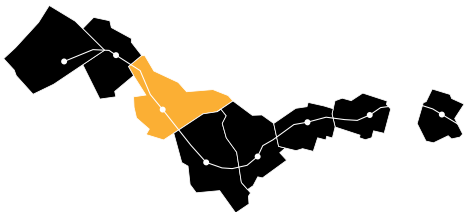

North West Rail Link Kellyville Station Draft Structure Plan

A Vision for Kellyville Station Surrounds



Kellyville Draft Structure Plan

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Kellyville Draft Structure Plan

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 housing and 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 surpasses that of the bus or car.

1.2 REPORT STRUCTURE

The following report is a study to determine the challenges and opportunities the new station will present to the Kellyville locality. This study will culminate in a collective vision and Draft 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 Kellyville. In preparing the Draft 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.
- 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 will be realised through the Draft 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*.

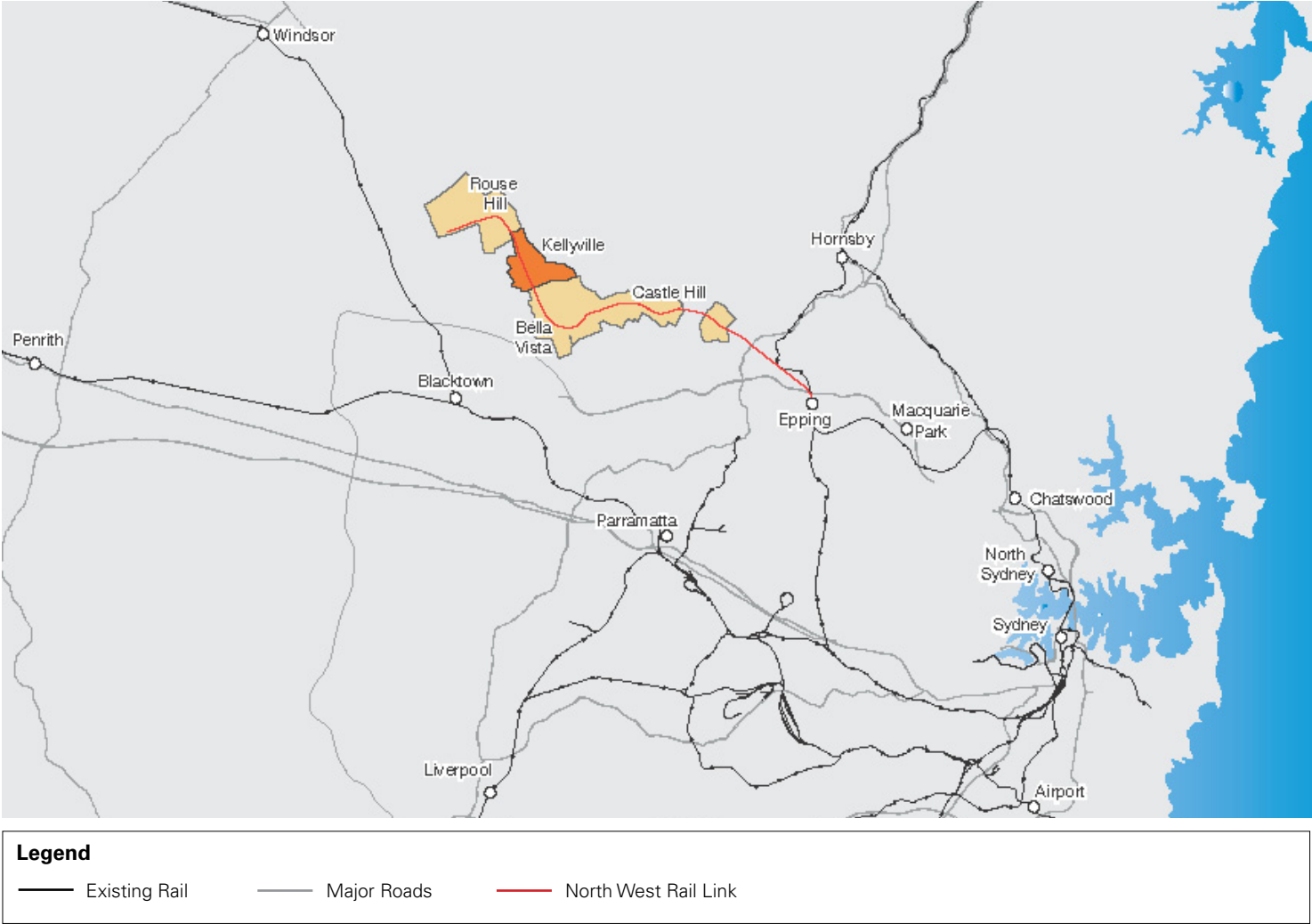


Figure 1: North West Rail Link in the context of Metropolitan Sydney



1.3 STUDY AREA LOCALITY & CHARACTER

The NWRL includes a new station at Kellyville. The new train station will be located just east of Old Windsor Road and south of Samantha Riley Drive.

The NWRL has the potential to strengthen Kellyville's role as a residential area, origin station and Village Centre within the North West Subregion. The station will assist in reducing car dependence and make walking, cycling and public transport more viable for residents.

The boundary of the Study Area is based on the nearest road boundary within a radius of 800m from Kellyville 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 Kellyville Study Area is an established residential and retail/commercial centre that covers approximately 437 hectares and is located within the Hills Shire and Blacktown Local Government Areas (LGAs).

The Study Area extends east to the Strangers Creek riparian corridor and Windsor Road, Memorial Avenue to the south, Stanhope Parkway, Rothbury Terrace, Salford Street, Tilbury Avenue, Hayle Terrace and Perfection Avenue to the west and Sanctuary Drive to the north.

The Study Area comprises the existing village centre along Windsor Road as well as low density residential and rural residential areas. The built form consists of 1-2 storey detached houses set on large blocks, with strong landscaped settings and extensive vegetation. Two major drainage corridors run north-south through the Study Area - Strangers and Elizabeth Macarthur creeks.

An aerial image of the Study Area is provided in Figure 3 on page 6. A series of photos which illustrate the existing built form and character of the Study Area are provided on page 7.

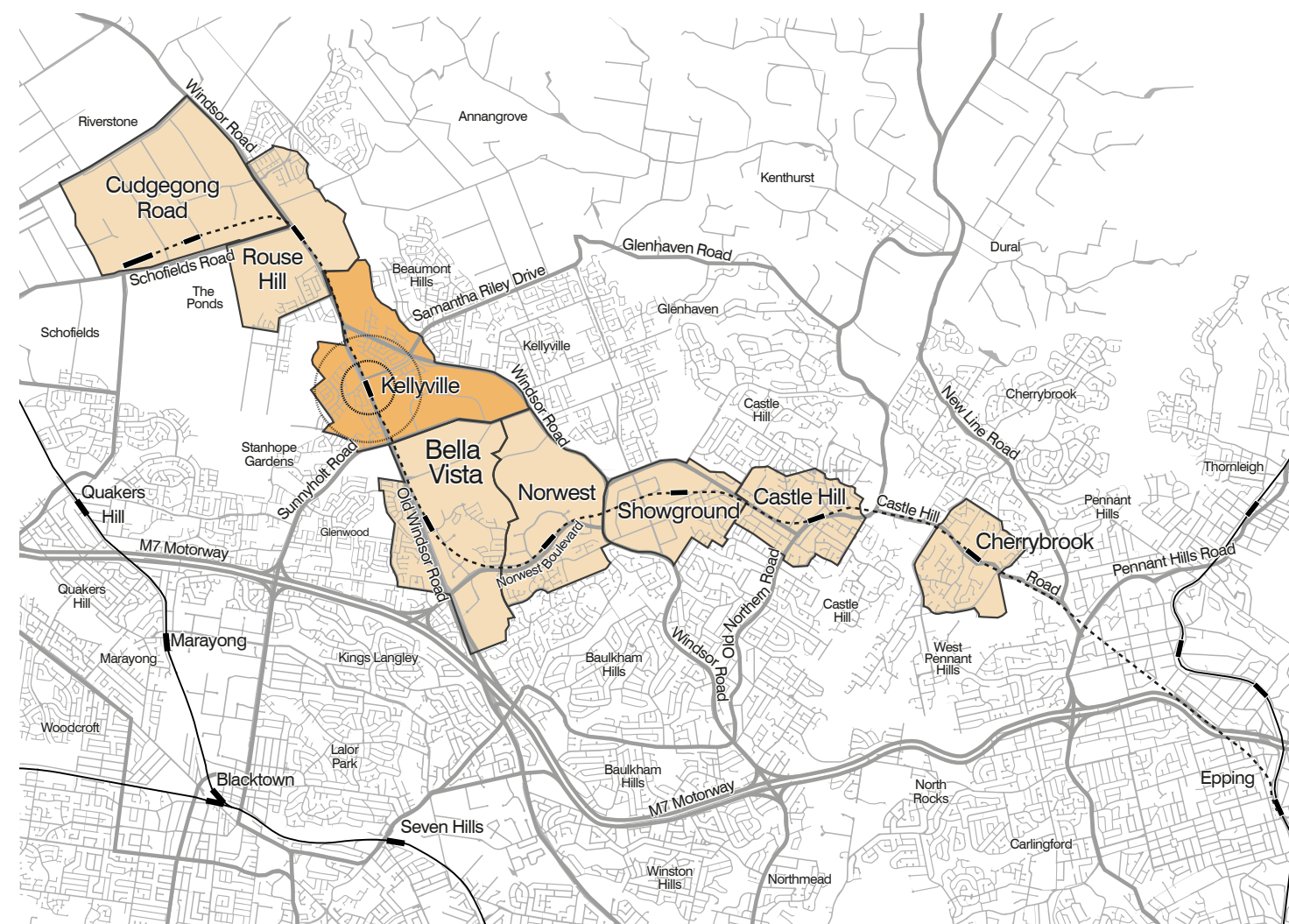


Figure 2: Kellyville Study Area, in the context of the North West Rail Link.

Kellyville Draft Structure Plan

2. Opportunities & Constraints Analysis

2.1 INTRODUCTION

This section is an assessment of the opportunities and constraints within the Study Area. The Study Area's physical characteristics have been mapped and analysed to identify physical constraints and opportunity sites within the Study Area. These 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 will 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 Kellyville.

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

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



Figure 3: Kellyville Station Study Area, showing station location, study area boundary and key land uses
Source: Google Maps 2012



Figure 4: Images illustrating the existing built form and character of Kellyville
Source: TfNSW

Kellyville Draft Structure Plan

2. Opportunities & Constraints Analysis

2.2 TRANSPORT, TRAFFIC & ACCESSIBILITY

The Study Area is accessible from three principle routes – Old Windsor Road from the north and south, Windsor Road also from the south, and Sunnyholt Road from the west. Old Windsor Rd traverses the Study Area in a north-south direction, linking Windsor and Kellyville to the CBD (via the M2) and important employment centres in the east, such as Macquarie Park. Windsor Road also provides another primary route between Windsor and the CBD (via the M2).

There are two secondary roads running east-west across the Study Area - Samantha Riley Drive and Memorial Avenue. These two roads link suburbs Stanhope Gardens with Beaumont Hills. Memorial Avenue connects to Sunnyholt Road which links south to Blacktown.

Existing bus services operate along the TWay and Sunnyholt Road, linking Rouse Hill and Beaumont Hills/Kellyville to Parramatta and the City/North Sydney and Blacktown.

A pedestrian path and regional cycle way is located on the eastern side of Old Windsor Road south from the intersection with Memorial Avenue and west along Sunnyholt Road. Pedestrian crossings are provided at the Old Windsor Road/Memorial Avenue / Sunnyholt Road intersection, the northern side of the intersection of Old Windsor Road/Miami Avenue and across the T-Way at Memorial Avenue and Balmoral Road.

Figure 5 below demonstrates the 5, 10 and 20 minute walking catchments from the proposed station location.



Figure 5: Walking Catchment within the Study Area

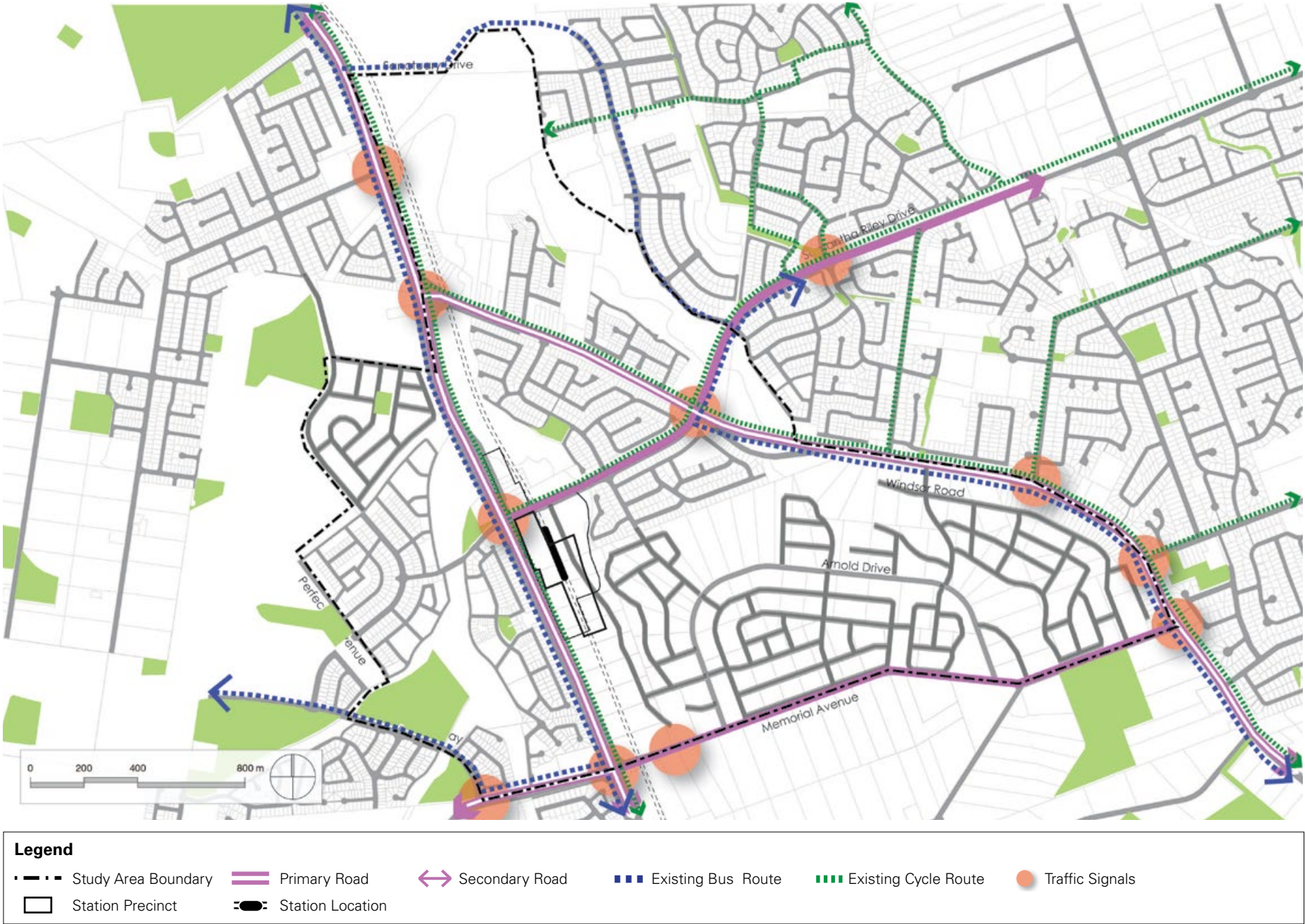
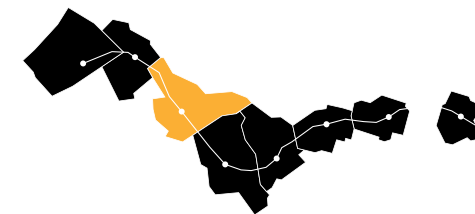


Figure 6: Access & Movement within the Study Area



2.3 OPEN SPACE & CONSERVATION

Key open spaces within the study area are include;

- Stanhope Gardens Reserve, north of Stanhope Parkway
- Maurice Hughes Reserve, north of Samantha Riley Drive.

Given the quantity of undeveloped land in government ownership, there are opportunities to provide a well-connected open space network, within walking distance from new residential areas.

The Study Area includes significant tracts of Sydney Coastal River-flat Forest, listed as an Endangered Ecological Community under the *Threatened Species Conservation Act 1995*, located in the north-east, south and east. There are also pockets of Cumberland Plain Woodland, classified as a Critically Endangered Ecological Community under the *Environment Protection and Biodiversity Conservation Act (EPBC) 1999* and the *NSW Threatened Species Conservation Act 1995*. A number of these areas are contained within government-owned lands, thus representing an opportunity to protect the vegetation and incorporate it into the open space network.

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 7: Open Space & Conservation within the Study Area

Kellyville Draft Structure Plan

2. Opportunities & Constraints Analysis

2.4 HERITAGE & SPECIAL USES

Windsor Road is designated as a General Heritage Item, and Old Windsor Road an Archaeological Heritage Item and is subject to a Conservation Management Plan prepared by Roads and Maritime Services. The remainder of the Study Area is free of heritage constraints.

The heritage/archaeological assets form an important part of the character of the Study Area.

The Study Area includes tracts of land identified as Special Use and zoned SP2 (Railway Corridor), to allow for the construction of the rail links and SP2 (Drainage Corridor). This land is largely government-owned and will become available for development once the rail link is complete, thus representing an opportunity to accommodate future development.

The Draft Structure Plan must seek to retain and reinforce the heritage items identified in *Figure 8: Heritage & Special Uses within the Study Area*.

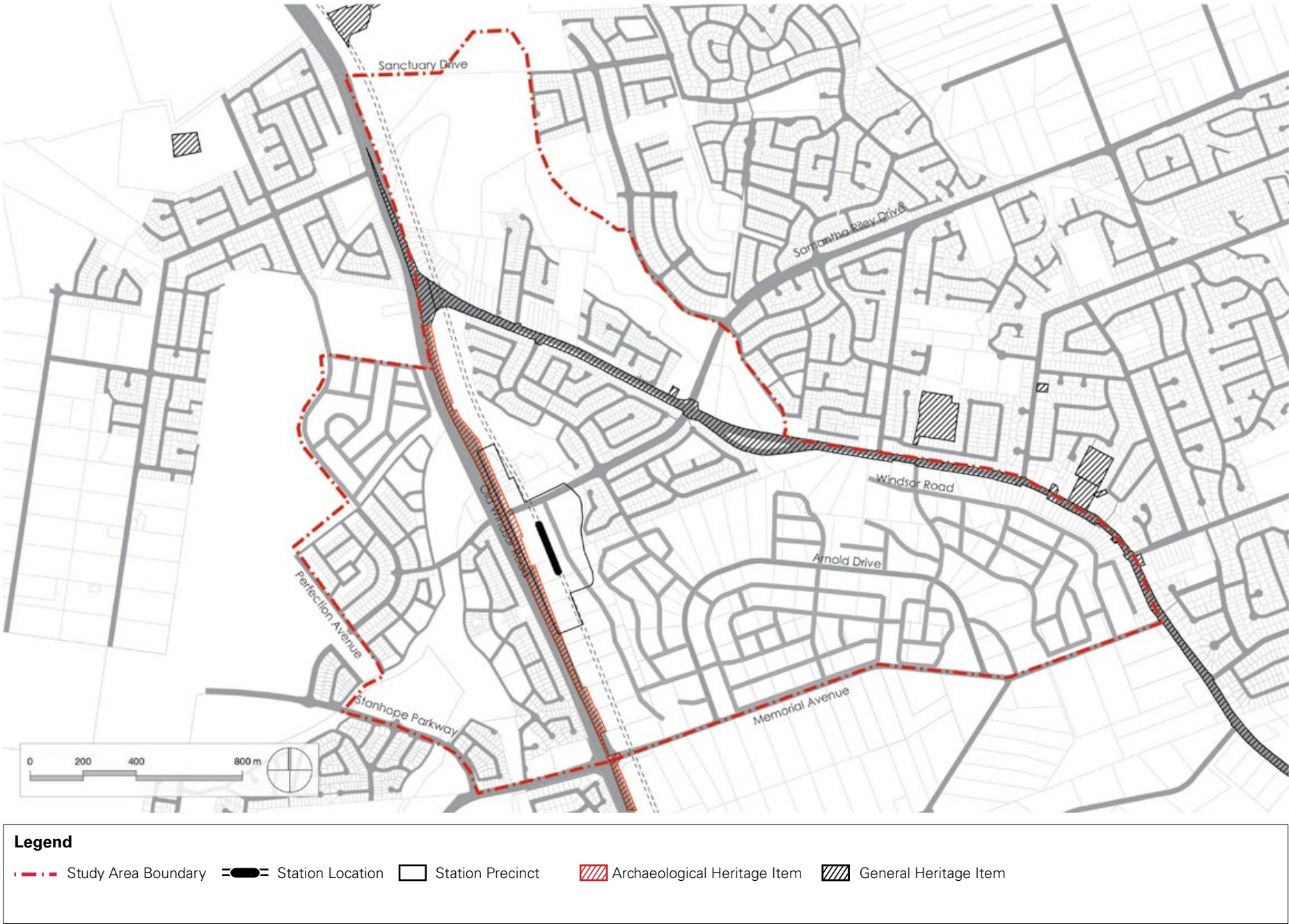
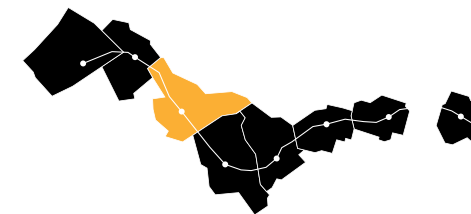


Figure 8: Heritage within the Study Area



2.5 TOPOGRAPHY

The topography within the Study Area is characterised by a ridgeline that runs south-north and falls gently away to two drainage lines, Elizabeth Macarthur and Strangers creeks, that both feed into Caddies Creek to the north.

Heights within the Study Area range between approximately 46-72 metres above sea level. The high point within the Study Area is located within the proposed park located on Penny Ave and Water Creek Boulevard.

Slope analysis of the Study Area shows that land levels are highest in the south adjacent to Memorial Ave and to the west adjacent Stanhope Gardens.



Figure 9: Topography within the Study Area

Kellyville Draft Structure Plan

2. Opportunities & Constraints Analysis

2.6 DRAINAGE

The station is located parallel to Windsor Road and within the Elizabeth Macarthur Creek riparian corridor catchment. This and the Strangers Creek catchment drain into the Hawkesbury River catchment which lies to the north. The Study Area contains a number of lower order drainage lines that form part of either Elizabeth Macarthur or Strangers Creek system.

The predominantly rural land and areas of open space adjoining Elizabeth Macarthur Creek, Caddies Creek and Strangers Creek are subject to a high and low risk of flooding. Further investigation may be required at any future re-zoning or development application stage to establish appropriate flood planning levels.

Similarly, given the location at the start of significant drainage catchments, controls governing stormwater capture, treatment and re-use will need to be devised to govern any future growth within the Study Area.

The flooding information captured in this report is preliminary and a detailed flooding study will need to be undertaken at master plan or rezoning level.

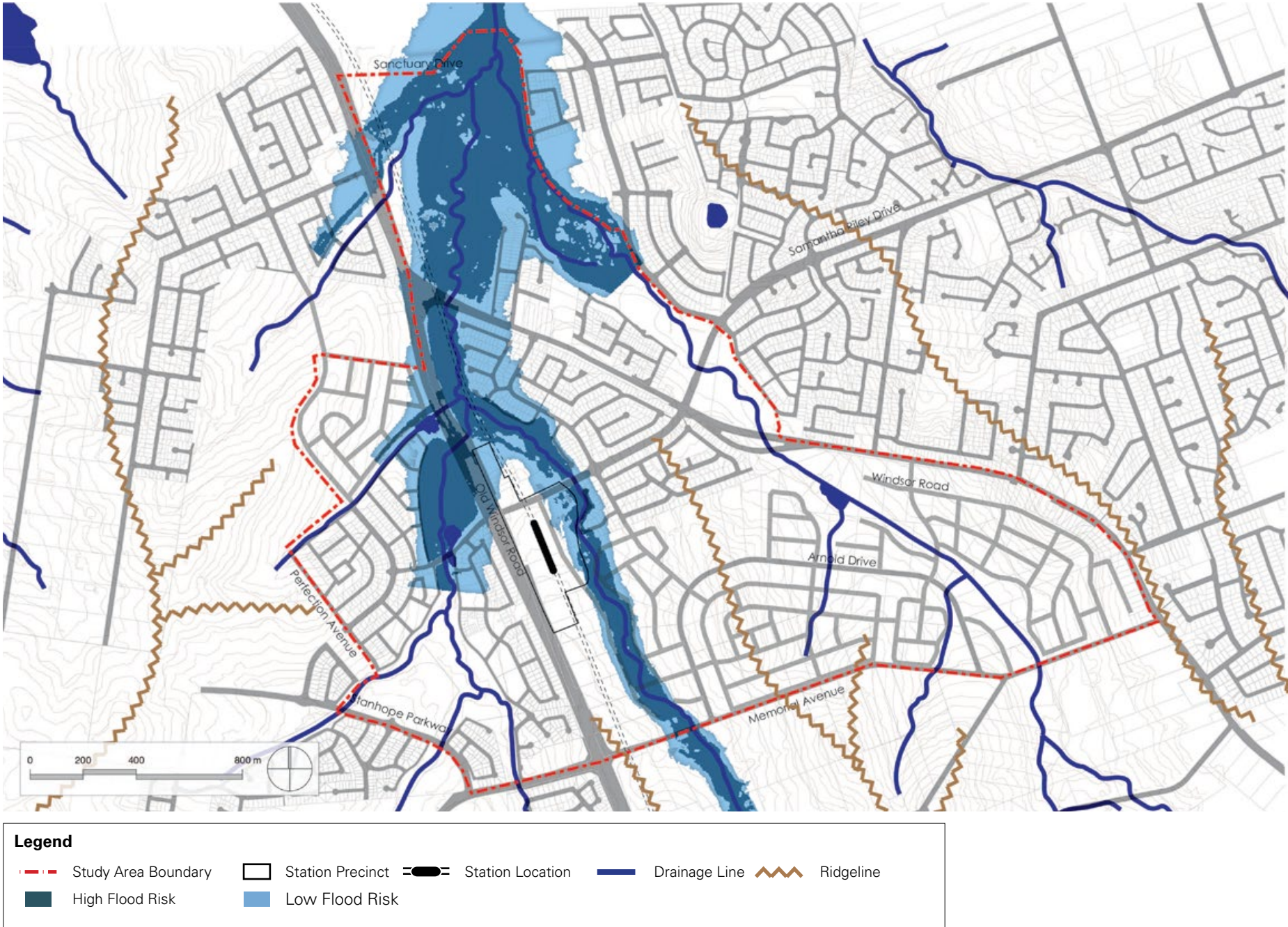
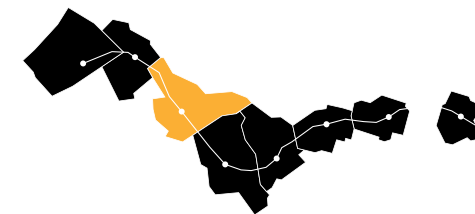


Figure 10: Drainage within the Study Area



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.

Recent development is concentrated in pockets located both east and west of Old Windsor Road and Windsor Road. Other areas of recent development surrounding the Study Area include the recent sub-divisions of Beaumont Hills and Stanhope Gardens.

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 Draft 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 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.

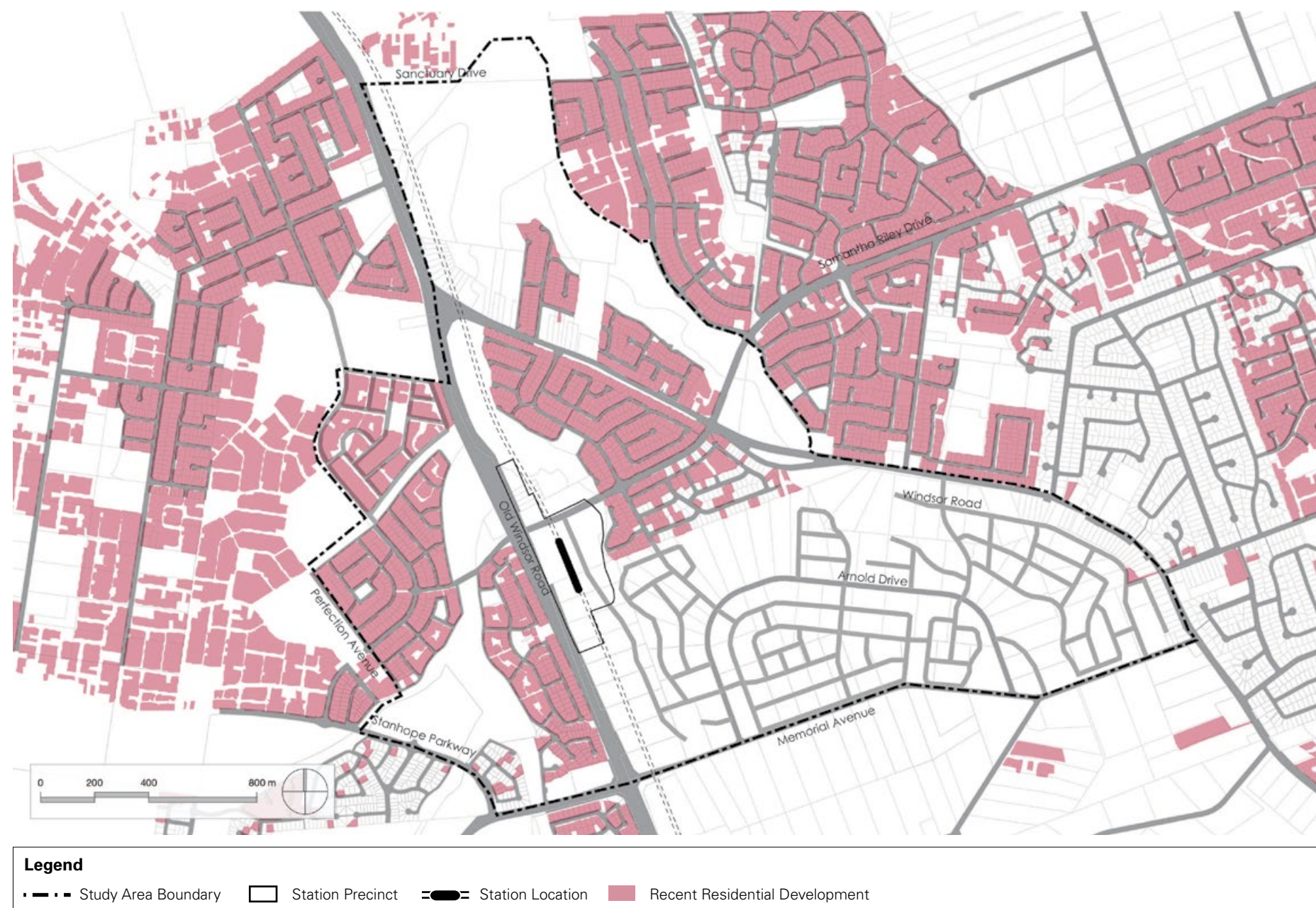


Figure 11: Recent Residential Development within the Study Area

Kellyville Draft Structure Plan

2. Opportunities & Constraints Analysis

2.8 OTHER CONSTRAINTS

There are areas within the Study Area which, as a result of their highly vegetated setting, are prone to bushfire. Bushfire prone land is concentrated in the north of the Study Area, comprising greenfield land. The remainder of the Study Area is otherwise free of bushfire prone land.

Any redevelopment of land within these bushfire prone areas will need to provide the required asset protection zones in accordance with relevant Planning for Bushfire Protection guidelines.

The majority of residential land to the west of Old Windsor Road and a small residential subdivision located to the north of Samantha Riley Drive are subject to community title ownership arrangements.

Land governed by community title arrangements are considered a constraint to redevelopment, as under current legislation, the approval of all owners and lenders is first required. Accordingly, these schemes are not likely to contribute to the future residential capacity of the Study Area into the foreseeable future.

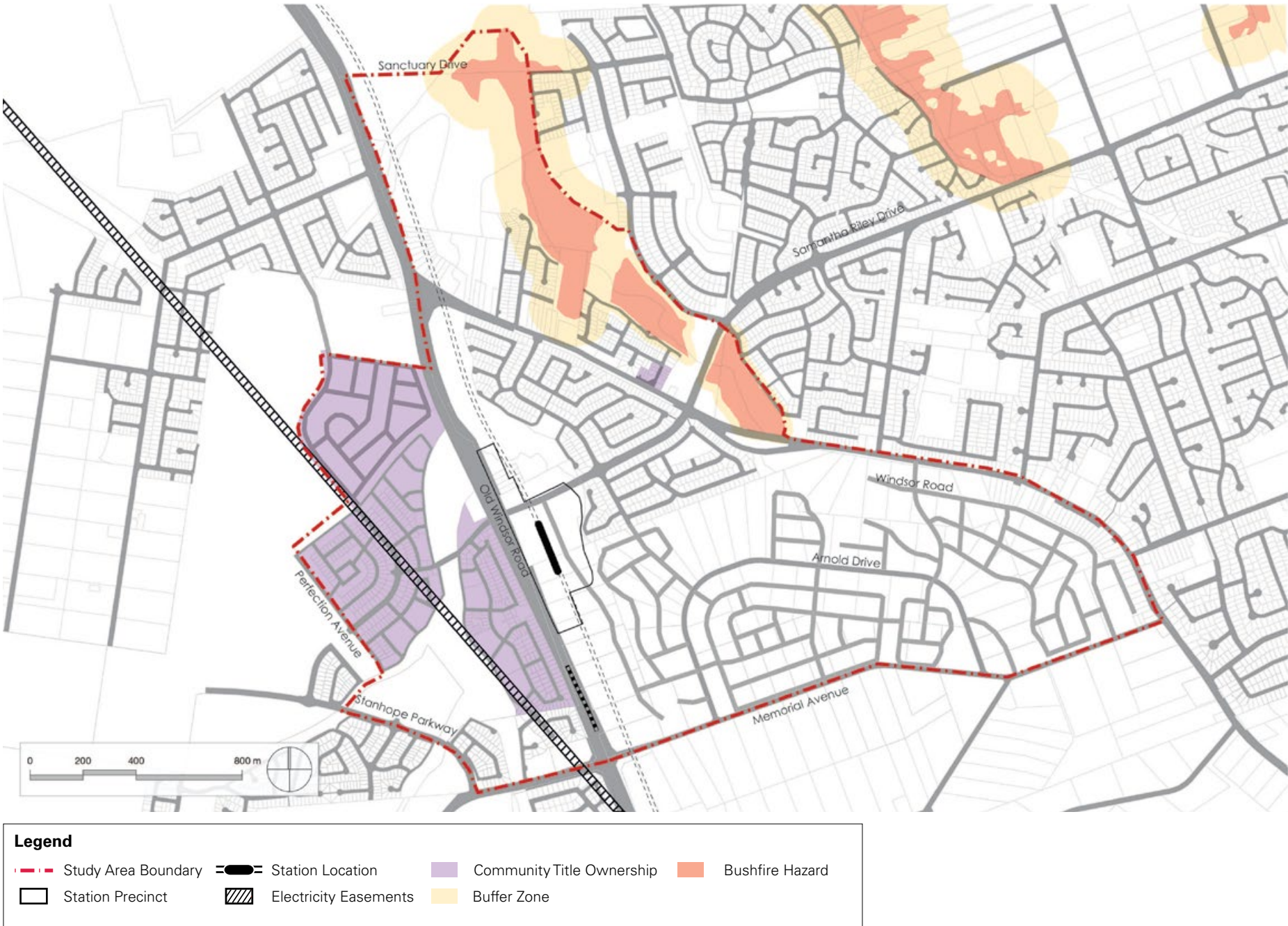
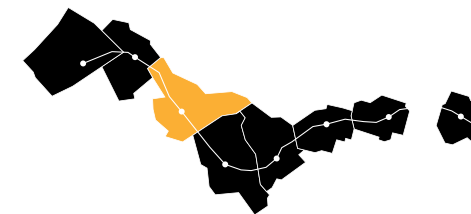


Figure 12: Other Constraints within the Study Area



2.9 COMBINED CONSTRAINTS

The constraints mapping indicates there are large portions of the Study Area that are constrained. The major constraints include:

- The number of large vegetation tracks scattered across the Study Area
- Bushfire constraints associated with this existing vegetation
- The Elizabeth Macarthur Creek and Strangers Creek riparian corridors, and their associated flooding
- The large areas of recent development and sites with community title ownership arrangements.

Areas with both existing vegetation and flooding are seen as both a constraint and opportunity. They may provide the opportunity to increase community facilities, and active and passive recreation spaces to contribute to increased levels of amenity for workers and residents of Kellyville in the future.

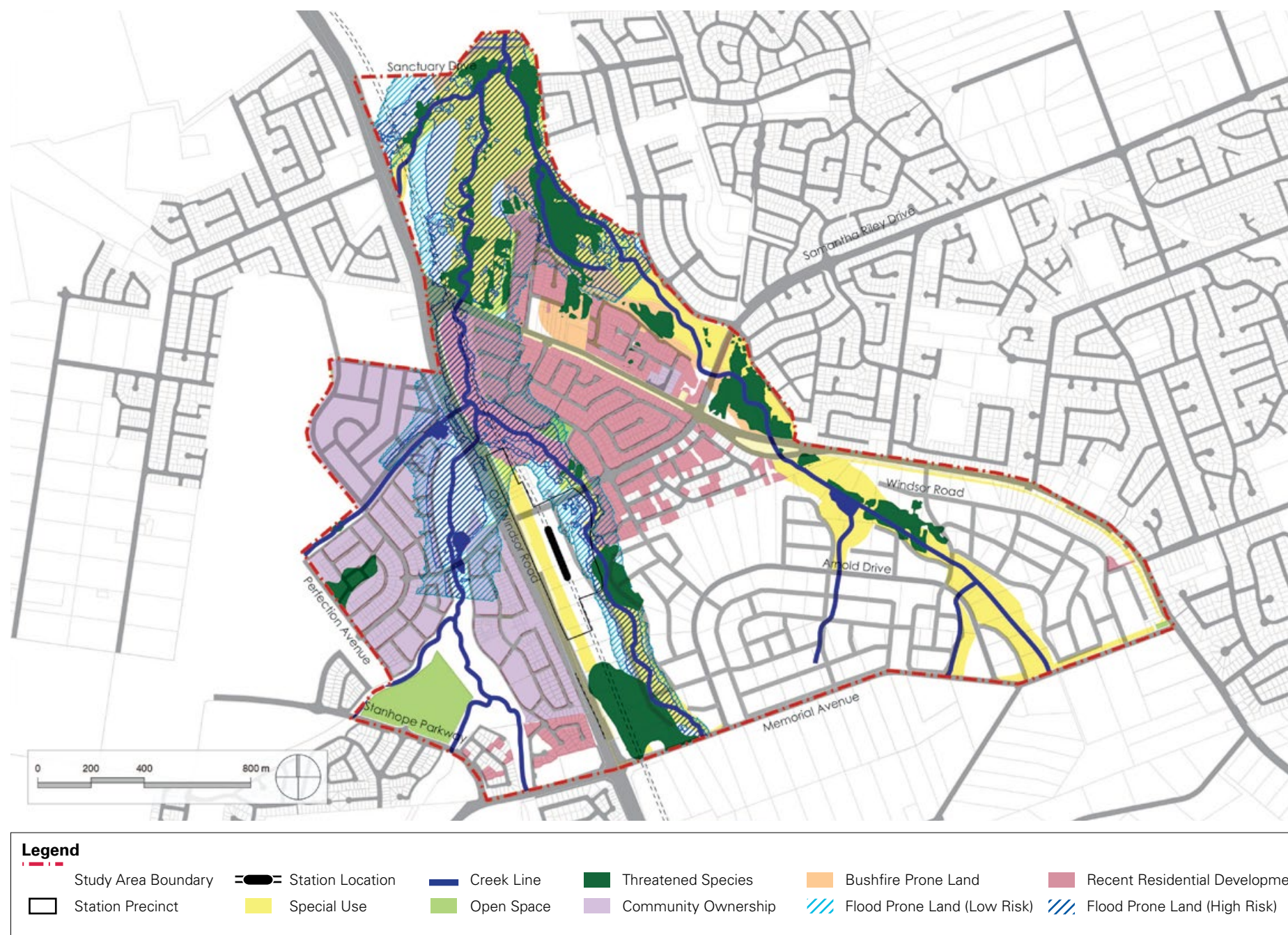


Figure 13: Combined Constraints within the Study Area

Kellyville Draft Structure Plan

3. Planning Controls

3.1 INTRODUCTION

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

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

Additional relevant controls are also contained in *The Hills Development Control Plan 2011* and the *Blacktown Development Control Plan 2006*.

3.2 LAND USE

Land within the Kellyville Study Area is predominately zoned for residential use, with some employment land uses. Medium density residential development is located to the north of the station, while low density residential development is located to the east of the station, and to the west across Old Windsor Road.

Land zoned as an Enterprise Corridor is located to the north of the station adjacent to Old Windsor Road, while a significant tract of land to the north of Memorial Drive is zoned as a B7 Business Park.

There is also land zoned SP2 Infrastructure to accommodate the NWRL rail alignment corridor, while two continuous tracts of land running north to south are zoned as trunk drainage.

A plan illustrating the zoning controls is provided in *Figure 14: Zoning Controls*.

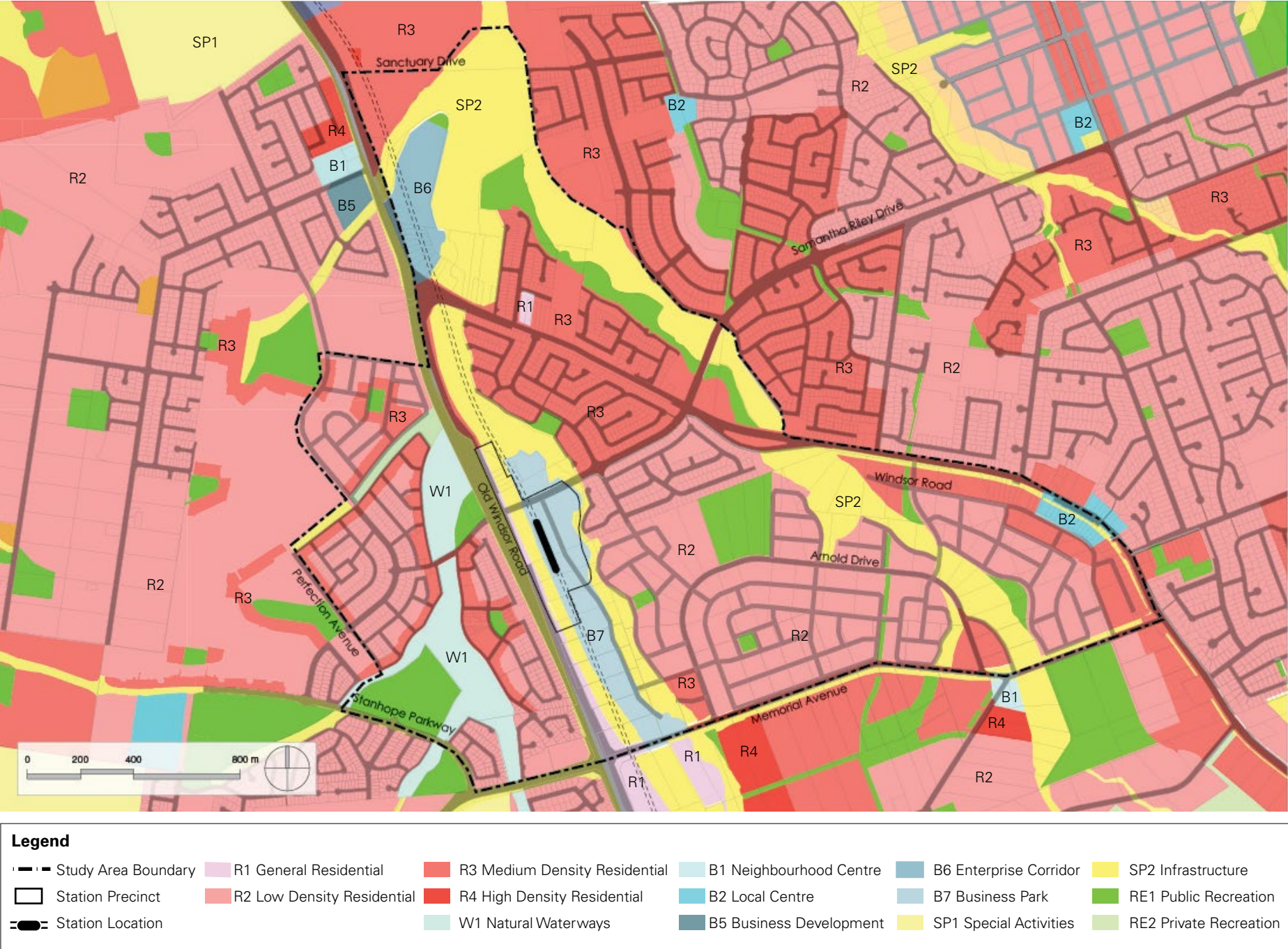


Figure 14: Zoning Controls within the Study Area



3.3 BUILDING HEIGHT

Lands zoned for employment uses surrounding, and to the north of, Kellyville station have a maximum building height ranging from 12m to 16m, while residential lands to the east of Old Windsor Road that are within The Hills LGA have a maximum building height of 10 metres.

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



Figure 15: Building Heights within the Study Area

Kellyville Draft Structure Plan

3. Planning Controls

3.4 LOT SIZE

The land zoned for employment uses surrounding, and to the north of Kellyville station has a minimum lot size ranging from 600m2 in the B6 Enterprise Corridor zone to 6,000m2 for land within the B7 Business Park zone. Land zoned for low density residential development to the east of Kellyville station has a minimum lot size of 700m2, while remaining residential lands within the Kellyville sub precinct (both within The Hills LGA have a minimum lot size of 450m2.

In the area to the west of Old Windsor Road in Blacktown LGA, most areas have a minimum lot size of 450m2. In the areas fronting on to open space the minimum lot size is reduced to 330m2

A plan illustrating the zoning controls is provided in *Figure 16: Minimum Lot Size Controls*.

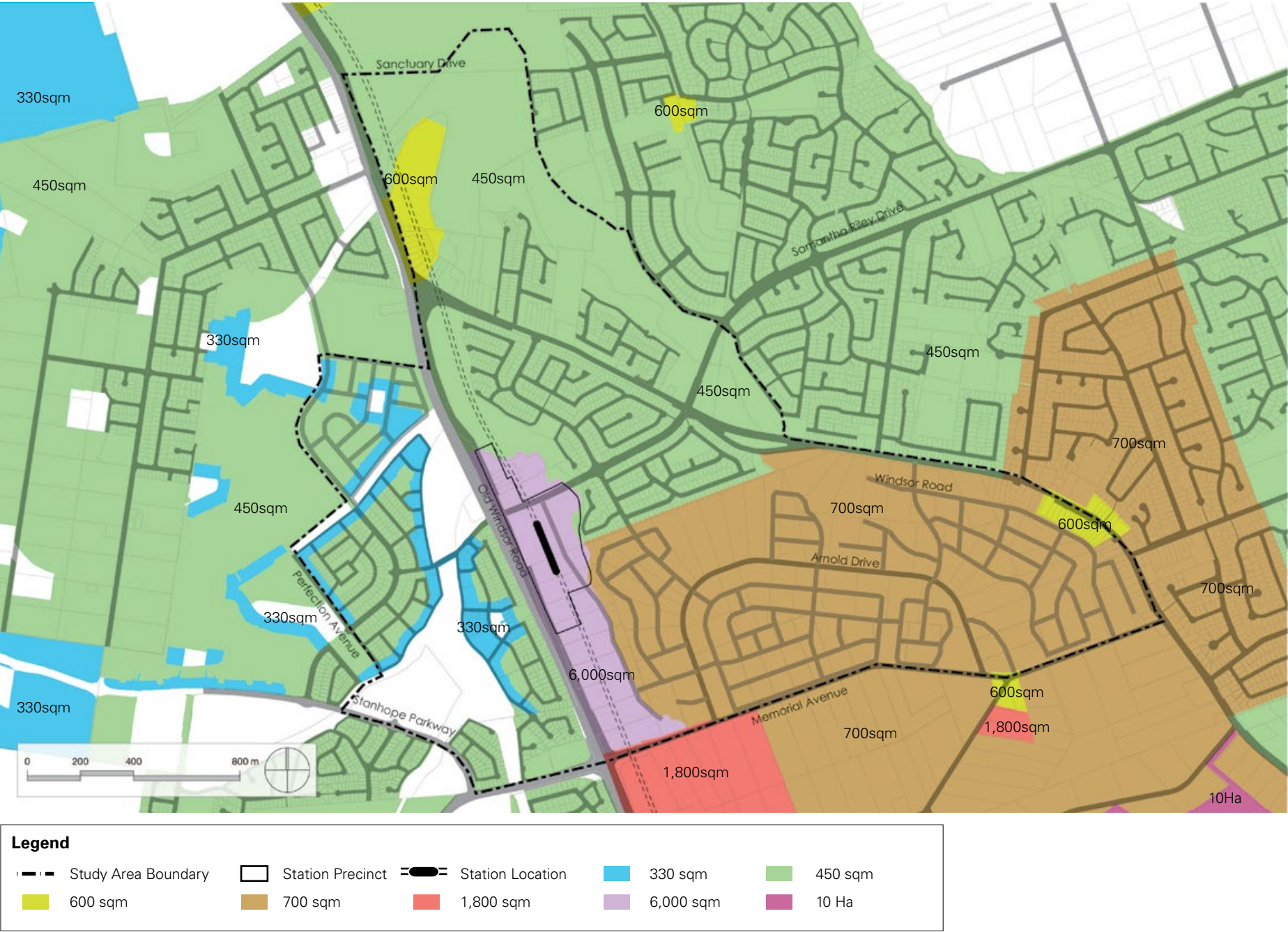
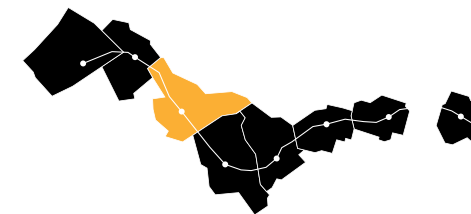


Figure 16: Minimum Lot Size Controls within the Study Area



3.5 FLOOR SPACE RATIO

The employment lands within the Kellyville Study Area have an FSR of 1:1 under the The Hills LEP 2012. There are no FSR controls for remaining land within The Hills Shire LGA.

Land within Study Area that is located within the Blacktown LGA to the west of Old Windsor Road contain a FSR control of 0.5:1 for dual occupancy buildings and integrated housing under Part C of Blacktown DCP 2006 – Development in the Residential Zones. There are no specific FSR controls for other dwelling types.

A plan illustrating the zoning controls is provided in *Figure 17: Floor Space Ratio Controls*.



Figure 17: Floor Space Ratio Controls within the Study Area

Kellyville Draft Structure Plan

4. Opportunities for Growth

4.1 OPPORTUNITY SITES

The outcome of the opportunities and constraints analysis and the review of the existing planning controls of the Study Area, leads to the identification of sites that could make a contribution to the growth of the Study Area in response to a new rail link and station.

Those sites which are unconstrained present opportunities for renewal within the Study Area. This includes short term opportunity sites that may be renewed prior to 2036 and long term opportunity sites that are subject to recent residential development, however, due to the average 30-40 year building lifespan, may present themselves as opportunities for renewal beyond 2036.

The diagram adjacent highlights these opportunity sites, both short and long term. The sites located to the east of the proposed station present the fewest constraints with good connectivity and within walking distance of the proposed Kellyville station. Contiguous opportunity sites may also allow for the amalgamation of lots in to larger single landholdings. To the east of the proposed station, the opportunity sites are constrained by poor accessibility, due to the barrier of Old Windsor Road.

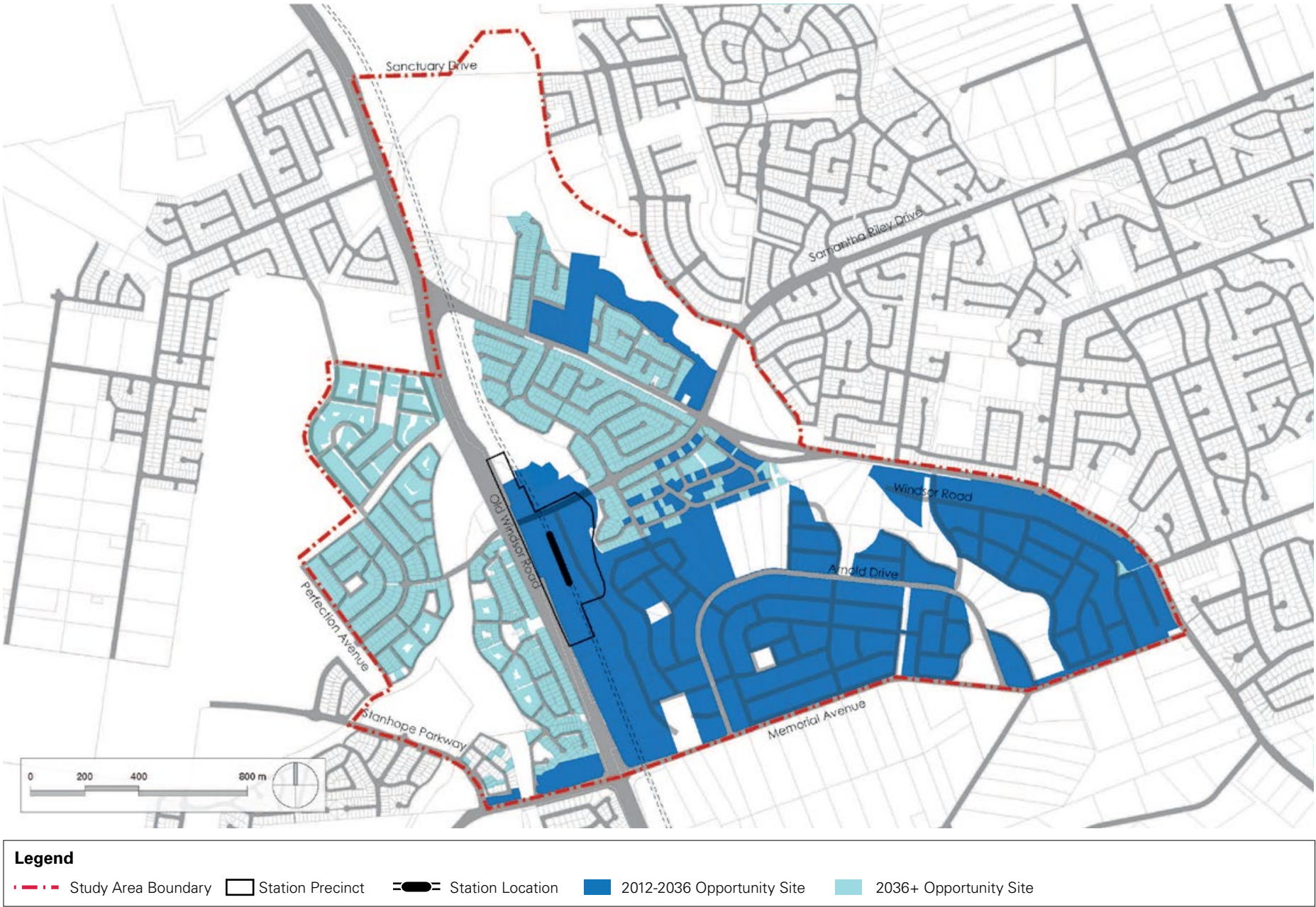
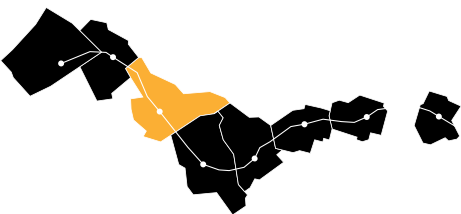


Figure 18: Opportunity Sites within the Study Area



4.2 PROJECTED GROWTH UNDER EXISTING CONTROLS

Under the existing planning controls contained within the *The Hills Local Environmental Plan 2012* and *Blacktown Local Environmental Plan 2013*, the opportunity sites within Kellyville have a variety of land use, height, floor space and minimum lot size controls applied to them.

The current zoning and planning controls allow for business park, residential, both low and medium density, local centre and open space/drainage uses. Proposed controls on the area zoned for business park uses permit a 1:1 FSR, minimum lot size of 6,000 square metres and a maximum height of 16 metres. Residential use areas have a minimum lot size that varies between 450 and 700 square metres and a maximum height of between 10 to 12 metres.

An assessment of these current controls on the opportunity sites reveals that the capacity for future growth within Kellyville 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 assessment also reveals that parking requirements and minimum apartment sizes are restricting the supply of a variety of apartments.

The current and proposed draft controls for the Study Area could result in an additional 3,750 jobs and 3,000 dwellings.

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

However, there are opportunities to reconsider the type of development around the station. Lands, such as those zoned for Business Park are more suitable for residential development. The existing controls are more suited to large floor plate office-type development, and as such, may need to be revised. Similarly, existing controls and zoning limit the desired scale of residential development near the station to low density housing on large lots.

The vision and draft structure plan contained 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.

	RESIDENTIAL		EMPLOYMENT	
	TOTAL DWELLINGS	GROWTH	TOTAL JOBS	GROWTH
2012	2,000	-	100	-
2036	5,000	3,000	3,850	3,750

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



Kellyville Draft Structure Plan

5. Vision & Structure Plan

5.1 VISION FOR THE STUDY AREA

The introduction of the NWRL and a station at Kellyville has the potential to further reinforce Kellyville as a major residential area for Sydney’s North West. A new station will provide further impetus for Kellyville to evolve as a transit oriented, predominately residential area offering high, medium and low density housing options as well as local centre shopping.

The introduction of the NWRL has the potential to transform the Kellyville Study Area by providing a new focal point for the community centred around the station. This is proposed to include a mix of neighbourhood shops and services to provide for the daily needs of the local community.

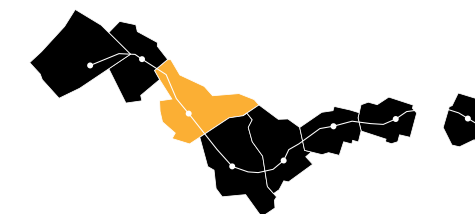
The NWRL will also provide opportunities to increase residential densities within walking distance of the station, involving a variety of housing types to ensure there is affordable and appropriate housing for all members of the community.

Local Centres have been identified to be located at the proposed station location and along Windsor Road. Other areas close to the station location and along logical open space corridors have been identified for increased densities. In the residential area closest to the station, it is envisaged that the future character will comprise, over the long term, high density residential of 7-12 storeys. Medium density residential has been located surrounding this and along major bus routes. It is envisaged that the future character of these areas will comprise, over the long term, medium density residential dwellings, ranging in height from 2-3 storey townhouses to 3-6 storey apartments, with higher density developments located closest to the station.

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, 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 19: Images depicting the desired future character of Kellyville



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Kellyville Draft Structure Plan

5. Vision & Structure Plan

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5.2 PROPOSED DRAFT STRUCTURE PLAN

The Draft Structure Plan for Kellyville has been prepared by The Department of Planning and Infrastructure, Transport for NSW, Cox Richardson Architects and Planners and Hill PDA economic consultants, in consultation with Blacktown City Council and The Hills Shire Council.

The Draft Structure Plan is the framework which will guide future planning within the Kellyville Study Area. It is the result of assessing the natural and built elements of the Study Area and existing planning controls. It is founded on principles of reinforcing Kellyville as a transit oriented precinct, delivering a variety of housing types with local retail services and greater connectivity by strengthening existing links and providing new links between the station and surrounding uses.

The Draft Structure Plan proposes two local centres to provide for the growing retail needs of the existing and future residents of the Kellyville Study Area, including a new local centre adjoining the NWRL Station and T-Way.

Suitable locations for high density residential, of between 7 to 12 storeys, have been identified within close proximity to the station and along open space corridors where there is greater amenity and direct access to the bus and rail transport interchange and local services. Medium density living comprising of 3-6 storey apartments will be located within an easy 10-minute walk of the station or major bus route. Beyond this, townhouses, duplexes and single-detached dwellings will characterise the Study Area.

New links are proposed in locations within the Study Area where they will increase connectivity and permeability. These links could be either pedestrian or vehicular connections. Drawing on existing significant vegetation, existing parks and riparian corridors, green links are

proposed along Elizabeth Macarthur and Strangers creeks. These will become significant pedestrian and cycle links between Rouse Hill and Bella Vista/Norwest. It will also provide significant ecological and drainage corridor within the Study Area.

Old Windsor Road and Windsor Road is proposed to remain the primary north-south connections. Memorial Avenue is proposed to also be a primary road, connecting east-west. Samantha Riley Drive is proposed to play a secondary function in an east-west direction. Upgrades of the streetscapes on these major thoroughfares may be required to provide attractive and accessible pedestrian connections between the station and the adjacent uses.

The redevelopment 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 Kellyville Draft Structure Plan is the upgrading of the streetscapes in and around the proposed station precinct. The creation of new and widening of existing footpaths, providing barrier-free access and introducing attractive and appropriate street furniture will be required to reinforce the introduction of the NWRL and a new station at Kellyville.

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

1. The creation of new open space linkages, streets and connections between transport, new and existing housing, commercial, retailing and civic spaces.
2. The protection of existing green spaces within the Study Area which form part of the Kellyville identity, such as the Stanhope Gardens Reserve and Maurice Hughes Reserve. Areas that have conservation value will become key in providing additional open space and recreational assets to the Kellyville community.
3. The provision of additional urban plazas, parks and open spaces for the amenity of existing and future residents and workers, particularly within the station precinct and local centres.

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. This Strategy will need to address a legible hierarchy of streetscapes, treatment of open spaces and plazas, 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.

To complement the introduction of the NWRL to the study area a number of transport, movement and accessibility initiatives will need to be delivered to ensure safe and attractive movement to, from and within the Study Area.

Within Kellyville, the key connectivity issue is pedestrian access across Old Windsor Road and Windsor Road, Samantha Riley Drive and the proposed station location. The anticipated growth within the Draft Structure Plan and

increased activity around the new station will require a number of pedestrian priority measures, such as signalised crossings and potentially overpasses, to provide safe and attractive pedestrian and cycle access to the station from the south.

Complementing these connections within the Study Area will be a number of new links throughout the area to connect to the station and local centres.

Local road improvements may also be required within the station precinct and broader Study Area to accommodate future growth opportunities. These requirements are to be determined through further investigations by the relevant government agencies and authorities.

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

- New roads between Kellyville station precinct and Samantha Riley Drive
- Provision of kiss and ride spaces, park and ride spaces (located north and south of Samantha Riley Drive, under the rail viaduct and south east of the station), bicycle parking, taxi spaces and bus bays at the station
- A pedestrian bridge over Old Windsor Road to provide safe and convenient access between Stanhope Gardens and the new station and the Riley T-Way stop
- Buses operating via the T-Way with pick up and set down at the existing T-Way stops.

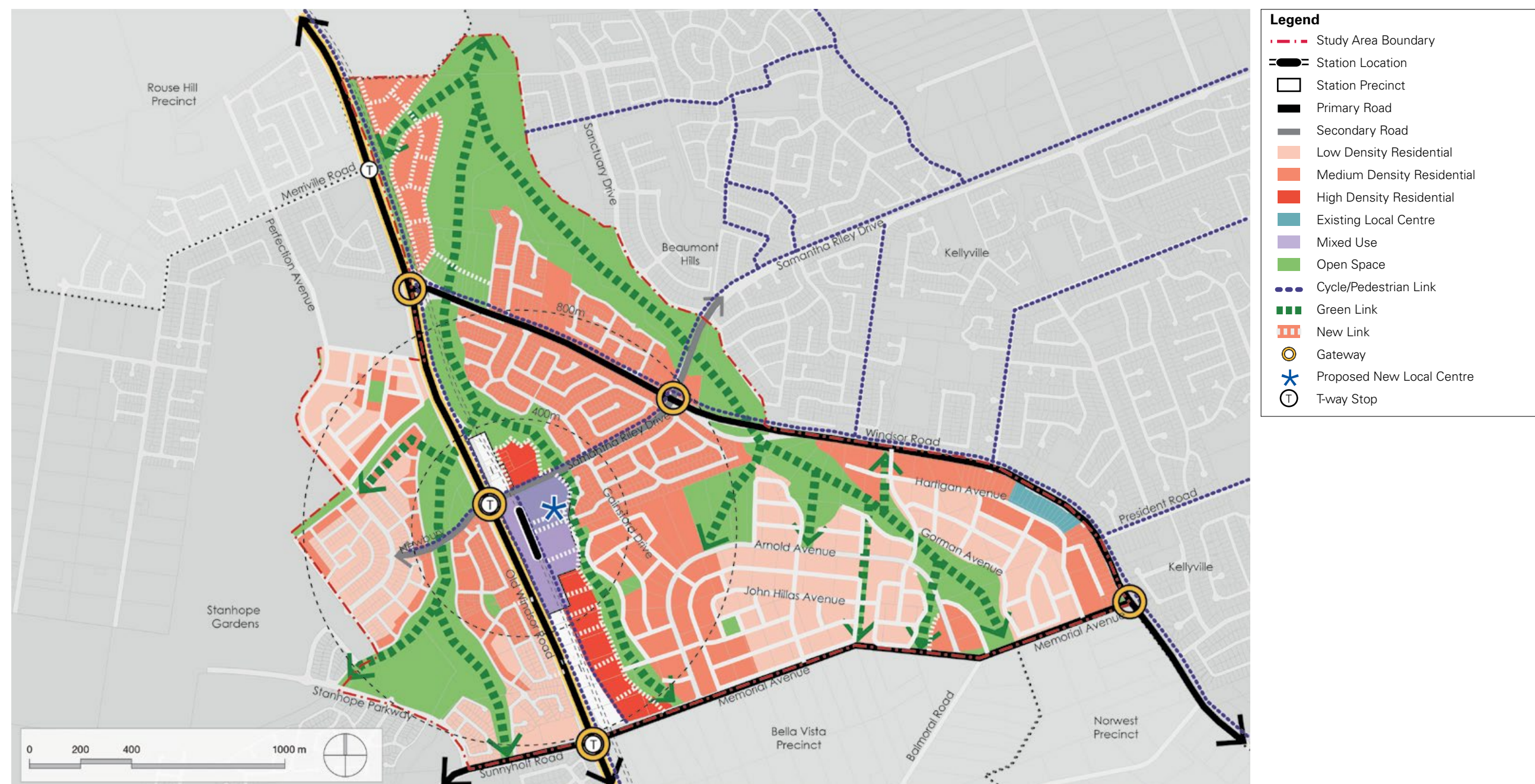


Figure 20: Draft Structure Plan for the Kellyville Study Area

Kellyville Draft Structure Plan

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 Kellyville in the future.

Station Precinct

Objectives: To provide a vibrant and attractive precinct that contains a range of active uses including retail, commercial and residential uses that suit the surrounding character and are located in close proximity to the proposed station.

Character: It is anticipated that under the vision and draft structure plan this precinct could accommodate retail, commercial amenity and higher density residential uses that would complement the character of the local area and that are carefully designed to integrate into the existing streetscape. It is located next to a riparian corridor that will provide an attractive landscape setting and the opportunity for pedestrian and cycle access to surrounding neighbourhoods. The Precinct will also include commuter parking.

Public Domain and Open Space

Objectives: To provide attractive open spaces of high amenity for the public.

Character: The draft structure plan identifies green open spaces for residents that are accessible and safe. They should be landscaped appropriately to integrate with the existing character of the area.



Figure 21: Proposed Location of Station Precinct



Figure 22: Proposed Location of Public Domain and Open Space





Local Centres

Objectives: To provide for the retail needs of a growing community and to provide retail/commercial services within close proximity of the station.

Character: It is anticipated that under the vision and draft structure plan that this precinct will evolve to become a local centre within the North West Region. The local centre located near the station will be part of the station complex and will also integrate with the surrounding residential area and character. The second local centre is a small strip of restaurants and service retail located on Windsor Road.



Figure 23: Proposed Location of Local Centres



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 proposed that under the vision and draft structure plan that this precinct will evolve to become a mixture of single detached dwellings and medium density townhouses. This precinct will serve as a transition between the lower density residential areas beyond the Study Area and the station precinct.



Figure 24: Proposed Location of Low Density Living



Kellyville Draft Structure Plan

5. Vision & Structure Plan

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 25: Proposed Location of Medium Density Townhouse Living



Medium Density Apartment Living

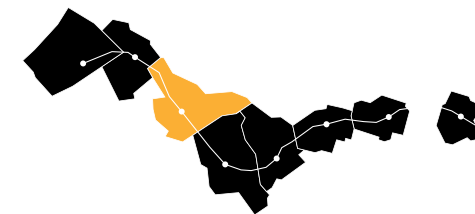
Objectives: To provide for the housing needs of a growing community and to provide a variety of housing types within close proximity of the station and associated uses.

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.



Figure 26: Proposed Location of Medium Density Apartment Living





High Density Apartment Living

Objectives: To provide for the housing needs of a growing community and to encourage an increased residential density in areas 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 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 7-12 storey apartment buildings, carefully master planned around communal open spaces and incorporating landscaped setbacks to existing streetscapes. Higher tower forms may be considered on a merit basis within close proximity of the station.



Figure 27: Proposed Locations of High Density Residential



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 28: Areas Expected to Remain Unchanged

Kellyville Draft Structure Plan

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 Draft 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 Kellyville, 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 52% for housing and 83% 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 106 hectares.

Application of the proposed land uses and typologies within the Draft Structure Plan will result in a total capacity for an additional 8,400 dwellings by 2036. However, it is anticipated that only 52% of this capacity will be realised, delivering an additional **4,400** dwellings within the Study Area.

The proposed Draft Structure Plan will result in an additional employment capacity of 800 jobs by 2036. It is anticipated that only 83% of this capacity will be realised, delivering an additional **800** jobs within the Study Area.

RESIDENTIAL

TYPE OF HOUSING	DWELLINGS IN 2012		DWELLINGS IN 2036		GROWTH
	TOTAL	%	TOTAL	%	
SINGLE DETACHED	2,000	100%	1,200	19%	-800
TOWNHOUSE	0	0%	1,000	16%	1,000
3-6 STOREY APARTMENT	0	0%	3,100	48%	3,100
7-12 STOREY APARTMENT	0	0%	1,100	17%	1,100
TOTAL DWELLINGS	2,000	100%	6,400	100%	4,400

Table 5.1: Projected Residential Growth in Kellyville under the Draft Structure Plan

EMPLOYMENT

TYPE OF JOBS	JOBS IN 2012		JOBS IN 2036		GROWTH
	TOTAL	%	TOTAL	%	
COMMERCIAL	0	0%	0	0%	0
RETAIL	100	100%	900	100%	800
BULKY GOODS	0	0%	0	0%	0
INDUSTRIAL	0	0%	0	0%	0
TOTAL JOBS	100	100%	900	100%	800

Table 5.2: Projected Employment Growth in Kellyville under the Draft 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 Draft 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:

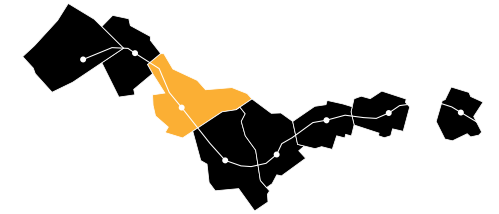
- Demand for Additional Dwellings.** Future demand for additional residential development in the Study Area is estimated to be in the order of **200** dwellings per annum comprised of 22% 7-12 storey apartments, 60% 3-6 storey apartments and 18% townhouses in addition to existing stock resulting in the 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 Kellyville, the demand for housing diversity and improved access to social, recreational and employment opportunities as a result of the North West Rail Link.
- Demand for Employment Lands.** Future demand for additional employment floorspace within the Study Area is projected to be constrained to retail only and increase within the Study Area at a rate of **1,000m2** p.a.
- Type and Location of Development.** The demand analysis supports the provision for 7-12 storey and 3-6 storey garden apartments within the mixed use station precinct and within close walking distance of the new train station. 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 high levels of amenity, employment opportunities, retail, cultural and community facilities and close proximity to the train station.

The analysis supports the provision for townhouse development on the periphery of the Study Area where large single lots could accommodate 2-4 townhouses each and the possibility to amalgamate sites into larger contiguous landholdings exists.

In terms of future employment generating development, the feasibility analysis supports the provision for retail land-use at the mixed use area around the new station to provide for the day to day needs of residents and workers and the local catchment. Future retail floorspace within Kellyville is to be located within the mixed use station precinct and the local centre on Windsor Road and is expected to increase in line with the growth of the local population catchment.

Kellyville Draft Structure Plan

6. Actions and Implementation



6.1 INTRODUCTION

The Draft 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 Draft Structure Plans will inform, and be implemented through, appropriate zonings, amendments to built form controls and to guide the assessment of major projects and development applications within the Study Area.

To deliver the Draft Structure Plan's projected growth, zoning and planning controls for the study area 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, Section 94 Schemes and Public Domain Strategies may also need to be revised in light of the NWRL. Current parking policies and minimum apartment sizes are constricting the type and variety of dwellings being offered within the study area.

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, commercial, civic and retail spaces,
- The need for additional urban plazas, parks and open spaces for the amenity of existing and future residents and workers,
- Preservation of ecological corridors and existing significant vegetation for green links,
- 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 non-vehicular 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,
- Local road widening to accommodate increased movements associated with the evolution of the Centre and future growth opportunities
- Bus, taxi, kiss n ride interchange which is integrated with the stations.

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.



