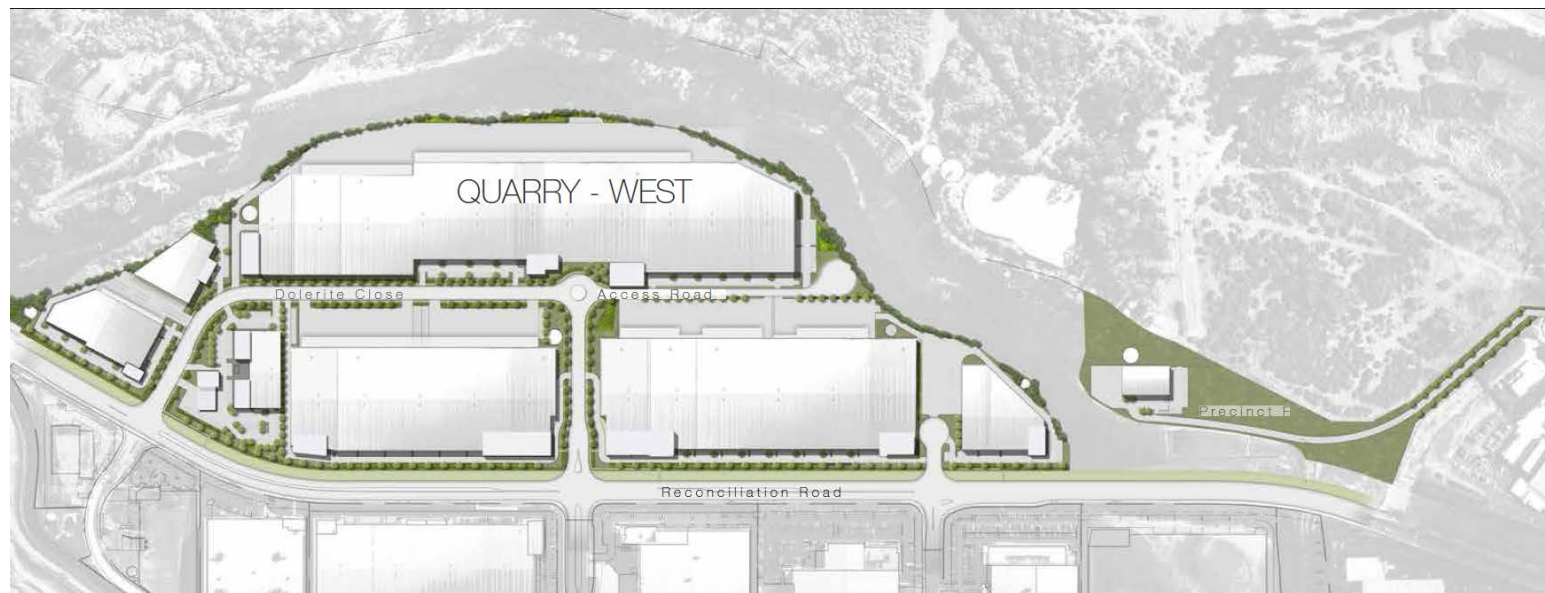


QuarryWEST Project, DEXUS Estate Environmental Impact Statement

March 2015





Prepared for:



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SYDNEY NSW 2000

Prepared by:



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striving for balance between economic, social and environmental ideals...

PJEP Ref: EIS_Mar15.docx

DISCLAIMER

This document was prepared for the sole use of DEXUS Quarry West Subtrust and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of PJEP Environmental Planning and DEXUS Quarry West Subtrust.



DECLARATION BY AUTHOR

Environmental Impact Statement

Prepared under Part 4 of the
*Environmental Planning and Assessment
Act 1979*

EIS prepared by

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Development to which Part 4 applies

Application number
Development
Applicant name
Applicant address

SSD 6801
Proposed QuarryWEST Project, DEXUS Estate
DEXUS Quarry West Subtrust
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Land to be developed

Lot 18 in Community Plan DP270644,
Reconciliation Road, Pemulwuy

Declaration

I certify that I have prepared the contents of this document, and to the best of my knowledge the EIS:

- (i) has been prepared in accordance with Part 4 Division 4.1 and the Regulations;
- (ii) contains all available information that is relevant to the environmental assessment of the development; and
- (iii) is neither false nor misleading.

Signature

Name Phillip Jones
Date 16 March 2015





EXECUTIVE SUMMARY

DEXUS Quarry West Subtrust, part of the DEXUS Property Group (DEXUS), is proposing to develop an industrial and business park on a 26 hectare portion of the Greystanes Southern Employment Lands (Greystanes SEL), within the former Prospect Quarry at Pemulwuy.

The Greystanes SEL is the subject of a concept plan and project approval approved by the Minister for Planning in 2007, and is a State significant site listed under *State Environmental Planning Policy (Major Development) 2005*.

In November 2009, the Minister for Planning approved a proposal from DEXUS for the development of an industrial park on the eastern portion of the Greystanes SEL. That project – then known as the DEXUS Estate Industrial Park Project and now known as QuarryEAST – involves the development of a world class industrial park, including:

- subdivision of the 47 hectare site;
- construction of internal estate roads and site services;
- detailed earthworks; and
- construction and use of industrial facilities (mainly warehousing and distribution centres) across the site.

QuarryEAST is being developed on a staged basis in line with the securing of end-users for the facilities and/or market demand. The project approval has been tailored in accordance with this staged development approach, and includes a number of conditions requiring certain matters to be completed to the satisfaction of the Secretary of the Department or other authorities prior to the commencement of construction of each facility.

In only 5 years, DEXUS has largely completed development of the QuarryEAST project, with all lots in the estate except one now having been developed (or under construction).

In June 2014, DEXUS purchased the western portion of the industrial and business precinct of the Greystanes SEL from Boral Limited. It is now proposing to develop this western half – known as QuarryWEST – in a similar manner as the successful development of QuarryEAST, including a world-class 'logistics campus' over a large portion of the site.

The QuarryWEST project has been designed in a manner that is generally consistent with the Greystanes SEL concept plan and the QuarryEAST project, and involves:

- subdivision of the 26 hectare site;
- construction of internal estate roads and site services;
- bulk and detailed earthworks; and
- construction and use of industrial (warehousing and distribution centres) and business facilities (retail facilities) across the site.

The project would, essentially, develop the entirety of the QuarryWEST site. It would also complete the development of the industrial and business precincts within the Greystanes SEL. DEXUS' objective is to construct a world-class and distinctive industrial and business park that maximises the opportunities of the site and is aligned with foreseeable market demand for industrial facilities in Western Sydney.

The project has a capital investment value of approximately \$118 million, and is expected to generate 500 full-time equivalent jobs during the 5 year construction period, and 880 jobs during operation.



The project constitutes a State Significant Development under Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979*, and consequently the Minister is the approval authority.

The key environmental issues identified for assessment in this Environmental Impact Statement (EIS) include:

- layout and design quality;
- consistency with strategic and statutory planning instruments, including the Greystanes SEL concept plan approval, State significant site provisions and the Greystanes SEL Urban Design Plan;
- traffic and transport;
- soil and water;
- heritage; and
- noise.

Assessment of these and other environmental issues indicates that the project is able to be conducted in a manner that would not result in any significant environmental impacts, or impacts on the amenity of surrounding land users.

DEXUS has committed to a range of measures to ensure that the project is undertaken in an orderly and environmentally responsible manner.

Importantly, the project is considered to be generally consistent with the aims and objectives of the Greystanes SEL concept plan and the State significant site provisions. Where the project departs from the applicable development controls in the concept plan – particularly in relation to road design (streetscape), setbacks, building heights and landscaping area on part of the site – it is considered that the differences are minor, do not detract from the overall design intent or quality of the estate, and are not expected to result in any significant environmental impacts.

The project is also considered to be compatible with the future desired character of the area under the NSW Government's (draft) Metropolitan Strategy. The project would have significant social and economic benefits for the local area through the provision of increased employment opportunities and a significant capital investment in the Western Sydney's employment areas.

Accordingly, it is considered that the project represents orderly development of the land. It is respectfully requested that the Minister, having due regard for the information submitted in this EIS, grants approval to the proposed QuarryWEST project within the Greystanes SEL.



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- C Architectural Design Plans
- D Landscape Masterplan
- E Detailed Area Schedules
- F Greystanes SEL Concept Plan Consideration
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- H Civil Design Report (including Stormwater Review)
- I Noise Assessment
- J Heritage Review
- K Traffic Assessment
- L Waste Management Plan
- M Statement of Commitments



1 INTRODUCTION

1.1 Overview

DEXUS Quarry West Subtrust, part of the DEXUS Property Group (DEXUS), is proposing to develop a world class industrial and business park on a 26 hectare portion of the Greystanes Southern Employment Lands (Greystanes SEL) in Western Sydney. The Greystanes SEL is a State Significant Site, and is the subject of a concept plan approved by the then Minister for Planning in 2007.

This Environmental Impact Statement (EIS) has been prepared by PJEP Environmental Planning Pty Ltd (PJEP) on behalf of DEXUS to assist the consideration of the development under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

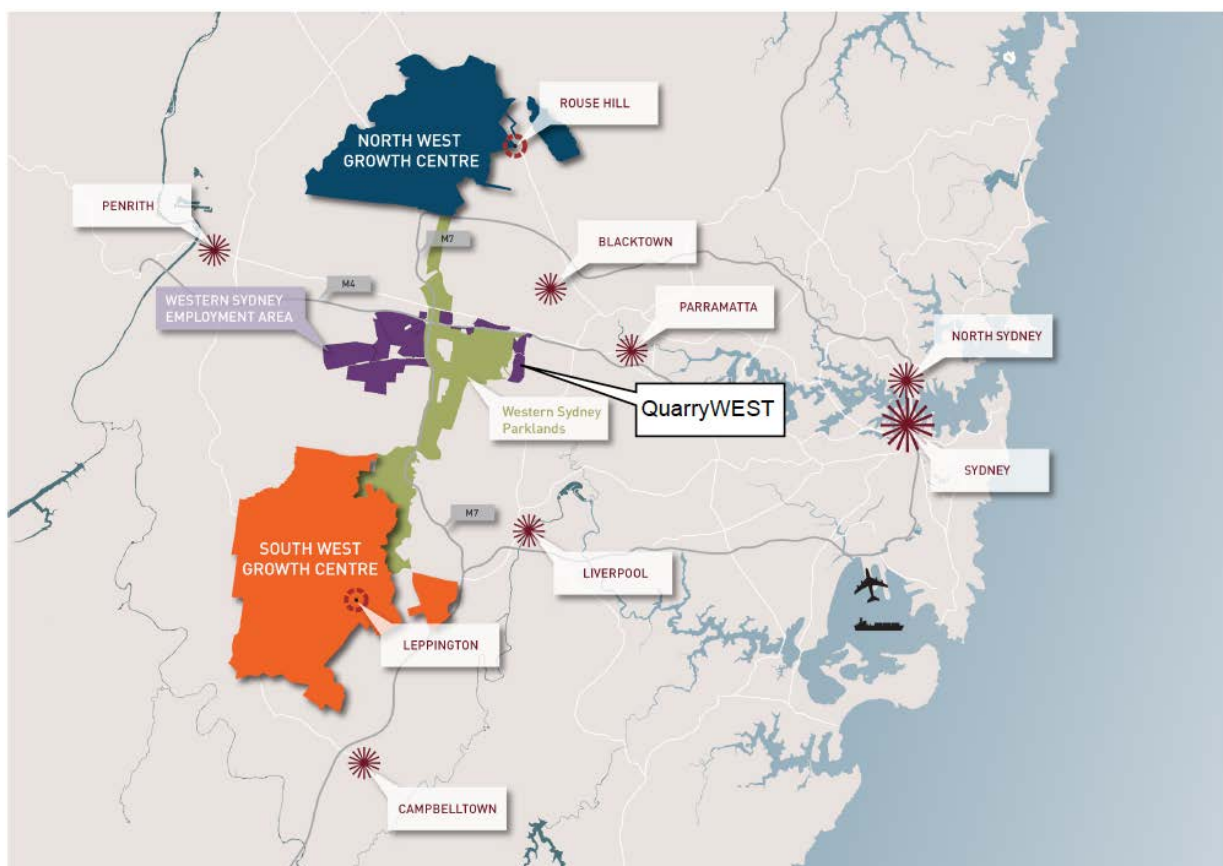


Figure 1.1: Regional Context (Source: Department of Planning Guide to WSEA, 2009)

1.2 Background

The Greystanes SEL is situated on the former Prospect Quarry within the Greystanes Estate, at Pemulwuy in Western Sydney. The Greystanes Estate comprises the Northern Employment Lands (NEL), Residential Lands, Southern Employment Lands (SEL) and open space (see **Figure 1.2**). The Greystanes SEL occupies a total area of 156 hectares, whilst the wider Greystanes Estate occupies about 330 hectares.

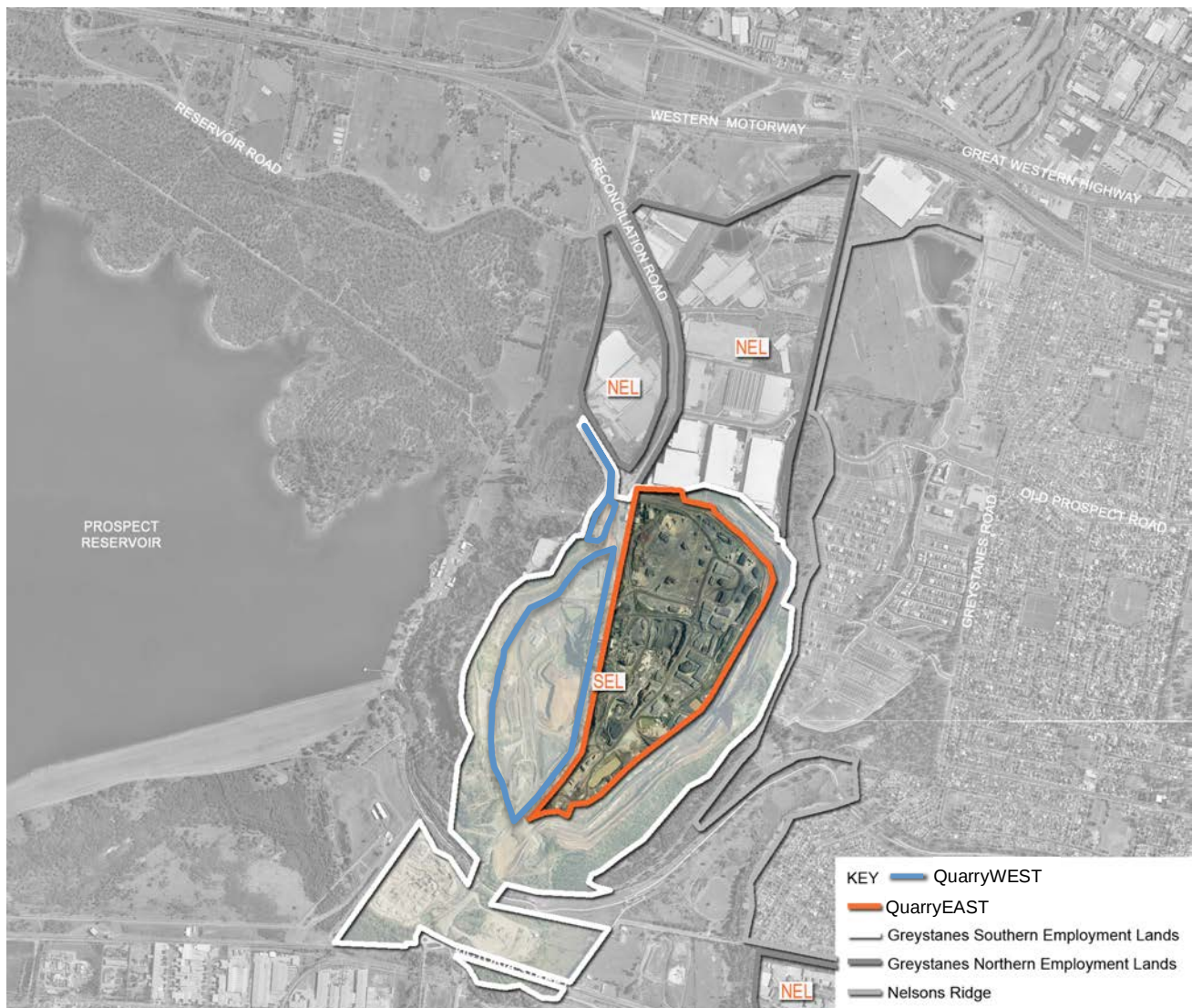
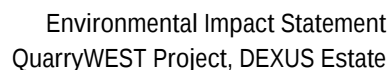


Figure 1.2: Greystanes Estate Location Plan
(c.2009, prior to development of QuarryEAST)

On 20 July 2007, the then Minister for Planning approved a concept plan and project application (MP 06_0181) from Boral Limited (Boral) for the Greystanes SEL under the former Part 3A of the EP&A Act. The approval has subsequently been modified three times. The modifications include:

- MOD 1 – approved on 11 January 2008. This modification involved the reconfiguration of site superlots, revision of the stormwater and groundwater management systems and the consequential deletion of an industrial lot on Widemere East, an amendment to the heritage interpretation strategy, and minor housekeeping amendments;
- MOD 2 – approved on 21 August 2009. This modification involved minor subdivision adjustments, amendments to the width of the transitway corridor, and amendments to the Statement of Commitments with respect to approval of the southern road connection and contributions towards bus services; and
- MOD 3 – approved on 13 November 2014 – This modification involved the importation of Virgin Excavated Natural Material (VENM)/Excavated Natural Material (ENM) on the western precinct of the estate to account for an in-balance in the availability of fill material sourced from the site and the approved finished ground levels.



- an industrial precinct comprising 75 industrial lots, one of which may be used for the purpose of hotel accommodation, with a maximum floor space ratio of 0.75:1 across the industrial lots;
- a business park precinct comprising a gross floor area of 97,500m² for business uses and 6,500m² for service retail uses; and
- associated infrastructure and services, including a conceptual road design comprising a central spine road (Reconciliation Road, including provision for a future bus transitway) and local estate roads.





The accompanying project approval (as modified) provides for the:

- preliminary subdivision of the site into 6 development lots (ie. Lots 101 to 106), along with road and infrastructure corridors and community lots;
- subsequent subdivision of the site into:
 - o 75 industrial lots, one of which may be used for the purpose of hotel accommodation;
 - o 3 main business park lots; and
 - o ancillary infrastructure and community lots; and
- construction (including earthworks) of major infrastructure including roads, groundwater management works, stormwater management works, and detention ponds and bulk earthworks at Widemere East.

On 5 December 2008, the Greystanes SEL site was gazetted as a State significant site under *State Environmental Planning Policy (Major Development) 2005* (the Major Development SEPP). The Major Development SEPP establishes zoning provisions and permissible uses for the Greystanes SEL site, and details applicable development standards.

On 8 November 2009, the then Minister for Planning approved a proposal from DEXUS under the former Part 3A of the EP&A Act, for the DEXUS Estate Industrial Park Project (DEXUS Estate Project) – now known as QuarryEAST. The QuarryEAST project essentially involves development of the eastern portion of the industrial precinct within the Greystanes SEL, in a manner that is generally consistent with the approved Greystanes SEL concept plan. Specifically, the project involves:

- subdivision of the 47 hectare site;
- construction of internal estate roads and site services;
- detailed earthworks; and
- construction and use of industrial facilities (specifically warehousing and distribution centres) across the site.

QuarryEAST is being developed on a staged basis in line with the securing of end-users for the facilities and/or market demand. The project approval has been tailored in accordance with this staged development approach, and includes a number of conditions requiring certain matters to be completed to the satisfaction of the Secretary of the Department of Planning & Environment or other authorities prior to the commencement of construction of each facility.

To date, 15 end-user facilities have been either approved or are pending approval by the Department and have been constructed or are pending construction. The project approval has been modified 6 times to accommodate these facilities, with these modifications involving changes to the masterplan and subdivision layout, and addition of industrial uses for some of the facilities. The currently approved masterplan layout, and the approved facilities, are shown on **Figure 1.4**. As shown on the figure, only 1 of the 16 industrial lots now remains undeveloped (ie. Lot 2).

In June 2014, DEXUS purchased the western portion of the industrial and business precinct of the Greystanes SEL from Boral. It is now proposing to develop this western portion – known as QuarryWEST – in a similar manner as the successful development of QuarryEAST.

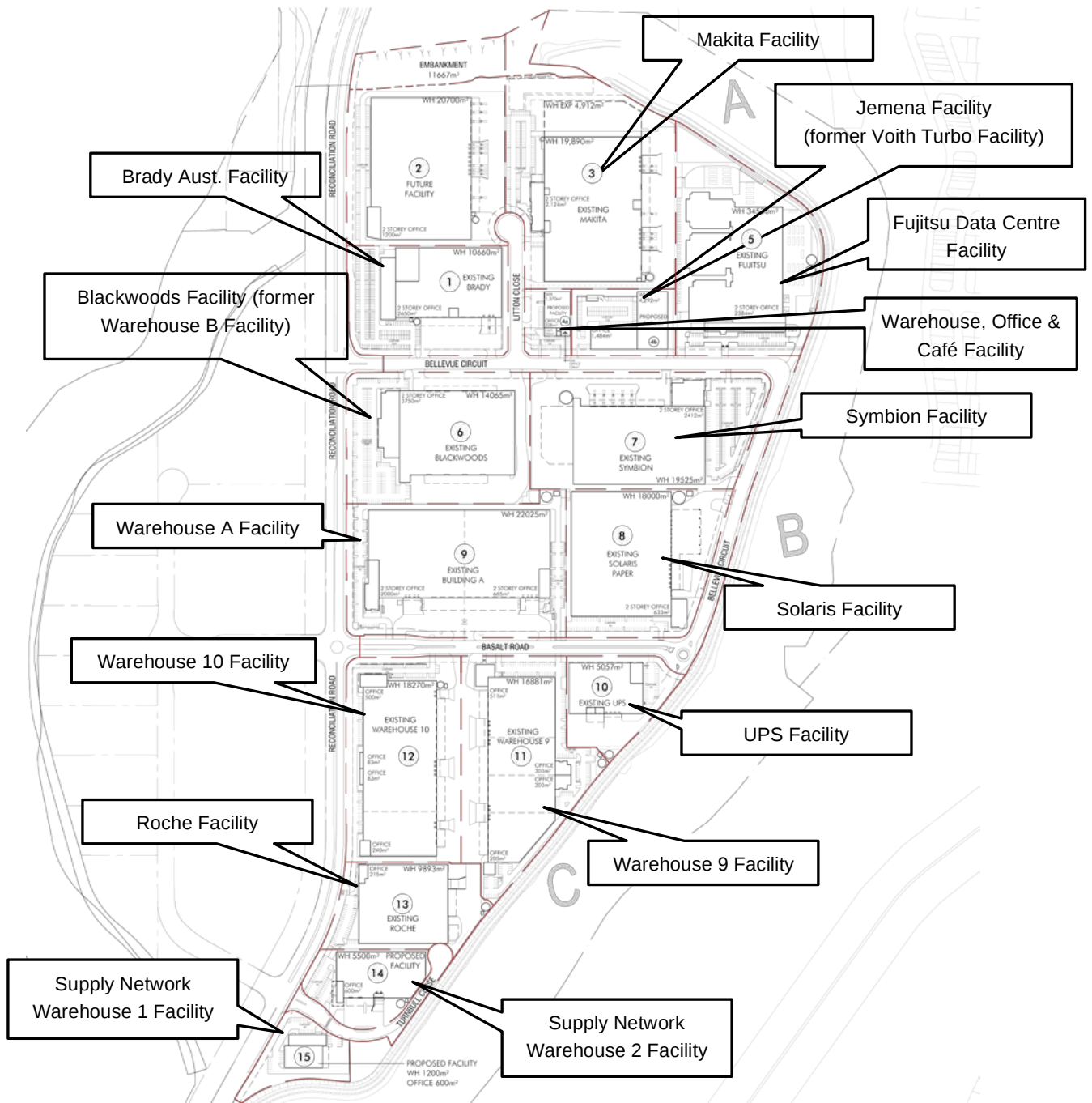


Figure 1.4: QuarryEAST Masterplan – As Currently Approved



1.3 DEXUS Property Group

DEXUS Property Group is one of Australia's leading real estate groups, investing directly in high quality Australian office and industrial properties. With \$17.8 billion of assets under management, DEXUS also actively manages office, industrial and retail properties located in key Australian markets on behalf of third party capital partners.

The Group manages an office portfolio of 1.7 million square metres located predominantly across Sydney, Melbourne, Brisbane and Perth and is the largest owner of office buildings in the Sydney CBD, Australia's largest office market.

The Group is also a specialist in managing and developing Australian industrial property, with some \$2.5 billion in assets under management, including the QuarryEAST project.

DEXUS is a Top 50 entity by market capitalisation listed on the Australian Securities Exchange, and is supported by more than 32,000 investors from 20 countries.

With nearly 30 years of expertise in property investment, development and asset management, the Group has a proven track record in capital and risk management, providing service excellence to tenants and delivering superior risk-adjusted returns for its investors.

The Group is committed to being a market leader in Corporate Responsibility & Sustainability (CR&S) and has a proud record of achievement in developing and implementing leading CR&S practices.

1.4 Proposed Project

DEXUS is proposing to develop the QuarryWEST site for industrial and business purposes, including a world-class 'logistics campus' over a large portion of the site. The site would be developed in a manner that is generally consistent with the Greystanes SEL concept plan, and in a similar conceptual manner as the QuarryEAST project.

In this regard, the project involves:

- subdivision of the 26 hectare site;
- construction of internal roads and site services;
- bulk and detailed earthworks; and
- construction and use of facilities in two zones, including:
 - o a *Logistics Campus and Service Centre* on Zone 1, comprising industrial (warehousing and distribution centres) and business facilities (retail facilities); and
 - o associated industrial facilities on Zone 2, comprising warehousing and distribution centres.

The project is described in detail in Section 3.

The project would, essentially, develop the entirety of the QuarryWEST site.

The project has a capital investment value of approximately \$118 million, and is expected to generate approximately 500 full-time equivalent jobs during construction and 880 jobs during operation.

1.5 EIS Project Team

This EIS has been prepared by PJEP in conjunction with a range of specialist consultants as listed in the following table.



Table 1.1: EIS Project Team

<i>Discipline</i>	<i>Organisation</i>	<i>Study/Deliverable</i>
<i>Project Management</i>	Tactical Project Management	Project Management
<i>Environmental Planning</i>	PJEP Environmental Planning	Environmental Assessment
<i>Architecture</i>	Nettleton Tribe	Architectural Plans
<i>Landscape Design</i>	Site Image	Landscape Plans
<i>Soil and Water</i>	Costin Roe	Stormwater Management Plan
<i>Groundwater</i>	Pells Sullivan Meynink (for Boral)	Groundwater review
<i>Noise</i>	Wilkinson Murray	Noise Assessment
<i>Heritage</i>	City Plan Heritage	Heritage Review
<i>Traffic and Parking</i>	Transport & Urban Planning	Traffic Assessment
<i>Wastes</i>	PJEP	Waste Management Plan
<i>Hazards</i>	PJEP	SEPP 33 Analysis
<i>Survey</i>	Land Partners	Survey
<i>Infrastructure</i>	Land Partners	Infrastructure Review
<i>Quantity Survey Report</i>	Rider Levett Bucknall	QS Report

The EIS also benefits from a range of documents and studies that have been undertaken for the broader Boral concept plan and Greystanes Estate development.



2 THE SITE

A detailed site analysis for the Greystanes SEL is provided in the Urban Design Plan (UDP) which forms a key component of the Greystanes SEL concept plan (the concept plan). The UDP is attached at **Appendix B**, and is discussed in more detail in Section 2.3.

The following provides a summary of the site attributes, as reproduced and adapted from the UDP for the purposes of the project.

2.1 Site Location

The 26 hectare QuarryWEST site (the site) forms part of the 156 hectare Greystanes SEL, which in turn forms part of the approximately 330 hectare Greystanes Estate. The current real property description of the site is Lot 18 in Community Plan DP270644. It is located within both the Holroyd and Blacktown local government areas. The boundary between the two local government areas runs down the middle of the QuarryWEST site, as shown (by the red line) on **Figure 2.3**.

The Greystanes Estate is located in close proximity to the M4 Motorway, Great Western Highway, M7 Western Sydney Orbital road system and the Cumberland Highway providing high levels of accessibility to Metropolitan Sydney (see **Figure 2.1**). Also, unlike some other Western Sydney employment lands, services are readily available making it ideal for creating employment opportunities by either utilising or augmenting existing infrastructure.

The ultimate physical attributes of the employment zone, in addition to its accessibility to a regional transport network, make it ideal for a range of employment developments, as described below.



Figure 2.1: Aerial Photograph – Locality (Source: DEXUS)



Figure 2.2: Aerial Photograph – Site (Source: DEXUS)

2.2 Site Analysis

The site is located within the former Prospect Quarry, which produced aggregate for use in the construction industry for around 100 years. As outlined in Section 1.2 above, the eastern half of the quarry is currently being developed as a high quality industrial estate by DEXUS. The western half of the quarry is currently undergoing final quarry rehabilitation and decommissioning by Boral, in parallel with infrastructure works for the Greystanes SEL.



The Greystanes SEL comprises the quarry itself, together with 3 smaller adjacent parcels to the south (see **Figure 2.3**).

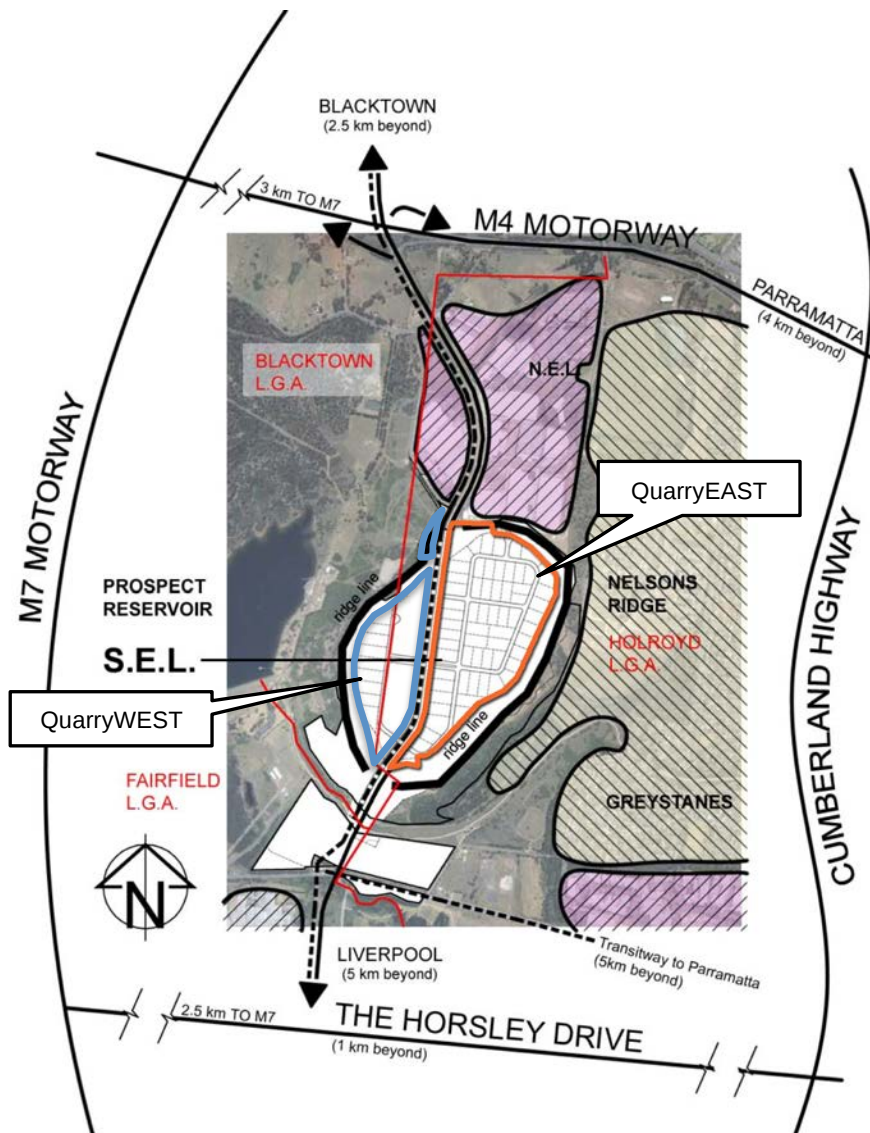


Figure 2.3: Site Analysis Plan (Source: Boral)

2.2.1 Surrounding Development

Land use surrounding the QuarryWEST site is shown on **Figure 2.3**, and includes:

- North – the established Northern Employment Lands (NEL), an industrial subdivision consisting of lots sizes of approximately 5 hectares. Further north of the NEL is the M4 Motorway and the suburbs of Prospect, Girraween and (further afield) Seven Hills and Blacktown;
- East – the predominately established QuarryEAST industrial estate, beyond which lies the residential area of Nelson's Ridge and the suburb of Greystanes;
- South – Boral's construction materials recycling facility is located directly to the south, beyond which comprises a variety of open space. Further afield again are the existing industrial/manufacturing areas of Wetherill Park, Smithfield and Fairfield West; and
- West – Prospect Reservoir and Eastern Creek.



2.2.2 Transport Infrastructure Interface

The M4 Motorway and the Great Western Highway lie to north of the Greystanes SEL, providing high levels of accessibility to Metropolitan Sydney. Between these arterial roads and the SEL is the NEL, which is serviced by the established north-south Reconciliation Road and secondary road network. A Bus Transitway dedication is located parallel to Reconciliation Road (western side adjacent the QuarryWEST site).

To the south, The Horsley Drive and the Liverpool-Parramatta Bus Transitway are the main east-west arterial links from Wetherill Park. Reconciliation Road has recently been opened to connect to this southern arterial road network, with this road connection undertaken as part of Boral's Greystanes SEL project approval.

The existing sections of the 'Lower Prospect' cycleway, adjacent to Widemere, utilise the path of the former Sydney Water Supply Canal to provide pedestrian and cycle movements between Prospect and Greystanes and beyond.

To the west lies the M7 motorway, while to the east of the site are the heavily patronised routes offered by the Greystanes Road – Gipps Road – Hassell Street linkage, and further afield, the Cumberland Highway, both orientated north/south.

2.2.3 Views

There are greatly reduced visual implications arising from development within the Greystanes SEL, given that most of the development will be located on the finished quarry floor. The distance from the top of the existing quarry walls to the finished quarry floor is approximately 40 to 60 metres.

The UDP notes that there are 4 parcels of land included in the SEL that may be visible beyond the boundaries of the site, the first of which is within the QuarryWEST site. These parcels are:

- Part of Precinct 1 (see Section 2.3.2) located toward the crest of the north-western quarry wall;
- Widemere East precinct located on the southern foothills of the existing quarry;
- Widemere West precinct located on the southern foothills of the existing quarry; and
- the 'Southern-Cut' through the southern end of the quarry required to form the arterial road and transitway connections.

2.2.4 Orientation

The Greystanes SEL has a predominantly north-south orientation. The road network including Reconciliation Road predominantly follows this bearing. The lot distribution roughly follows a north-south and east-west alignment of varying proportions in a regular matrix.

2.2.5 Flora and Fauna

The Greystanes SEL, given its historical and current use as a working quarry, is largely barren of remnant flora and fauna. Existing remnant flora and fauna is generally restricted to the upper reaches of the surrounding quarry walls, and in Widemere East and West. Vegetation in Widemere East and West present in parts examples of two endangered ecological communities – Swamp Oak Floodplain Forest and Swamp Sclerophyll Forest on Coastal Floodplains, however much of the vegetation is degraded or disturbed, with substantial areas of weed infestation.

There is some scattered areas of regrowth vegetation and weeds on the quarry floor of the QuarryWEST site, however this vegetation will be removed by Boral as part of the final rehabilitation of the quarry site.



Vegetation within the QuarryEAST site and in services areas (such as the perimeter swales and road corridors) has been planted as part of the landscaping for the estate.

2.2.6 Topography

Prior to the commencement of quarry activities, Prospect Hill was the dominant landform in the area. Extensive quarrying activity has modified the topography significantly. The landform today presents a crater-like appearance.

As part of Boral's quarry exit activities, the quarry floor is being progressively shaped to an essentially flat landform with a slight fall toward the southern end and to the toe of the quarry walls. The stabilised quarry walls enclosing the quarry on the eastern, western and southern edges are steep and severe in nature, rising up to 60 metres from the quarry floor. The quarry walls do not form part of the QuarryWEST site.

On the outer faces of the quarry walls, the topography is moderately steep to the south and west and more rolling in nature to the east toward residential areas. The NEL to the north of the quarry has been benched to an essentially flat landform.

2.3 Greystanes SEL Concept Plan

2.3.1 Aims and Objectives

The stated vision of the approved Greystanes SEL concept plan is to *'transform a working quarry into a high standard industrial business estate comprising a range of complimentary uses and support facilities all of which provide a range of employment opportunities'*.

The concept plan has the following aims and objectives:

- to facilitate the State Government's objectives of strengthening the provision of employment lands in Western Sydney, the major growth centre;
- to provide employment lands in the geographical centre of Sydney that are well located and accessible to major transport routes and workforce, meeting the demands of industry;
- to provide a framework for designing and locating development to ensure the best possible urban design outcomes including landscape, user amenity and visual character; and
- to draw urban design principles from an analysis of the site and its context; and influence parameters including setbacks, building materials and colour to minimise visual impact from main roads.

2.3.2 Land Use Concept

The Land Use Plan in the concept plan is presented on **Figure 2.4**.

As indicated, the land use plan comprises 4 precincts. The QuarryWEST site forms part of Precinct 1 and Precinct 2. A description of each precinct is presented below.

Precinct 1 – Business Park and Service Retail Uses

The Business Park is located on the western side of Reconciliation Road. It will form a key element in the creation of employment in the area presenting a high degree of visibility and accessibility, and being ideally located adjacent to the future Bus Transitway.

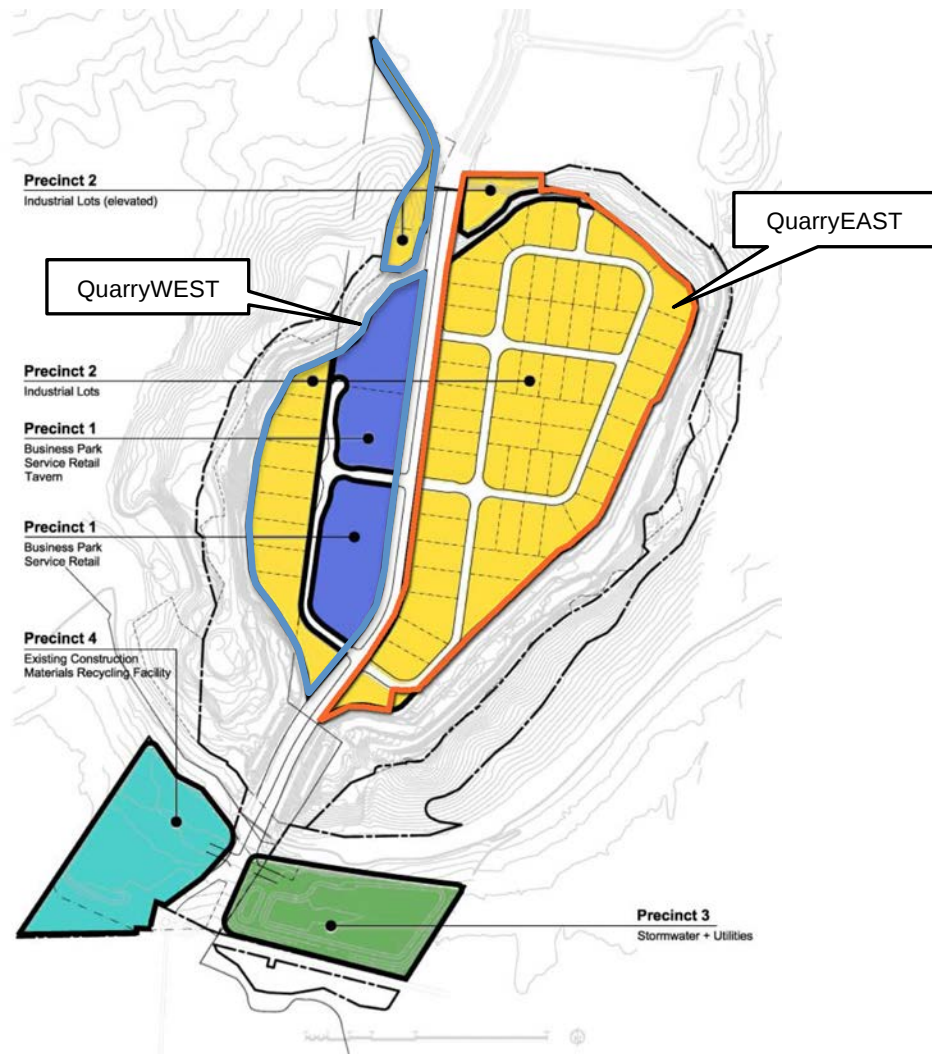


Figure 2.4: Land Use Plan

The UDP notes that the Business Park will offer flexible business accommodation suitable for¹:

- office premises;
- product assembly and service;
- research and development;
- light industries;
- warehouse or distribution facilities;
- function centres;
- recreational facilities; and
- standard industries.

In addition to the Business Park, the UDP provides that service retail uses may be accommodated in this precinct, which may include:

- a tavern/hotel and associated restaurants;
- fast food outlets;
- automotive service: including a service station, car/truck wash, spare parts service/retail;

¹ Not all of these uses envisaged in the UDP may be permissible under the provisions of the State Significant site listing in the Major Development SEPP.



- business support: including office supplies and furniture, printing, office equipment repair/sales;
- convenience retail: including a small supermarket, newsagency, milk bar, pharmacy, café, dry cleaners or similar; and
- community/recreational facilities such as child care, indoor sports or fitness centres.

Precinct 2 – Industrial Subdivision

The primary industrial subdivision will be located within the existing quarry, clustered either side of Reconciliation Road.

The precinct will facilitate a range of industrial land use, including warehouse, distribution, manufacturing, high technology and research uses. The UDP (and the concept plan approvals) allows for ancillary (or 'associated') offices to be up to a maximum of 50% of total gross floor area (GFA) for lots within 400 metres of a bus stop, and up to 30% GFA for lots greater than 400 metres from a bus stop.

The small parcel of land in the north-western corner of Precinct 2 (within the QuarryWEST site) is permitted for development of hotel accommodation.

Precinct 3 – Widemere East

Widemere East accommodates stormwater / sediment basins, and a water treatment basin to service the Greystanes SEL, including the QuarryWEST site (see **Figure 2.5**).

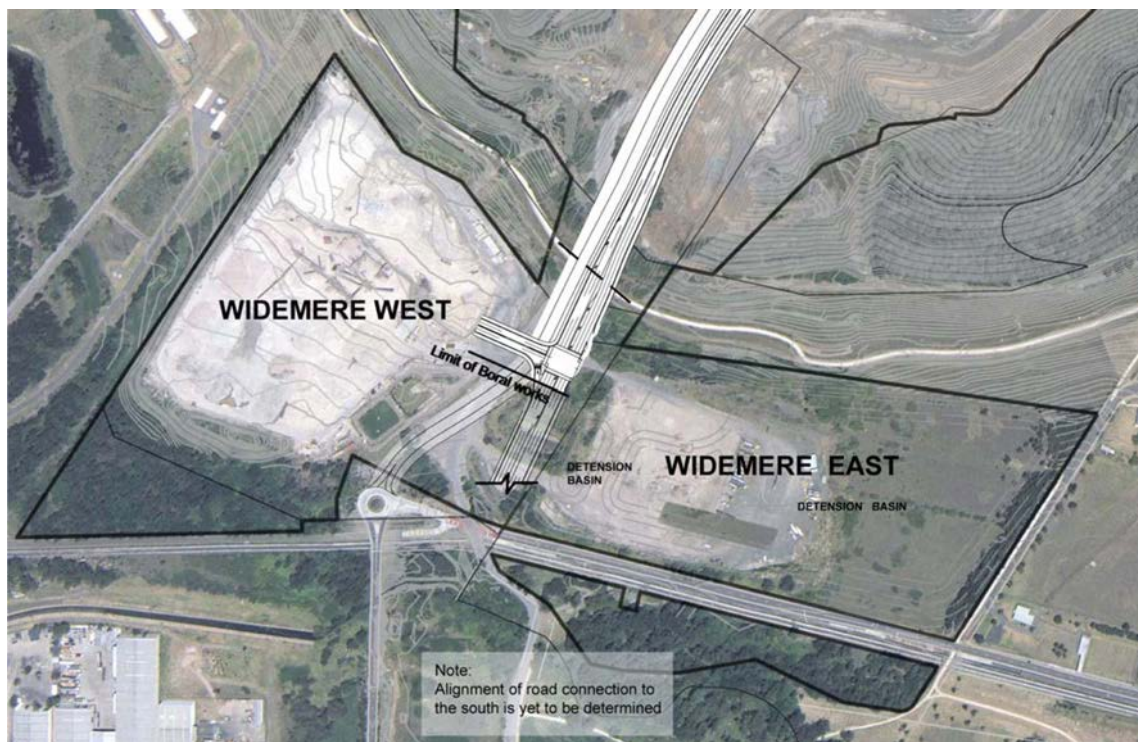


Figure 2.5: Widemere

Precinct 4 – Widemere West

Boral Recycling currently occupies this site, under a development consent issued by the Minister for Planning in 2002. The concept plan did not seek approval for an amendment to the existing use of this precinct, although the UDP notes that should its use change, then characteristics and controls similar to that of Precinct 2 will be appropriate for any future development.



Utilities / Common Areas

Although primarily an industrial subdivision, the concept plan provides a number of common areas that will provide visual relief to the built industrial environment. The common/open space areas are shown on **Figure 2.6**, and include:

- C1: Western quarry walls, incorporating stormwater channel/swales, service road and batter maintenance zone;
- C2: Eastern quarry walls, incorporating stormwater channel/swales, service road and batter maintenance zone;
- C3: Stormwater detention / sediment / treatment basins (Precinct 3);
- C4: Aquifer pumping station (Precinct 1);
- C5: Sewer pumping station (Precinct 2);
- C6: Groundwater pumping station (Precinct 3);
- C7: Reconciliation Road / Bus Transitway stormwater detention (between Precinct 3 & 4);
- C8: Interchange Road Reserve; and
- C9: Riverine corridor.

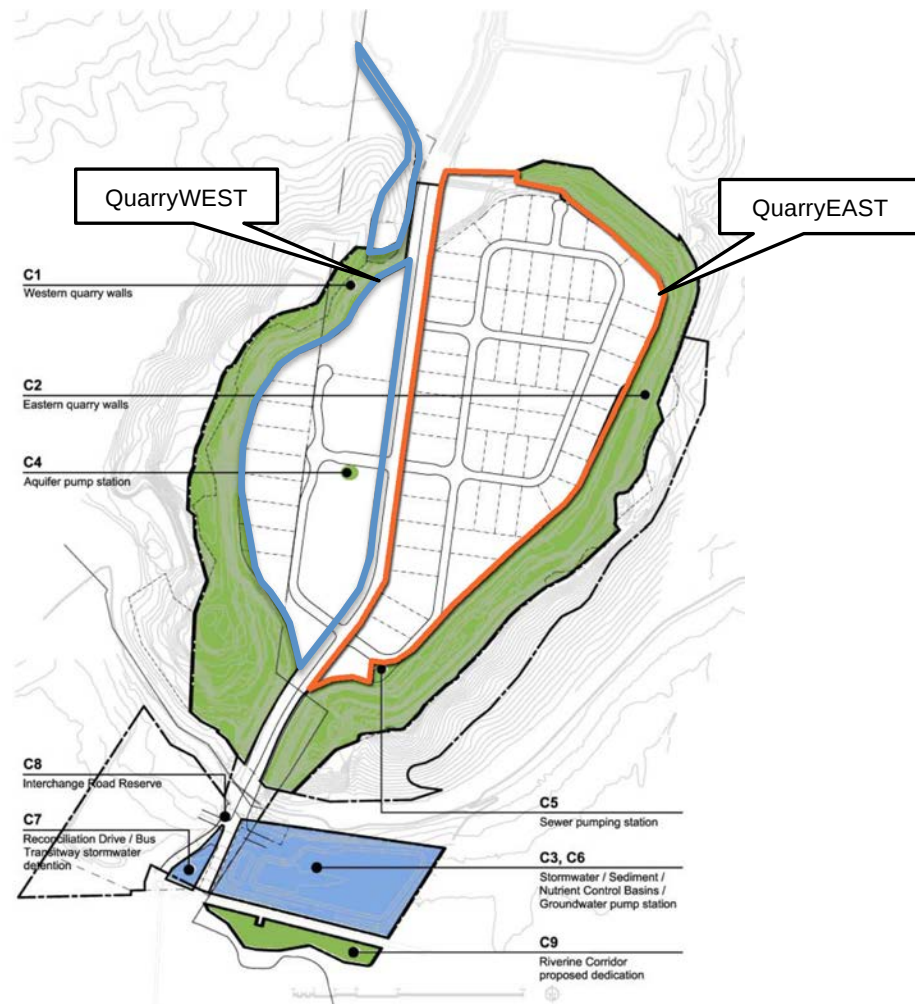


Figure 2.6: Utilities / Common Areas Plan

2.3.3 Indicative Subdivision and Built Area

The concept plan includes indicative subdivision and built area plans, as reproduced on **Figures 2.7 and 2.8**.



The UDP notes that the subdivision has the following attributes;

- provides for a range of lot sizes and shapes, ranging from approximately 0.25 hectares to 2.5 hectares;
- no lot requires direct vehicular access from Reconciliation Road with the exception of one lot in Widemere East;
- the lot configuration has been designed to allow maximum flexibility and consolidation to meet the needs of end users; and
- provides for a Business park, hotel accommodation, and service retail uses over four parcels of land.

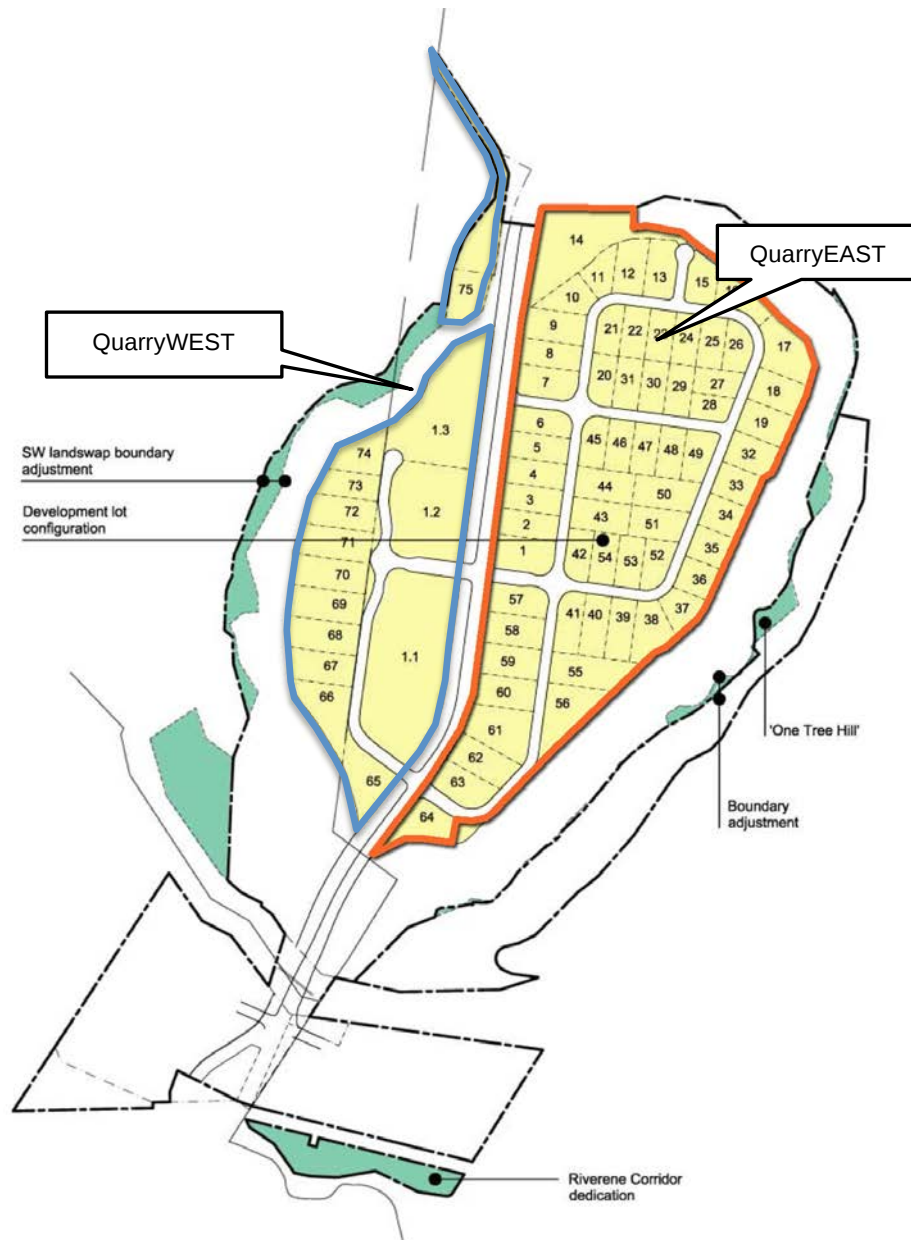


Figure 2.7: Concept Subdivision Plan

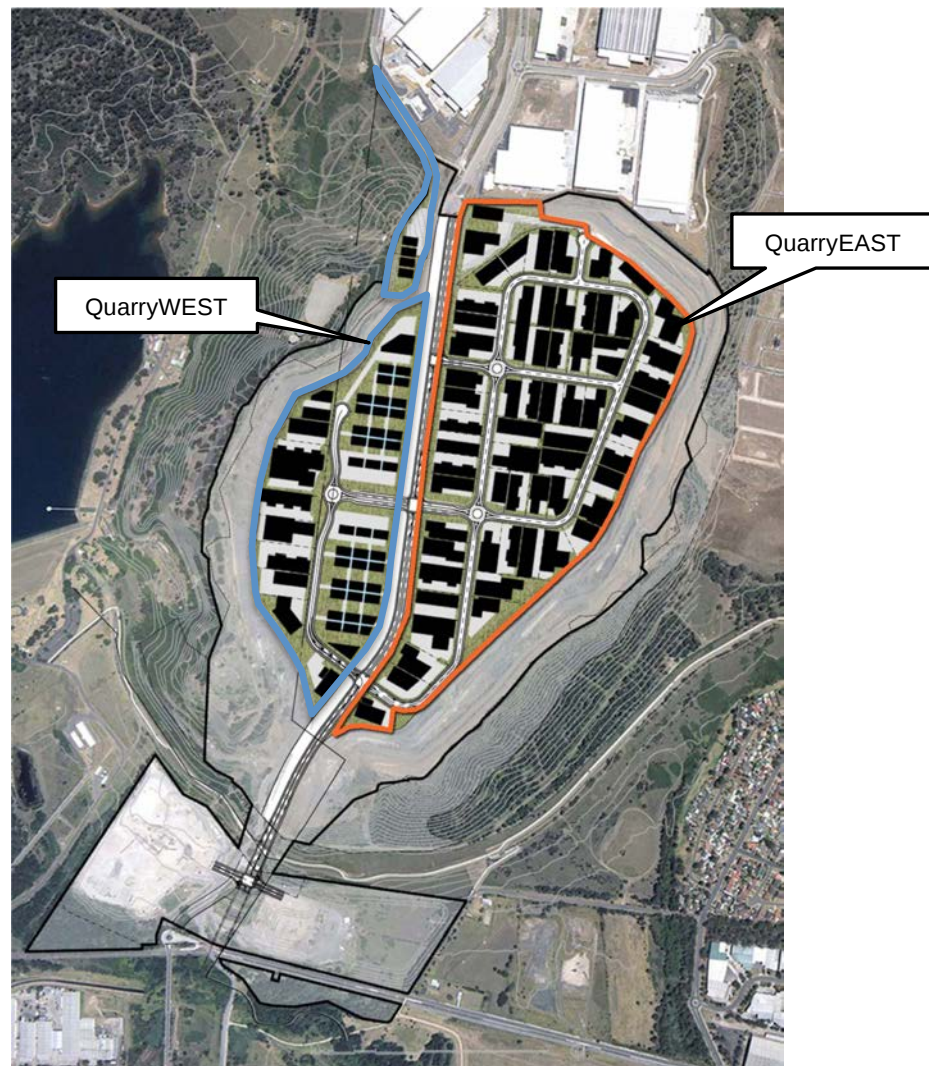


Figure 2.8: Indicative Built Area Plan

2.3.4 Infrastructure and Services

Roads

The approved road layout for the Greystanes SEL is shown on **Figure 2.9**.

As indicated, the SEL is serviced by a central spine road (Reconciliation Road), of a predominantly north-south orientation, coupled with a local road network. Reconciliation Road is not within the QuarryWEST site.

To the north, Reconciliation Road connects the SEL with the M4 Motorway, Great Western Highway and M7 Motorway providing high levels of accessibility to Metropolitan Sydney. To the south, Reconciliation Road connects through Wetherill Park to Hassall Street.

Generally, a 35 metre wide road reserve accommodates Reconciliation Road, services reticulation, footpaths, future bus transitway, cycleway, and landscape zones.

The local roads within the SEL generally comprise a 20 metre wide road reserve with the exception of the east-west boulevard in Precinct 1 and a small portion of Precinct 2. The boulevard road reserve measures 30 metres.

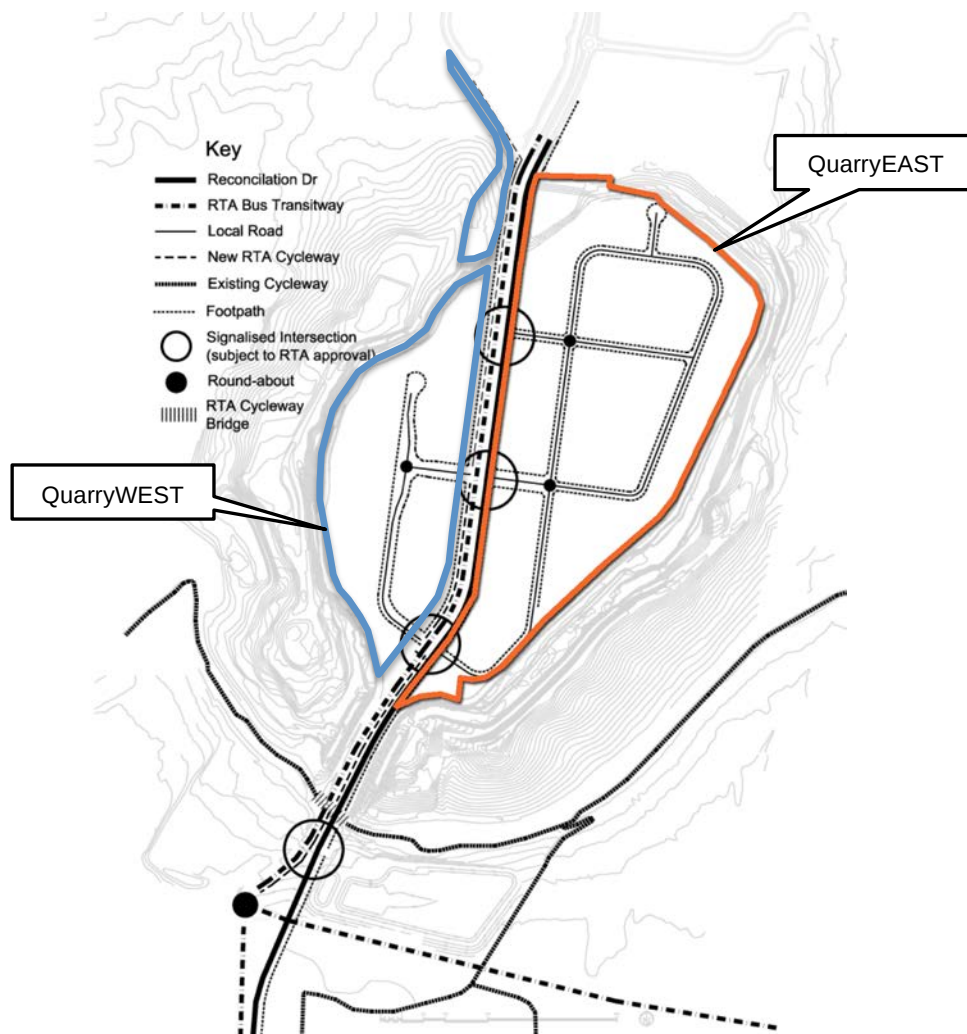


Figure 2.9: Concept Road Layout Plan

Construction of all roads required for the Greystanes SEL (including Reconciliation Road and the 3 internal intersections), with the exception of the internal local roads, has been approved as part of Boral's Greystanes SEL project application. To date, Reconciliation Road, the northern two signalised intersections, and the internal estate road network within the QuarryEAST site², have been constructed.

At present, the third (southern) intersection is being constructed as a priority-controlled intersection. RMS has noted that it will install the signals on this intersection once the warrants (ie. traffic demands) are met for the intersection. In this regard, RMS has assumed responsibility for construction of the intersections, in accordance with a Deed of Agreement with Boral.

Public Transport, Pedestrian and Bicycle Facilities

The concept plan includes provision within the 35 metre Reconciliation Road reserve for the future construction of the Wetherill Park to Blacktown Bus Transitway. The 10 metre wide Transitway corridor will run parallel to the western side of Reconciliation Road for the full length of the SEL, linking with the provision already made within the NEL (to the north) and the existing Transitway

² The QuarryEAST internal road network is broadly similar, but not identical, to the UDP concept road layout. Figure 1.4 shows the approved QuarryEAST road layout.



intersection to the south of Widemere East and Widemere West. The Transitway corridor will accommodate bus lanes, bus stops, cycleway, pedestrian paths and landscaping.

The concept plan also provides for a network of pedestrian footpaths within the road reserves. All local roads have been designed with pedestrian footpaths to both verges.

Cycleway provision is made in the Transitway road reserve, which will link to the cycleway network north and south of the SEL and designed to integrate with the RMS's "Bikeplan 2010" (and the NSW Government's *Sydney Cycling Future*). The concept plan also includes provisions requiring all (significant) developments to provide adequate bicycle parking facilities.

Stormwater Management

The concept plan includes a detailed Stormwater Management Strategy for the Greystanes SEL, as shown on **Figure 2.10**.

The strategy provides for stormwater to drain to perimeter drains, before draining in a southerly direction to Widemere East, with controlled discharge into Prospect Creek.

The strategy uses a combination of source, conveyance and discharge control measures, including onsite treatment (within Precinct 1 only), gross pollutant traps in lots, vegetated perimeter channels, and detention basin at Widemere East.

The perimeter channels and detention basin (which are outside the QuarryWEST site) have been designed to convey/store the full 1 in 100 year ARI storm events.

A 5 megalitre water harvesting dam is also located at Widemere East to collect and store the peak low stormwater flows at a minimum for pumping to the Cumberland Country Golf Club (CCGC) for re-use purposes. Boral, DEXUS and the CCGC have entered into an agreement for this water re-use, which includes a minimum 25-year contractual obligation for water harvesting by the CCGC.

Construction of the stormwater management facilities, with the exception of the on-lot and local road stormwater facilities, has been approved as part of Boral's Greystanes SEL project application.

Groundwater Management

The concept plan includes a Groundwater Management Strategy which comprises a passive gravity drainage system draining to the Widemere East water harvesting basin via a series of perimeter trench drains located below the perimeter stormwater channels. The drainage system has been designed to maintain a water level within the SEL of a minimum of 2.5 metres below ground surface.

Collected groundwater will be pumped to the CCGC for re-use purposes (along with the collected low stormwater flows as described above).

Construction of the groundwater management facilities has been approved as part of Boral's Greystanes SEL project application.

Services

The concept plan includes a detailed Servicing Strategy to provide all essential services to the Greystanes SEL.

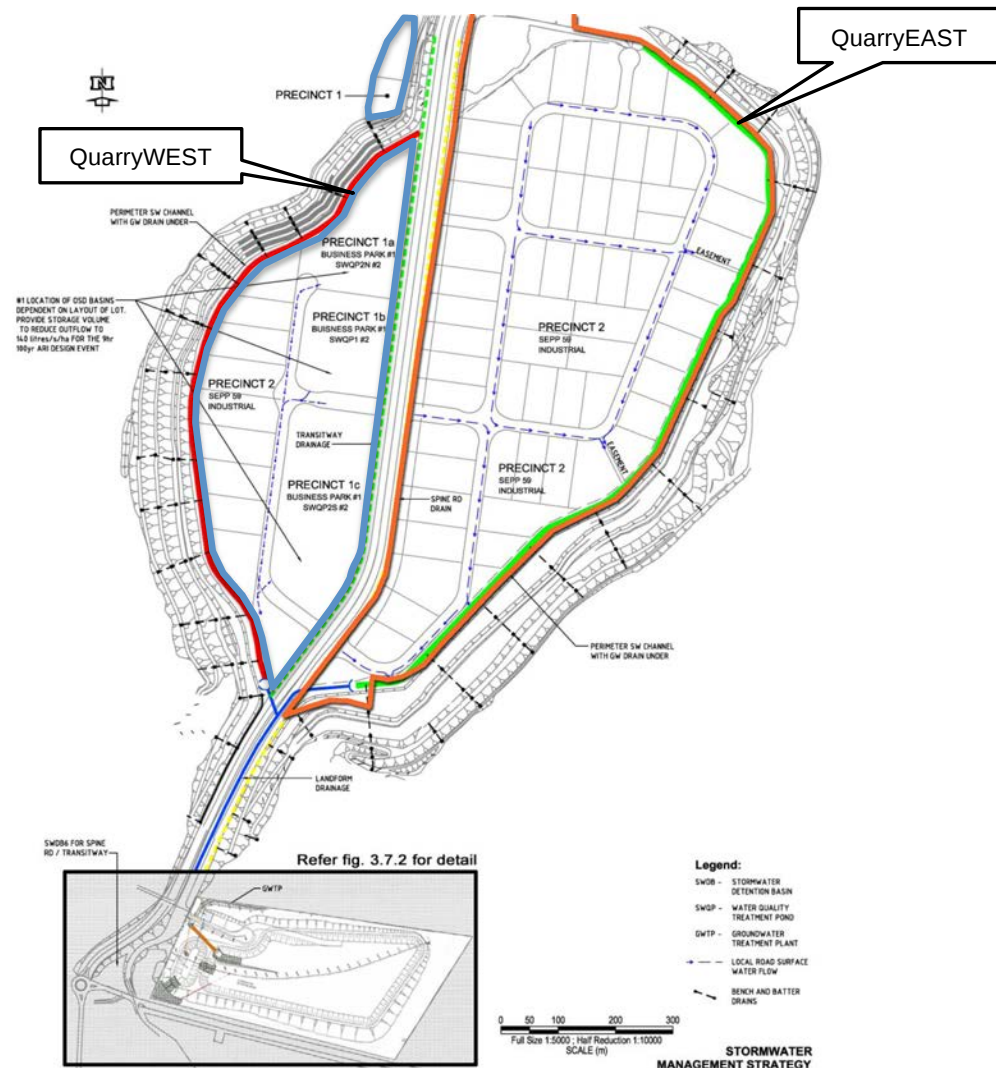


Figure 2.10: Stormwater Management Strategy



The servicing reticulation through the SEL is shown on **Figure 2.11**. The strategy comprises:

- *Sewer Reticulation* – Sewer mains are to be located generally at the low end of each development lot. The sewer system gravitates to the south following the ground profile discharging through the southern cut to a sewer pump station located in the south-eastern corner of Precinct 2 (within the QuarryEAST site);
- *Water Supply* – The water mains layout generally follows the alignment of the road layout and is located in the standard water main allocation in the road verge;
- *Electrical Supply* – The electrical mains layout also generally follows the alignment of the road layout and is located in a standard electrical allocation in the road verge. Street lighting will be provided, and localised substations will be installed to service public infrastructure for respective stages;
- *Telecommunications Supply* – The telecommunications network provided via an extension of the existing services in the Northern Employment Lands, and follows the alignment of the road layout; and
- *Gas Supply* – Provision for future gas supply to the SEL will be provided in the road verges, however the gas pipelines are not proposed to be laid until the need for such services is established.

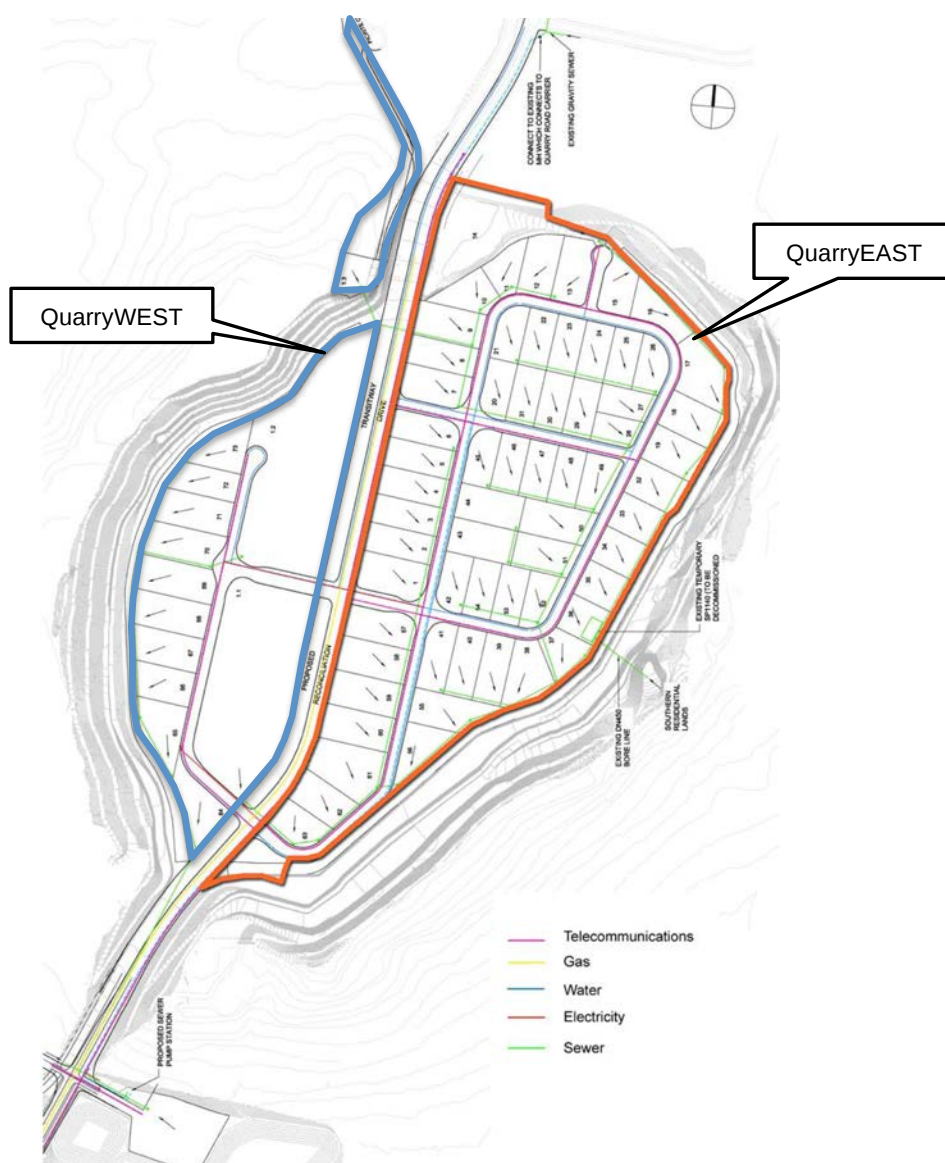


Figure 2.11: Servicing Strategy



3 PROPOSED DEVELOPMENT

3.1 Development Summary

DEXUS is proposing to develop the QuarryWEST site for industrial and business purposes, including a world-class 'logistics campus' over a large portion of the site. The site would be developed in a manner that is generally consistent with the Greystanes SEL concept plan, and in a similar conceptual manner as the QuarryEAST project.

The project involves:

- subdivision of the site;
- construction of internal roads and site services;
- bulk and detailed earthworks; and
- construction and use of facilities in two zones, including:
 - o a *Logistics Campus* and *Service Centre* on Zone 1 (Lots A, B & C), comprising industrial (warehousing and distribution centres) and business facilities (retail facilities); and
 - o associated industrial facilities on Zone 2 (Lots D, E & F), comprising warehousing and distribution centres.

The project would, essentially, develop the entirety of the QuarryWEST site.

The proposed masterplan for the project is shown on **Figure 3.1**, and the main components of the project are outlined in **Table 3.1**. The full set of architectural design plans, based on the proposed masterplan, is attached at **Appendix C**.

Whilst the estate would be developed and managed by DEXUS, the facilities would be operated by end-users which have not been identified at this time. Accordingly, approval is sought for operation of generic warehouse and distribution centres and retail facilities from the buildings.

Table 3.1: QuarryWEST Project Summary

Development Summary	Construction and use of the QuarryWEST Industrial & Business Park within the Greystanes Southern Employment Lands, for warehouse and distribution purposes, and for retail purposes
<i>Proposed Uses</i>	Warehousing and distribution, with ancillary office. Retail facilities including a supermarket, petrol station and fast food outlet, and specialty retail stores.
<i>Subdivision</i>	Subdivision of the site to create (nominally) 8 development lots and roads
<i>Earthworks</i>	Bulk and detailed earthworks associated with infrastructure and facility construction. It is noted that the site is being rehabilitated and levelled as part of Boral's quarrying approval and Greystanes SEL project approval, ready for employment-related development.
<i>Facility Description</i>	The proposed masterplan provides for: • Zone 1: - o construction of a <i>Logistics Campus</i> comprising an integrated warehouse and distribution complex with a gross floor area (GFA) of 60,295 m², including ancillary offices; and - o construction of a <i>Service Centre</i> with a GFA of 3,220m² comprising: - a supermarket with a GFA of 2,000 m²; - retail stores with a GFA of 870 m²; - a fast food outlet with a GFA of 250 m²; and - a petrol station with a GFA of 100 m²; • Zone 2: - o construction of 4 warehouse and distribution facilities with a total



	GFA of 67,625 m ² , including ancillary offices; • a total GFA of approximately 131,140 m² across the site, including 3,220m² of retail GFA; and • ancillary development including hardstand, carparking, landscaping, etc.
<i>Staging</i>	DEXUS seeks flexibility in the staging of the project, with facilities across the site to be developed in line with market demand for individual facilities.
<i>Capital Investment Value</i>	\$118,000,000
<i>Employees</i>	Construction – Approximately 500 full-time equivalents Operation – Approximately 880 ¹ full-time equivalents
<i>Infrastructure and Services:</i>	
<i>Access and Roads</i>	Construction of internal road network comprising three roads – identified as Dolerite Close, Basalt Road and Bellevue Circuit – and internal access roads. Minor upgrades to the external road network, namely upgrade and/or signalisation of the 3 intersections with Reconciliation Road.
<i>Stormwater</i>	Construction of on-lot and internal estate stormwater drainage infrastructure. The estate infrastructure would drain to existing Greystanes SEL stormwater infrastructure, which includes a perimeter open swale and precinct detention/harvesting basin.
<i>Potable Water</i>	The reticulated potable water supply in Reconciliation Road would be adequate to service the project.
<i>Sewer</i>	The site would be connected to reticulated sewer in Reconciliation Road
<i>Electricity</i>	The estate is able to be serviced from electrical supplies in Reconciliation Road. The project includes a number of passive and active energy savings measures, in accordance with the Greystanes SEL concept plan.
<i>Telecommunications</i>	The site would be connected to telecommunications infrastructure in Reconciliation Road.
<i>Gas</i>	The project is not proposed to be connected to a reticulated gas supply, although spatial provision for future gas supplies would be provided in road verges.

¹ Estimate based on carparking provision (95% of parking spaces)

3.2 Subdivision

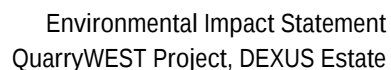
The project involves the subdivision of the site to create:

- 8 development lots; and
- road corridors (for Basalt Road and Dolerite Close).

The proposed subdivision is shown on **Figure 3.2**. Final subdivision plans would be prepared, to the satisfaction to the Secretary of the Department of Planning & Environment, prior to obtaining a subdivision certificate for the subdivision³.

It is noted that Boral's project approval for the Greystanes SEL provides for the subdivision of the Greystanes SEL, including the QuarryWEST site, to create some 75 industrial lots (including 1 hotel lot). Further, the Major Development SEPP provides for lot consolidation and boundary adjustment within the Greystanes SEL, without the need for development consent. Accordingly, the subdivision for the project could conceivably be undertaken without development consent.

³ In a similar manner as the existing QuarryEAST subdivisions.



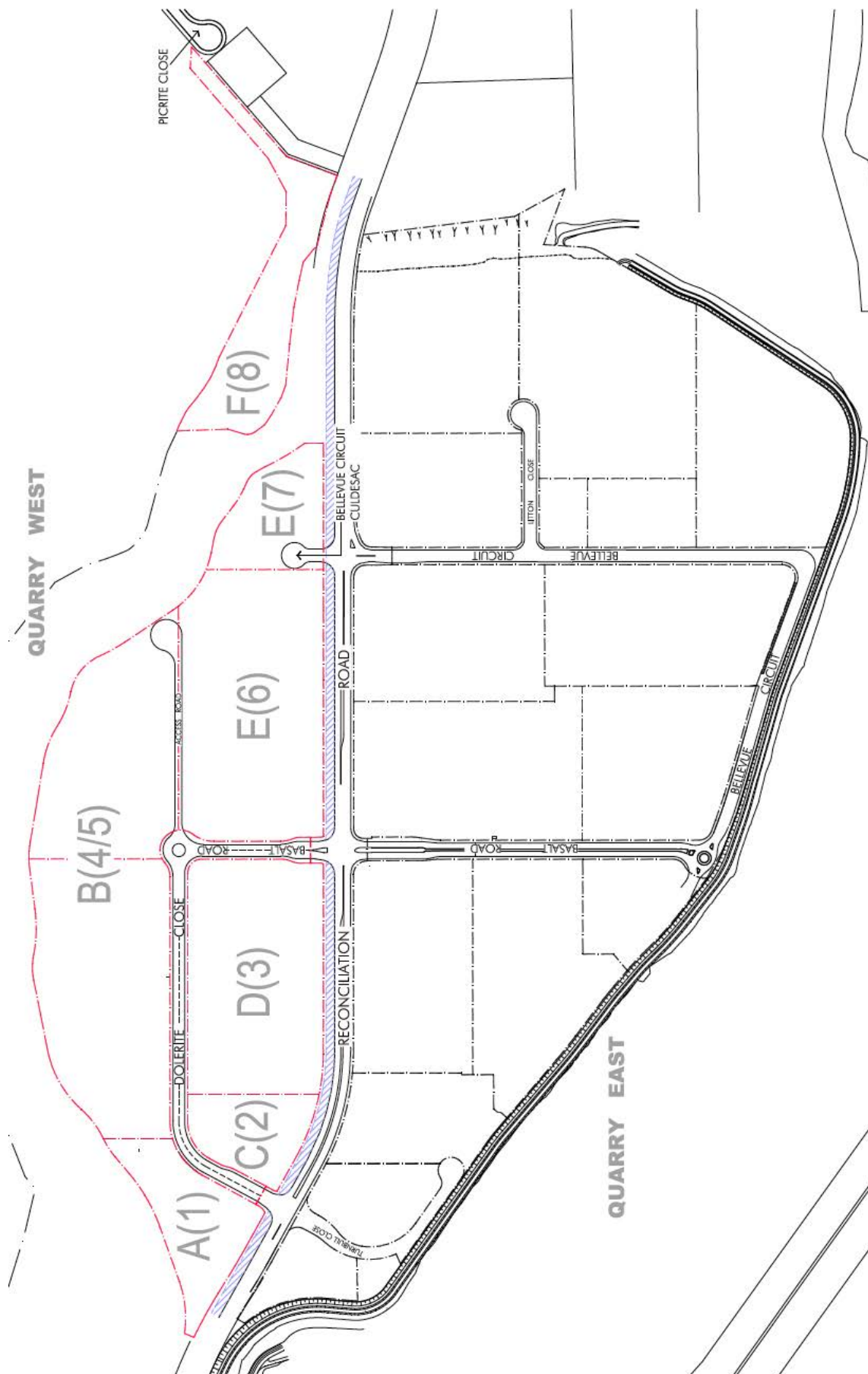


Figure 3.2: Subdivision Concept Plan (Source: Nettleton Tribe)

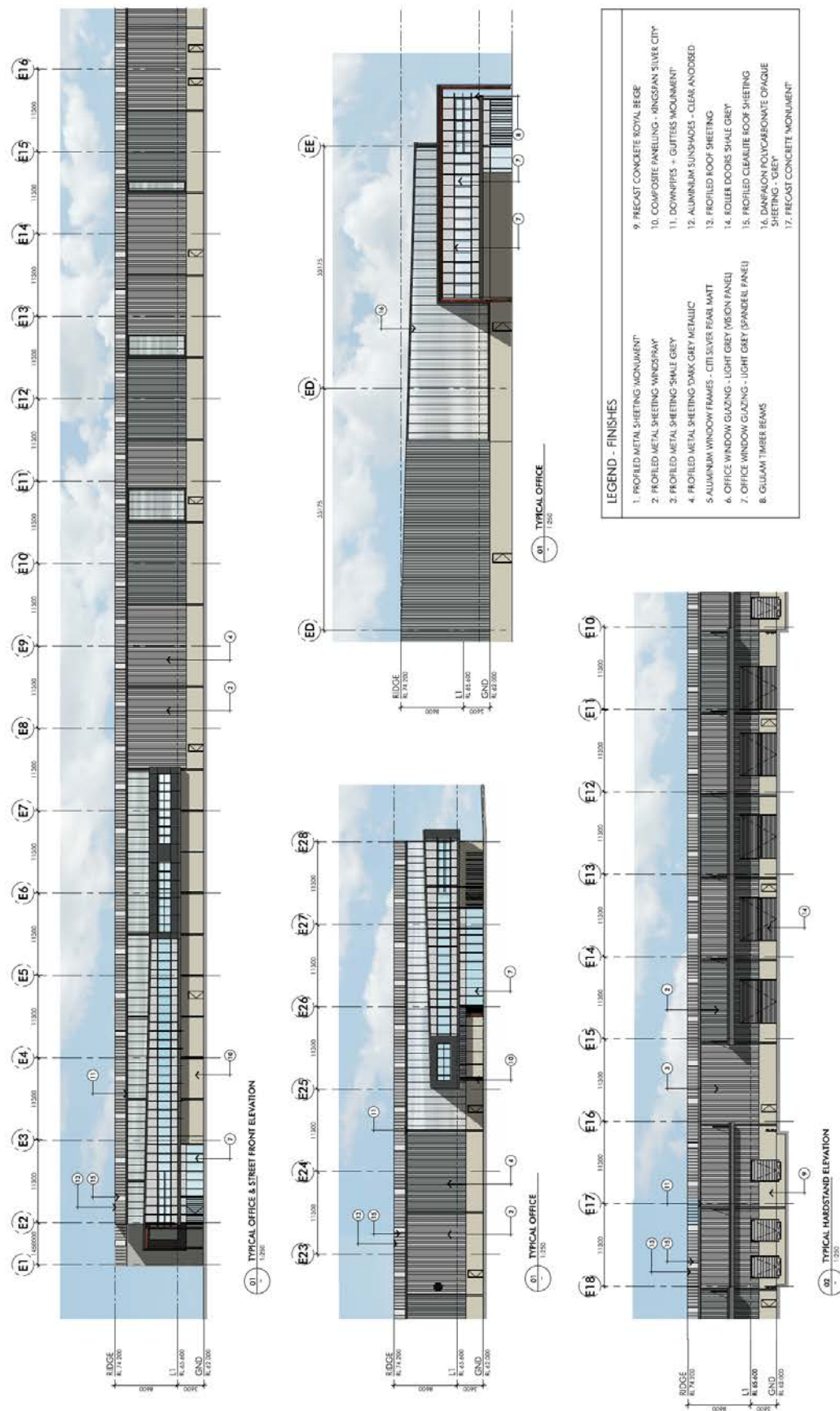


Figure 3.3: Typical Elevations (Source: Nettleton Tribe)

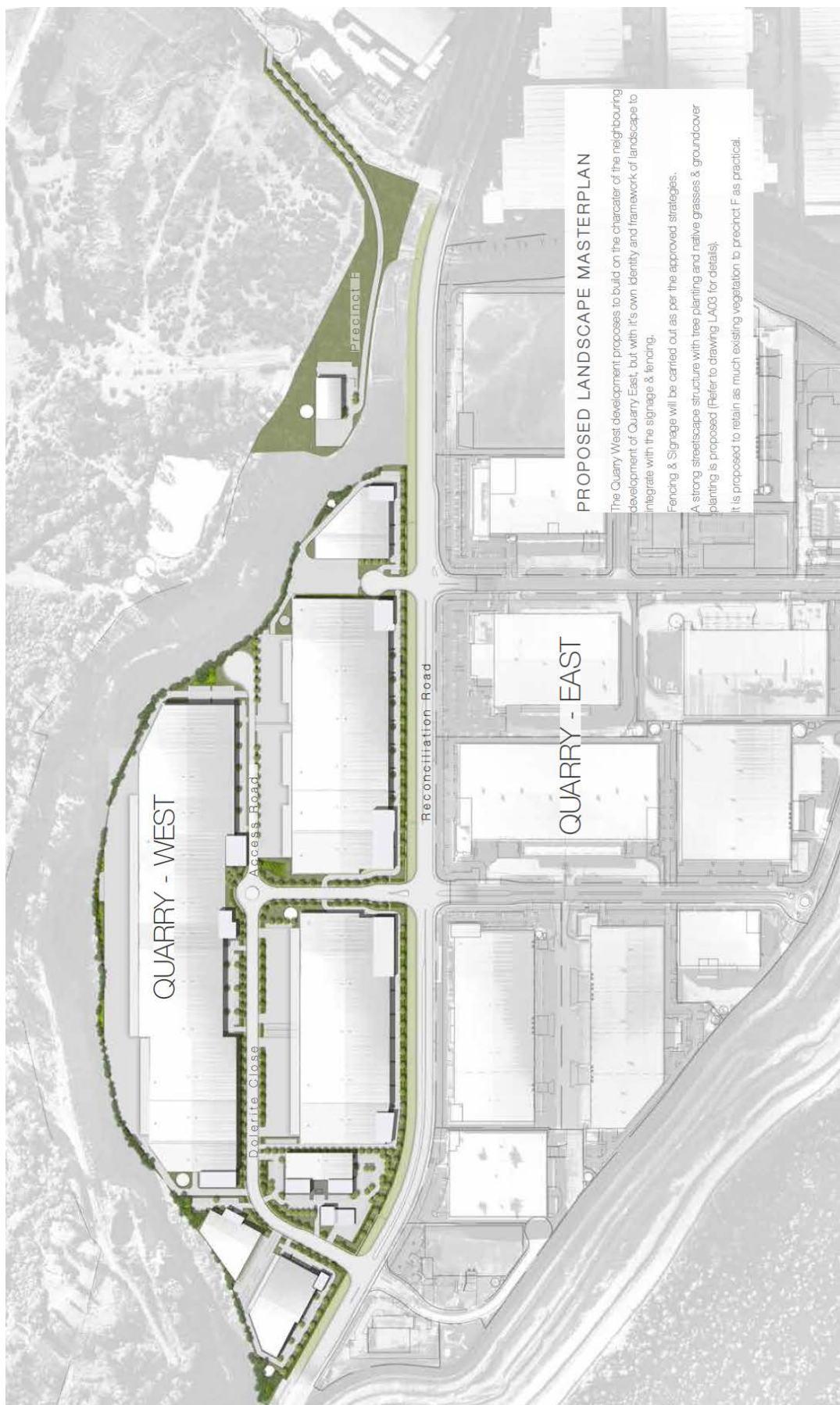


Figure 3.4: Proposed Landscape Masterplan (Source: Site Image)



3.3 Earthworks and Construction

Bulk earthworks (including filling) and demolition⁴ works for the Greystanes SEL are largely being completed by Boral as part of the rehabilitation of the Prospect Quarry, in accordance with the existing quarry approval and the concept plan approval. The quarry rehabilitation works will create a final landform ready for subsequent industrial and business development of the QuarryWEST site.

Once the quarry rehabilitation works are complete, construction works associated with the project would involve:

- bulk and detailed earthworks associated with facility and estate infrastructure construction;
- infrastructure and site servicing;
- facility construction; and
- site landscaping.

Construction works would be undertaken in accordance with a detailed Environmental Management Strategy, prepared to the satisfaction of the Secretary of the Department of Planning & Environment.

Construction of the project would be undertaken progressively in line with market demand for the facilities, with full development of the QuarryWEST site expected within 5 years. Project staging is discussed in more detail in Section 3.10 below.

3.4 Proposed Facilities

3.4.1 Masterplan Rationale

Although the QuarryWEST estate is modelled on the quality and success of QuarryEAST, DEXUS is proposing to develop an estate that moves to the next generation. In this regard, DEXUS's design philosophy includes development of a 'campus style' industrial estate that integrates design and functional movement in two distinct zones, namely:

- Zone 1 – *Logistics Campus* on Lots A & B and a *Service Centre* on Lot C; and
- Zone 2 – associated conventional warehouse and distribution facilities on Lots D, E and F.

Zone 1 – Logistics Campus and Service Centre

The *Logistics Campus* has been designed to enable operation as a single integrated complex spread over 2 lots, including:

- Lot A – Staging Warehouse & Truck Service – comprising two smaller warehouse and distribution centres, plus ancillary offices; and
- Lot B – Divisible Warehouse – comprising a large warehouse and distribution centre with ancillary offices, capable of being divided to suit specific user sizes and configurations. A long frontage to Dolerite Close provides for independent entry together with a rear access to common docking and hardstand.

The *Logistics Campus* has been designed to allow flexibility and inter-changeability for the end-user/s, with the large site and building footprint maximising the ability to internally manage logistics operations, including movement and internal warehouse design.

The concept is modelled in part on the advent of industrial '*symbiosis estates*' in Europe. The concept evolved from the European Union White Paper *EU EP7* (ie. the 7th Framework Programme for Research and Technological Development with a budget of 50 billion Euro).

⁴ Including demolition of the existing building on the elevated lot (ie. Lot 8).



The *Service Centre* on Lot C – comprising associated retail facilities (including speciality retail, supermarket, fast food outlets and a petrol station) – has been designed to satisfy the demand from the *Logistics Campus* and the wider DEXUS Estate and Greystanes SEL.

Zone 2 – Associated Warehouse and Distribution Centres

The other facilities within QuarryWEST would be associated warehouse and distribution facilities, with their design and size configuration derived from the successful QuarryEAST estate. These warehouses would be designed to enable provision of supporting logistics to the *Logistics Campus*.

3.4.2 Masterplan Layout

As outlined above in Section 3.1, DEXUS has prepared a masterplan for the proposed warehouse and distribution facilities (see **Figure 3.1**). The masterplan has been designed to accommodate the proposed *Logistics Campus* in an efficient and functional manner, while also accommodating the associated warehouses and service retail facilities in a manner that integrates with the campus and the wider DEXUS Estate.

The masterplan layout is generally consistent with the broad conceptual layout as shown in the Greystanes SEL concept plan and the accompanying UDP, in particular the layout of the internal roads (see **Figure 2.9**).

A development summary of the proposed masterplan is provided in the following table. For the purposes of consideration against the provisions of the concept plan in Section 4, the table includes consideration of the areas within the industrial and business precincts defined in the concept plan, and shown on **Figure 2.4**. Additional development data schedules for each individual lot are provided in **Appendix E**.

Table 3.2: Development Schedule

Development Data	Industrial Precinct	Business Precinct	Total
Areas (m ²)			
- Site Area (exc. roads) ¹	122,267	120,130	242,397
- Warehouse Area	57,195	60,515	117,710
- Office Area	4,650 (8%)	5,560 (8%)	10,210 (8%)
- Retail Area	0	2,870	2,870
- Food & Drink Premises Area ²	0	350	350
- Total Building Area	61,845	69,295	131,140
- Awning Area	4,560	4,964	9,524
- Hardstand Area (heavy & light)	32,551	36,782	69,334
- Landscaping Area	25,596 (21%)	13,442 (11%)	39,038 (16%)
Site Cover (inc. awning)	53%	59%	56%
Floor Space Ratio	51%	58%	54%
No. office levels	1-2	1-2	1-2
Building Height (m)	13.7	8 to 13.7	8 to 13.7
Car Parking Spaces Required ³	307	528	835
Car Parking Spaces Provided	388	539	927
Employees ⁴	369	512	881
Hours of Operation	24 hours, 7 days	24 hours, 7 days	24 hours, 7 days

1 Total site area including roads is 255,890m²

2 Includes fast food outlet and service station

3 Based on the parking controls in the Major Development SEPP and Urban Design Plan for the Greystanes SEL, namely 1 space per 300m² of warehouse floor space, 1 space per 77m² of workshop/industrial space, 1 per 40m² of



office floor space and 1 space per 20m² of retail floor space. Parking rates for food and drink premises based on the Holroyd DCP 2013, namely 1 space per 8m² of floor space.

- 4 Estimate only (based on 95% of car parking spaces)

3.4.3 Building Heights

The proposed buildings would have relatively modest building heights, namely up to 13.7 metres.

3.4.4 Building Setbacks

The proposed masterplan applies a consistent set of setbacks to all public roads, namely a:

- 4.0 metre landscape setback; and
- 7.5 metre building setback.

A larger minimum building setback of 15 metres to Reconciliation Road has been applied to the warehouse component of facilities fronting this road (ancillary office components of these facilities may extend within this nominal setback).

The landscape setback would be fully landscaped, with only driveways and site services allowed in this zone. All buildings would be located behind the building setback.

3.4.5 Building Appearance and Finishes

The architectural design of the proposed facilities is shown on the attached representative elevations and finishes plans (see **Appendix C**). **Figure 3.3** shows representative elevations, and precedent perspectives of similar existing buildings in QuarryEAST are shown on **Figure 3.5**. The buildings have been designed to achieve a modern and high quality architectural theme for the estate, in a manner that is consistent with the theme adopted for the QuarryEAST site. The *Logistics Campus* has been designed to achieve its own high quality identity.



41 1 RECONCILIATION ROAD



42 1 RECONCILIATION ROAD



43 1 BRUNNEN DRIVE



44 2 BRUNNEN DRIVE

Figure 3.5: Precedent Building Perspectives (Source: Nettleton Tribe)



Given the relatively large number of buildings proposed to be constructed on the site, DEXUS has committed to the preparation of detailed architectural plans for each building, prior to the commencement of construction of the applicable building⁵.

The detailed architectural design plans would be prepared to the satisfaction of the Secretary of the Department of Planning & Environment. The plans would:

- be generally consistent with the architectural design plans in the EIS; and
- be prepared in a manner that achieves the design excellence standards in the Major Development SEPP, including achieving:
 - o a high standard of architectural design, materials and detailing appropriate to the building type and location;
 - o form and external appearance of the building to improve the quality and amenity of the public domain; and
 - o the relevant sustainable design principles as outlined in the Greystanes SEL Urban Design Plan.

3.5 Infrastructure and Services

3.5.1 Access and Road Network

Internal Roads and Intersections

The project involves the construction of 2 internal estate roads that are proposed to be dedicated as public roads, nominally named as:

- Basalt Road (West) – which would be an extension to the existing Basalt Road (East); and
- Dolerite Close – which would extend from a roundabout intersection with Basalt Road down to meet the existing intersection of Reconciliation Road with Turnbull Close.

In addition to these roads, two internal access roads would be constructed that are proposed to remain privately-owned, including:

- Bellevue Circuit (West) to service Lots 6 and 7. This access road would be a short cul-de-sac extension to the existing Bellevue Circuit (East); and
- an access road to the north of Basalt Road (West) to service Lots 5 and 6. This access road has been designed with an 8 metre pavement and a nominal 12.5 metre corridor (see **Figure 3.7**).

The road layout is broadly similar to the road layout as shown in the Greystanes SEL concept plan (see **Figure 2.9**). The intersections with Reconciliation Road have been designed to meet the 3 existing intersections for QuarryEAST, which are in identical locations to those envisaged in the concept plan.

The public roads would be generally based on the 'local road' design in the concept plan, and provide for a 20.5 metre road reserve with 4 lanes, including parking (see **Figure 3.6**). This road reservation width is slightly wider than the local road design in the UDP (ie. 20 metres). Localised widenings near the key intersections would be provided to improve access and amenity.

In this regard, the eastern section of Basalt Road (West) adjacent Reconciliation Road would be accommodated within an expanded 30 metre corridor, to match the width of Basalt Road (East) and allow for a short section of 3 metre central landscape median to be added to the 'local road' design. This expansion provides a key entry marker to the estate, in accordance with the 'estate boulevard' design in the concept plan (see **Figure 2.8**).

⁵ In a similar manner as the existing QuarryEAST developments.



The internal roads would be designed and constructed in accordance with AS2890 and AUSTRoads and to the satisfaction of Holroyd Council⁶.

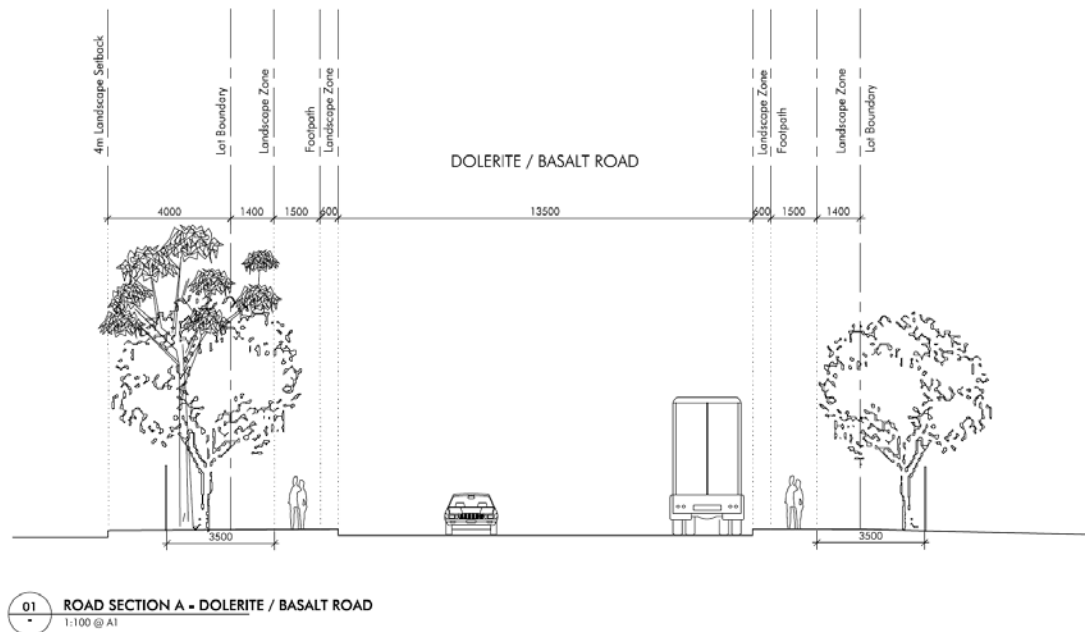


Figure 3.6: Dolerite Road / Basalt Road Typical Cross Section (Source: Nettleton Tribe)



Figure 3.7: Internal Access Road Typical Cross Section (Source: Nettleton Tribe)

External Roads

External road works required for the project are shown on **Figure 3.8**, and include:

- signalisation and provision of turning bays for the intersection of Dolerite Close / Reconciliation Road; and
- provision of a turning bay for the intersection of Bellevue Circuit / Reconciliation Road.

These intersection works would be designed and constructed in accordance with AS2890 and to the satisfaction of RMS and Holroyd Council. It is noted that some of these works are provided for in the Deed of Agreement between Boral and RMS for the wider Greystanes SEL.

⁶ The internal roads are all within the Holroyd LGA.

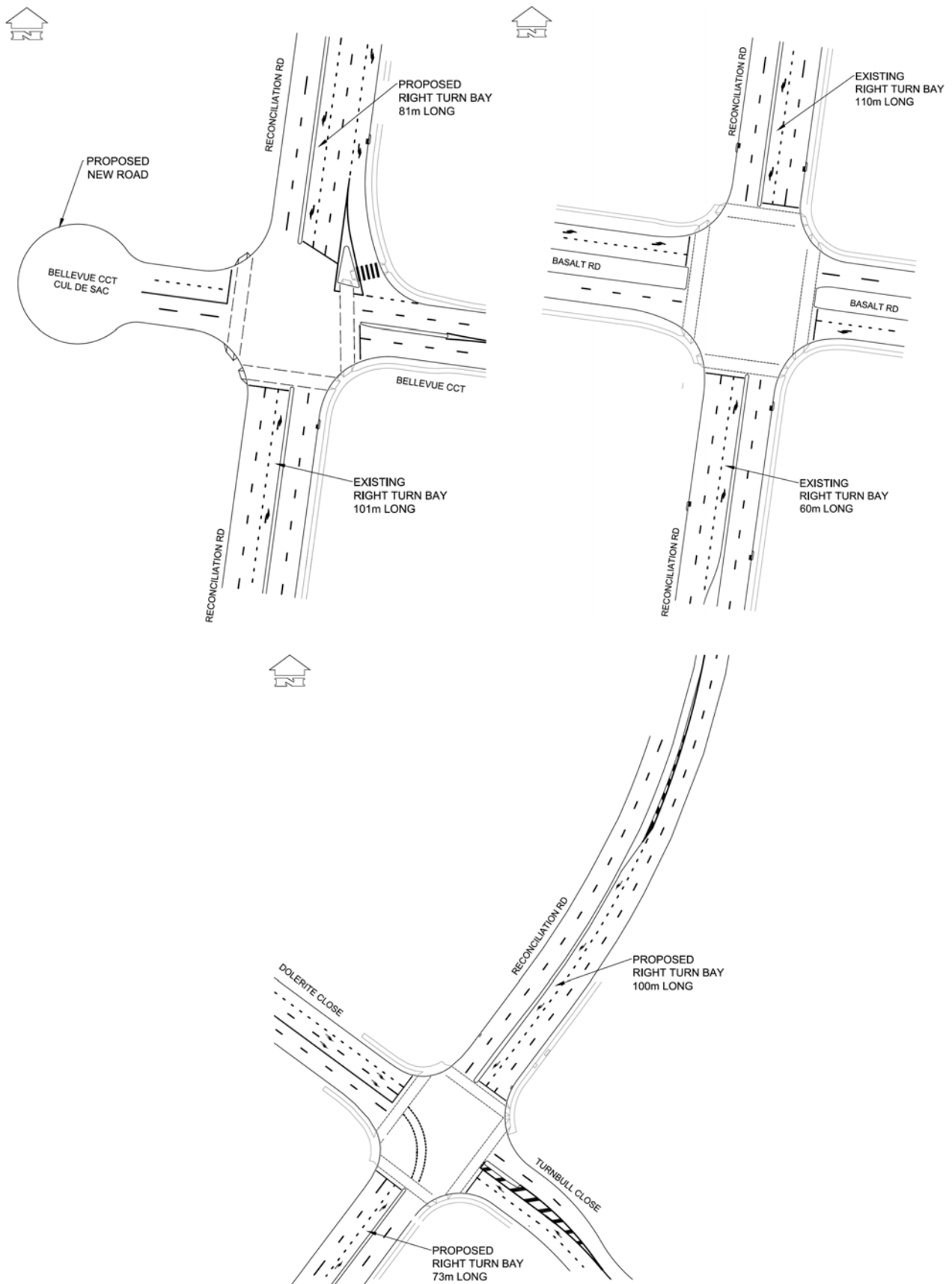


Figure 3.8: Reconciliation Road Intersections



Parking and Loading

The Major Development SEPP, and the approval for the Greystanes SEL concept plan, require parking to be provided at a rate of:

- 1 space per 300m² of warehouse gross floor area (GFA);
- 1 space per 40m² of office GFA; and
- 1 space per 20m² of retail GFA.

These planning instruments do not include a separate parking rate for food and drink premises. The *Holroyd Development Control Plan 2013* does include a specific rate for food and drink premises, namely 1 space per 8m² of such floorspace, which has been adopted for the project.

The proposed masterplan has been designed to achieve these minimum parking rates, for all buildings on the site. Parking compliance for each building is shown on the architectural plans in **Appendix C**, and in the development schedules in **Appendix E**.

The masterplan has also been designed in accordance with the other parking and loading development standards of the Greystanes SEL concept plan, including:

- provision of tree bays within car parking areas (generally at a rate of 1 per 10 spaces for parking areas with more than 20 spaces);
- design of parking areas to minimise conflicts with pedestrians and trucks;
- ensuring cars and trucks are able to enter and exit lots in a forward direction; and
- providing adequate loading docks for facilities and designing them to minimise conflicts with cars and pedestrians as far as practicable.

Public Transport, Pedestrian and Bicycle Facilities

The project has been designed in accordance with the public transport, pedestrian and cycling provisions of the Greystanes SEL concept plan, including:

- ensuring that the development does not conflict with the future construction of the Wetherill Park to Blacktown Bus Transitway by RMS. It is noted that the site is located immediately to the west of the transitway corridor, which has been provided as part of the concept plan approval;
- ensuring that the development provides access to, and does not conflict with, the future construction of the cycleway (by RMS) within the transitway corridor. It is noted that the cycleway provision has been made as part of the transitway corridor, which in turn has been provided under the concept plan approval;
- providing pedestrian footpaths to both verges of internal roads, to facilitate pedestrian and cycle movement within the estate;
- provision for bus stops on the Reconciliation Road frontage; and
- provision of bicycle facilities for all building developments in accordance with the Greystanes SEL Urban Design Plan requirements, including bicycle parking racks and change facilities (for facilities over 4,000m² floor area).

3.5.2 Stormwater

Stormwater management for the project has been designed in a manner that is generally consistent with the Stormwater Management Strategy in the Greystanes SEL concept plan (see **Figure 2.10**).

In accordance with the wider management strategy, stormwater infrastructure for the project would include:

- bio-retention basins throughout the site for stormwater quality improvement;
- on-lot stormwater drains, including gross pollutant traps in all lots; and
- stormwater pipes in the local roads, draining to the off-site perimeter channels.

Stormwater management is discussed in more detail in Sections 2.3.4 and 6.2.



3.5.3 Potable Water

Reticulated potable water supplies for the Greystanes SEL have been approved and constructed as part of Boral's Greystanes SEL project approval. This includes provision of mains supplies in Reconciliation Road.

The project would provide for the extension of these mains supplies throughout the QuarryWEST site (following the road layout) in a manner that is consistent with the servicing strategy in the concept plan (see **Figure 2.11**). The potable water supplies would be adequate to service the project.

3.5.4 Sewer

Reticulated sewer for the Greystanes SEL has also been approved and constructed as part of Boral's Greystanes SEL project approval.

The project would provide for the extension of these supplies throughout the QuarryWEST site (following the low points of the site – ie. generally to the south), in a manner that is consistent with the servicing strategy in the concept plan (see **Figure 2.11**). The sewer supplies would be adequate to service the project.

3.5.5 Electricity

Electricity supply for the Greystanes SEL has also been approved and constructed as part of Boral's Greystanes SEL project approval.

The project would provide for the extension of this supply throughout the QuarryWEST site (following the road layout), in a manner that is consistent with the servicing strategy in the concept plan (see **Figure 2.11**).

Endeavour Energy has indicated (during planning for the concept plan) that the existing zone substation, located off Picrite Road, has spare capacity to supply the loads for the Greystanes SEL. The loads associated with the project would be consistent with those assumed in the planning for the wider estate.

3.5.6 Telecommunications

Telecommunications supply for the Greystanes SEL has also been approved and constructed as part of Boral's Greystanes SEL project approval.

The project would provide for the extension of this supply throughout the QuarryWEST site (following the road layout), in a manner that is consistent with the servicing strategy in the concept plan (see **Figure 2.11**).

3.5.7 Gas

The project would not generate significant demand for, and does not involve connection to, a reticulated gas supply. Notwithstanding, spatial provision for future gas reticulation will be provided in the internal roads.

3.6 Resource Use Management

3.6.1 Water Conservation

The Greystanes SEL concept plan and accompanying project approval provides for construction of a considerable 5 megalitre water harvesting dam at Widemere East, as part of the Stormwater



Management Strategy for the estate. The water harvesting basin collects and stores the peak low stormwater flow from the Greystanes SEL, for pumping to the Cumberland Country Golf Club (CCGC) for re-use purposes (see Section 2.3.4).

Boral, DEXUS and the CCGC have entered into an agreement for this water re-use, which includes a minimum 25-year contractual obligation for water harvesting by the CCGC.

The project is consistent with, and would contribute to, this major water conservation scheme.

In addition, the project would incorporate the following potable water conservation measures:

- roof rainwater harvesting, for reuse in toilet flushing and non-potable uses (Nb. Given the estate-wide water harvesting for the CCGC, this measure would only be undertaken on an optional basis);
- installation for water efficient (4-star) fixtures to all sanitary fixtures; and
- adoption of water efficient landscaping techniques, including:
 - o draining hardstand areas to soft landscaping areas where feasible and practical;
 - o incorporating water efficient native landscaping species and mulched beds; and
 - o installation of water efficient irrigation systems.

3.6.2 Energy Conservation

The project would adopt the sustainable design and energy conservation measures outlined in the Greystanes SEL concept plan and consistent with those adopted in the QuarryEAST project, including:

- orienting buildings to minimise energy as far as practicable;
- maximising natural lighting;
- maximising cross ventilation;
- use of glazing, eaves or shading to protect windows from summer sun;
- insulation of offices;
- use of low energy lighting where possible;
- use of low embodied energy materials wherever appropriate and practical; and
- use of energy efficient plant, equipment and appliances.

3.7 Landscaping

Landscaping would be undertaken in accordance with the landscape masterplan for the project, prepared by Site Image (see **Figure 3.4** and **Appendix D**). The landscape plan has been prepared in a manner that is generally consistent with the broader landscape plan in the Greystanes SEL concept plan, and the concept for QuarryEAST, as well as the Heritage Interpretation Plan for the SEL.

Given the relatively large number of buildings proposed to be constructed on the site, DEXUS has committed to the preparation of detailed landscape plans for all buildings and road works, prior to the commencement of the applicable works⁷.

The landscape plans would be prepared in consultation with the applicable Council, and to the satisfaction of the Secretary of the Department of Planning & Environment.

Further detail on the landscaping principles is provided in Section 6.1.

⁷ In a similar manner as the existing QuarryEAST developments.



3.8 Fencing, Lighting and Security

Fencing, external lighting and security arrangements would be provided in a manner that is consistent with the Greystanes SEL concept plan, and the QuarryEAST project.

In particular, fencing would be provided in accordance with the controls in the Greystanes SEL UDP (see Section 4.2.5 of the UDP), and the existing Estate Fencing Strategy for QuarryEAST. A conceptual fencing strategy is provided in the landscape masterplan in **Appendix D**.

To ensure that fencing is designed and installed in a consistent and unobtrusive manner, DEXUS has committed to the preparation of a final Fencing Strategy for the QuarryWEST site, to be prepared in consultation with the Councils and to the satisfaction of the Secretary of the Department of Planning & Environment.

All lighting would be installed in compliance with *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*.

3.9 Signage

Estate and building signage would be provided in a manner that is consistent with the Greystanes SEL concept plan (see Section 4.0.9 of the UDP), and the existing Estate Signage Strategy for QuarryEAST. A conceptual signage strategy is provided in the landscape masterplan in **Appendix D**.

To ensure that signage is designed and installed in a consistent and high quality manner, DEXUS has committed to the preparation of a final Signage Strategy for the QuarryWEST project, to be prepared in consultation with the Councils and to the satisfaction of the Secretary of the Department of Planning & Environment.

3.10 Staging

DEXUS seeks flexibility in the staging of the project, to enable it to respond to the needs of individual end-users. Accordingly, it is proposed to develop facilities across the estate in line with market demand for individual facilities.

In the short term however, staging would be constrained by:

- the staged release of the QuarryWEST site from Boral to DEXUS; and
- the construction of site infrastructure (roads and services) by DEXUS.

DEXUS' purchase of the site from Boral is contingent upon Boral completing quarry rehabilitation and landform activities across the site, and the provision of Greystanes SEL estate infrastructure (eg. precinct stormwater management works, estate services, etc). The release has been undertaken on a staged basis, generally in accordance with the staging plan shown on **Figure 3.9**.

To date, Stages 1 to 4 (ie. QuarryEAST) have been released, including the provision of the precinct stormwater facilities for the entire Greystanes SEL. With regard to subsequent staging, it is noted that Stages 5 and 6 have been swapped due to the need for ongoing rehabilitation (and filling) in the Stage 5 area to meet required finished surface levels.

In accordance with this staged release, and the staging constraints associated with the provision of infrastructure within the QuarryWEST site, DEXUS has committed to:

- not commencing any construction works on site until it has taken possession of the applicable part of the site in accordance with the staged release from Boral; and



- not commencing operations of any building on site until all infrastructure necessary for the operation of that building has been completed.

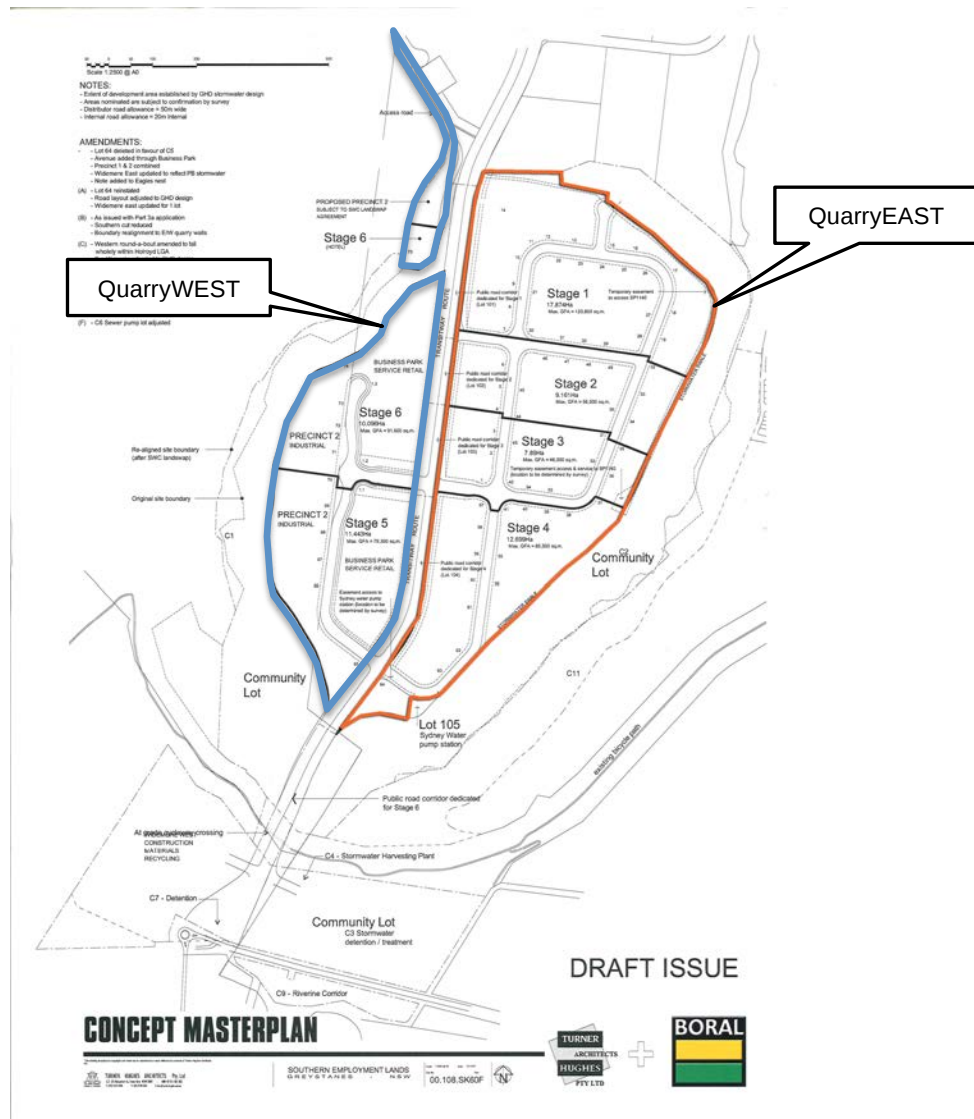


Figure 3.9: Staging Plan

3.11 Hours of Operation

The proposed facilities would operate up to 24 hours a day, 7 seven days a week, 365 days a year.

Construction works for the project would be undertaken generally in accordance with the hours as stipulated in the EPA's *Interim Construction Noise Guideline*, namely:

- 7:00am to 6:00pm Monday to Friday;
- 8:00am to 1:00pm Saturdays; and
- no work on Sundays or public holidays.

However, noise assessment indicates that construction works are able to be undertaken outside these standard hours without being audible at surrounding receivers (see Section 6.3).



Accordingly, DEXUS seeks flexibility to undertake construction works outside these times where they are inaudible at surrounding receivers.

3.12 Capital Investment

The project has a capital investment value of approximately \$118 million, including:

- \$53.5 million for the *Logistics Campus* on Zone 1 (including infrastructure);
- \$8.5 million for the *Service Centre* on Zone 1; and
- \$56 million for the associated warehouse facilities on Zone 2.

3.13 Employment

The project would generate about 500 jobs (full-time equivalents) during the construction phase of the project, which is expected to extend over a period of about 5 years.

Once the QuarryWEST site is fully developed, the project is expected to generate about 880 full-time jobs. Together with QuarryEAST, the entire DEXUS Estate is predicted to generate about 2,900 jobs.



4 PLANNING CONTEXT

4.1 Strategic Context

4.1.1 Metropolitan Strategy

A *Plan for Growing Sydney*, released in December 2014, is the State Government's long term planning blueprint for the Sydney Metropolitan Area for the next 20 years. It caters for the creation of 689,000 extra jobs over the period to 2034, with a considerable portion of these planned to be provided in Western Sydney. The Plan includes a vision for Western Sydney that will secure the city's productivity into the future – so that Western Sydney can meet its full potential, build strong centres and be an even greater place to live.

The Greystanes SEL site is identified in the Plan as part of Sydney's existing employment lands (see **Figure 4.1**). In this regard, the Greystanes SEL forms an integral component of the Plan's goal of creating additional jobs in Western Sydney.

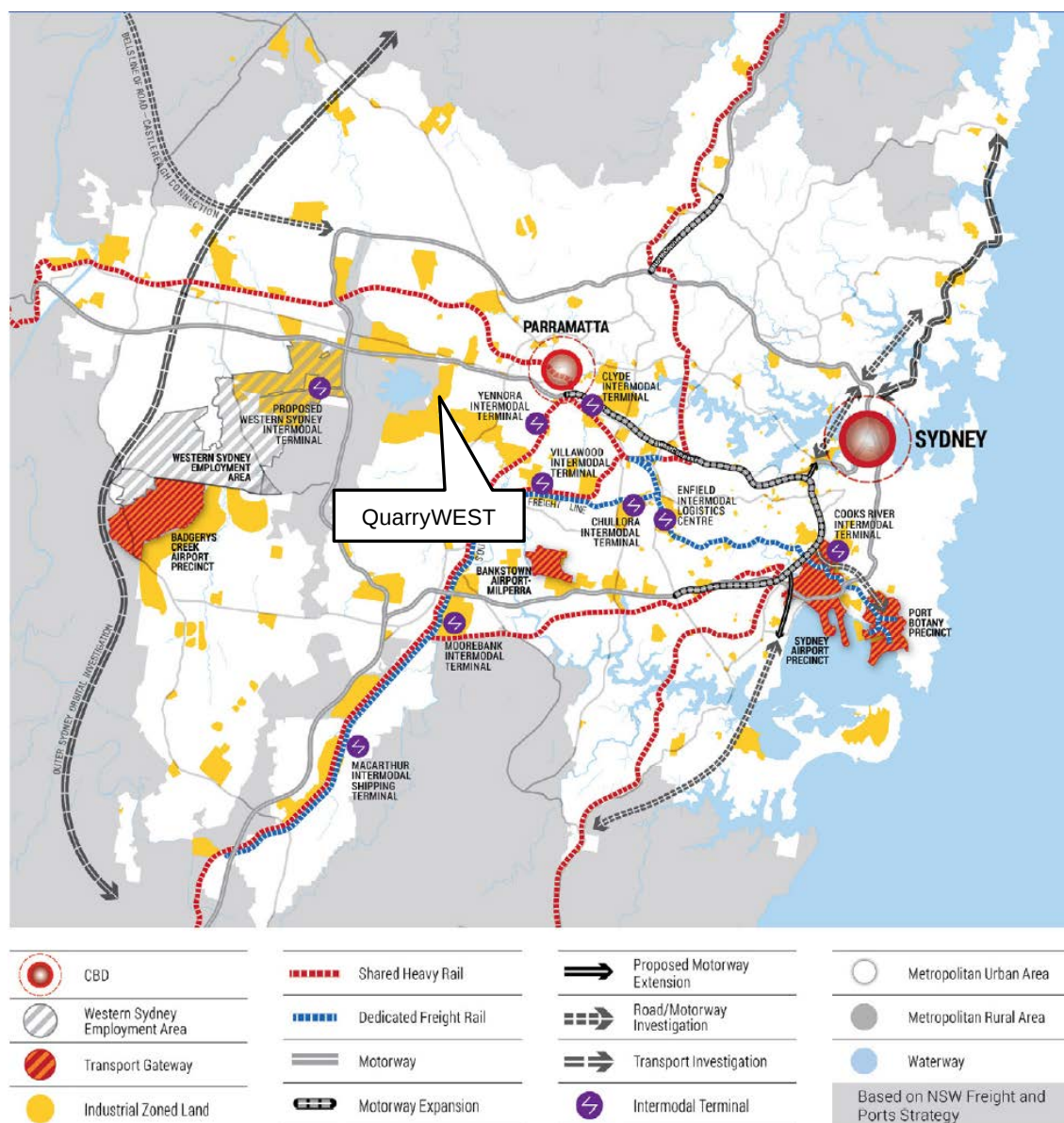


Figure 4.1: Metropolitan Strategy Key Economic Activities



It is considered that the QuarryWEST project is wholly consistent with the Plan's balanced growth and productivity strategies, and is able to be conducted in a manner that is consistent with all other aspects of the Plan.

4.1.2 Other Strategic Plans

A number of other strategic plans are of some relevance to the development, including:

- *NSW 2021* – the State's 10 year plan to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities;
- *NSW Long-Term Transport Master Plan* – the NSW Government's 20-year vision for the delivery of a world-class public transport, roads and freight network to the State;
- *NSW Freight and Ports Strategy* – the NSW Government's 20 year road map that will ensure freight is at the forefront of our economy, by providing a transport network that allows the efficient flow of goods to their market;
- *Sydney's Walking Future* – providing a plan to make walking the transport choice for quick trips under two kilometres and helping people access public transport;
- *Sydney Cycling Future* – a plan to encourage cycling as a priority transport choice; and
- *Planning Guidelines for Walking and Cycling* – providing guidelines to assist communities and the development industry to improve planning for walking and cycling.

The QuarryWEST project has been prepared in a manner that is broadly consistent with the aims, objectives and provisions of these strategic plans, including:

- generating considerable capital investment (\$118 million) and job creation (some 880 operational jobs) in Western Sydney, thereby facilitating the NSW Government's goal of generating more jobs and investment closer to home;
- providing a range of modern warehousing and distribution centres with efficient and direct access to Sydney's arterial road network, which would facilitate the efficient movement of freight;
- developing the estate in a manner that consistent with the long term transport planning for the Greystanes SEL and the wider Western Sydney Employment Area, which includes the future development of the Wetherill Park to Blacktown Bus Transitway immediately to the east of the site; and
- provision of facilities to encourage the use of public transport, walking and cycling (see Section 3.5).

4.2 Statutory Context

4.2.1 State Significant Development

The proposal is classified as State Significant Development under Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), as it involves development with a capital investment value of more than \$50 million for the purposes of warehouses or distribution centres at one location and related to the same operation, and therefore triggers the criteria in Clause 12 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*. In this regard, the proposed *Logistics Campus* has a capital investment value of \$53.5 million, and the entire development has a value of \$118 million (see Section 3.12).

Consequently, the Minister for Planning is the consent authority for the proposed development.

4.2.2 Permissibility

The Greystanes SEL is listed as a State significant site under Schedule 3 of *State Environmental Planning Policy (Major Development) 2005* (the Major Development SEPP). The QuarryWEST site is zoned IN2 Light Industrial and B7 Business Park under Schedule 3 (clause 6, Part 22) of the SEPP. The zoning is shown on **Figure 4.2**.

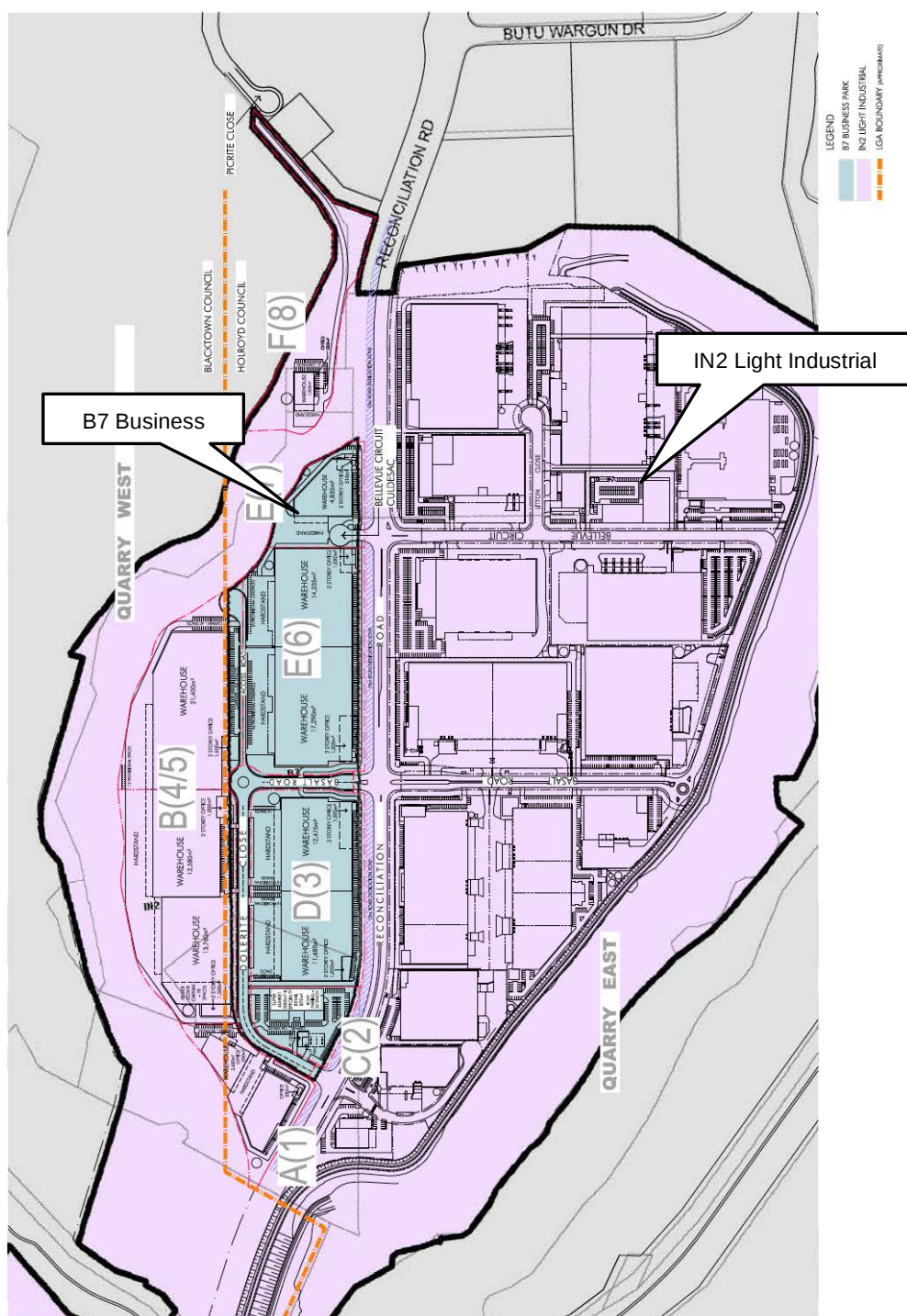


Figure 4.2: Zoning Plan (Source: Growth Centres SEPP, Nettleton Tribe)

The objectives of the IN2 Light Industrial zone include:

- (a) to provide a wide range of light industrial, warehouse and related land uses,
- (b) to encourage employment opportunities,
- (c) to minimise any adverse effect of industry on other land uses,
- (d) to enable other land uses that provide facilities or services to meet the day to day needs of workers in the area,
- (e) to facilitate employment-generating development for a wide range of purposes, including light industry, technology-based industry, manufacturing, warehousing, storage and research.



Under the SEPP's development control table, development for the purposes of warehouse and distribution centres is permissible with consent in the IN2 zone.

The objectives of Zone B7 Business Park are as follows:

- (a) *to provide a range of office and research and development uses,*
- (b) *to encourage employment opportunities,*
- (c) *to enable other land uses that provide facilities or services to meet the day to day needs of workers in the area, and*
- (d) *to service the site by providing for a variety of commercial and retail facilities.*

The proposed supermarket, retail stores, fast food outlet and petrol station would be located within the B7 Business Park zone, as would some of the warehouse and distribution centres. All of these land uses are permissible with consent in the B7 zone.

4.2.3 Environmental Planning Instruments

Clause 3, Part 22 of Schedule 3 of the Major Development SEPP provides that the only environmental planning instruments that apply to land within the Greystanes SEL site are the Major Development SEPP itself and all other SEPPs (except *SEPP No 1—Development Standards* and *SEPP No 59—Central Western Sydney Economic and Employment Area*).

The following SEPPs have been considered during the preparation of the EIS:

- *SEPP No.33 – Hazardous and Offensive Development;*
- *SEPP No.55 – Remediation of Land;*
- *SEPP No.64 – Advertising and Signage;*
- *SEPP (State and Regional Development) 2011;*
- *SEPP (Infrastructure) 2007; and*
- *SEPP (Major Development) 2005.*

Consideration of these SEPPs is provided below. Based on this assessment it is considered that the development is able to be conducted in a manner that is consistent with the aims, objectives and provisions of all of the applicable instruments.

The Secretary's Environmental Assessment Requirements for the development (see **Appendix A**) also refer to the *SEPP (Western Sydney Employment Area) 2009* and the *Blacktown Development Control Plan 2006*.

It is noted that the Western Sydney Employment Area SEPP applies to the Greystanes Northern Employment Lands, but not to the Greystanes SEL. Accordingly, this SEPP does not apply to the development. Notwithstanding, the development is considered to be consistent with the SEPP's aims and objectives.

Further, the Blacktown DCP 2006 is not considered to be relevant to the proposed development, given that detailed development controls for the Greystanes SEL are provided in the Major Development SEPP, the Greystanes SEL concept plan, as well as the Greystanes SEL Urban Design Plan. Consideration of these instruments is presented below.

SEPP No.33 – Hazardous and Offensive Development

SEPP 33 provides definitions for hazardous and offensive industry to enable decisions on developments to be made on the basis of merit, rather than on industry type per se.

The development as a whole is not expected to involve the storage, distribution or use of significant quantities of dangerous goods or hazardous substances. Nor is the development



expected to emit a polluting discharge (eg. noise or odour) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land.

Accordingly, it is considered that the QuarryWEST project as a whole does not constitute a 'potentially hazardous industry' or 'potentially offensive industry', and that the project is able to be conducted in a manner that is consistent with the aims and objectives of SEPP 33.

However, as the end-users for the warehouse facilities are not known at this stage, there is the possibility that some of the end-users would require the storage, distribution or use of dangerous goods or hazardous substances. The proposed service station would also involve the storage of fuel and/or gas in underground (and potentially above-ground) storage tanks. The precise details and locations of fuels and materials to be stored are not known at this time.

To ensure that hazards are effectively managed, DEXUS has included a commitment to provide an analysis against SEPP 33 and the Department of Planning & Environment's *Applying SEPP 33* guidelines, prior to construction or installation of any dangerous goods and/or hazardous materials. Any facility involving bulk fuel storage (ie. the service station) would also include detailed information on underground petroleum storage systems (UPSS) in accordance with applicable regulatory requirements and guidelines.

With this commitment, the development is able to be conducted in a manner that is consistent with the aims, objectives and provisions of SEPP 33.

SEPP No.55 – Remediation of Land

SEPP 55 aims to provide for a statewide planning approach to the remediation of contaminated land, and in particular, to promote the remediation of contaminated land for the purpose of reducing risk of harm to human health or any other aspect of the environment.

Clause 7 of the SEPP requires a consent authority to consider whether the land to which a development application relates is contaminated, and if the land is contaminated, to be satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation), prior to granting consent.

Site contamination within the Greystanes SEL has been assessed and is being managed as part of the planning for the concept plan.

Boral has progressively obtained site audit statements certifying that the QuarryEAST site is not contaminated and is suitable for its intended industrial/commercial land use. Additional site audit statements will be provided from Boral to DEXUS with the release of each subsequent stage for the QuarryWEST site (Nb. Provision of the site audit statement is a contractual requirement on the sale of the land to DEXUS).

DEXUS has committed to ensuring that a site audit statement has been prepared for the relevant part of the site, prior to commencing any construction activities. The site audit statement would certify that the relevant part of the site is suitable for commercial/industrial land use.

With this commitment, the development is able to be conducted in a manner that is consistent with the aims, objectives and provisions of SEPP 55.



SEPP No.64 – Advertising and Signage

SEPP 64 aims to ensure that any signage associated with a development, including any advertisement, that is visible from a public place is compatible with the desired amenity and visual character of an area, is suitably located and is of a high quality and finish.

The development would involve building identification signs and business identification signs as defined in the policy, as well as estate directory signage. Clause 9 of the SEPP provides that an assessment of matters identified in Schedule 1 is not required for building identification signs and business identification signs.

Whilst final signage details are yet to be finalised, any signage is considered able to be designed and installed in a manner that is consistent with the aims and objectives of SEPP 64. As discussed in Section 3.9, DEXUS has committed to the preparation of a detailed signage strategy for the project.

With this commitment, the project is able to be conducted in a manner that is consistent with the aims, objectives and provisions of SEPP 64.

SEPP (State and Regional Development) 2011

SEPP (State and Regional Development) 2011 aims to identify developments of State or regional planning significance to which the approval and assessment process under the State significant provisions of the EP&A Act should apply.

As stated in Section 4.2.1 above, the development constitutes a class of development in Schedule 1 of the SEPP. Consequently, the Minister is the consent authority for the development.

SEPP (Infrastructure) 2007

SEPP (Infrastructure) 2007 aims to facilitate the effective delivery of infrastructure across the State.

Clause 104 of the SEPP applies to traffic generating development and ensures that the Roads and Maritime Services (RMS) is given the opportunity to make representations on certain traffic generating development applications before a consent authority makes a determination on the proposal.

The development meets the thresholds in schedule 3 of the SEPP (as industry with an area of over 20,000m², and providing ancillary parking for over 200 vehicles), and is therefore considered to be traffic generating development for the purposes of the SEPP. Consequently, the application will need to be referred to the RMS for comment.

A traffic assessment has been undertaken for the proposal, which indicates that the development is unlikely to result in any significant traffic impacts (see Section 6.7).

SEPP (Major Development) 2005

The Major Development SEPP is the dominant environmental planning instrument applying to the site. As outlined in Section 4.2.2 above, the Greystanes SEL is listed as a State Significant Site under Part 22 of Schedule 3 of the SEPP. Part 22 outlines a number of principal development standards and provisions related to development in the Greystanes SEL.

A review of the project against the development standards for the Greystanes SEL, as set out in the SEPP, is presented in the following table.

It is noted that clause 20, Part 22 of Schedule 3 provides that the development standards imposed by the SEPP may be varied for development if the consent authority is satisfied that:



- (a) compliance with the development standard is unreasonable or unnecessary in the circumstances of the case; and
- (b) there are sufficient environmental planning grounds to justify contravening the development standard.

In deciding whether to vary the development standard, the consent authority must:

- (a) be satisfied that an applicant's request to vary the development standard addresses the above matters, and that the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone;
- (b) obtain the concurrence of the Secretary of the Department of Planning & Environment.

In deciding whether to grant concurrence, the Secretary must consider:

- (a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning;
- (b) the public benefit of maintaining the development standard; and
- (c) any other matters required to be taken into consideration by the Secretary.

Table 4.1: Major Development SEPP Development Standard Compliance

Clause (Part 22, Sch.3)	Issue	Key Controls Summary	Complies (Yes or No)	Comments / EA Reference
13	Building Height	- Maximum height in B7 zone is 25 metres - Maximum height in IN2 zone is 15 metres	Yes	The project seeks approval for building heights up to 13.7 metres
14	Gross Floor Area (GFA)	- Maximum GFA in B7 zone is 104,000m², of which: - max. of 6,500m² for retail premises, service stations and vehicle repair stations, with a max. pub GFA of 2,500m² and max. supermarket GFA of 2,000m²; - max. GFA for other uses of 97,000m²; and - min. GFA of 3,000m² for any building containing office premises; - Maximum office GFA in IN2 zone is: 50%, for lots within 400 metres of bus stop; and 30%, for lots more than 400 metres of bus stop.	Yes	- The proposed masterplan has a GFA in the B7 zone of 69,295m² - The proposed masterplan has a GFA of 3,220m² for retail and service uses - The proposed supermarket has a GFA of 2,000m² - The proposed warehouses in the IN2 zone (and B7 zone) have ancillary office components less than 30%
15	Floor Space Ratio	Maximum floor space ratio in IN2 zone is 0.75:1	Yes	- The proposed warehouses in the IN2 zone all have FSRs well below 0.75:1 - The proposed masterplan has an overall FSR of 0.54:1
16	Hotel Accommodation	Not applicable	Yes	The project does not involve hotel development



Clause (Part 22, Sch.3)	Issue	Key Controls Summary	Complies (Yes or No)	Comments / EA Reference
17	Child Care Centres	Not applicable	Yes	The project does not involve child care centre development
18	Car Parking	- Car parking rates include: - Warehouses or distribution centres, 1 space per 300 m²; - Offices, 1 space per 40m²; - Retail, 1 space per 20m²	Yes	The project has been designed to comply with the car parking rates.
21	Design Excellence	Requires buildings to achieve a high level of architectural design merit	Yes	The project's urban design and architecture have been designed by prominent architects Nettleton Tribe, following the design theme from the successful QuarryEAST estate
22	Architectural Roof Features	Allows decorative architectural roof elements above the maximum building height under certain circumstances	Yes	The development does not involve architectural roof elements above the proposed heights, other than as shown on the architectural plans
23	Public Utility Infrastructure	Requires infrastructure to be provided, including potable water, electricity, gas and sewerage	Yes	All required infrastructure for the Greystanes SEL has been approved

4.3 Consistency with Greystanes SEL Concept Plan

Consideration of the project against the relevant provisions of the Greystanes SEL concept plan – including the concept plan approval and the development controls under the concept plan's Urban Design Plan (UDP) – is provided in **Appendix F**.

In summary, it is considered that the project is generally consistent with the concept plan approval, with the project providing for a high quality industrial estate in a manner that is consistent with the desired character for the Greystanes SEL. However, the project does involve some relatively minor departures from the development controls in the UDP, namely:

- streetscape, in particular the width of Basalt Road;
- setbacks in some areas of the site;
- building heights adjacent Basalt Road; and
- landscaping areas for some individual lots.

The departures generally arise as a result of the proposed masterplan involving more industrial land uses and less business-related land uses than that envisaged in the concept plan. Whilst acknowledging that the masterplan provides for less business-related uses than indicated in the concept plan, DEXUS believes that the proposed mix of development in the business precinct is more aligned with current and forecast market demand than the more intensive vision in the concept plan. Further, the proposed warehouses are somewhat larger and less dense than that envisaged in the concept plan, in line with the market demand for industrial facilities in Western Sydney and the proposed campus-style development of the *Logistics Campus*.



Consideration of each of the departures from the development controls in the UDP is provided below. In summary, it is considered that the proposed variations would not result in any significant environmental impacts, and that the variations would not compromise the intent or objectives of the Greystanes SEL concept plan. Indeed, the variations would benefit the Greystanes SEL objectives by significantly improving the efficiency and viability of the industrial and retail facilities. This would help to attract end-users to the estate, thereby accelerating the delivery of capital investment and jobs to the Greystanes SEL.

Streetscape

With regard to the streetscape, Section 3.6 of the UDP outlines a conceptual streetscape hierarchy which includes an east-west 'estate boulevard' where Basalt Road (West) is proposed to be constructed. The UDP notes that the purpose of the estate boulevard is to provide a sense of place and focal point to the Business Park and Service Retail uses. To this end, the estate boulevard provides a 30 metre road corridor, larger setbacks (see below) and reduced height limits (9 metres) within 30 metres of the road frontage.

DEXUS does not believe that a suitable market for intensive business-related uses within the Greystanes SEL exists now or in the foreseeable future. Accordingly, the proposed masterplan involves development of warehouse and distribution centres on both sides of Basalt Road (West).

Given the proposed industrial development in this location, DEXUS has adopted a 20.5 metre road corridor for the majority of Basalt Road (West), which is generally consistent with the 'local road' design in the UDP and similar to most other internal roads in the DEXUS Estate. However, a small section of 30 metre corridor would be constructed adjacent Reconciliation Road to match the corridor width on the western portion of Basalt Road (East), and to act as a key estate entry marker consistent with the intent for the estate boulevard road.

It is considered that the reduction in road corridor width over the remainder of Basalt Road (West) is justified, given that the proposed masterplan involves development of warehouses and distribution centres in this area of the estate rather than the business-related uses envisaged in the concept plan.

Setbacks

The UDP outlines a rather complex and confusing range of setback controls, as outlined in the following table.

Table 4.2: Greystanes SEL Urban Design Plan Setback Controls

Road	Setback to	Setback (m)			Proposed QuarryWEST
		Urban Design Plan			
		Business Park	Service Retail	Industrial Zone	
Reconciliation Road/Transitway	Building	7.5 average (4 min.)	7.5	15	7.5
	Landscape	4	7.5 ¹	7.5	4
Boulevard Road (ie. Basalt Road)	Building	10	5	7.5	7.5
	Landscape	5	5	7.5	4
Other Local Roads	Building	7.5	5	7.5	7.5
	Landscape	7.5 ²	5 ²	7.5 ³	4

1 Seating/dining, verandas and some other elements allowed in setback to within 0m of boundary

2 However, Section 4.1.3(8) of the UDP states that carparking allowed in 50%

3 However, Section 4.2.3(3) of the UDP provides reduced setbacks (3.0 metres) for corner lots



As outlined in Section 3.4 and shown in **Table 4.2**, DEXUS proposes a consolidated and simplified hierarchy of setbacks within the QuarryWEST site, namely a 4.0 metre landscape setback and a 7.5 metre building setback for all public road frontages. Whilst some of these do not comply with the setback controls in the UDP, it is considered that the setbacks are reasonable and justified given that:

- the proposed masterplan provides for uniform setbacks across the estate, most of which are consistent with the UDP controls;
- the proposed masterplan provides for larger warehouse-related and less business-related uses than envisaged in the UDP; and
- the proposed setbacks are generally consistent with those adopted for the QuarryEAST site.

With regard to the Reconciliation Road setback, as outlined in **Table 4.2** above the UDP applies different setbacks for the frontage within the business precinct and the industrial zone. Whilst the project adopts a 7.5 metre setback to this road, it is noted that the warehouses in the proposed masterplan are all set back at least 15 metres from the road, with only minor encroachments within this distance for the ancillary office components of the buildings (see **Figure 3.1**).

Building Height

The project building heights (ie. maximum 13.7 metres) comfortably comply with the standard building height controls in the UDP (ie. 25 metres in the business precinct and 15 metres in the industrial precinct apart from Lot 8 which has an allowable height of 25 metres). However, Section 4.1.4 of the UDP provides that building heights along the east-west boulevard (ie. Basalt Road West) should not exceed 9 metres within 30 metres of the frontage. The intent of this height control is to support the envisaged status of this road in the UDP as a focal point for the business-related land use in this area of the estate.

As outlined above, the proposed masterplan does not involve development of business-related uses along the Basalt Road (West) frontage, and instead involves the development of standard warehouse and distribution centres along this road, with a maximum height of 13.7 metres.

Given the proposed warehouse-related uses along this road, it is considered that compliance with a height limit of 9 metres within 30 metres of the road for the proposed warehouses is not warranted or reasonable in this area.

Landscaping Area

Section 4.1.4 of the UDP provides that a minimum of 15% of the site area for lots in the business precinct should be soft landscaping.

Whilst the project has been designed to comply with the minimum 15% standard across the whole QuarryWEST site (ie. the project provides an overall landscaping area of 16%), landscaping area for individual lots varies considerably, with some lots below the minimum (see **Appendix E**).

It is considered that this non-compliance with the landscaping area is minor and justified, given that:

- the overall masterplan complies with the minimum landscape area;
- the masterplan provides landscape setbacks that are generally consistent or greater than the landscape setbacks in the UDP;
- the physical layout of the estate makes it difficult to achieve minimum landscape areas for individual lots without significantly affecting the developable areas of the estate;
- the GFA for the estate is well below the maximum allowable density within the Greystanes SEL;



- the proposed masterplan adopts landscaping strategies that would maximise the appearance of green space within the public domain, including consistent landscape setbacks to all public roads, and provision of shade trees in car parking areas; and
- the overall landscape area complies with the stormwater objectives for the estate.

With regard to this last point, the minimum landscape area control in the UDP is at least in part related to the stormwater management planning for the Greystanes SEL. In this regard, an impervious area of 86% (or a landscape area of 14%) was used in the original stormwater management strategy for the concept plan to define the capacity of the precinct-wide detention basin at Widemere East that services the Greystanes SEL. Accordingly, the overall soft landscape area of 16% provided by the proposed masterplan complies with the stormwater management strategy for the estate.

4.4 Developer Contributions

Developer contributions for the development of the entire Greystanes SEL site were resolved as part of the concept plan approval.

In April 2002, Boral and the RMS entered into a Deed of Agreement for regional road improvements for the whole Greystanes estate. Under that agreement, Boral was required to:

- dedicate a 25 metre (later reduced to 10 metre) transport corridor and construction of earthworks related to the Blacktown to Wetherill Park Transitway;
- provide a monetary contribution towards improvement works on Greystanes Road;
- provide a monetary contribution towards public transport improvements; and
- provide a monetary contribution towards off-site traffic mitigation works including intersection treatments on Greystanes Road.

As part of the concept plan approval, Boral supplemented these contributions by committing to additional contributions including:

- construction of a 4 lane road through the Greystanes SEL (ie. Reconciliation Road);
- construction of a 4 lane road from the SEL to Davis Road, Wetherill Park;
- a cash contribution of \$250,000 to the Ministry of Transport to contribute to the provision of bus services along Reconciliation Drive;
- construction of a cycleway; and
- a 40 place child care centre within the Greystanes Estate.

These works equated to \$50.954 million dollars. It is understood that some changes to these contributions has occurred as part of subsequent modifications to the concept plan.

As developer contributions for the Greystanes SEL site have already been resolved at the concept plan level, no further contributions are payable for the project.



5 CONSULTATION AND IDENTIFICATION OF KEY ISSUES

Development of the Greystanes SEL concept plan and the QuarryEAST project has been subject to extensive consultation with government authorities, service providers, surrounding landowners and the wider community.

This consultation has occurred during the preparation of the concept plan and project applications, during the assessment of the applications, and during the post approval development stage of the projects.

Based on this consultation (some it undertaken by Boral and some by DEXUS), it is considered that DEXUS and the relevant stakeholders have gained a good appreciation of the key issues relevant to development of the Greystanes SEL.

Key stakeholders consulted, and the key issues raised by or considered to be of relevance to these stakeholders, are listed in the table below.

Table 5.1: Previous Greystanes SEL Consultation and Key Issues Raised

Stakeholder	Key Issues⁸
Government Authorities	
<i>Department of Planning & Environment (DP&E)</i>	• Strategic context and appropriateness of the business park; • Quantum of retail services uses; • Urban design and quantum of associated offices in industrial precinct; • Developer contributions; • Traffic, transport and parking; • Ecologically sustainable development principles
<i>Office of Environment & Heritage</i>	• Surface and ground water management
<i>NSW Office of Water</i>	• Surface and ground water management
<i>Roads and Maritime Services (RMS)</i>	• Developer contributions; • Traffic, transport and parking
<i>Transport for NSW</i>	• Strategic context and appropriateness of business park; • Quantum of retail services uses; • Developer contributions; • Traffic, transport and parking
<i>Heritage Office</i>	• Heritage
<i>Parramatta Council, Blacktown Council, Holroyd Council, Fairfield Council</i>	• Strategic context and appropriateness of business park; • Quantum of retail services uses; • Urban design and quantum of associated offices in industrial precinct; • Developer contributions; • Traffic, transport and parking; • Surface and ground water management
Service Providers	
<i>Sydney Water</i>	• Water and sewer servicing
<i>Telstra</i>	• Telecommunications servicing
<i>Integral Energy</i>	• Electrical servicing
Special Interest Groups and the General Public	• Traffic, transport and parking; • Heritage; • General planning and environmental issues

⁸ Sourced from DEXUS and the Department of Planning & Environment's Assessment Report for the Greystanes SEL concept plan, the Environmental Assessment for the concept plan, and the EA for the QuarryEAST project (formerly known as the DEXUS Estate project).



As discussed in Section 6 below, these issues have largely been addressed as part of the wider Greystanes SEL project.

With regard to the current project, the Secretary of the DP&E has provided her environmental assessment requirements for the project, which are attached in **Appendix A**. These environmental assessment requirements have been prepared in consultation with key applicable agencies, including RMS, Transport for NSW, Holroyd Council and Blacktown Council (agency responses are included as Attachment 2 of the Secretary's environmental assessment requirements).

DEXUS has and/or is continuing to undertake additional consultation with these authorities as part of the development of the DEXUS Estate, including the QuarryWEST and QuarryEAST sites. As the project is not predicted to result in any significant impacts to surrounding land users (see Section 6), no additional 'pre-lodgement' consultation with surrounding land users has been undertaken, nor is considered to be necessary.

The key issues identified for assessment in the Secretary's environmental assessment requirements and/or consultation and risk assessment of the project to date, include:

- layout and design quality;
- consistency with strategic and statutory planning instruments, including the concept plan approval, State significant site provisions and the Urban Design Plan;
- traffic and transport;
- soil and water;
- heritage; and
- noise.

These issues, along with other environmental issues of relevance to the project, are addressed in Section 6 below. Consistency with the Greystanes SEL concept plan and related instruments is addressed in Section 4.



6 ENVIRONMENTAL ISSUES

The environmental assessment for the project benefits from the comprehensive environmental assessment undertaken for the Greystanes SEL concept plan. Accordingly, most of the environmental issues associated with the project have already been addressed as part of the planning and approval for the concept plan. The assessment also benefits from the environmental assessment undertaken for the QuarryEAST project.

The environmental assessment undertaken for the project relies upon, and supplements where necessary, the assessment already undertaken for the Greystanes SEL.

6.1 Design and Visual

The Major Development SEPP requires that buildings with the Greystanes SEL achieve a high level of architectural design merit, or design excellence.

In accordance with this requirement, and DEXUS' objective of developing a world-class and distinctive industrial estate, DEXUS engaged respected architects Nettleton Tribe together with landscape architects Site Image to develop a high quality urban and architectural design for the estate.

The architectural and landscape design for the QuarryWEST project has been prepared in a manner that:

- respects and is broadly consistent with the Greystanes SEL concept plan, particularly the concept plan's Urban Design Plan;
- maximises the realistic development potential of the site, in accordance with current and foreseeable market demand;
- respects and highlights the natural attributes of the site, particularly the visually striking feature of the quarry walls; and
- respects and highlights the historic values of the former Prospect Quarry, in a manner that is consistent with the Heritage Interpretation Plan for the Greystanes SEL.

The consistency of the project with the Greystanes SEL concept plan is addressed in Section 4.3 of this report. In summary, the proposed masterplan is generally consistent with the concept plan. Where the project differs from the concept plan – particularly in relation to road design (streetscape), setbacks, building heights and landscaping area on part of the site – it is considered that the differences are minor and do not detract from the overall design intent or quality of the estate, and are not expected to result in any significant environmental impacts.

6.1.1 Urban Design

The urban design of the QuarryWEST project is guided by the masterplan rationale (including the *Logistics Campus*) as outlined in Section 3.4, the concept plan and the proposed layout of the internal road network. In this regard, the road layout is broadly consistent with the layout in the concept plan, including the 3 key intersections with Reconciliation Road.

Conceptual designs for key urban design elements, including estate signage, are provided in **Appendix C** and **Appendix D**. All of these elements would be provided in a manner that is consistent with the concept plan and the existing urban design elements employed in the QuarryEAST estate.

To ensure that all estate signage and fencing is designed and installed in a consistent and high quality manner, DEXUS has committed to the preparation of a final Signage Strategy and a



Fencing Strategy for the site, to be prepared to the satisfaction of the Secretary of the Department of Planning & Environment.

6.1.2 Architectural Design

The project presents an opportunity to develop a consistent and high quality architectural theme across the entire DEXUS Estate site, including QuarryEAST and QuarryWEST.

In this regard, the proposed external appearance of the buildings would be similar to those developed in QuarryEAST, as shown on the precedent images on **Figure 3.5** and the plans in **Appendix C**. A design statement from the project architect is presented below:

“The approach to the built form of the QuarryWEST project will be to develop an architectural treatment to ensure the creation of a high quality, cohesive estate with an attractive appearance, in a manner that is consistent with the successful QuarryEAST estate and highlights the integrated Logistics Campus.

The estate architecture is envisaged as simple, rational, repeatable and well proportioned buildings accented with high quality elements around the entry and office components.

The base building type will be developed with a concern for exacting proportion control and elemental expression. The office components of each building will repeat variations on a theme. These elements will articulate the main point of entry and contain zones for tenant identity signage and street numbers, as well as creating the main focal point of the building.

The warehouse cladding will be selected from a variety of neutral tones and will be simple and clean so as to not distract from the offices in the foreground. The office components – whether single storey, raised or double storey – will be treated with performance glazing combined with a system of sunshade elements to suit orientation. The associated office components of the buildings will be more expressive and will have more articulation in their façade. Concrete will be sealed natural grey cement or painted and glazing will be selected from a suitable range of performance glazing.

The buildings will be set in a considered industrial park precinct – unified language of signage, fencing and public domain elements will ensure a consistency to the estate character.”

Given the relatively large number of buildings proposed to be constructed on the site, DEXUS has committed to the preparation of detailed architectural plans for each building, prior to the commencement of construction of the applicable building. This approach is similar to that adopted for the QuarryEAST project.

The detailed architectural design plans would be prepared in consultation with the relevant Council and to the satisfaction of the Secretary of the Department of Planning & Environment. The plans would:

- be generally consistent with the architectural (see **Appendix C**) plans in the EIS; and
- be prepared in a manner that achieves the design excellence standards in the Major Development SEPP, including achieving:
 - o a high standard of architectural design, materials and detailing appropriate to the building type and location;
 - o form and external appearance of the building to improve the quality and amenity of the public domain; and



- o the relevant sustainable design principles as outlined in the Greystanes SEL Urban Design Plan.

6.1.3 Landscape Design

Landscaping would be undertaken in accordance with the landscape masterplan for the project, prepared by Site Image. The project landscape plan has been prepared in a manner that is generally consistent with the broader landscape plan in the Greystanes SEL concept plan, and the landscape masterplan prepared for QuarryEAST. It also incorporates the recommendations from the Heritage Interpretation Plan (see Section 6.6).

The UDP includes the following key landscaping principles:

- landscaping is to create a quality industrial park setting, with hard landscaping features (including paving, terracing, retaining walls and kerbing) and soft landscaping features (ie. vegetation);
- soft landscaping to include indigenous species selected from the planting schedule in the UDP;
- outdoor staff areas to be provided (close to offices) to meet the needs of the workforce;
- where feasible, hardstand areas to be drained to soft landscaping areas;
- landscaping to include mulched beds;
- planting to be used to highlight pedestrian and vehicular access points and building entries;
- automatic soaker irrigation systems to be installed for all landscaped areas;
- landscaping to be designed to assist energy conservation (ie. through shading);
- landscaping to be designed to encourage safety by allowing for street surveillance;
- landscaping to provide for pedestrian paths;
- landscaping to be separated from vehicle areas by physical barriers; and
- carparks to be landscaped to soften car parking areas and provide shading.

Given the relatively large number of buildings proposed to be constructed on the site, DEXUS has committed to the preparation of detailed landscape plans for all buildings and road works, prior to the commencement of the applicable works. This approach is similar to that adopted for the QuarryEAST project.

The landscape plans would be prepared in consultation with the relevant Council and to the satisfaction of the Secretary of the Department of Planning & Environment.

6.1.4 Visual Amenity

The eastern and western bounding ridges that contain the former Prospect Quarry block views toward the site from virtually all directions. Despite the local and regional prominence of Prospect Hill, which is both a current and a historical landmark, the site is virtually invisible from surrounding residential and publicly accessible areas.

Key visual receivers in proximity to the site include:

- commuters on Reconciliation Road, from which the site would be highly visible;
- the Prospect Hill heritage area to the north-east, including the future walkway and lookouts on the eastern ridge of the former quarry in Mar-rong Reserve, from which the site would be moderately to highly visible; and
- the Prospect Reservoir Nature Reserve, from which the site would be highly visible.

There are no views to the site from the private and public domain within Nelsons Ridge residential area, which is situated below the eastern ridge of the former quarry.



The proposed QuarryWEST project includes a number of measures to avoid or minimise any adverse visual impacts on these receivers, including:

- relatively modest building heights that comply with the general development controls in the Greystanes SEL Urban Design Plan;
- generous building setbacks to key frontages, including minimum 15 metre setbacks for warehouse components of facilities along Reconciliation Road;
- gross floor areas (GFA) and floor space ratios (FSR) for individual sites and the overall estate have been kept well below the maximum GFA and FSR in the Greystanes SEL concept plan and Urban Design Plan;
- facilities have been oriented to key frontages, with office components of warehouse facilities and retail buildings presenting to key frontages including Reconciliation Road and other estate roads;
- building facades (including warehouses, ancillary offices and service retail facilities), would be designed to a high standard, providing good articulation and visual relief, particularly through a mix of materials and colours, with all facilities to be subject to detailed architectural and landscape design in consultation with the relevant Council;
- plant and equipment has been located away from key frontages as far as practicable; and
- generous landscaping would be provided to key frontages.

With the implementation of these measures, it is considered that the development of the QuarryWEST project would not result in any significant adverse impacts on the visual amenity of the locality.

6.2 Soil and Water

6.2.1 Erosion and Sedimentation

As the site is relatively flat and self-contained, with all stormwater flowing to the precinct detention basin at Widemere East, the project does not entail a significant risk of erosion and sedimentation during construction works.

To manage erosion and sedimentation during construction, DEXUS has committed to the preparation and implementation of Erosion and Sediment Control Plans for all development involving ground disturbance. The plans would be prepared in accordance with Landcom's (2004) *Managing Urban Stormwater: Soils and Construction* manual (ie. the 'Blue Book'), prior to the commencement of relevant building works.

6.2.2 Contamination

Site contamination within the Greystanes SEL has been assessed and is being managed as part of the planning for the concept plan.

Boral has obtained staged site audit statements certifying that Stages 1 to 4 of the SEL as shown on **Figure 3.9** (ie. the QuarryEAST site) are not contaminated and are suitable for its intended industrial/commercial land use. Additional site audit statements will be provided from Boral to DEXUS with the release of each subsequent stage for the QuarryWEST site (Nb. Provision of the site audit statement is a contractual requirement on the sale of the land to DEXUS).

DEXUS has committed to ensuring that a site audit statement has been prepared for the relevant part of the site, prior to commencing any construction activities. The site audit statement would certify that the relevant part of the site is suitable for commercial/industrial land use.



6.2.3 Groundwater Management

As the former Prospect Quarry intercepts the regional groundwater table, the concept plan provides for a detailed Groundwater Management Strategy for the Greystanes SEL, which details measures to drain and treat groundwater from the base of the quarry. The strategy is described in Section 2.3.4.

The Groundwater Management Strategy forms part of the concept plan approval, and the construction of the groundwater management infrastructure has been approved as part of the Greystanes SEL project approval. The infrastructure includes a series of groundwater interception drains around the perimeter of the former quarry (below the perimeter stormwater swale), with collected groundwater draining to the detention basin at Widemere East. The strategy is shown on **Figure 6.1** below, which shows the as-designed system and the as-built system at the current time.

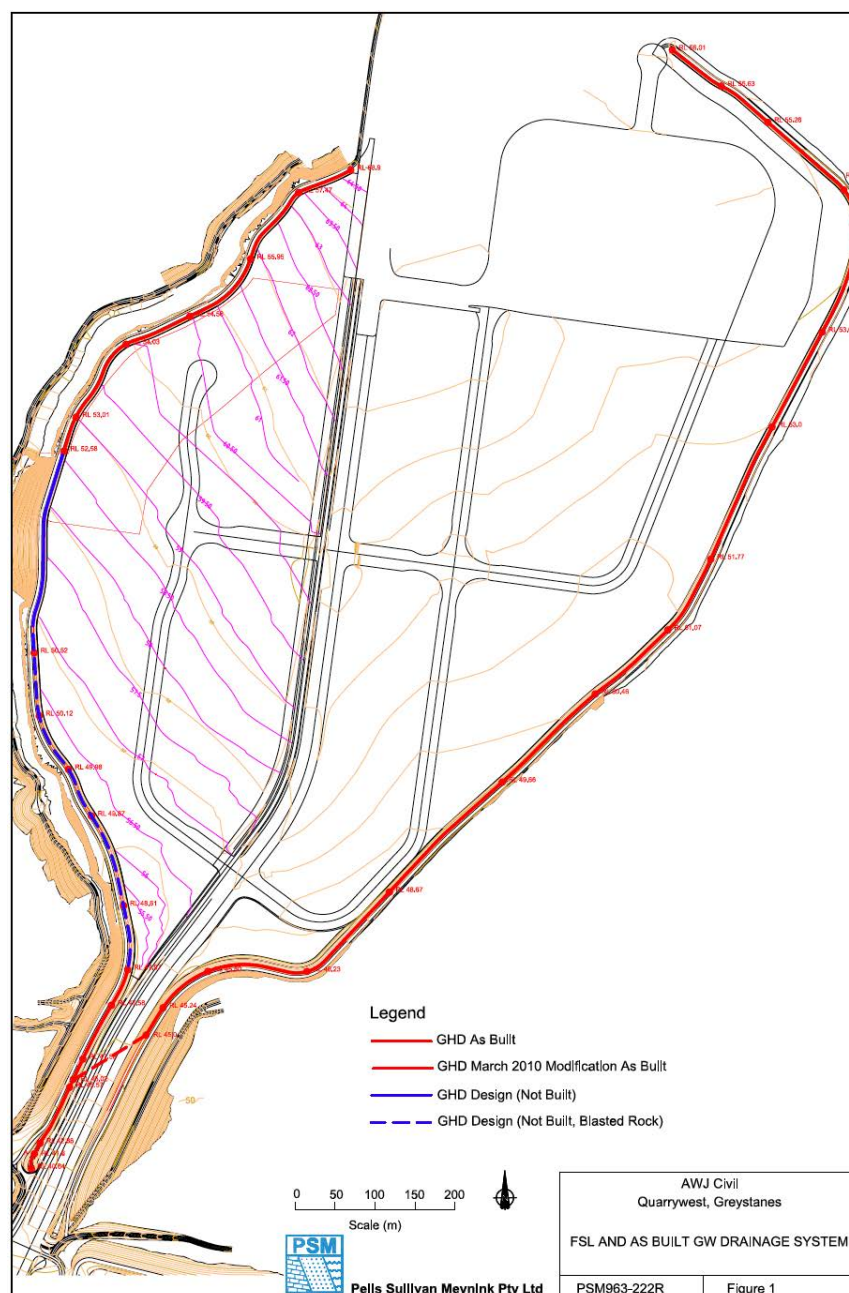


Figure 6.1: Groundwater Management System



Pells Sullivan Meynink Pty Limited has recently undertaken an assessment of the status and operation of the groundwater management strategy on behalf of Boral (see **Appendix G**). The assessment includes:

- review of the existing groundwater conditions on-site, and the performance of the existing groundwater management system;
- review of the effect of the proposed development on groundwater levels;
- review of previous groundwater assessments; and
- modelling to ascertain whether the existing as-built groundwater infrastructure is adequate to achieve the aims of the groundwater management strategy.

Based on detailed assessment and modelling, the assessment found that the groundwater levels within the Greystanes SEL are between RL48m and RL50m AHD, which is more than 6 metres below the finished surface level (FSL) of the Greystanes SEL (including QuarryWEST) and more than 3 metres below the FSL in the perimeter swale. As such, there has been very little groundwater reporting to the as-built groundwater drainage system.

The assessment notes that the proposed development of QuarryWEST would reduce groundwater levels further, by reducing infiltration due to construction of impervious areas.

The groundwater modelling found that, even in very wet years, groundwater levels are unlikely to rise significantly above existing levels, and very unlikely to rise above the FSL for the estate.

Accordingly, the groundwater assessment concludes that the existing as-built groundwater management system is sufficient to achieve the aims of the Groundwater Management Strategy.

Whilst the implementation of the Groundwater Management Strategy is regulated under the concept plan approval, it is considered that the proposed QuarryWEST project is able to be undertaken in a manner that is consistent with the strategy.

6.2.4 Stormwater Management

Background

The Greystanes SEL concept plan provides for a detailed Stormwater Management Strategy for the SEL. The plan has been designed to manage both the quality and quantity of surface water flow in a sustainable manner prior to its ultimate discharge to Prospect Creek. The strategy is described in Section 2.3.4, and includes:

- on-site treatment (business precinct only);
- gross pollutant traps in lots;
- stormwater drains/pipes in the internal road network;
- vegetated open bio-filtration channels around the perimeter of the estate; and
- a precinct detention basin at Widemere East, along with a 5 megalitre harvesting dam.

The perimeter stormwater channels and the precinct detention basin have been designed to convey stormwater events up to the 100 year ARI event, with discharge maintained at pre-development levels to minimise the risk of downstream flooding. Finished surface levels have been designed to be at least 500 millimetres above the 100 year ARI water level in the perimeter drains (at the upstream side of development lots), to minimise flood risk on site. Overland flow paths are provided via estate roads and drains.

The 5 megalitre harvesting dam at Widemere East has been designed to collect and store peak low stormwater flows for pumping to the Cumberland Country Golf Club for re-use purposes.



Boral, DEXUS and the golf club have entered into an agreement for the water re-use, which includes a minimum 25 year contractual obligation for water harvesting by the golf club.

The Stormwater Management Strategy (and an accompanying Stormwater Maintenance Plan) forms part of the concept plan approval, and the construction of the estate stormwater infrastructure has been approved as part of the Greystanes SEL project approval. The Stormwater Maintenance Plan includes a stormwater monitoring program for the estate.

QuarryWEST Stormwater Review

Costin Roe has reviewed the QuarryWEST project against the Stormwater Management Strategy and confirmed that the project is consistent with the stormwater quality and quantity goals of the strategy (see **Appendix H**). DEXUS would undertake the project in accordance with the strategy, which would include:

- on-site treatment via bio-retention basins;
- on-lot stormwater drains, including gross pollutant traps in all lots; and
- stormwater pipes in the local roads, draining to the off-site perimeter channels.

With regard to on-site treatment, the Stormwater Management Strategy in the concept plan provides for bio-retention within the business precinct to supplement the SEL-wide stormwater management measures. The strategy requires that a catchment area of 11.3 hectares is treated by a bio-retention system with 3,000 m² of filtration media.

To address this requirement, the stormwater concept for the QuarryWEST project provides for a series of bio-retention basins in landscaping areas throughout the site. Whilst these basins are not restricted to the business precinct as envisaged in the concept plan, the conceptual layout meets the strategy's intent for 3,000 m² of bio-retention.

With regard to stormwater quality, the stormwater review notes that the MUSIC modelling undertaken in the Stormwater Management Strategy confirms that the SEL would comply with the Councils' stormwater quality objectives, including the updated requirements in Blacktown Council's engineering guidelines. The modelling results are reproduced in the following table.

Table: 6.1: Greystanes SEL Water Quality Modelling Results

Pollutant	Reduction	Reduction Criteria¹
Gross Pollutant Loading	95%	90%
Total Suspended Solids	87%	85%
Total Phosphorus	75%	65%
Total Nitrogen	48%	45%

¹ Based on current Council criteria.

As the stormwater management for the QuarryWEST project would be undertaken in a manner that is consistent with the Greystanes SEL Stormwater Management Strategy, the project would comply with the applicable stormwater criteria.

To ensure that stormwater is effectively managed, DEXUS has committed to preparing Stormwater Management Plans for all buildings and road works to be constructed on site, in accordance with the Greystanes SEL Stormwater Management Strategy.

6.3 Noise and Vibration

6.3.1 Background

A Noise Management Strategy for the development of the Greystanes Estate was prepared by Richard Heggie and Associates in 2001, which informed the planning of the Greystanes Estate.



The assessment modelled a worst case scenario involving the development of heavy industry (metal fabrication) throughout the Greystanes SEL and NEL.

Based on a total of 15 heavy industries throughout the estate, the assessment found that the worst case noise levels at the residential area to the east (ie. Nelsons Ridge) would be 32dB(A) L_{Aeq} during calm conditions and 37dB(A) L_{Aeq} during temperature inversion conditions. These levels complied with the relevant project specific noise criteria for day, evening and night periods of 48dB, 38dB and 37dB, respectively.

The assessment concluded that the development of the industrial land within the Greystanes SEL would comply with applicable noise criteria and would not have any significant noise impact on the Nelsons Ridge residential area. This is largely due to the nature of the Greystanes SEL site, which is separated from surrounding land uses by the walls of the former Prospect Quarry. These walls, at up to 60 metres high, act to effectively attenuate noise emissions.

Given that the QuarryWEST project is generally consistent with the approved concept plan, and involves only warehousing and distribution and retail land uses (as opposed to heavy industry), the project is unlikely to result in any operational or construction noise impacts.

Further, given that the Greystanes SEL site enjoys direct access to the arterial road network, without the need to travel through any residential areas, the development of the Greystanes SEL is not expected to result in any traffic noise impacts.

Nonetheless, given the number of years that have passed since the Heggies noise assessment in 2001, DEXUS engaged Wilkinson Murray to undertake a contemporary noise assessment for the project. The noise assessment is attached in **Appendix I**, and is summarised below. The assessment was undertaken with respect to the nearest sensitive receivers (which remains the residential area of Nelsons Ridge to the east of the former quarry), and in accordance with applicable guidelines including the EPA's *Industrial Noise Guideline* and *Interim Construction Noise Guideline*.

6.3.2 Operational Noise

Operational noise emissions associated with the QuarryWEST project at full development have been modelled using CadnaA software. Predicted operational noise levels at the nearest residential receiver locations at Nelsons Ridge are provided in **Table 6.2** below, along with the applicable criteria. Receiver locations and predicted noise contours are shown on **Figure 6.2**.

The modelling indicates that the operation of the project would comfortably comply with the applicable noise criteria during all time periods.

Table 6.2: Operational Noise Predictions, dB $L_{Aeq(15min)}$

Receiver Location	Predicted Noise Level	Intrusive Noise Criteria		
		Day	Evening	Night
Nelsons Ridge A	16			
Nelsons Ridge B	20	40	42	38
Nelsons Ridge C	15			

Note: With regard to time periods:

- Day is the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and public holidays;
- Evening is the period from 6pm to 10pm; and
- Night is the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and public holidays.



The noise assessment notes that the project is not expected to result in any cumulative noise impacts with the development of the broader Greystanes estate, given that the predicted noise levels are more than 10dBA below existing background noise levels, which means that noise from QuarryWEST would not result in any increase in existing noise levels at receivers, and would be inaudible.

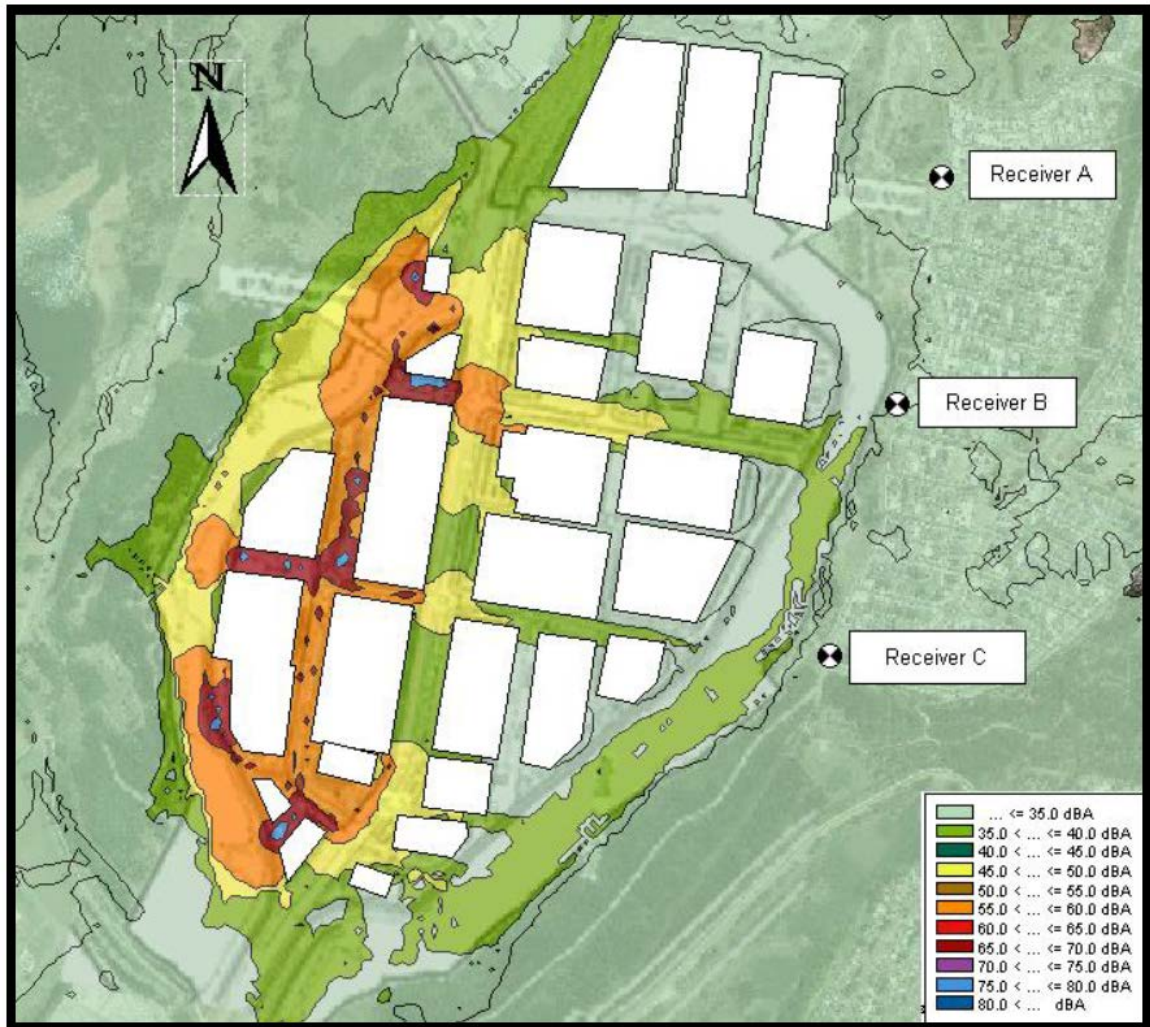


Figure 6.2: Predicted Operational Noise Levels

Sleep Disturbance

In addition to the above operational noise emissions, which are based on average noise levels over a 15 minute period, sudden or short-lived noise emissions at night have the potential to result in sleep disturbance. Such sudden noise emissions associated with the development might include metal-on-metal contact or truck reversing alarms.

The noise assessment includes modelling of truck reversing alarms to provide a consideration of the potential for sleep disturbance associated with the development. Predicted L_{Amax} noise levels at the nearest residential receiver locations at Nelsons Ridge are provided in **Table 6.3** below, along with the applicable criteria.

The modelling indicates that the operation of the development would comfortably comply with the applicable sleep disturbance screening criterion.



Table 6.3: Truck Reversing Alarm Noise Predictions, dB_{LAmax}

Receiver Location	Predicted Noise Level	Sleep Disturbance Screening Criterion
Nelsons Ridge A	13	48
Nelsons Ridge B	24	
Nelsons Ridge C	13	

6.3.3 Traffic Noise

There is no residential zoned land or existing residences between the site and the arterial road network (ie. the M4 Motorway via Reconciliation Road). Accordingly, the noise assessment concludes that there is no potential for adverse traffic noise impact associated with the project. As outlined in Section 6.7, traffic volumes associated with the development of the QuarryWEST and QuarryEAST projects are well below the levels assessed and approved under the Greystanes SEL concept plan.

6.3.4 Construction Noise

The main noise-generating construction works associated with the project would be the earthworks phase, and to a lesser extent building construction.

The noise assessment includes consideration of worst case noise emissions associated with the earthworks phase. The predicted noise levels are presented in **Table 6.4**, which indicates that the development would comfortably comply with applicable construction noise criteria at all time periods.

Table 6.4: Predicted Construction Noise Levels, dB_{LAeq}

Receiver Location	Predicted Noise Level	Construction Noise Criteria			
		Day	Evening	Night	Saturday (8am – 1pm)
Nelsons Ridge A	29	45	42	38	44
Nelsons Ridge B	31				
Nelsons Ridge C	24				

Given that the predicted construction noise levels would comfortably comply with the applicable criteria, and are below background noise levels, DEXUS proposes the flexibility to undertake construction works up to 24 hours a day, 7 days a week. Notwithstanding, the majority of construction works would be undertaken within the standard hours stipulated in the EPA's *Interim Construction Noise Guideline* (as reproduced in Section 3.11), with works only undertaken outside these hours if they are inaudible at surrounding receivers (as is predicted).

DEXUS would also implement standard best practice measures including:

- scheduling noisy activities in less sensitive periods of the day;
- maintaining all plant and equipment in good condition; and
- maintaining a complaints handling and management system.

6.3.5 Vibration

The noise assessment indicates that project-related vibration during construction works or operational activities has no potential to adversely impact surrounding receivers, given the distance to the nearest receivers.



6.4 Air Quality and Odour

6.4.1 Air Emissions

The main sources of air emissions associated with the operation of the QuarryWEST project would be vehicle emissions and emissions from plant and equipment. Neither of these emissions sources are expected to be significant, and would be consistent with emissions from similar warehouse and distribution centres and retail facilities in Western Sydney. Given that the project is not expected to result in any significant adverse incremental or cumulative impact on the air quality of the locality, quantitative assessment of air emissions associated with the project is not considered to be necessary or warranted.

Initiatives to encourage sustainable transport modes, as described in Section 6.7, would assist in reducing transport-related air emissions.

Dust emissions during construction works are considered able to be managed in accordance with standard best practice controls, including:

- minimising the area of disturbance as far as practicable during works;
- promptly stabilising/revegetating disturbance areas;
- minimising drop heights for materials being worked on the site;
- keeping exposed surfaces moist; and
- ensuring trucks are covered and do not track sediment onto public roads.

6.4.2 Odour

Whilst the end-users of the facilities are not known at this stage, it is unlikely that the project would result in any adverse odour impacts, given the distance to sensitive receivers and the nature of the proposed facilities (ie. warehousing and distribution and retail). Any petroleum-related odour emissions associated with the proposed service station are likely to be very localised around the facility, and are not expected to result in any detectable odour off-site.

6.4.3 Greenhouse Gas and Energy Efficiency

The environmental assessment for the QuarryEAST project included a detailed Energy and Greenhouse Gas (GHG) Assessment prepared by NDY Management.

The assessment included an estimate of the greenhouse gas (GHG) emissions generated by each of the 4 main GHG sources associated with the QuarryEAST project, namely:

- warehouses;
- ancillary offices;
- car parking (lighting); and
- transport.

The QuarryWEST project would involve similar GHG sources, though would also involve a relatively small amount of additional emissions associated with the proposed retail uses. Nonetheless, the assessment undertaken for the QuarryEAST project is considered to be broadly relevant to the QuarryWEST project, and it is considered that a separate assessment for the current project would not add any particular value to the environmental assessment of the project.

The assessment for the QuarryEAST project considered two development scenarios, namely adoption of:

- no energy savings measures; and
- the energy savings measures as outlined in the UDP (and reproduced in Section 3.6).



A summary of the estimated GHG emissions from QuarryEAST is reproduced in the following table.

Table 6.5: QuarryEAST Project GHG Emissions

Source	Annual GHG Emissions (tonnes CO ₂ equivalent)		
	Scenario 1 – No Energy Savings Measures	Scenario 2 – UDP Energy Savings Measures	Saving (%)
Warehouse	19,757	9,580	
Ancillary Office	5,128	4,034	
Car Parking	500	212	
Transport	4,489	4,489	
Total	29,874	18,315	39%

The GHG emissions estimates in the QuarryEAST project were based largely on the gross floor areas for the facilities. With a GFA for the QuarryWEST project approximately half that of the QuarryEAST project, the annual GHG emissions for the QuarryWEST project would be expected to be in the order of:

- 15,000 tonnes CO₂ equivalent with no energy savings measures; and
- 10,000 tonnes CO₂ equivalent with adoption of the UDP energy savings measures.

To minimise GHG emissions associated with the project, DEXUS would adopt the energy savings measures in the UDP as far as practicable (see Section 3.6). To ensure this occurs, DEXUS has committed to providing detail on the energy savings measures that would be adopted for each individual facility, prior to the commencement of construction of the applicable building.

6.5 Flora and Fauna

As a former quarry, the QuarryWEST site is largely devoid of vegetation and has no significant fauna habitat. There is some scattered areas of regrowth vegetation and weeds on the quarry floor of the QuarryWEST site, however this vegetation will be removed by Boral as part of the final rehabilitation of the quarry site. There is also some scattered vegetation in the sloped areas of proposed Lot 8, however this is largely outside the developable portion of this lot and the proposed masterplan provides for the retention of this vegetation. Accordingly, the project is not expected to have any impact on the flora and fauna values of the area.

As discussed in Section 6.1, a landscape masterplan has been prepared for the project, which comprises species indigenous to the local area.

DEXUS has committed to preparing detailed landscape plans for all buildings and road works to be constructed on site, to the satisfaction of the Secretary of the Department of Planning & Environment. The plans would be generally consistent with the landscape masterplan, and the landscape concept in the UDP.

6.6 Heritage

6.6.1 Aboriginal Heritage

As a former hard rock quarry, the QuarryWEST site does contain any Aboriginal sites or objects.

Previous archaeological assessments for the Greystanes SEL concept plan identified one Aboriginal site ('PH1', an artefact scatter) at Widemere East, within the vicinity of the Greystanes SEL precinct stormwater detention basin facilities. The site was considered to be of low archaeological significance.



The project does not involve any additional disturbance of the Widemere East area, as the stormwater detention facilities have been approved as part of the wider Greystanes SEL project.

6.6.2 Historical Heritage

Background

Previous heritage assessments for the Greystanes SEL concept plan have identified a number of heritage items in the area, including (see **Figure 6.3**):

- Prospect Hill, to the east of the site, which is listed in the State Heritage Register (SHR) and Holroyd Local Environmental Plan (LEP);
- Prospect Reservoir and its curtilage, to the west, which is listed in the SHR and the Holroyd LEP;
- Veteran Hall Archaeological Site, located in the Prospect Reservoir site, which is listed in the SHR;
- Boral Main Gate (Greystanes Gates), located in the Nelsons Ridge residential area to the east, which is listed in the LEP; and
- some items within the quarry itself, including a 'Traylor' jaw rock crusher and associated rocks (see **Figure 6.4**).

Essentially, the Prospect Hill and Prospect Reservoir heritage sites encircle the Greystanes SEL, as shown on **Figure 6.3**. A small portion of the curtilage of the Prospect Reservoir site extends into the Greystanes SEL and QuarryWEST site (ie. the north-western corner).

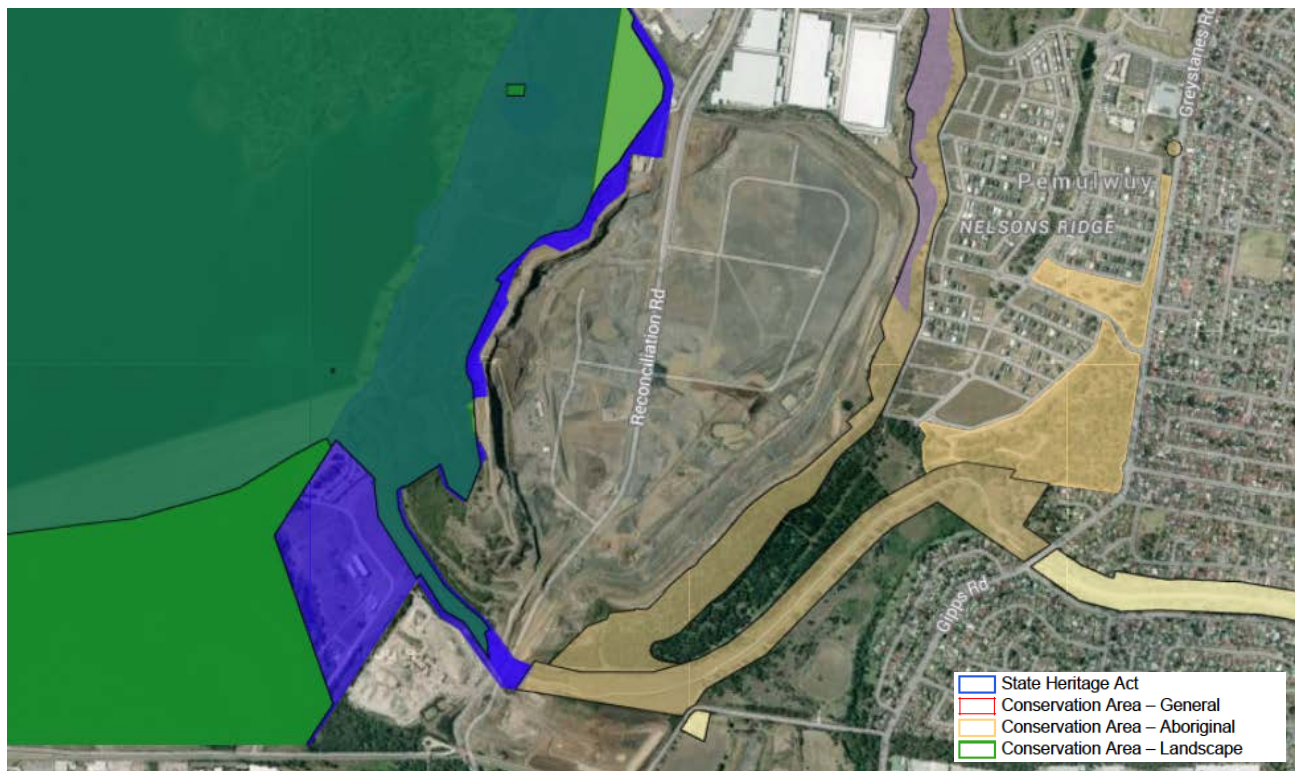


Figure 6.3: Heritage Sites Surrounding the Greystanes SEL

(Source: DP&E Planning Viewer, 2014)



Figure 6.4: 'Traylor' Rock Crusher and Associated Rocks

The heritage assessment for the concept plan concluded that the development of the Greystanes SEL would not have a significant impact on the heritage items, provided that archival recording was undertaken and an interpretation strategy implemented to record and conserve the heritage values of the Prospect Quarry.

Boral has since undertaken the archival recording, and prepared the interpretation strategy (titled Heritage Interpretation Plan, prepared by Turner Hughes Architects, dated September 2010), in accordance with the concept plan approval. The Heritage Interpretation Plan is attached in **Appendix J**, and the key elements of the plan are shown on **Figure 6.5** below. As indicated on the figure, one of the heritage interpretation sites identified in the Heritage Interpretation Plan is located within the QuarryWEST site (ie. 'Site 5').

Heritage Review

City Plan Heritage has undertaken a review of the heritage implications of the project, particularly in relation to the recommendations of the approved Heritage Interpretation Plan. The heritage review is attached in **Appendix J**.

The project involves two changes to the approved Heritage Interpretation Plan, namely:

- relocation of Site 5 from the Basalt Road 'estate boulevard' to the front setback within the retail area (*Service Centre*) of the site; and
- incorporation of additional interpretive elements in the Site 5 heritage interpretation site, including relocation of the jaw crusher (and associated rocks) from Site 1 to the new Site 5 location.

Site 5 was proposed in the Heritage Interpretation Plan to be located in the vicinity of Basalt Road (West) as this area was envisaged as being one of the key entrances to the estate, and the main focal point for business and service retail related land use. As discussed in Section 6.1, this area is now proposed to be developed for warehouse and distribution land use, with the service retail land use proposed to be located to the south fronting Dolerite Close.

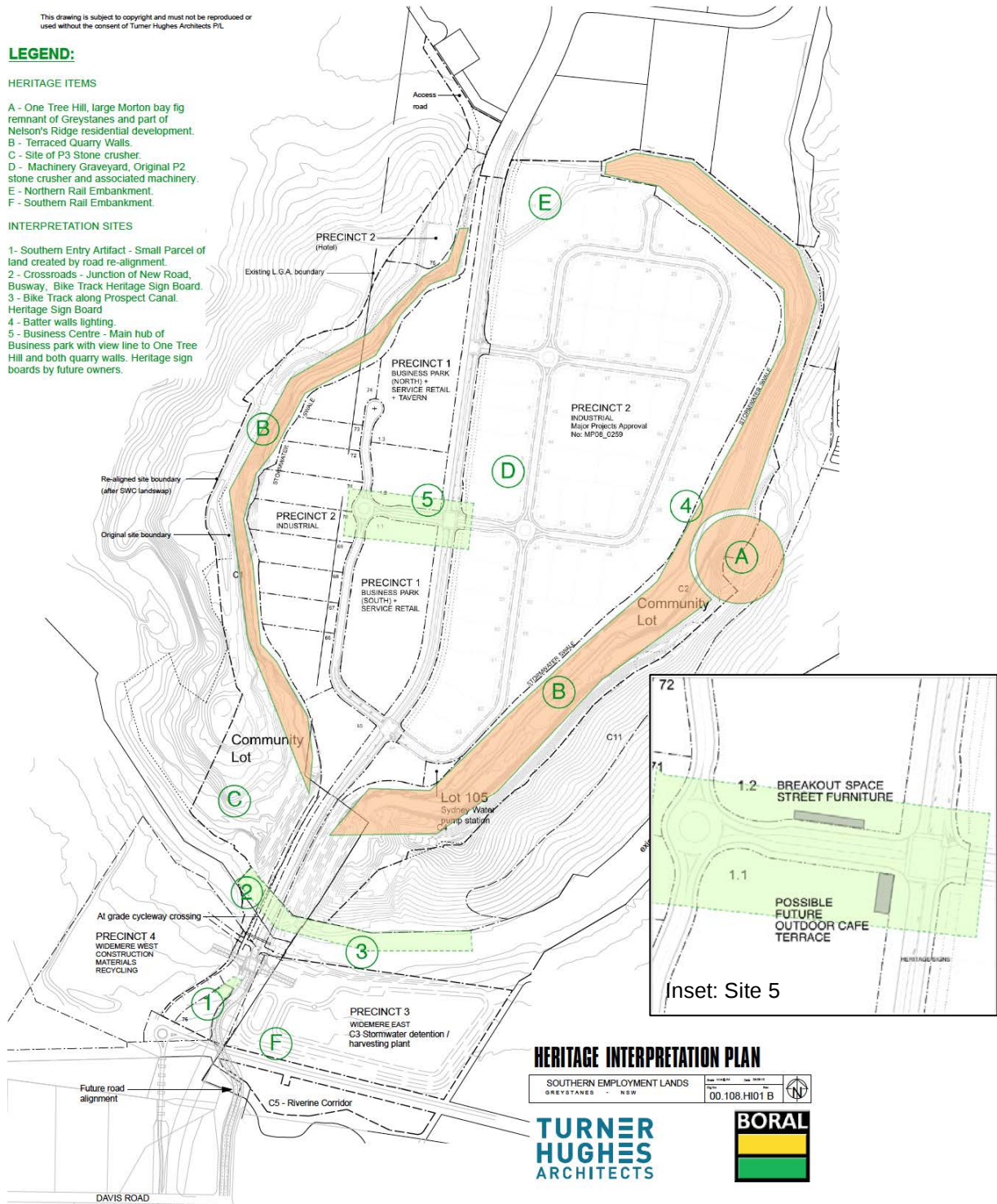


Figure 6.5: Greystanes SEL Heritage Interpretation Plan (Source: Boral)

Given this change in land use, it is proposed to relocate Site 5 to the street frontage near the Service Centre land uses, as this area would become the key public focal space within the estate.

The heritage review considered that the relocation of Site 5 would be acceptable and not result in any adverse heritage impacts, particularly as the retail area retains the same visual links previously identified in the Heritage Interpretation Plan (ie. with One Tree Hill and the quarry walls).



The interpretive concepts for Site 5, as identified in the Heritage Interpretation Plan, are shown on **Figure 6.5**, and an excerpt of the concept is reproduced below:

"Items in the area should be aimed at pedestrian level movement. Possibly incorporated into breakout and staff recreation spaces of the development. Ideally these would be discovery elements, instead of a fixed bay of information, in which case they can include detailed text and imagery, incorporated with the general street furniture, landscaping or commercial operations like a Cafes' outdoor terrace.

Consideration should be given to incorporating less literal elements, like use of materials with a local connection such as the gravel for mulching garden beds and a grey stone similar to the one that lend Greystanes house its name for street furniture, benches or paving."

The relocated Site 5 has been designed generally in accordance with this concept, however it also includes addition of the 'Traylor' rock crusher that was originally proposed to be located in Site 1 under the Heritage Interpretation Plan. In this regard, the proposed Site 5 provides for:

- placement of the rock crusher within a specifically landscaped zone;
- use of the associated 'heritage' rocks to form either a vertical element or incorporated into a seating element, which could be supplemented by a footpath made of railway sleepers; and
- interpretive signage associated with the crusher and rocks;

The key elements of the interpretation are shown on the landscape masterplan in **Appendix D**.

The heritage review notes that the relocation of the jaw crusher is considered an important and positive change from a heritage perspective as it raises the visibility of the item and immediately conveys an industrial character to the site, furthering that already imposed by the quarry walls and branding of the site. This is considered appropriate as it provides all users of the site the opportunity to engage with the item.

The review concludes that the proposed heritage interpretation is consistent with the Greystanes SEL concept plan, and that the development of the QuarryWEST project is not expected to result in any significant impacts on the heritage values of the locality, given that the project is consistent with the approved concept plan in terms of general layout and built form.

As detailed in Section 6.1, DEXUS has committed to preparing detailed landscape plans for each facility on site, in consultation with the applicable Council and to the satisfaction of the Department of Planning & Environment, prior to the construction of each facility. For the *Service Centre* lot (ie. Lot 2), this would include detailed interpretive information on the relocated 'Site 5', in a manner that is consistent with the landscape masterplan and the heritage review.

6.7 Traffic and Parking

A Traffic Assessment has been undertaken for the project by Transport & Urban Planning, and is attached as **Appendix K**. The assessment includes a review of the traffic impacts of the project against the approved Greystanes SEL concept plan.

Existing and Proposed Road Network

As outlined in Section 2, the SEL is serviced by a central spine road (Reconciliation Road) coupled with a local road network, which is accessed via 3 existing intersections on Reconciliation Road.



Construction of all roads required for the Greystanes SEL (including Reconciliation Road and the 3 intersections), with the exception of the internal local roads, has been approved as part of Boral's Greystanes SEL project application. To date, Reconciliation Road, the northern two signalised intersections, and the internal estate road network within the QuarryEAST site, have been constructed.

At present, the third (southern) intersection has been constructed as a priority-controlled intersection. RMS has noted that it will install the signals on this intersection once the warrants (ie. traffic demands) are met for the intersection. In this regard, RMS has assumed responsibility for construction of the intersections, in accordance with a Deed of Agreement with Boral.

As outlined in Section 3.5, the project provides for:

- internal road works, including construction of:
 - o 2 internal estate roads which are proposed to be dedicated to Holroyd Council as public roads (ie. Basalt Road West and Dolerite Close); and
 - o 2 internal access roads which are proposed to remain privately-owned (ie. a road servicing Lots 5 and 6 and a small extension to Bellevue Circuit West); and
- external road works, including:
 - o signalisation and provision of turning bays for the intersection of Dolerite Close / Reconciliation Road; and
 - o provision of a turning bay for the intersection of Bellevue Circuit / Reconciliation Road.

The road works would be designed and constructed in accordance with AS2890 and AUSTRROADS, and to the satisfaction of RMS and/or Holroyd Council. The road network has been designed to accommodate truck sizes up to and including B-Doubles. Swept paths demonstrating the ability for B-Doubles to efficiently access the site are provided in **Appendix K**.

Traffic Generation and Impacts

The traffic assessment for the Greystanes SEL concept plan (Sinclair Knight Merz, 2006) was based on a traffic generation for the overall SEL of some 4,800 vehicles per hour two-way during peak periods, including traffic generation of some:

- 2,700 to 2,800 vehicles per hour two-way for the QuarryEAST site; and
- 2,000 to 2,100 vehicles per hour two-way for the QuarryWEST site.

Traffic assessment for the QuarryEAST project (Colston Budd Hunt & Kafes, 2009) subsequently assessed that the traffic generation from the QuarryEAST masterplan could be expected to generate up to 1,500 to 1,700 vehicles per hour two-way. This is considerably less than what was previously assessed for the site and used in traffic management planning for the SEL (ie. 2,700 to 2,800 vehicles per hour two-way).

The current traffic assessment includes a review of the actual traffic generation in QuarryEAST, given that the estate development is almost complete. The assessment found that the existing traffic generation at QuarryEAST, together with the predicted traffic generation associated with the remaining development of QuarryEAST, amounts to some 600 to 615 vehicles per hour two-way, which is well less than that assumed in both the original SKM report for the Greystanes SEL, and the traffic reports for QuarryEAST.

These lower rates are expected to be the result of:

- longer and staggered working hours, which reduces peak traffic flows;
- less intensive development than assumed in the Greystanes SEL concept plan; and
- the conservative nature of original traffic generation predictions.



For the QuarryWEST development, the traffic assessment predicts that the project would generate some 888 to 1,158 vehicle trips per hour two-way in the peak hours.

Again, these predicted traffic generation levels are well less than those used in the traffic and transport planning for the Greystanes SEL. The proposed masterplan is therefore expected to generate considerably less traffic than what has been previously assessed for the site, and hence the regional road network as planned for the Greystanes SEL is able to accommodate the traffic generated by the development.

The traffic assessment includes SIDRA modelling of the performance of the 3 signalised intersections on Reconciliation Drive through the Greystanes SEL. The modelling found that the intersections would operate at average levels of service B/C or better during the morning and afternoon peak periods. Average delays per vehicle were found to be less than 38 seconds per vehicle during peak periods, which represents a satisfactory level of intersection operation.

Internal Circulation, Parking and Loading

Access to internal development lots has been designed in accordance with the Greystanes SEL concept plan and in a manner that minimises the potential for conflict, including:

- ensuring that development lots are accessed via the secondary road network only, with no direct access from Reconciliation Road;
- separation of car and truck driveways where practicable; and
- ensuring cars and trucks are able to enter and exit all lots in a forward direction.

As outlined in Section 3.5, the proposed masterplan has been designed to achieve the minimum parking rates in the Major Development SEPP⁹, for all buildings on the site. Parking compliance for each building is shown on the architectural plans in **Appendix C**, and in the development schedules in **Appendix E**.

The masterplan has also been designed in accordance with the other parking and loading development standards of the Greystanes SEL concept plan, including:

- provision of tree bays within car parking areas (generally at a rate of 1 per 10 spaces for parking areas with more than 20 spaces);
- design of parking areas to minimise conflicts with pedestrians and trucks; and
- providing adequate loading docks for facilities and designing them to minimise conflicts with cars and pedestrians as far as practicable.

Public Transport, Pedestrian and Bicycle Facilities

The project has been designed in accordance with the public transport, pedestrian and cycling provisions of the Greystanes SEL concept plan, including:

- ensuring that the development does not conflict with the future construction of the Wetherill Park to Blacktown Bus Transitway by RMS. It is noted that the site is located immediately to the west of the transitway corridor, which has been provided as part of the concept plan approval;
- ensuring that the development provides access to, and does not conflict with the future construction of the cycleway (by RMS) within the transitway corridor. It is noted that the cycleway provision has been made as part of the transitway corridor, which in turn has been provided under the concept plan approval;
- providing pedestrian footpaths to both verges of internal roads, to facilitate pedestrian and cycle movement within the estate;
- provision for bus stops on the Reconciliation Road frontage; and

⁹ And the Holroyd DCP 2013 for food and drink premises, given that the SEPP does not include a specific rate for such facilities.



- provision of bicycle facilities for all building developments in accordance with the Greystanes SEL Urban Design Plan requirements, including bicycle parking racks and change facilities (for facilities over 4,000m² floor area).

6.8 Wastes and Hazards

6.8.1 Wastes

The proposed warehouse and distribution centres and retail facilities are not expected to generate a significant amount of waste, with waste streams typical of standard warehousing and retail developments.

A generic Waste Management Plan has been prepared for the facilities, which is attached as **Appendix L**. The plan has been prepared generally in accordance with the *Holroyd Development Control Plan 2013* and *Blacktown Development Control Plan 2006*. All development on the QuarryWEST site would be carried out in accordance with the Waste Management Plan.

6.8.2 Crime Risk

The development of the QuarryWEST project is not expected to increase crime rates or crime risk in the locality, as the proposed development has been designed to a high standard and does not involve any particularly offensive activities, and is therefore not expected to degrade the amenity of the locality.

Notwithstanding, the facility has been designed in accordance with crime prevention through environmental design (CPTED) principles, and includes a number of security measures, including:

- design that provides for casual surveillance, and activation of the streetscape;
- generous front building set backs, particularly to key road frontages;
- a mix of warehousing and retail land uses to improve estate amenity;
- security measures for individual facilities, which would likely include:
 - o security fencing, including perimeter fencing and traffic/security bollards;
 - o sliding security gates to control entry;
 - o internal security authorisation systems;
 - o security personnel;
 - o closed circuit TV security networks; and
 - o security lighting.

With the implementation of these measures, the security threats associated with the development are expected to be able to be effectively managed.

6.8.3 Dangerous Goods and Hazardous Substances

The proposed warehouse and distribution centres and retail facilities (with the exception of the proposed service station) are not expected to store significant quantities of hazardous materials or dangerous goods. However, specific end-users may require some hazardous materials or dangerous goods storage in accordance with their individual needs. The details of such storage are not known at this stage.

The proposed service station would store a considerable volume of dangerous goods (ie. petroleum fuels), which would likely be stored in underground and potentially above ground (ie. LPG) storage tanks. However the location, type and volume of this storage is not known at this stage.



Given that end-users and dangerous goods storage is not known at this time, DEXUS has committed to undertaking a hazards review, prior to construction of any building involving storage of hazardous materials or dangerous goods (apart from minor storage). The review would be undertaken in accordance with the Department of Planning & Environment's *Applying SEPP 33* and other hazards guidelines, to the satisfaction of the Secretary of the Department of Planning & Environment.

Further, all dangerous goods and hazardous substances storage and handling on site would be undertaken in accordance with the Dangerous Goods Code and AS 1940-2004: *The storage and handling of flammable and combustible liquids*.

6.9 Socio-Economics

Whilst the project is consistent with the desired character for the Greystanes SEL, it is acknowledged that the proposed masterplan involves less intensive business-related uses than that envisaged in the concept plan, and warehouses that are generally larger and have less ancillary office component than envisaged under the Greystanes SEL concept plan.

However, at the time of the concept plan approval the relevant Councils – including Holroyd, Blacktown and Fairfield Councils – all expressed significant concerns that the high level of office/commercial development within the Greystanes SEL would have adverse economic impacts on existing and planned commercial centres within their respective local government areas. The Councils argued that the business park was not a recognised centre in the Metropolitan Strategy (either existing or proposed), and that the proposed business park would set an undesirable precedent for industrial lands in Western Sydney.

The strategic justification for up to 50% ancillary office in industrial facilities was also questioned by the authorities at the time of the concept plan approval. The Department's assessment report for the concept plan notes that the Department initially raised concern with the density of such a high office component in the industrial precinct, particularly having regard to the potential for the industrial uses to be compromised by office development, and the increased reliance of private car use.

DEXUS' market research indicates that there is simply not a market for such a high percentage of business-related development and ancillary office at this time, and for the foreseeable future. Accordingly, the project seeks approval for a more realistic balance of warehousing and service retail land use.

In this regard, the proposed masterplan would assist in addressing the Councils' concerns about the impact on existing and proposed commercial centres.

It is considered that the project would not result in any adverse socio-economic impacts. On the contrary, by seeking approval for more a realistic industrial and commercial balance, the project provides for a development that is more aligned with current and foreseeable market demand, thus helping to ensure the timely development of the estate, and realise the jobs creation targets in the Metropolitan Strategy. In this regard, the project is expected to generate approximately 880 jobs for the people of Western Sydney. Together with QuarryEAST, the development of the entire DEXUS Estate is expected to generate about 2,900 jobs.

It is acknowledged that this employment generation is lower than that envisaged in the concept plan, which estimated generation of approximately 3,150 jobs across the industrial precinct in the SEL, and about 4,850 jobs in the business precinct. However, given that DEXUS' market



research indicates that there is not sufficient foreseeable demand for higher-density land use, it is considered that the project provides for more certainty in employment generation.

It is noted that the project would not preclude the scope to provide additional business and office space in accordance with the needs of future end users. This could be achieved via modification of the project approval, if required, in line with trends in market demand.

7 JUSTIFICATION AND CONCLUSION

7.1 Statement of Commitments Summary

DEXUS has prepared a detailed Statement of Commitments for the project, which is attached as **Appendix M**.

The Statement of Commitments outlines a range of measures that DEXUS would implement during the detailed design, construction and operational phases of the project, to ensure that the project is undertaken in an orderly and environmentally responsible manner. The commitments are similar to those that have been successfully implemented for the QuarryEAST project.

A summary of the key commitments is presented in the following table.

Table 7.1: *Statement of Commitments Summary*

Aspect	Key Commitment
<i>Subdivision</i>	DEXUS will prepare final subdivision plans for all estate subdivisions, in consultation with the applicable Council and to the satisfaction of the Department of Planning & Environment. The plans will be generally consistent with the concept subdivision plan in the EIS.
<i>Building Design</i>	DEXUS will prepare detailed architectural design plans for all buildings to be constructed on site, in consultation with the applicable Council and to the satisfaction of the Department of Planning & Environment. The plans will be generally consistent with the masterplan in the EIS, and be prepared in a manner that achieves the design excellence standards in the Major Development SEPP.
<i>Landscape Design</i>	DEXUS will prepare detailed landscape plans for all buildings and road works to be constructed on site, in consultation with the applicable Council and to the satisfaction of the Department of Planning & Environment. The plans will be generally consistent with the concept landscape masterplan in the EIS and the Heritage Interpretation Plan.
<i>Estate Signage Strategy</i>	DEXUS will prepare a detailed Signage Strategy for the site, to the satisfaction of the Department of Planning & Environment. The strategy will be generally consistent with the signage controls in the approved concept plan.
<i>Estate Fencing Strategy</i>	DEXUS will prepare a detailed Fencing Strategy for the site, to the satisfaction of the Department of Planning & Environment. The strategy will be generally consistent with the fencing controls in the approved concept plan.
<i>Soil and Water</i>	<i>Erosion and Sediment Control</i> DEXUS will prepare and implement Erosion and Sediment Control Plans for all works involving ground disturbance (apart from minor works – eg. signage installation). <i>Stormwater Management</i> DEXUS will prepare and implement Stormwater Management Plans (ie. drawings) for all buildings and road works to be constructed on site. The plans will be generally consistent with the stormwater strategy in the EIS and the



Aspect	Key Commitment
	approved concept plan.
	<i>Site Contamination</i> DEXUS will ensure that a site audit statement from an accredited Site Auditor has been prepared for the relevant part of the site, prior to construction works.
Noise	DEXUS will only carry out audible construction works within the day-time period. DEXUS will ensure that operational noise complies with the project specific noise level criteria for the development.
Air Quality	DEXUS will implement reasonable and feasible measures to control dust emissions, and ensure that the project does not generate offensive odour.
Energy and Greenhouse Gas	DEXUS will detail energy efficiency measures for all buildings to be constructed on site, with these measures to be generally in accordance with the energy savings measures in the approved concept plan.
Traffic and Transport	DEXUS will construct the internal roads and undertake external road works to the satisfaction of Holroyd Council/RMS, ensure all parking/queuing generated by the project is accommodated on site, and provide bicycle parking facilities for buildings. DEXUS will prepare and implement Construction and Operational Traffic Management Plans for all buildings to be constructed on site, in consultation with the applicable Council and to the satisfaction of the Department of Planning & Environment.
Visual Amenity	DEXUS will maintain landscaping on site to a high quality, and ensure that all lighting is installed and maintained in a manner that does not cause nuisance.
Wastes and Hazards	DEXUS will implement reasonable and feasible measures to minimise waste, carry out the project in accordance with the project Waste Management Plan, and undertake hazard analyses for any building involving the bulk storage of dangerous goods, to the satisfaction of the Department of Planning & Environment.
Environmental Management	DEXUS will prepare and implement an Environmental Management Strategy for the project, to the satisfaction of the Department of Planning & Environment.

7.2 Consideration of Alternatives

Alternatives to carrying out the project on the site in the proposed manner include:

- developing the site to a lesser or higher scale;
- developing the site with a different layout and/or design; and
- not undertaking the project at all.

In terms of scale, DEXUS acknowledges that the project provides for generally larger, less dense facilities, and larger lot sizes, than indicated in the Greystanes SEL concept plan. It also proposes less business-related uses and an ancillary office component which is less than the maximum allowed in the concept plan approval.

As discussed in Section 6.9, the proposed masterplan is based on DEXUS' market research of the current and foreseeable demand for industrial and commercial facilities in Western Sydney. This research indicates that there is simply not demand for intensive commercial land use and smaller industrial facilities with large ancillary offices (of up to 50% GFA) in the foreseeable future. Indeed, it is noted DEXUS would prefer a higher density and office component, as it would



translate to a higher use and higher returns within the estate. As a result of its market research, DEXUS' proposed masterplan is based on a realistic assessment of foreseeable market demand.

This market research and approach has been a highly successful strategy for QuarryEAST, which has seen the development of almost the entire estate within approximately 5 years.

As discussed in Section 6.9, the strategic justification for commercial land use and intensive ancillary office was questioned by authorities at the time of the concept plan approval, with Holroyd, Blacktown and Fairfield Councils all expressing significant concerns that the high level of office/commercial development within the Greystanes SEL would have an adverse economic impact on existing and planned commercial centres within their respective local government areas. The Department of Planning & Environment also raised concern with the density of such a high office component in the industrial precinct.

The project addresses these concerns, by seeking approval for more a realistic mix of industrial and service retail land uses that are more aligned with current and foreseeable market demand. It also includes provision for a world-class *Logistics Campus* based on similar-style campuses in Europe.

By aligning the project scale with the market demand, the project would help to ensure the timely development of the estate and the wider Western Sydney employment areas, and realise the jobs creation targets in the Metropolitan Strategy.

In summary, it is considered that the proposed scale of the project provides a reasonable balance between maximising the development and employment opportunities of the site whilst ensuring that the amenity of the surrounding area is not adversely affected.

In terms of alternative layouts and/or designs (in addition to the identified alternative options), it is noted that the proposed masterplan and landscape masterplan have been designed to a high quality by respected architects Nettleton Tribe and landscape architects Site Image. The urban and architectural design for the estate is discussed in Section 6.1, and has been prepared in a manner that:

- respects and is consistent with the Greystanes SEL concept plan, particularly the concept plan's Urban Design Plan;
- maximises the realistic development potential of the site, in accordance with current and foreseeable market demand;
- provides for development of an integrated campus-style logistics complex over a large portion of the site; and
- respects and highlights the natural attributes of the site, particularly the visually striking feature of the quarry walls.

To ensure that the QuarryWEST project is designed to a high standard, DEXUS has committed to preparing detailed architectural design plans, landscape plans, a signage strategy and a fencing strategy for the estate, to the satisfaction of the Department of Planning & Environment.

Not undertaking the project at all on the site is not considered to be a reasonable alternative, as:

- the project is consistent with the objectives of the Metropolitan Strategy;
- the project is generally consistent with the approved Greystanes SEL concept plan;
- the project is not predicted to have any significant impacts on the environment or surrounding land users; and
- not undertaking the project would negate the project's significant socio-economic benefits, including a capital investment of \$118 million in Western Sydney, the creation of around



500 construction jobs over a 5 year period, and the creation of around 880 full time jobs for the people of Western Sydney.

7.3 Project Need and Justification

The project would develop the remaining portion of the Greystanes SEL, in a manner that is generally consistent with the approved concept plan for the SEL, and the successful development of the QuarryEAST project.

Indeed, the project has been designed based on DEXUS' detailed market research of the current and foreseeable demand for industrial and retail facilities in this part of Western Sydney. By aligning the project with the market demand, the project would help to ensure the timely development of the QuarryWEST project, and realise the jobs creation targets in the Metropolitan Strategy.

In this regard, the project represents a significant capital investment by DEXUS in Western Sydney's employment areas, identified in the Metropolitan Strategy as a key centre for employment growth in Western Sydney over the next 20 years. The project would have a direct capital investment of \$118 million in the employment area, would create around 500 construction jobs over a period of about 5 years, and would create around 880 full time operational jobs for the people of Western Sydney.

Environmental assessment indicates that the project is able to be conducted in a manner that would not result in any significant environmental impacts, or adversely affect the amenity of the surrounding area.

The site is well suited to the project, as it:

- is zoned for employment uses;
- is subject to an approved concept plan;
- provides for the beneficial re-use of a former quarry void;
- enjoys very good access to Sydney's arterial road network;
- has access to all required services and utilities;
- is located in proximity to similar land uses; and
- is well removed from sensitive receivers and potential environmental hazard.

The project is also considered to be consistent with the objects of the *Environmental Planning & Assessment Act 1979*, the most relevant of which are reproduced below (Section 5(a) of the EP&A Act):

- (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment* – the project presents the opportunity for adaptive reuse of a former quarry site;
- (ii) *the promotion and co-ordination of the orderly and economic use and development of land* – the project facilitates employment-generating purposes on the site;
- (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats* – the project is not expected to result in any significant adverse environmental impacts; and
- (vii) *ecologically sustainable development* – the project is consistent with the principles of ESD, including:
 - *the precautionary principle* – the project is not predicted to pose any threat of serious or irreversible environmental damage;



- *inter-generational equity* – the project is not predicted to adversely affect the health, diversity and productivity of the environment for the benefit of future generations;
- *conservation of biological diversity and ecological integrity* – the project is not predicted to have any significant adverse impacts on biodiversity; and
- *improved valuation, pricing and incentive mechanisms* – the project is consistent with this principle.

On balance, it is considered that the project represents the orderly and reasonable development of the land, and is therefore in the public interest.

7.4 Conclusion

Having regard to all the salient environmental, social and economic issues, it is considered that the proposed development represents orderly development of the land. It is respectfully requested that the Minister for Planning (or her delegate), having due regard for the information submitted in this document, grants approval to the proposed QuarryWEST project.