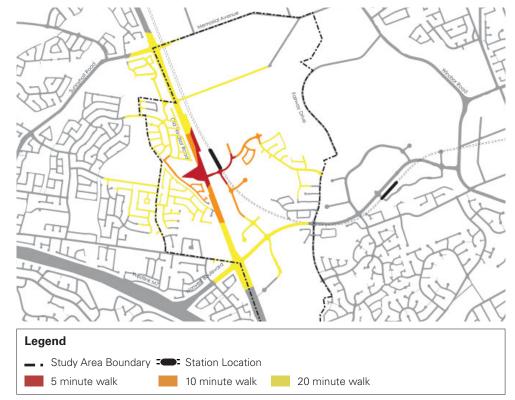
2. Opportunities & Constraints Analysis

2.2 TRANSPORT, TRAFFIC **& ACCESSIBILITY**

The Study Area is accessible from three major routes - Norwest Boulevard to the south, Old Windsor Road to the west and Balmoral Road and Burns Road from the north. While providing direct access to the M7/M2 and the wider Sydney Orbital Network. Old Windsor Road and Norwest Boulevard are also barriers which divide the Study Area in to three distinct precincts, south of Norwest Boulevard, east of Old Windsor Road and west of Old Windsor Road.

Pedestrian and cycling infrastructure is limited within the study area. Pedestrian crossings are provided as part of the traffic signals at the intersection of Celebration Drive and Old Windsor Road across the southern and eastern legs of the intersection, although no pedestrian crossing is provided for the northern leg of Old Windsor Road and Celebration Drive. A segregated cycle path is provided along Old Windsor Road. Key routes such as Norwest Boulevard are hostile cycling/pedestrian environments, lacking in adequate crossings and public lighting.

Bus services at Bella Vista are currently largely confined to the North West Transitway, with two services providing connections from Norwest Boulevard to Lexington Drive and Brighton Drive. Figure 4 below demonstrates the 5, 10 and 20 minute walking catchments from the proposed station location.



- - Study Area Boundary Primary Road ■■■ Existing Bus Route ■■■ Existing Cycle Route Secondary Road Traffic Signals Station Location

Figure 5: Access & Movement within the Study Area



2.3 OPEN SPACE & CONSERVATION

Key open spaces within the Study Area include:

- Two large greenfield sites in the north east
- Bella Vista Farm, in the south east corner
- A green link connecting these two spaces which is an important biodiversity corridor.

Despite its urbanised character, there remain areas of biodiversity importance within the Study Area. Dispersed pockets of significant vegetation are located in the north and north west of the Study Area. Of these, the largest concentration is located east of Old Windsor Road and contains large areas of Cumberland Plain Woodland, classified as a Critically Endangered Ecological Community (EEC) under the Environment Protection and Biodiversity Conservation Act 1995. A number of these areas are contained within government-owned land, thus representing an opportunity to protect the vegetation and provide public open space. Further large concentrations of the Cumberland Plain Woodland EEC are located west of Old Windsor Road and the Bella Vista Farm site.

Detailed ecological studies will be required to identify impacts on native vegetation and threatened flora and fauna as part of any future rezoning investigations within the Study Area.



Figure 6: Open Space & Conservation within the Study Area

2. Opportunities & Constraints Analysis

2.4 HERITAGE & SPECIAL USES

Figure 7 shows that within the Study Area a number of sites are identified as special use or of heritage value. These include Bella Vista Farm in the south, which is designated as a Conservation Area. A single residential property located in the west of the study area is designated as a general heritage item, and Old Windsor Road is classified as an Archeological Heritage Item.

The Structure Plan seeks to retain and reinforce the heritage items identified in Figure 7: Heritage & Special Uses within the Study Area as they form an important part of the character of the Study Area.

Norwest Private Hospital is nominated as a special use within the Bella Vista Study

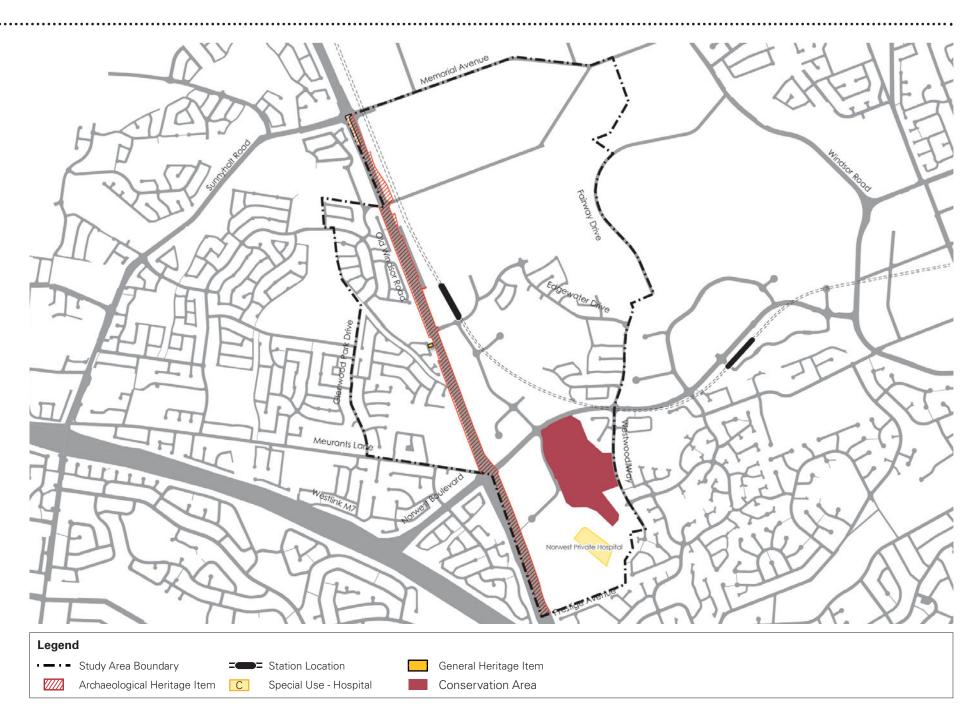


Figure 7: Heritage & Special Uses within the Study Area



2.5 TOPOGRAPHY

The topography within the Study Area is characterised by a high point that gently falls from the ridge lines of Old Windsor Road, Norwest Boulevard and north to Burns Road towards Elizabeth Macarthur Creek. Heights within the Study Area range between approximately 56-108 metres above sea level. The high point within the Study Area is located within the Bella Vista Farm Park which affords regional vistas to the north, west and south.

Slope analysis of the Study Area shows that land levels are highest in the south around Norwest Boulevard and Westwood Way.

To the north and west, lie moderately undulating areas. In contrast, to the south, levels fall steeply from Bella Vista Farm towards the private hospital and Circa retail centre. The development of these slopes could require alternative development and construction techniques and may limit the types of buildings that can be constructed.



Figure 8: Topography within the Study Area

2. Opportunities & Constraints Analysis

2.6 DRAINAGE

The study area is located within catchments of Stranger's Creek, Elizabeth Macarthur Creek, Caddies Creek and Lalor Creek.

The predominantly rural land adjoining Elizabeth Macarthur Creek, is subject to a high risk of flooding. Low risk areas extend approximately 5 to 50 metres beyond high risk flood areas. Further investigation will be required at any future rezoning or development application stage to establish appropriate flood planning levels.

The flooding information captured in this report is preliminary and a detailed flood study will need to be undertaken at the stage of rezoning.

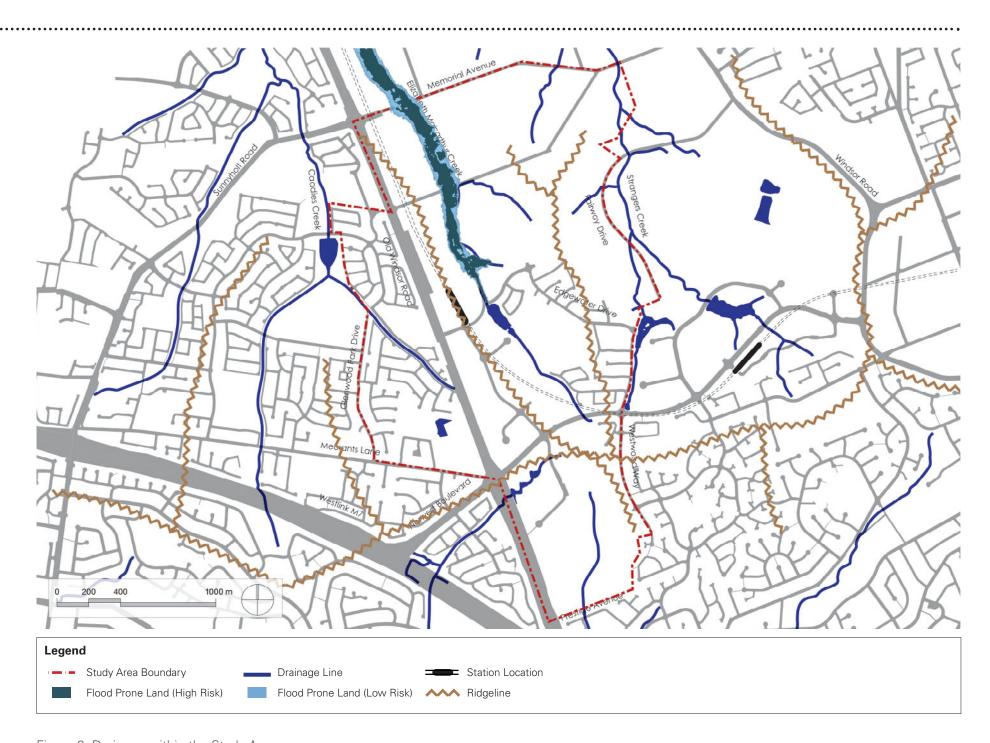


Figure 9: Drainage within the Study Area



2.7 RECENT RESIDENTIAL **DEVELOPMENT**

The assessment of recent residential development includes any development that has occurred over the last 15 years.

An analysis of recent residential development within the Study Area indicates that incremental low density residential development has occurred throughout the Study Area.

This recent development has occurred in two principal areas - west of Old Windsor Road in the Blacktown LGA and east of the existing business park in the Hills Shire LGA. Limited concentrations of residential development, including a high density apartment development, are located in the northeast of the study area.

Consideration has also been given to the condition and age of the existing building stock and impact of these factors on the likelihood of land being redeveloped in the lifetime of the Structure Plan. Recent development is considered a short to medium term constraint to development as the average life cycle of a building is generally 30-40 years. A high proportion of dwellings within the Study Area have been recently built and/or are of sufficient quality to be excluded as potential urban renewal redevelopment opportunity sites in the short to medium term. Refer to section 4 for an overview of the opportunity sites within the Study Area.

Please refer to the photos provided on Page 7 that illustrate the character of recent residential development within the Study Area.

The recent residential development data is sourced from the Metropolitan Development Program 2011 which catalogues dwelling completions from 1998/99 – 2009/10.

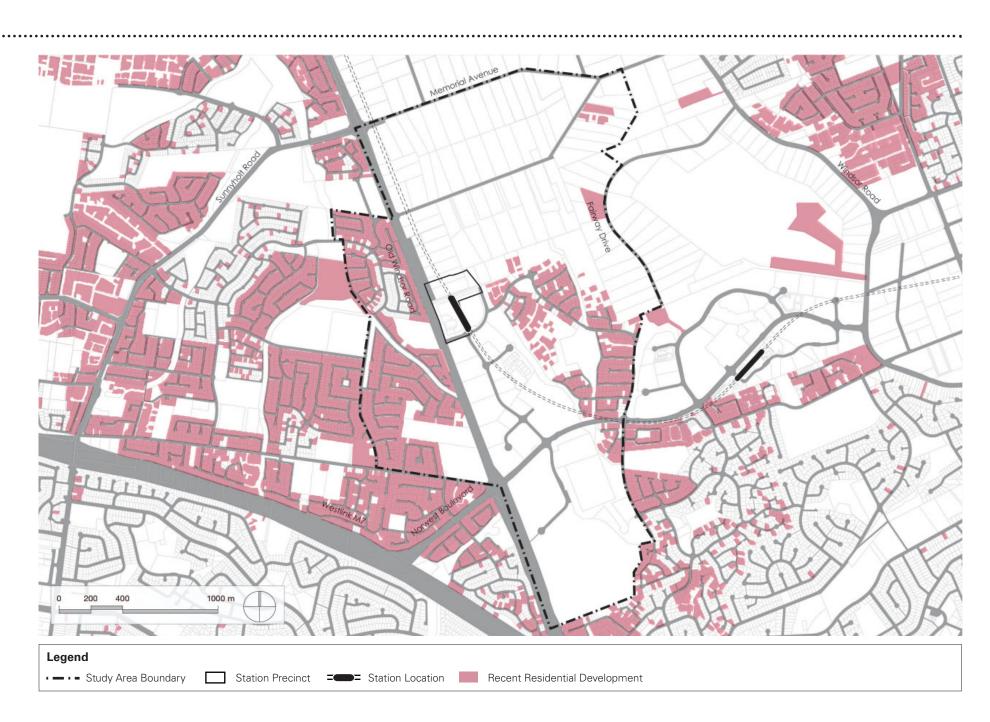


Figure 10: Recent Residential Development within the Study Area

2. Opportunities & Constraints Analysis

2.8 OTHER CONSTRAINTS

The Study Area contains sites in strata-title and communitytitle ownership on Lexington Drive and Meridian Place, in the centre of the Study Area. Lands governed by strata title arrangements are considered a constraint to development, as under current legislation, the approval of all owners and lenders is first required.

Accordingly, these parcels are not likely to contribute to the short-term commercial capacity of the Study Area, however they may become available in the medium to long term.

Overhead electricity wires, with a corresponding easement, traverse the northern half of the Study Area, from Norwest Business Park in the south east through to Old Windsor Road in the north west. This significant utility service and easement represents a constraint to certain types of land uses and development within its vicinity.

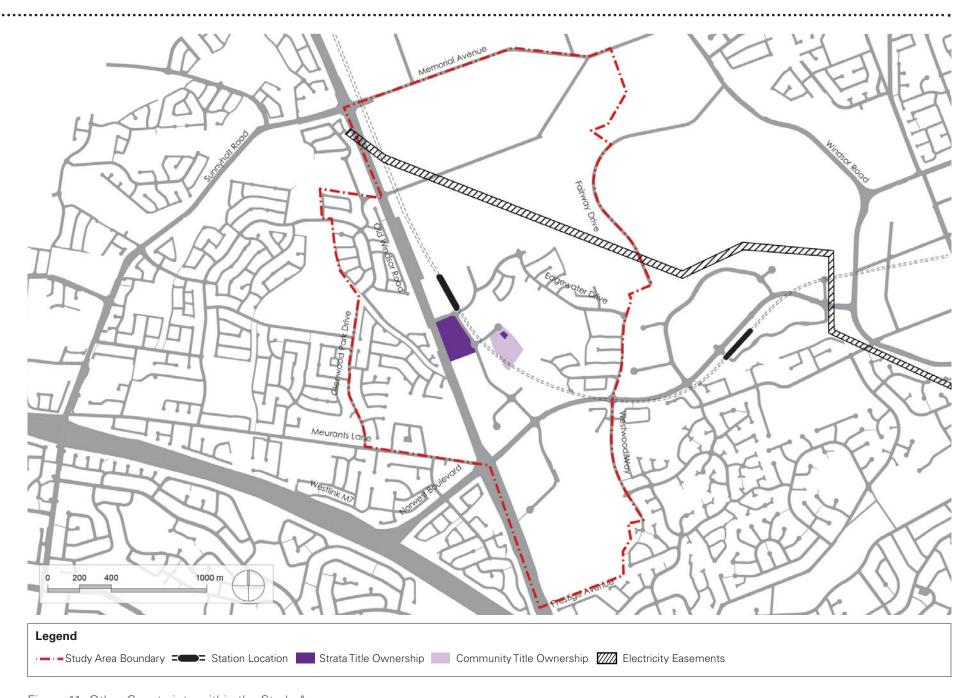


Figure 11: Other Constraints within the Study Area



2.9 COMBINED CONSTRAINTS

The combined constraints mapping indicates that portions of the Study Area are constrained.

Strata ownership in the Study Area is a constraint to development as the properties are not likely to contribute to any land use capacity over the short to medium term.

Overhead electricity wires and corresponding easements are a constraint to certain types of land uses and development in the immediately vicinity to the utility service.

Flooding in the Study Area will also be a constraint. Parts of the subject land is located in a riparian corridor parallel to Old Windsor Road. Development in the vicinity of the this corridor will need to establish a flood-risk management plan.

Special uses such as schools and community facilities and the areas of open space and significant vegetation are seen as both constraints and opportunities. They may provide the opportunity to increase community facilities, active recreation and passive recreation spaces to contribute to increased levels of amenity for workers and residents of Bella Vista in the future.

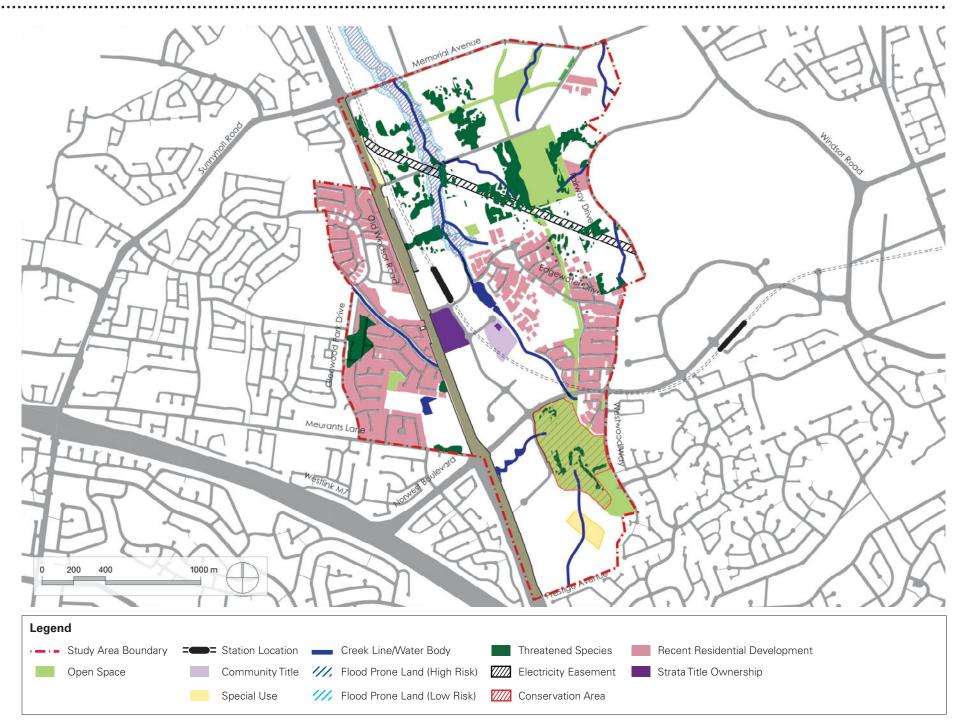


Figure 12: Combined Constraints within the Study Area

3. Planning Controls

3.1 INTRODUCTION

This section reviews the existing and Council land use zoning, height, floor space and lot size controls that apply to land within the Study Area.

The key planning controls applying to the Bella Vista Study Area are included in The Hills Local Environmental Plan 2012, and Draft Blacktown Local Environmental Plan 2013.

Additional relevant controls are also contained in *The Hills* Development Control Plan 2012.

3.2 LAND USE

In general terms, the zoning allocates the employment lands east of Old Windsor Road as B7 Business Park, which allows office and light industrial uses, including high technology industries. Lands to the north are zoned SP2 Infrastructure (Rail Corridor), to facilitate the provision of the NWRL. Lands immediately adjoining the new train station are zoned B5 Business Development, allowing for a mix of office, retail and warehouse uses to support the viability of centres, while limiting retailing of food and clothing.

Lands to the east of the station are a mix of residential densities, from medium and high, encouraging a mix of building types, with densities gradually decreasing with distance from the centre.

To the west of the station residential densities are low, retaining the existing character of the area. Bella Vista Farm in the south is protected by an RE1 Public Recreation zoning.

Since the zoning was proposed, the alignment of the NWRL has changed. Thus, there are opportunities to redevelop lands currently zoned for SP2 Infrastructure (Rail Corridor) to accommodate employment and housing lands in close proximity to the new rail station.

A plan illustrating the zoning controls is provided in *Figure* 12: Zoning Controls.

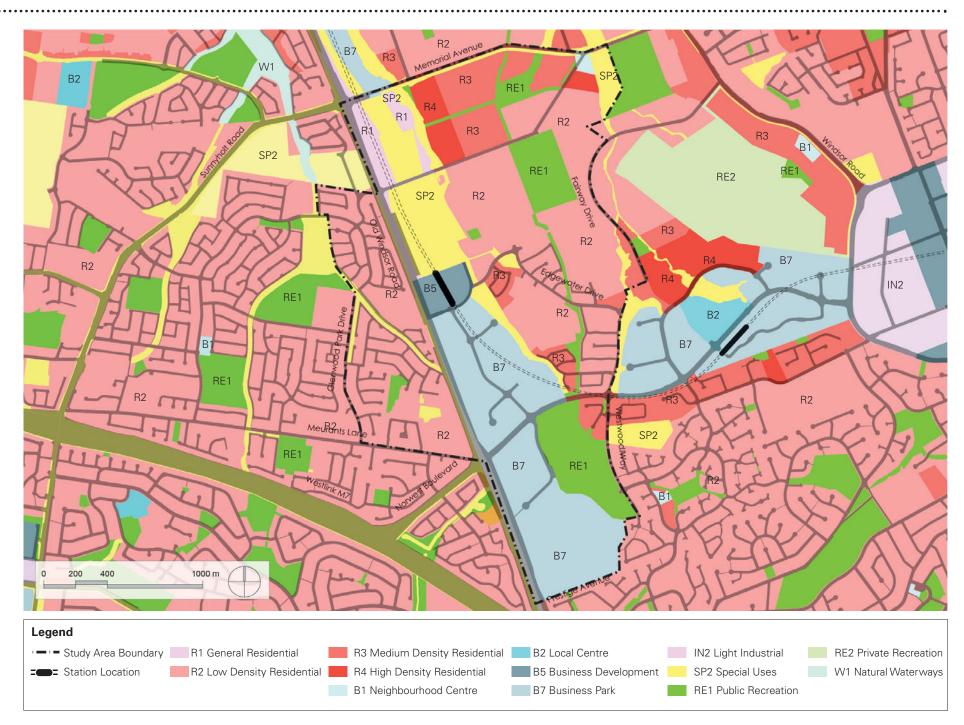


Figure 13: Zoning Controls within the Study Area

Note: Land use zoning within the Blacktown LGA is relevant to the Draft Blacktown LEP 2013



3.3 BUILDING HEIGHT

Employment lands and lands immediately adjoining the station are subject to a height limit of between 108 and 116m RL to preserve views to and from Bella Vista Farm.

An assessment of the topography reveals that buildings within this control could vary between a minimum height of 12m near the end of Bella Vista Drive to the south east, to a maximum height of 50m east of the proposed station location.

Beyond this, the north east of the Study Area is subject to a height control of 10m while lands adjacent to the junction of Memorial Ave and Old Windsor Road are subject to height limits of 16m.

The maximum building height for developments to the west of the station, within Blacktown LGA, is 9 metres.

A plan illustrating height controls is provided in Figure 13: Building Height Controls.

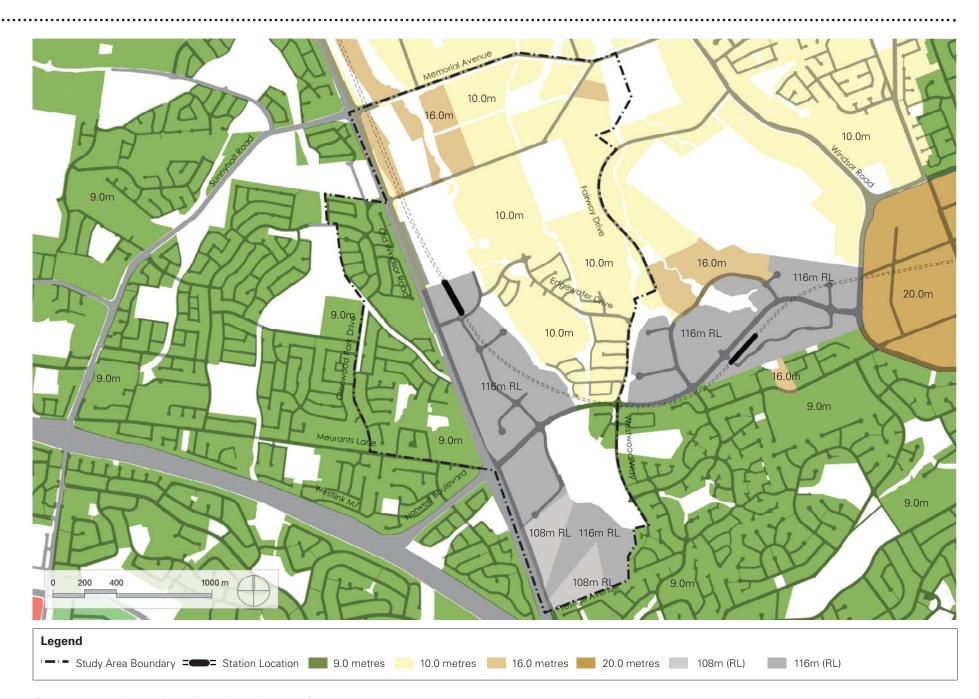


Figure 14: Building Height Controls within the Study Area

3. Planning Controls

3.4 LOT SIZE

Land within the Study Area to the south of Bella Vista, zoned employment lands, has a minimum lot size of 8,000m² under the Hills Local Environmental Plan 2012.

Within the residential zones there is a minimum lot size of 450m² to the west of Old Windsor Road and 700m² to the east of Old Windsor Road.

Minimum lot sizes in the area zoned Infrastructure along Old Windsor Road are 1,800m²

A plan illustrating the existing controls is provided in Figure 14: Minimum Lot Size Controls.

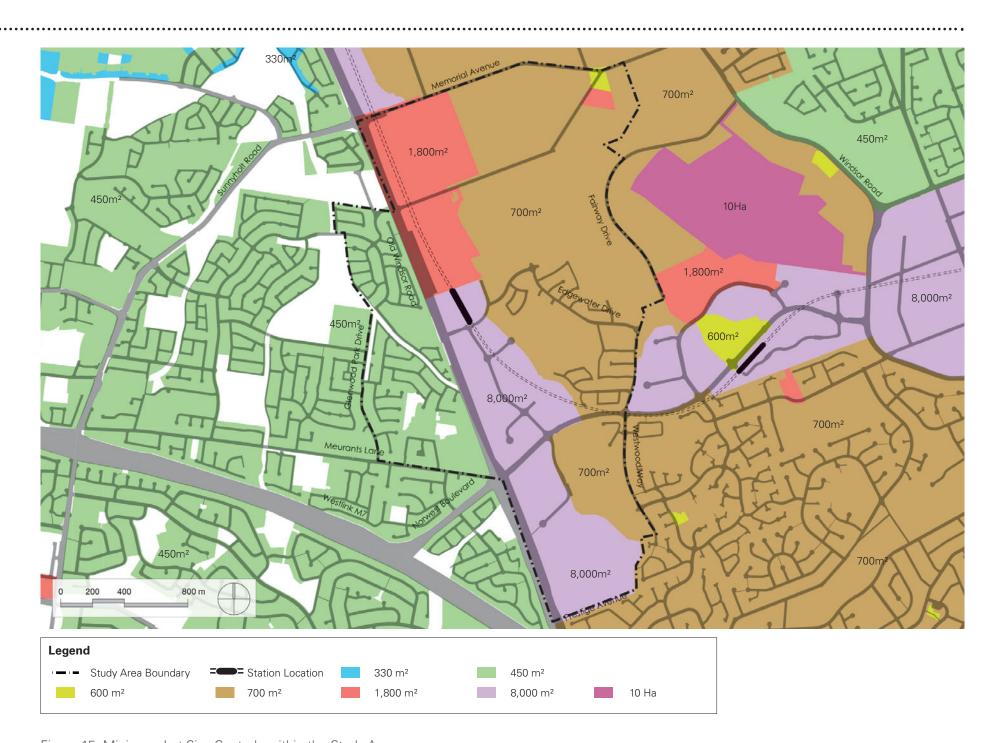


Figure 15: Minimum Lot Size Controls within the Study Area



3.5 FLOOR SPACE RATIO

Floor space ratio (FSR) controls refer to the relationship of the permitted built form to the area of a site. The majority of employment lands adjacent to, and to the south of Bella Vista station has an FSR of 1:1 under the Hills Local Environmental Plan 2012. A small pocket of 1.49:1 exists within the Circa Retail development to the south of Norwest Boulevard and 0.5:1 within the Local Centre on Memorial Ave in the north of the Study Area.

There are no FSR controls for remaining land within the Bella Vista Study Area that are located within The Hills or Blacktown LGAs.

A plan illustrating the existing Floor Space Ratios controls is provided in Figure 15: Floor Space Ratio Controls.



Figure 16: Floor Space Ratios within the Study Area

4. Opportunities for Growth

4.1 OPPORTUNITY SITES

The outcome of the review of the opportunities and constraints and the existing planning controls of the Study Area leads to the identification of sites with the most potential for renewal to complement a new rail link and station, subject to further investigations.

These opportunity sites vary in their capacity to contribute to the future growth of the Study Area. Some of the identified sites are currently unconstrained and present an immediate opportunity to stimulate growth within the corridor. However, some of the sites are currently being developed or have been developed in recent years and therefore present themselves as long-term opportunities for renewal.

The larger sites located to the east of Old Windsor Road, including within the Balmoral Road Release Area, present the fewest constraints with large lots, good connectivity and within walking distance of the proposed Bella Vista Station. Contiguous opportunity sites may also allow for the amalgamation of lots in to larger single landholdings.

To the east of Old Windsor Road and in a pocket towards Edgewater Drive, the opportunity sites are constrained by poor accessibility, due to an inadequately connected road network.

The future development of the opportunity sites is subject to environmental assessment and consideration of heritage, vegetation, bushfire and flooding constraints.

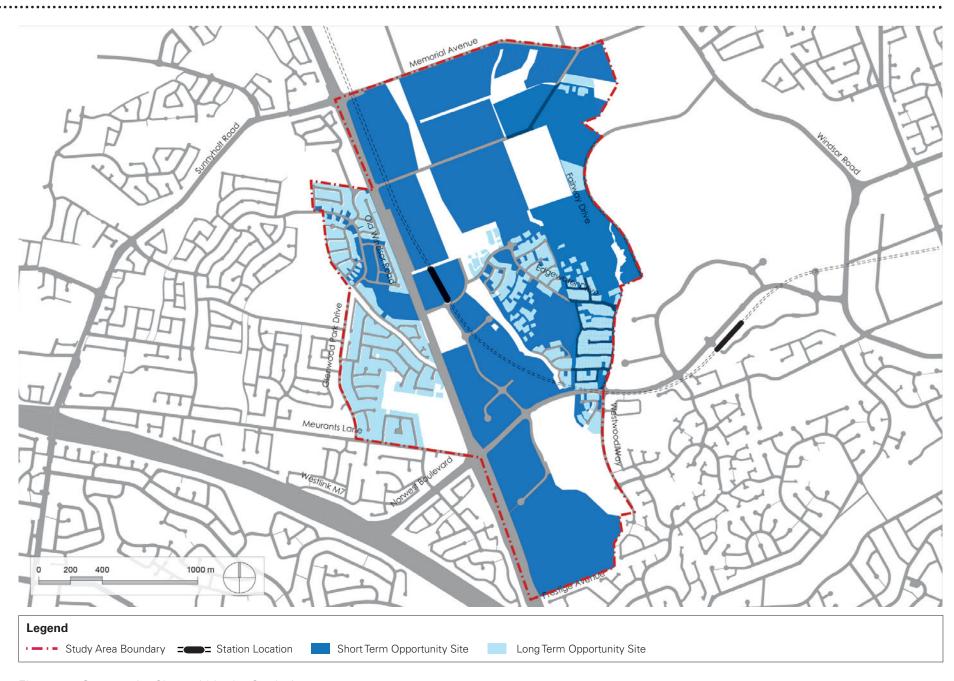


Figure 17: Opportunity Sites within the Study Area



4.2 PROJECTED GROWTH UNDER **EXISTING CONTROLS**

Under the planning controls in the *The Hills Local* Environmental Plan 2012 and Draft Blacktown Local Environmental Plan 2013, the opportunity sites within Bella Vista have a variety of land use, height, floor space and minimum lot size controls that allow for buildings with a mixture of uses including business, office, retail, education and medical uses.

Within the Business Park zone, current height controls vary between 12m (3 storeys) on Elizabeth Macarthur Drive and 56m (14 storeys) to the south of Circa Retail Centre. Circa Retail Centre is currently being developed under an FSR control of 1.49:1. Combined with a number of presently vacant sites within the Business Park that can be developed under these controls, these sites will deliver a moderate amount of new employment. Renewal within the remainder of the Business Park is governed by an FSR control of 1:1 that will largely maintain the existing built form and density on the site.

The area zoned for high density residential to the north of Balmoral Road, currently allows for 4-5 storey apartment buildings on minimum lot sizes of 1,800m². This is likely to result in a moderate increase in the number of dwellings within the Study Area.

Small pockets of medium density residential between Memorial Ave and Balmoral Road, Edgewater Drive and Northridge Ave, are governed by controls which permit 3-storey apartment buildings on minimum lots of 1,800m², townhouses on minimum lots of 720m², or dual-occupancy dwellings on a minimum lot size of 600m². These controls are likely to result in a moderate increase in the number of dwellings within the Study Area within the short-medium term. Low density residential controls permit 3-storey single detached on minimum lots of 700m² or dual-occupancy dwellings on minimum lot sizes of 600m².

An assessment of these current controls on the opportunity sites reveals that the capacity for future growth within Bella Vista is predominantly within the employment market. The controls governing existing and vacant sites within the Business Park and residential areas are likely to be developed within the short-medium term and deliver a significant amount of employment and housing within the Study Area.

The existing and proposed controls for the Study Area could result in an additional 9,300 jobs and 1,900 dwellings.

These planning controls are deemed to be broadly adequate to reinforce the delivery of a significant investment in infrastructure such as the NWRL.

The mixed use corridor to the north of the Bella Vista Station Precinct, as well as the residential area to the east needs to be able to adapt to respond to the NWRL. The vision and Structure Plan within this report will build upon these controls and detail the desired future character of the area and proposed land uses to complement the new rail link and station.

	RESIDE	ENTIAL	EMPLOYMENT		
	TOTAL DWELLINGS	GROWTH	TOTAL JOBS	GROWTH	
2012	1,800	-	9,500	-	
2036	3,700	1,900	18,800	9,300	

Table 4.1: Projected growth in Housing and Jobs under existing controls



5. Vision & Structure Plan

5.1 VISION FOR THE STUDY AREA

Bella Vista Study Area will have an important function in the NWRL corridor as a business and commercial 'destination' station, while also providing increased residential development opportunities.

The introduction of the NWRL will provide much needed public transport connections between Bella Vista and Rouse Hill, Norwest, Castle Hill and the wider Sydney rail network. The new station and service at Bella Vista will complement existing T-way bus services and provide a focal point for local bus networks. The Study Area will provide opportunities for increased employment and housing capacities within walking/cycling distance of the station, while ensuring the heritage, open space network and natural environment are protected. Existing employment lands will be retained and enhanced, and will accommodate higher density development in the future.

Bella Vista Business Park is a logical extension of Norwest Business Park and with the delivery of the NWRL provides an opportunity to increase its catchment and desirability beyond the immediate context of the North West of Sydney.

The vision is to see the orderly expansion and intensification of the Bella Vista Business Park, in line with this increase in demand, by delivering commercial floor space as efficient, large floor plate, campus-style office spaces. This future development will be characterised by business/office developments of between 4-6 storeys and a mix of floor plate sizes to promote a greater diversity of commercial activity. There will be a move away from car-dependent development with large areas of surface parking, to transit-orientated commercial/ office development, with lower parking rates and underground or structured parking.

The Study Area will provide opportunities for increased employment and housing capacities within walking/cycling distance of the station, while ensuring the local amenity, open spaces and natural environment are protected. There will also be the opportunity to integrate expanded retailing, community uses and cultural facilities which will activate a number of new pedestrian streets, plazas and squares and cater for the increased number of workers, residents and visitors alike.

This vision will be achieved by: building on the proposed new Centre's assets to enhance the competitiveness of commercial office employment, as well as retailing; identifying and assembling strategic sites within the Centre to attract public and private investment around a compact commercial core; and improving livability and amenities within the Centre by an enhanced public domain.

Underpinning this vision will be the final Structure Plan, formulated on the principles of Transit Oriented Development (TOD). TODs are generally mixed use communities within walking distance of a transit node that provide a range of residential, retail, commercial, open space and public facilities in a way that makes it convenient and attractive to walk, cycle or use public transport for the majority of trips.







Figure 18: Images depicting the desired future character of Bella Vista









5. Vision & Structure Plan

5.2 PROPOSED STRUCTURE PLAN

The Structure Plan is the framework which will guide future planning within the Bella Vista Study Area. It is a result of assessing the natural and built elements of the Study Area and existing planning controls. It is founded on principles of providing where possible greater connectivity and strengthening links between the station and surrounding uses.

USES

The Structure Plan proposes a commercial/retail core for Bella Vista centred around the new station, which will benefit from direct access to the train station the surrounding Business Park and be in close proximity to residential areas. The future character will be achieved though further consideration of zoning/development controls and through master-planning. The retail park on Celebration Drive will be redeveloped to accommodate the new Bella Vista train station, park and ride facilities and higher density employment development.

To the south of the station is the existing Bella Vista Business Park. Under the Structure Plan lots within the Business Park will be given greater flexibility in planning controls to attract more businesses through the provision of a variety of floor plates and to capitalise on the proximity and relationship of the park to the successful Norwest Business Park to the east.

To the north of the station, within the infrastructure corridor reserved for the NWRL, it is proposed that a mixed use area, comprising commercial, retail and medium density residential will serve as a transition between the employment areas and the residential of Memorial Avenue and Balmoral Road. In the north west of the Study Area a space for a smaller Local Centre has been designated on the corner of Hector Circuit and Memorial Avenue to provide local residents with day-to-day services and amenities.

The north east and east of the Study Area will be predominantly residential. Norwest Business Park and the Bella Vista employment lands play a key role in attracting managerial and professional employees to the greater

North West. Areas adjacent to Fairway Drive accommodate low density residential of 1-2 storeys. This area provides executive housing directly adjacent to the business parks of Norwest and Bella Vista, and the Castle Hill Country Club.

Between the rail corridor and the executive housing adjacent Fairway Drive, from Memorial Avenue down to Edgewater Drive the densities will increase towards the station and the mixed use precinct, with the highest densities around the station being 7-22 storeys and the medium density housing comprising 3-6 storey apartment buildings and townhouses. To the west of the station and Old Windsor Road, Glenwood Park could deliver townhouses and 3-6 storey residential in the longer term, provided that permeability is enhanced by reconfiguration of the existing culs-de-sac.

Bella Vista Farm is a significant conservation area protected and maintained by the Structure Plan. The history and character of the property add significantly to the identity of Bella Vista and the farm and its view corridors will be maintained.

ACCESS

Bella Vista Station will increase accessibility to transport for local residents and those of surrounding areas. Old Windsor Road and Norwest Boulevard will remain the primary thoroughfares within the Study Area. A secondary road network should be considered to improve internal access and permeability within the business park areas, particularly for pedestrians.

Within the Study Area, pedestrian and cycling accessibility is limited with a lack of adequate crossings and public lighting. No pedestrian access is provided for the northern leg of Old Windsor Road and Celebration Drive and key routes such as Norwest Boulevard are hostile pedestrian environments. Any secondary road network will require a well-developed pedestrian/cyclist path network, to promote active modes of transport and access to key employment locations and the station.

PUBLIC DOMAIN

The development of sites within the Study Area, and the establishment of a new station and transport interchange, will provide significant opportunities to improve the Study Area's public domain.

The primary public domain initiative nominated within the Bella Vista Structure Plan is the delivery of an attractive and accessible open space network to serve as a catalyst for private investment. Significant upgrading of the Elizabeth Macarthur Creek riparian drainage corridor running parallel to Old Windsor Road, to create an appealing, landscaped corridor containing mixed use and business park zoned sites will act as a link through to the new station. It will be landscaped appropriately and setback from new, wide and shaded footpaths to allow barrier-free access to the open spaces.

Upgrading the public domain of Bella Vista can be achieved through a number of initiatives:

- The creation of a new open space linkage between the commercial core and high density housing towards Memorial Avenue, with accessible and safe pathways appropriate for pedestrians and cyclists.
- The protection of existing green spaces within the Study Area which form part of the Bella Vista identity, such as Valentine Sports Park, Kellyville Memorial Park and Bella Vista Farm.
- The creation of a significant public open space, south of Balmoral Road in close proximity to both high and low density housing.

A Public Domain Strategy will be required to detail the delivery of the above initiatives and to guide the broader character of the public domain within the Study Area. Council have identified improvements around the proposed new bus interchange and train station to improve access, including footpath widening/provision and a paved interchange plaza with café/retail facilities, passenger waiting areas and a covered walkway that is integrated with the new commercial centre. This Strategy will also address preservation of ecological corridors, pedestrian and cycling linkages, built form response to public and private open space, signage and wayfinding, street furniture, lighting and public art.

The open spaces and green links will provide high amenity for residents and workers of the Study Area, as well as maintain the extensive existing vegetation and act as a natural drainage corridor for the Study Area. Public domain improvements will create a landscaped, pedestrian/cyclist friendly built environment, with strong links from the train station to key employment and residential areas.

Critical to the successful development of Bella Vista will be the provision of east-west connections. Old Windsor Road, a four-land State route that runs north-south represents a potential barrier to east-west movement. Similarly, Norwest Boulevard allows for east-west vehicular movement, however it also potentially severs north-south links in the south of the study area. To ensure ease of access from the west of the Study Area to the new station and to the rest of the Study Area, it is critical that an additional access point for all transport modes is provided close to the station.

Internally, the study area as a whole lacks an adequate secondary road network. Any increase in densities will put pressure on the existing arterial network, and thus the development of a local road network is crucial to future development.

INITIATIVES

Initiatives contained within the Environmental Impact Statement for Phase 2 of the NWRL include;

- Provision of kiss and ride spaces, bicycle parking, taxi spaces and bus bays at the proposed station.
- Lexington Drive and Celebration Drive will be extended north, including bus stops and kiss and ride parking located on the Lexington Drive extension, north of Celebration Drive.
- Provision of a pedestrian crossing across Tempus Street at Market Square to facilitate pedestrian access from residential areas on the western side of Old Windsor Road to the station precinct.
- Local bus services to Bella Vista would provide access from the Balmoral Road release area. Bella Vista and suburbs on the western side of Old Windsor Road.
- Construction of a local access road as an extension of Lexington Drive (new road) to the north of Celebration
- Mid-block pedestrian crossings are proposed to be located near the station entry
- Signalisation of the Celebration Drive/Lexington Drive intersection to improve pedestrian access to and from the stations.

The rail alignment and station location may change postexhibition of the Environmental Impact Statement for Phase 2 of the NWRL.



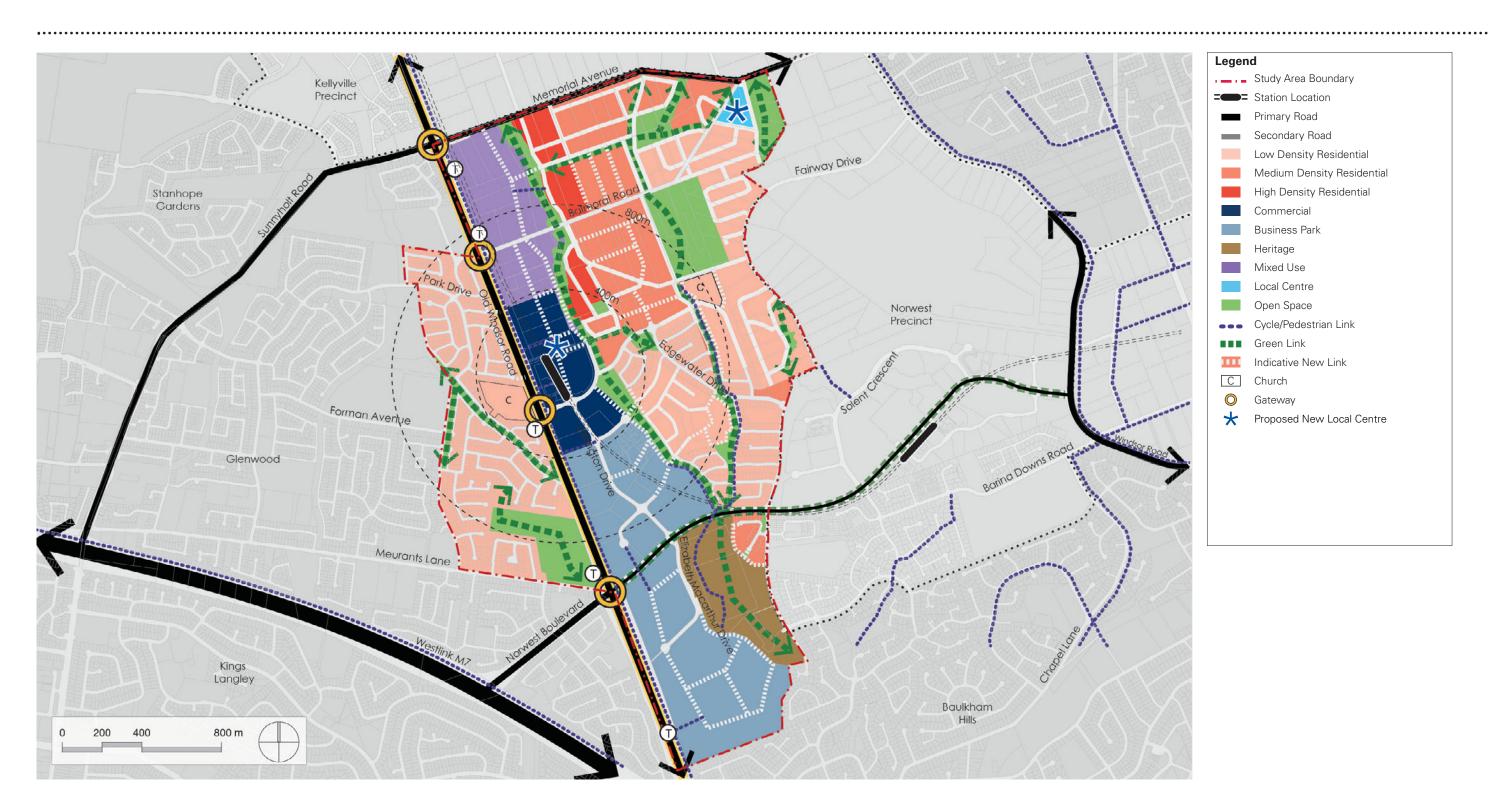


Figure 19: Structure Plan for the Bella Vista Study Area

5. Vision & Structure Plan

5.3 FUTURE PRECINCT CHARACTER

The following diagrams and images demonstrate the desired future character for the sites which may contribute to the growth of Bella Vista in the future.

Centre and Commercial Core

Objectives: To provide a precinct that contains a flexible mix of commercial and employment uses and mixed uses to the north, that provide activation within the Station Precinct and are located in close proximity to the proposed station. Public domain enhancements to integrate the station precinct with surrounding land uses and provide safe and efficient access to the station for pedestrians and cyclists. To improve connectivity with adjoining residential areas in Bella Vista Waters and Glenwood.

Character: It is anticipated that under the vision and Structure Plan the Centre surrounding the station could accommodate commercial and employment uses that would complement the character of the local area. It will be a safe, highly visible station and station precinct as it can be easily seen from public roads with provisions for a bus, taxi and kiss and ride interchange which is integrated with the station. It could accommodate built form up to 22 storeys to accommodate tower forms at appropriate locations within close proximity to the station, subject to merit assessment.

Public Domain and Open Space

Objectives: To provide attractive open spaces of high amenity for the public, as well as a robust street pattern to support future growth opportunities within the Study Area.

Character: The Structure Plan provides green open spaces for residents that are accessible and safe, and landscaped appropriately to integrate with the existing character of the area such as the existing landscape by the Elizabeth Macarthur Creek corridor and Business Park plantings. Access around the station would be improved with a robust street network that accommodates pedestrian focused street design and cycle access.



Figure 20: Proposed Location of Centre



Figure 21: Location of existing and proposed Open Space







Business Park

Objectives: To provide for the employment needs of a growing community and to encourage the emergence of a prominent employment area with direct access to the new rail link and station.

Character: It is anticipated that under the vision and Structure Plan that this precinct could accommodate 4-6 storey commercial offices on sites that are carefully designed to integrate into the surrounds.



Objectives: To provide for flexibility in uses such as retail, commercial and residential, to cater for a growing community and to encourage an increased use within the north west of the precinct.

Character: It is anticipated that under the vision and Structure Plan this precinct could accommodate a mixture of bulky goods, retail, commercial and residential buildings up to 22 storeys to accommodate tower forms at appropriate locations within close proximity to the station, subject to merit assessment.

Local Centre

Objectives: To provide the day to day services and amenities required by a growing community.

Character: It is anticipated that under the vision and Structure Plan this precinct could accommodate small good retail on sites that are carefully designed to integrate into the existing streetscape.



Figure 22: Proposed Location of the Business Park Area



Figure 23: Proposed Location of Mixed Use



Figure 24: Proposed Location of the Local Centre







5. Vision & Structure Plan

Low Density Detached House Living

Objectives: To provide for the housing needs of a growing community and to provide a variety of housing types within close proximity of the station and associated uses.

Character: It is anticipated that under the vision and Structure Plan that this precinct will evolve to become single detached dwellings.



Figure 25: Proposed Location of Low Density Detached House Living



Low/Medium Density Townhouse Living

Objectives: To provide for the housing needs of a growing community and to provide a variety of housing types within close proximity of the station and associated uses.

Character: Under the vision and Structure Plan it is anticipated this precinct will evolve to become a mixture of single detached dwellings and townhouses. This precinct will serve as a transition between the lower density residential areas beyond the Study Area and the station precinct.



Figure 26: Proposed Location of Low/Medium Density Townhouse Living





Medium Density Apartment Living

Objectives: To provide for the housing needs of a growing community and to provide a variety of housing types within close proximity of the station and associated uses.

Character: It is anticipated that this precinct could accommodate multi-dwelling housing only where the site is an appropriate size to deliver a high level of amenity for the existing and future residents. This could comprise of 3-6 storey apartment buildings, carefully master planned around communal open spaces and incorporating landscaped setbacks to existing streetscapes.

High Density Apartment Living

Objectives: To provide for the housing needs of a growing community and to provide a variety of housing types within close proximity of the station, Rouse Hill and Norwest.

Character: It is anticipated that under the vision and Structure Plan this residential area will evolve to accommodate 7-22 storey apartment buildings, carefully master planned around communal open spaces and incorporating landscaped setbacks to existing streetscapes only where the site is an appropriate size to deliver a high level of amenity for the existing and future residents. Higher tower forms may be considered on a merit basis within close proximity of the station.

Areas Expected to Remain Unchanged

Within the Study Area there are areas and sites which are expected to remain largely unchanged through the delivery of the NWRL and the Structure Plan.

This is due to a number of factors including existing uses, varying degrees of constraints, connectivity, accessibility and market demand.



Figure 27: Proposed Location of Medium Density Apartment Living



Figure 28: Proposed Location of High Density Apartment Living

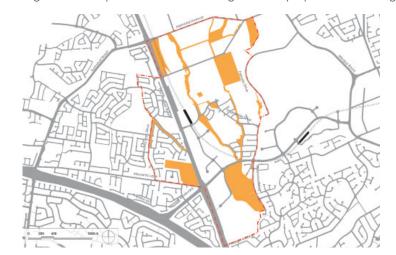


Figure 29: Areas Expected to Remain Unchanged





5. Vision & Structure Plan

5.4 PROJECTED GROWTH

Calculating Projected Growth

The projected growth is a calculation of the amount of residential and employment development that is expected to take place in the Study Area. The projected growth calculations take into consideration the following factors:

- **Development on Opportunity Sites.** Development is projected to occur on the opportunity sites identified in Section 4.1 of this report.
- The Proposed Future Character and Built Form. The Structure Plan identifies the future desired character and built form for areas within the Study Area. These character/building types have been applied to the opportunity sites.
- **Assumptions.** A series of assumptions related to the different development types have been applied to calculate the land areas required for each built form. Details can be found in the North West Rail Link Corridor Strategy.
- **Demand.** The amount, and rate of development is influenced by market demand for different types of development within the Study area. Market demand is determined by 'take-up' or 'realisation' rates, which reflect market conditions and has been informed by a high-level feasibility analysis. In Bella Vista, due to the high level of amenity and quality of life afforded within the Study Area at present and the added accessibility delivered by the North West Rail Link, the take up/ realisation rate is considered to be 32% for housing and 23% for employment. Take-up/realisation rates have been identified for each development type and these have been used in the projected growth calculations.

Projected Growth in the Study Area

The outcome of these projected growth calculations is provided in the tables below. Total opportunity site area within the Study Area equates to approximately 270 hectares.

Application of the proposed land uses and typologies in the Structure Plan will result in a total capacity for an additional 13,600 dwellings by 2036. However, it is anticipated that only 32% of this capacity will be realised by 2036, delivering an additional 4,400 dwellings within the Study Area.

The proposed Structure Plan will result in an additional employment capacity of 47,000 jobs by 2036. However it is anticipated that only 23% of this capacity will be realised by 2036, delivering an additional 10,500 jobs within the Study Area.

RESIDENTIAL

TYPE OF HOUSING	DWELLINGS IN 2012		DWELLINGS IN 2036		GROWTH
TYPE OF HOUSING	TOTAL	%	TOTAL	%	TOTAL
SINGLE DETACHED	1,800	100%	2,000	32%	200
TOWNHOUSE	0	0%	1,000	16%	1,000
3-6 STOREY APARTMENT	0	0%	1,800	29%	1,800
7-22 STOREY APARTMENT	0	0%	1,400	23%	1,400
TOTAL DWELLINGS	1,800	100%	6,200	100%	4,400

Table 5.1: Projected Residential Growth in Bella Vista under the Structure Plan

EMPLOYMENT

TYPE OF JOBS	JOBS IN 2012		JOBS IN 2036		GROWTH
TTPE OF JOBS	TOTAL	%	TOTAL	%	TOTAL
COMMERCIAL	8,000	84%	18,250	91%	10,250
RETAIL	1,000	11%	1,750	9%	750
BULKY GOODS	500	5%	0	0%	-500
INDUSTRIAL	0	0%	0	0%	0
TOTAL JOBS	9,500	100%	20,000	100%	10,500

Table 5.2: Projected Employment Growth in Bella Vista under the Structure Plan

Demand Analysis

A high level demand analysis has been undertaken to ascertain the demand for potential development scenarios on opportunity sites within the Study Area. The analysis:

- Assessed the proposed future desired character and built form, including densities, as proposed under the Structure Plan, against market conditions and demand; and
- Identified take-up/realisation rates for each land use within the Study Area, which informed the calculation of projected growth.

Outcomes of the demand analysis:

- 1. Demand for Additional Dwellings. Future demand for additional residential development in the Study Area is estimated to be in the order of 200 dwellings per annum comprised of 32% 7-22 storey apartments, 41% 3-6 storey apartments, 23% townhouses and 4% single detached in addition to existing stock resulting in the total dwelling diversity shown in the adjacent table in 2036. Such demand is related to the high level of amenity and quality of life afforded within Bella Vista, the demand for housing diversity and improved access to social, recreational and employment opportunities as a result of the North West Rail Link.
- 2. Demand for Employment Lands. Future demand for additional employment (commercial, retail and bulky goods) floorspace within the Study Area is projected to increase within the Study Area at a rate of 10,000m² p.a. of commercial, 900m² p.a. of retail, both of which will gradually replace the bulky goods retailing over time.
- **3.** Type and Location of Development. The demand analysis supports the provision for 7-22 and 3-6 storey apartments on the periphery of the commercial core adjacent significant areas of open space. These areas of residential uplift and renewal may serve as the catalyst for regeneration within the broader precinct. In particular, future residents will be attracted to these areas for their level of amenity, employment opportunities, retail and community facilities and close proximity to the train station.

The analysis supports the provision for townhouse and single detached development on the periphery of the Study Area on large undeveloped lots.

In terms of future employment generating development, the feasibility analysis supports the provision for the intensification of a true commercial core around the new transport opportunities that the station will provide, supported by moderate intensification and expansion of the existing business park and a mixed use area.

Future retail floorspace within Bella Vista is to be located within the commercial core and mixed use residential precinct south of Memorial Avenue and is expected to increase in line with the growth of the local population and employment catchment.

6. Actions and Implementations



6.1 INTRODUCTION

The Structure Plans for the NWRL Station Precincts are to be considered at the strategic planning level, similar to that of the Subregional Strategies for Sydney. The Structure Plans are to inform and be implemented through appropriate zonings and amendments to built form controls. It will also guide the assessment of major projects and development applications within the Study Area.

To deliver the Structure Plan's projected growth, zoning and planning controls will require review. Current controls, such as those relating to minimum lot size, height and FSR constrain intensification of land use and thus should be revisited. Similarly, Development Control Plans and Section 94 Schemes will also need to be revised in light of the NWRL. Current parking policies and minimum apartment sizes are also constricting the type and variety of dwellings being offered within the study area and should be reconsidered.

The above will be carried out in consultation with relevant agencies, stakeholders and key landholders. Other matters for consideration include public domain, transport. accessibility and infrastructure servicing.

6.2 PUBLIC DOMAIN, URBAN **DESIGN & OPEN SPACE**

Consideration is to be given to public domain and open space planning for the Study Area including:

- Streetscapes, with open space linkages and connections to transport, new and existing housing and open space,
- Treatment and provision of open spaces and civic spaces, and protection of existing green spaces,
- Preservation of Bella Vista Farm and its view corridor to the south.
- Pedestrian and cycling linkages,
- Built form response to public and private open spaces,
- Signage and wayfinding,
- Street furniture, lighting and public art.

6.3 TRANSPORT, MOVEMENT AND **ACCESSIBILITY**

Consideration is to be given to transport, movement and accessibility planning for the study area including:

- Safe and efficient movement to, from and within the Study Area,
- Improvements to connectivity, particularly for nonvehicular transport modes, to the new station and new centres including the identification and provision of cycle and pedestrian infrastructure along key routes within the study area,
- Identification of improvements to bus networks serving the precinct,
- Parking requirements,
- Road upgrades, including local road widening, to accommodate increased movements associated with the introduction of a new rail station at Bella Vista.
- Bus, taxi, kiss and ride interchange integrated with the



6.4 INFRASTRUCTURE AND **SERVICES**

The projected growth in population and employment within the Study Area will require consideration of infrastructure networks, such as water, sewer, electricity and gas to meet projected demand.





