

21 February 2018

Chris Ritchie
 Director Industry Assessment
 Department of Planning & Environment
 23-33 Bridge Street
 SYDNEY NSW 2000

Dear Chris,

DEXUS QUARRYWEST PROJECT (SSD 6801) – SECTION 96 MODIFICATION (MOD 6) – STATEMENT OF ENVIRONMENTAL EFFECTS

1 Introduction

On 20 October 2015, the Department of Planning & Environment (the Department), as delegate of the Minister for Planning, approved a development application from DEXUS Quarry WEST Subtrust (DEXUS) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), for the QuarryWEST Project within the Greystanes Southern Employment Lands (Greystanes SEL).

The approval allows the development of the QuarryWEST Estate comprising a range of industrial (warehousing and distribution, with ancillary office and light industry) and business (retail) facilities across the site. The originally approved estate masterplan is shown on **Figure 1**. The estate is being developed on a staged basis in line with the securing of end-users for the facilities and/or market demand.

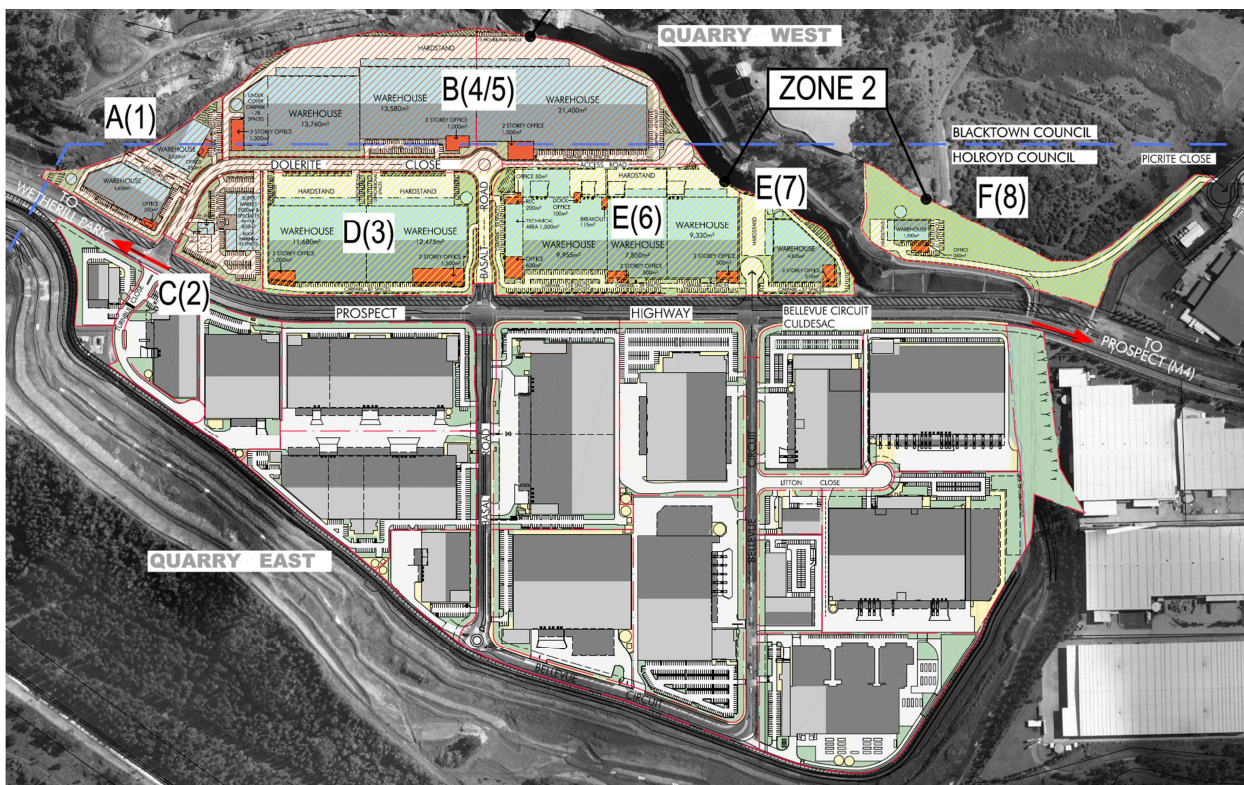


Figure 1: QuarryWEST Masterplan – As Originally Approved (Source: Nettleton Tribe)



DEXUS has now constructed or commenced construction of the following components of the QuarryWEST project:

- the internal roads (ie. Basalt Road, Dolerite Way and Charley Close cul-de-sac¹) and associated earthworks, infrastructure and services; and
- the buildings in:
 - Precinct E, including Warehouses E1 to E4;
 - Precinct B, including Warehouses B1 to B3;
 - Precinct A, including Warehouses A1 and A2; and
 - Precincts C and D, including Warehouses C, D1 and D2.

The development consent has been modified five times to accommodate these facilities, including:

- MOD 1 – approved by the Department on 16 June 2016. This modification involved minor changes to the layout of the facilities in Precincts A, B and E;
- MOD 2 – approved by the Department on 20 September 2016. This modification involved minor changes to the layout of the facilities in Precinct B, including alterations to the layout of Warehouses B2 and B3;
- MOD 3 – approved by the Department on 25 April 2017. This modification involved minor changes to the layout of the facilities in Precinct B, including further alterations to the layout of Warehouses B2 and B3;
- MOD 4 – approved by the Department on 10 August 2017. This modification involved minor changes to the layout of the facilities in Precinct A; and
- MOD 5 – approved by the Department on 20 December 2017. This modification involved changes to the use and layout of Precincts C and D.

The modified estate masterplan (based on the MOD 5 layout) is shown on **Figure 2**.

Subject to the completion of the current development of Precincts A to E, the only remaining precinct within the QuarryWEST Estate yet to be developed is Precinct F². The approved layout of Precinct F, which is the subject of the subject proposed modification, is shown on **Figure 3**.

As indicated on the figure (and detailed in the original Environmental Impact Statement), Precinct F is approved to be developed as a warehouse and distribution facility, with a gross floor area (GFA) of approximately 1,550m², comprising 1,200m² of warehouse and 350m² of ancillary office. With a total site area of approximately 22,926m² and floor space ratio (FSR) of less than 7%, the approved development represents a very modest utilisation of the site.

In late 2017, Hannas Contracting Services (Hannas) purchased the Precinct F site from DEXUS and is now proposing to develop the site, also referred to as the Bluestone Industrial Estate, for as-yet unidentified end-users. The proposal involves some changes to the layout of the approved Precinct F development, including development of five warehouse facility buildings on the site, comprising a total of 56 small warehouse units ranging in size from approximately 175m² to 330m².

Hannas is proposing to modify the development consent for the QuarryWEST Estate to accommodate the proposed changes to Precinct F. This Statement of Environmental Effects

¹ Dolerite Way was formerly known as Dolerite Close, and Charley Close was formerly known as Bellevue Circuit.

² Also referred to as Lot 8.



(SEE) has been prepared by PJEP Environmental Planning (PJEP) to support the modification application for the proposed changes under Section 96 of the EP&A Act.

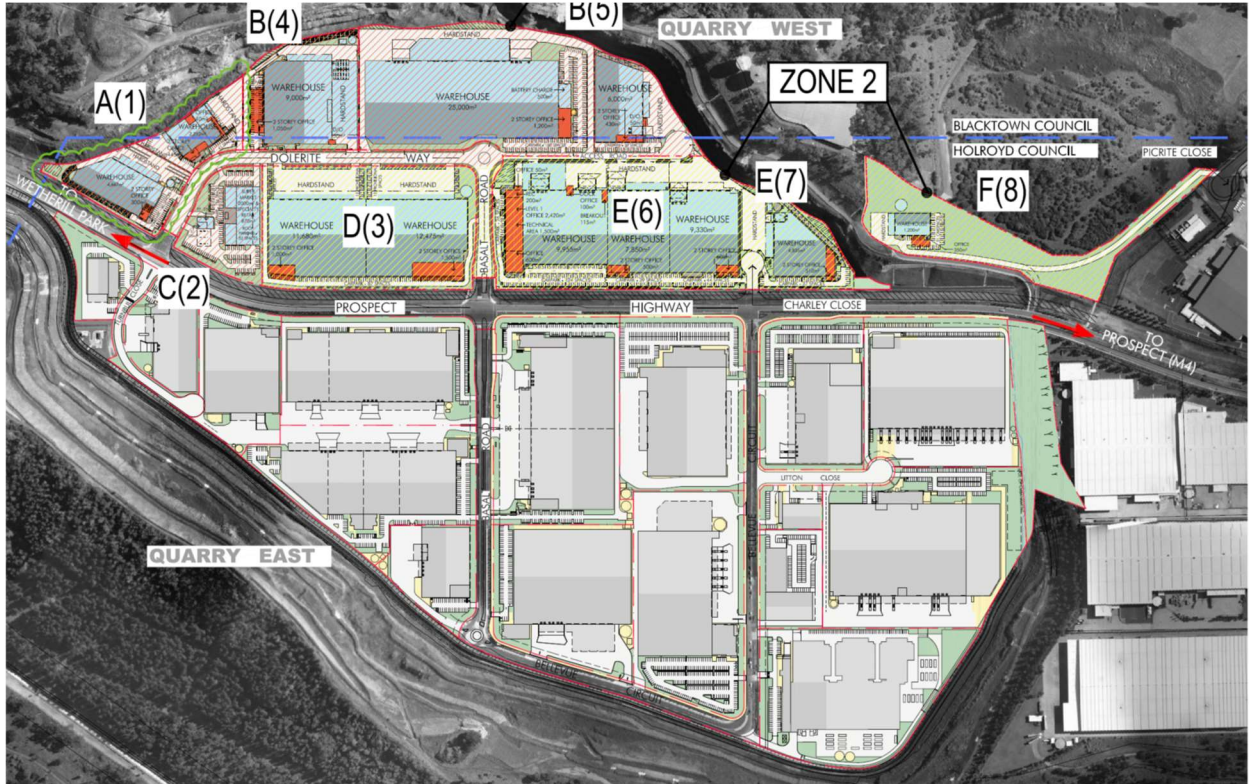


Figure 2: QuarryWEST Masterplan – As Currently Approved (Source: Nettleton Tribe)

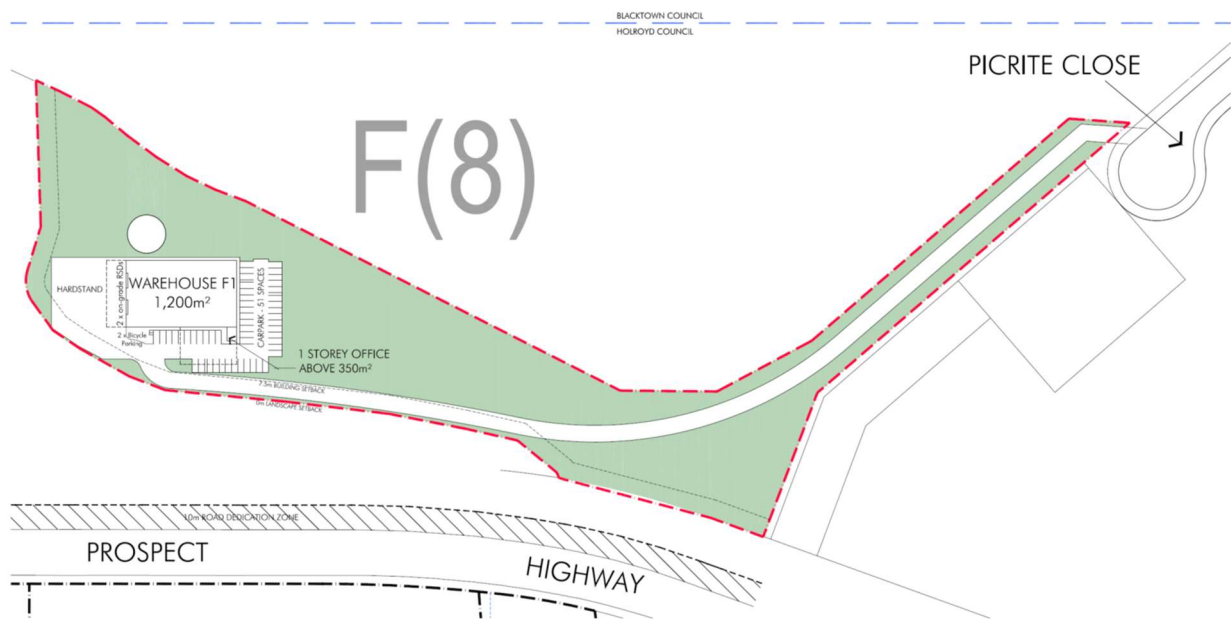


Figure 3: Precinct F Site Plan – As Currently Approved (Source: Nettleton Tribe)



2 Proposed Modification

Proposed Changes to the QuarryWEST Project

Hannas proposes to modify the development consent for the QuarryWEST Project to amend the internal masterplan layout in Precinct F, including:

- amendments to the footprint and layout of the precinct, including development of five warehouse facility buildings (Buildings A to E) comprising a total of 56 warehouse units;
- additional clearing and bulk earthworks within the precinct to create level pads for the proposed buildings (involving approximately 57,500m³ of cut and 16,600m³ of fill, with the balance of 40,900m³ to be exported from site for beneficial re-use off-site);
- an increase in total floor area for the precinct, associated with the proposed warehouse changes; and
- changes to internal circulation and parking layout within the precinct.

The proposed modifications do not involve any change to other precincts within the QuarryWEST Estate, or changes to the broad layout of the estate (including internal roads and access).

The amended precinct layout plan is shown on **Figure 4**, and representative floor plans, elevations and perspectives for the facilities are shown on **Figures 5 to 8**. A full set of revised architectural design plans is attached in **Appendix A**, and revised landscape design plans and civil design plans are attached in **Appendix B** and **Appendix C**, respectively.

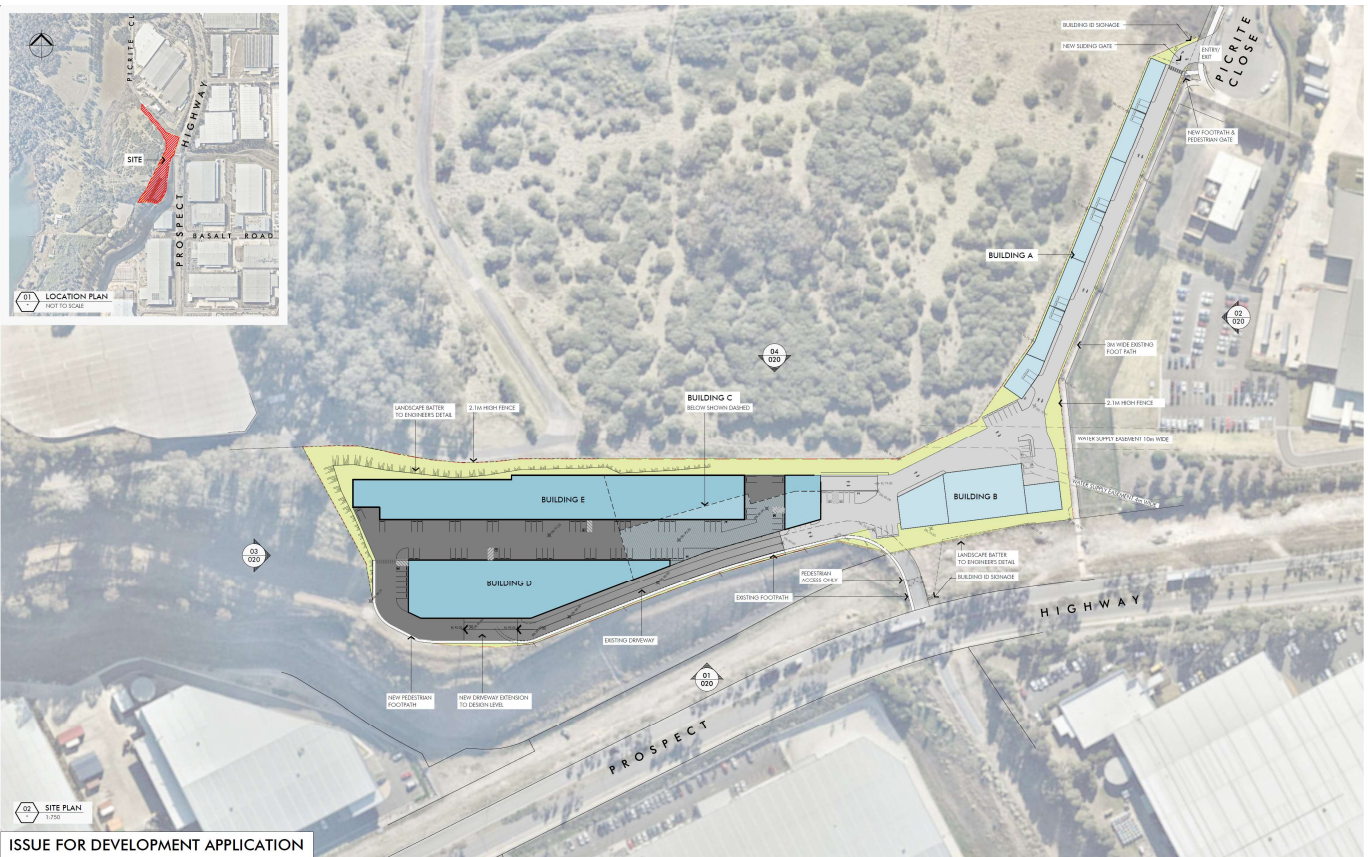


Figure 4: Precinct F Site Plan – As Proposed (Source: Nettleton Tribe)

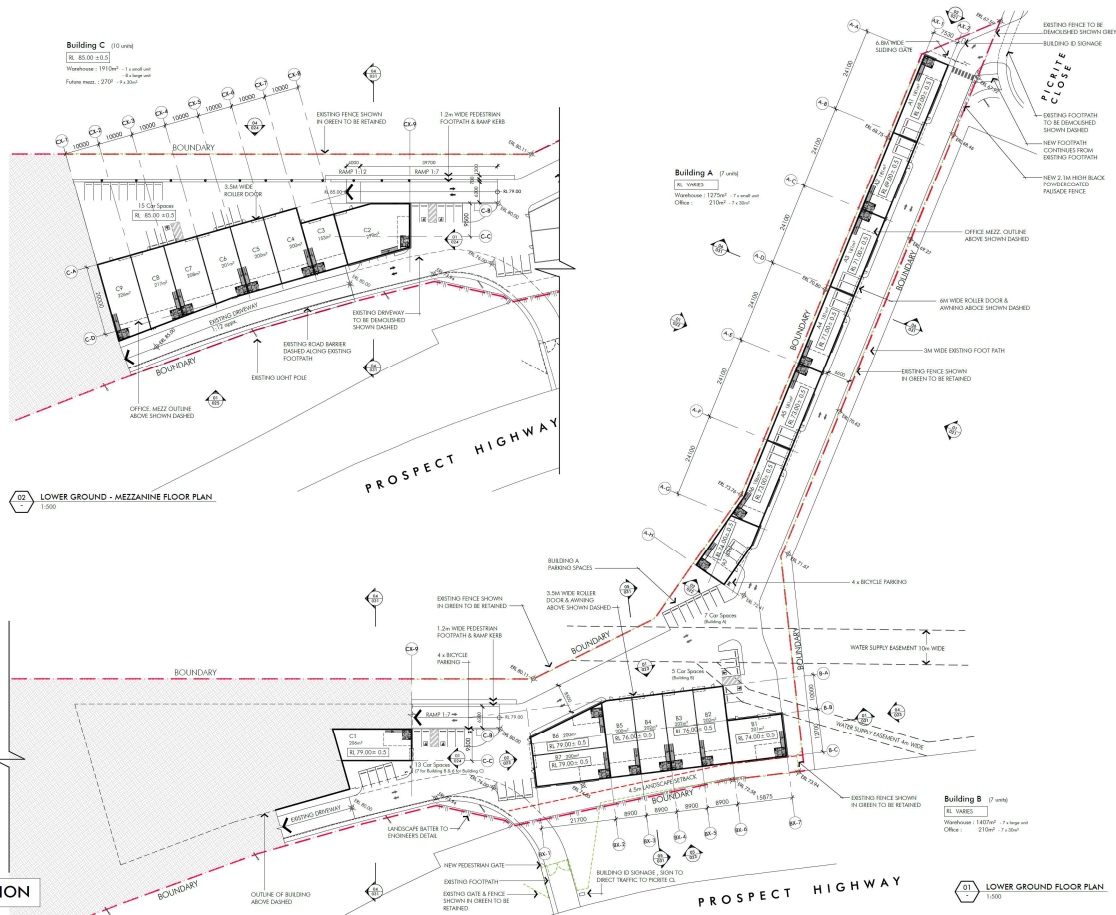


Figure 5: Lower Ground Floor Plan (Source: Nettleton Tribe)

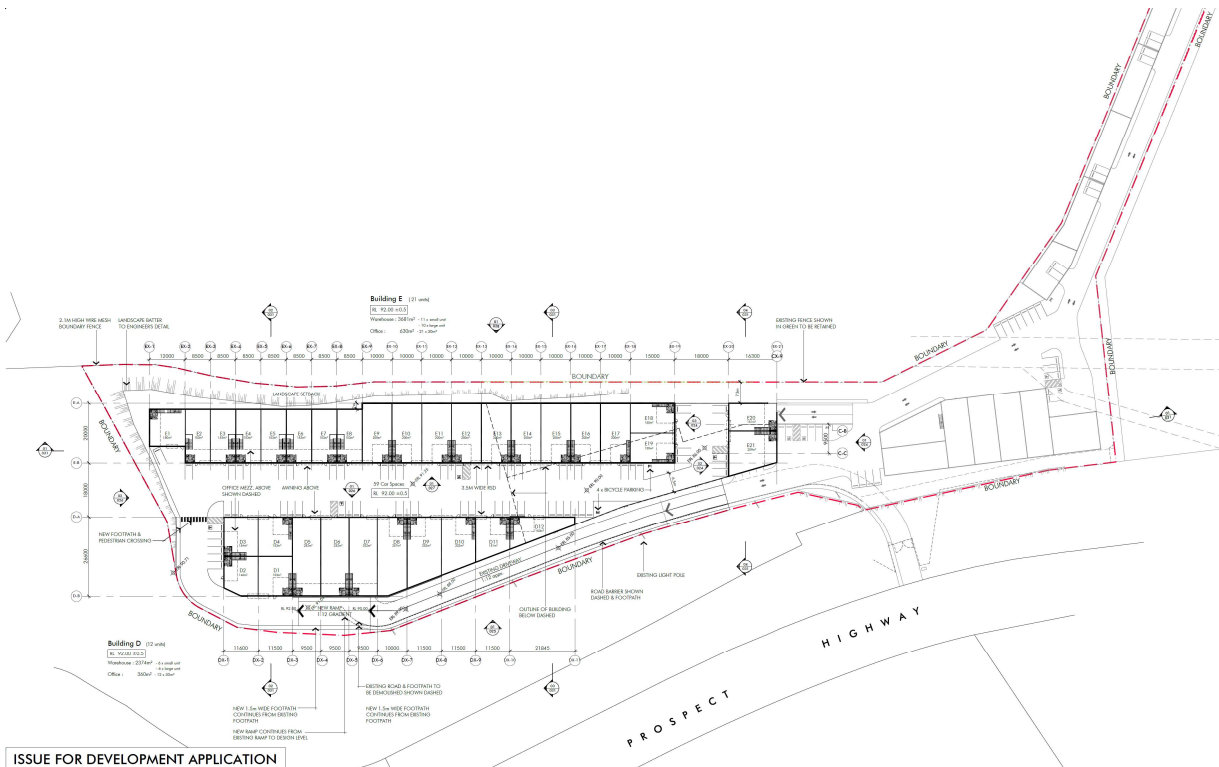


Figure 6: Upper Ground Floor Plan (Source: Nettleton Tribe)

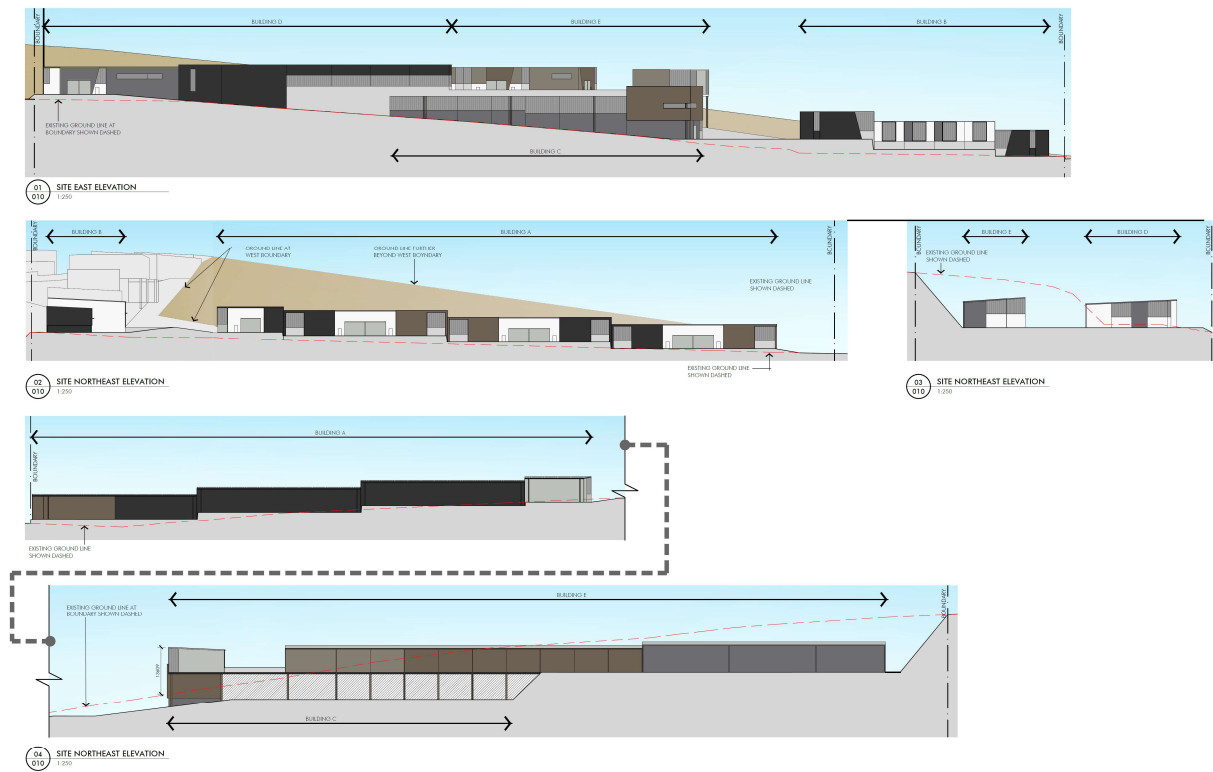


Figure 7: Representative Elevations (Source: Nettleton Tribe)

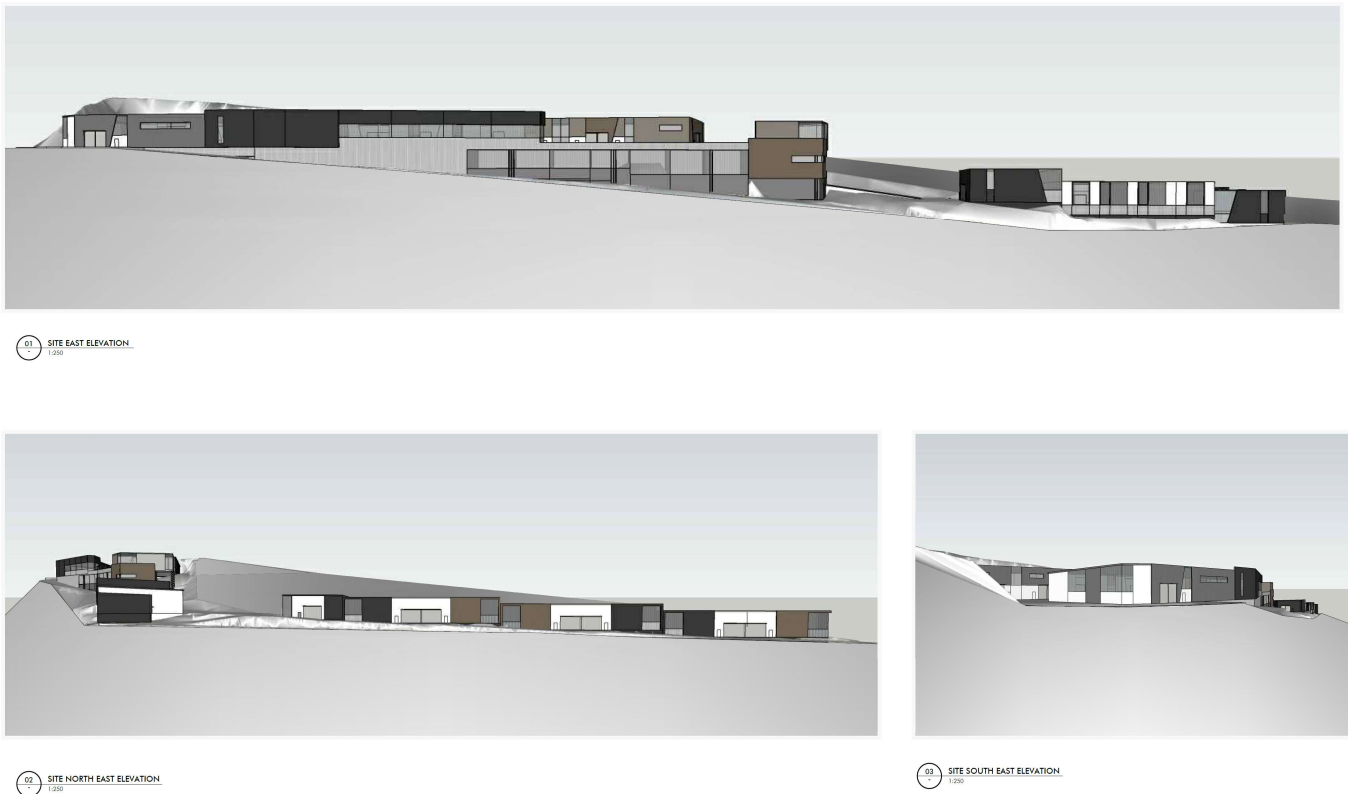


Figure 8: Representative Perspectives (Source: Nettleton Tribe)



Table 1 provides a development schedule comparing the approved project and the proposed modification. For the purposes of consideration against the provisions of the concept plan in Section 3 below, the table includes consideration of the areas within the industrial and business zones/precincts defined in the *State Environmental Planning Policy (State Significant Precincts) 2005* (see **Figure 9**) and the Greystanes SEL concept plan. Additional development data schedules for each individual lot are provided in **Appendix D**.

Table 1: Development Schedule

Development Data	Industrial Precinct ¹		Business Precinct ¹		Total		
	Approved	Proposed	Approved	Proposed	Approved	Proposed	Change
Areas (m ²)							
- Site Area (exc. Roads) ²	122,267	122,298	120,130	120,130	242,397	242,428	+31
- Warehouse Area	48,619	58,066	62,490	62,490	111,109	120,556	+9,447
- Industrial Area	100	100	1,500	1,500	1,600	1,600	No change
- Bulky Goods/Counter Area	212	212	0	0	212	212	No change
- Office Area	3,915 (7%)	5,245 (8%)	7,895 (11%)	7,895 (11%)	11,810 (9%)	13,140 (10%)	+1,330
- Retail Area ³	0	0	0	0	0	0	No change
- Food & Drink Premises Area ³	0	0	0	0	0	0	No change
- Total Building Area	52,846	63,623	71,885	71,885	124,731	135,508	+10,777
- Awning Area	8,721	8,616	9,415	9,415	18,137	18,032	-105
- Hardstand Area (heavy & light)	40,579	43,814	36,948	36,948	77,527	80,762	+3,235
- Landscaping Area	26,853 (22%)	15,418 (13%)	12,523 (10%)	12,523 (10%)	39,375 (16%)	27,941 (12%)	-11,434 (-4%)
Site Cover (inc. awning)	50%	57%	64%	64%	57%	60%	+3%
Floor Space Ratio	43%	52%	60%	60%	51%	56%	+5%
No. office levels	1-2	1-2	1-2	1-2	1-2	1-2	No change
Building Height (m)	13.7-17.4	13.7-20.3	8 to 15.8	8 to 15.8	8 to 17.4	8 to 20.3	+2.9
Car Parking Spaces Required ⁴	265	333	425	425	691	758	+67
Car Parking Spaces Provided	394	456	455	455	849	911	+62
Employees ⁶	374	433	432	432	807	865	+58
Hours of Operation	24 hrs, 7 days	24 hrs, 7 days	24 hrs, 7 days	24 hrs, 7 days	24 hrs, 7 days	24 hrs, 7 days	No change

Notes to Table 1:

- 1 The Industrial Precinct covers Lots 1, 4, 5 & 8 (ie. Precincts A, B & F). The Business Precinct covers Lots 2, 3, 6 & 7 (ie. Precincts C, D & E) (see Figure 7)
- 2 The site area of Precinct F increased marginally from MOD 5 following detailed survey. Total site area including roads is approximately 255,890m²
- 3 Retailing and food related uses were removed in MOD 5
- 4 Based on the parking controls in the development consent (condition C5) and the State Significant Precincts SEPP, namely 1 space per 300m² of warehouse floor space, 1 space per 77m² of industrial space, 1 per 40m² of office floor space and 1 space per 20m² of retail floor space. Parking rates for other uses based on the Holroyd DCP 2013, namely 1 space per 50m² of floor space for bulky goods, and 1 space per 8m² of floor space for food and drink premises.
- 6 Estimate only (based on 95% of car parking spaces)



Proposed Changes to Approval Instrument

The proposed modification would require only minor amendments to the development consent instrument, including amendments to:

- *Condition B2 – Terms of Consent:* to add reference to the modification application and/or this SEE;
- *Condition B6 – Limits of Consent:* to amend the total building area for warehouse and distribution uses, including ancillary office area (to 133,696m²); and
- *Appendix 1 – Schedule of Approved Drawings:* to update the schedule to reflect the amended drawings.

3 Planning Context

State Significant Development

The QuarryWEST Project is classified as State Significant Development under Part 4, Division 4.1 of the 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, and therefore triggers the criteria in Clause 12 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*.

Consequently, the Minister for Planning was the consent authority for the original development application.

Section 96 of the EP&A Act

As the Minister for Planning was the consent authority for the original development application, he is therefore the consent authority for the proposed modification.

Under Section 96(1A) of the EP&A Act, a consent authority may modify a development consent if it:

- (a) is satisfied that the proposed modification is of minimal environmental impact;
- (b) is satisfied that the development as modified is substantially the same development as the development as originally granted;
- (c) has notified the application in accordance with the regulations or a development control plan, if required; and
- (d) it has considered any submissions made concerning the proposed modification.

It is considered that the proposal represents a minor modification of the development as originally approved, as it:

- does not affect the predominant approved use of the QuarryWEST project (ie. warehousing and distribution, with smaller amounts of industry);
- does not involve any significant change to the broad layout of the QuarryWEST project (including the road layout and broader site layout);
- does not significantly affect the development's consistency with any environmental planning instrument (see below); and
- would not result in any significant environmental effects (see Section 4).

Consequently, it is considered that the development as modified is substantially the same development as that originally granted, and can be considered and determined as a minor modification under Section 96(1A) of the EP&A Act (or alternatively under Section 96(2) of the Act).



Environmental Planning Instruments

The proposal is considered able to be undertaken in a manner that is generally consistent with applicable environmental planning instruments. Consideration of applicable instruments is presented in the following table.

Table 2: Consideration of Environmental Planning Instruments

Instrument	Consideration
<i>SEPP (State Significant Precincts) 2005³</i>	<p>The Greystanes SEL is listed as a State significant precinct under Part 22 of Schedule 3 of the State Significant Precincts SEPP. The QuarryWEST Estate site is zoned IN2 Light Industrial and B7 Business Park under Schedule 3 (clause 6, Part 22) of the SEPP. Precinct F is within the IN2 zoned area (see Figure 9).</p> <p>The proposed modification does not change the predominant approved uses of the QuarryWEST project (ie. warehousing and distribution, and light industry). Warehousing and distribution facilities (and light industries) are permissible with consent in both the IN2 and B7 zones.</p> <p>Part 22 of Schedule 3 of the SEPP outlines a number of principal development standards and provisions related to development in the Greystanes SEL. A review of the proposed modification against these development standards is presented in Table 3 below.</p> <p>As indicated in the table, the proposed modification would not change the approved development's consistency with the applicable development standards under the SEPP, although it would add to an existing non-compliance regarding maximum building height.</p>
<i>SEPP (Infrastructure) 2007</i>	<p><i>SEPP (Infrastructure) 2007</i> aims to facilitate the effective delivery of infrastructure across the State.</p> <p>Clause 104 of the SEPP applies to traffic generating development and ensures that 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.</p> <p>The QuarryWEST project meets the thresholds in schedule 3 of the SEPP (as industry with an area of over 20,000m²), and is therefore traffic generating development for the purposes of the SEPP. The RMS has been consulted in relation to the broader QuarryWEST project.</p> <p>The proposed modification would not alter the existing road network servicing the estate, or significantly affect traffic associated with the estate (see Section 4).</p>
<i>SEPP 33 – Hazardous and Offensive Development</i>	<p>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.</p> <p>The proposed modification does not involve any significant change to dangerous goods or hazardous materials storage associated with the</p>

³ Formerly SEPP (Major Development) 2005



<i>Instrument</i>	<i>Consideration</i>
	<p>approved project, which is not considered to constitute a 'potentially hazardous industry' or 'potentially offensive industry' under SEPP 33.</p> <p>As required under the development consent (Conditions C21 and C22 of Schedule C), Hannas is required to ensure that dangerous goods storage does not exceed the thresholds in the Department's <i>Applying SEPP 33</i> guidelines, and to store and handle all dangerous goods in accordance with relevant Australian Standards.</p>
<i>SEPP 55 – Remediation of Land</i>	<p>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.</p> <p>Clause 7 of the SEPP requires a consent authority to consider whether the land to which a proposal 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.</p> <p>The proposed modification does not involve any change to the approved project area, any change to a more sensitive land use, or affect any known contaminated land. Condition C7 of schedule C of the development consent for the QuarryWEST project required DEXUS to submit a Site Audit Statement prior to the commencement of construction in each relevant part of the site, certifying that the relevant part of the site is suitable for the intended land use. Site Audit Statements confirming that the entirety of the QuarryWEST site is suitable for its intended land use were submitted to the Department on 18 November 2015.</p>
<i>SEPP 64 – Advertising and Signage</i>	<p>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.</p> <p>The proposed modification does not involve any significant changes to broad signage for the QuarryWEST Estate, however the nature, location and layout of signage for Precinct F would be amended with the proposed changes to layout of the precinct, and the ownership of the precinct by Hannas (rather than DEXUS).</p> <p>In this regard, the precinct would involve a separate pylon sign and precinct signage, as well as building and tenant signage on the warehouse facades. Indicative signage locations are shown on the precinct site plan.</p> <p>Condition C27 of schedule C of the development consent required DEXUS to prepare and implement a detailed Signage Strategy for the estate prior to the installation of permanent signage on the site. The Estate Signage Strategy was approved by the Department on 27 June 2016.</p> <p>The proposed signage for the precinct and warehouse facilities in Precinct F would be broadly consistent with the signage controls in the approved Signage Strategy, comprising 'Type 1' street entry signs and/or 'Type 2' tenant identification signs at the entrance to the precinct, 'Type 3' tenant</p>



Instrument**Consideration**

directional signs, and 'Type 4' building tenant signs on the warehouse facades.

However, the design of the Type 1, Type 2 and Type 3 signs would be amended to differentiate the precinct from the DEXUS-owned parts of the estate, and a greater number of Type 4 signs would be installed (compared to the approved building) given the increase in buildings and the multiple-tenant nature of the proposed facilities.

In accordance with Condition C27 of the development consent, Hannas would prepare a specific Signage Strategy for the Precinct F site prior to the installation of any permanent signage on the site. The strategy would be prepared in consultation with Council and to the satisfaction of the Department.

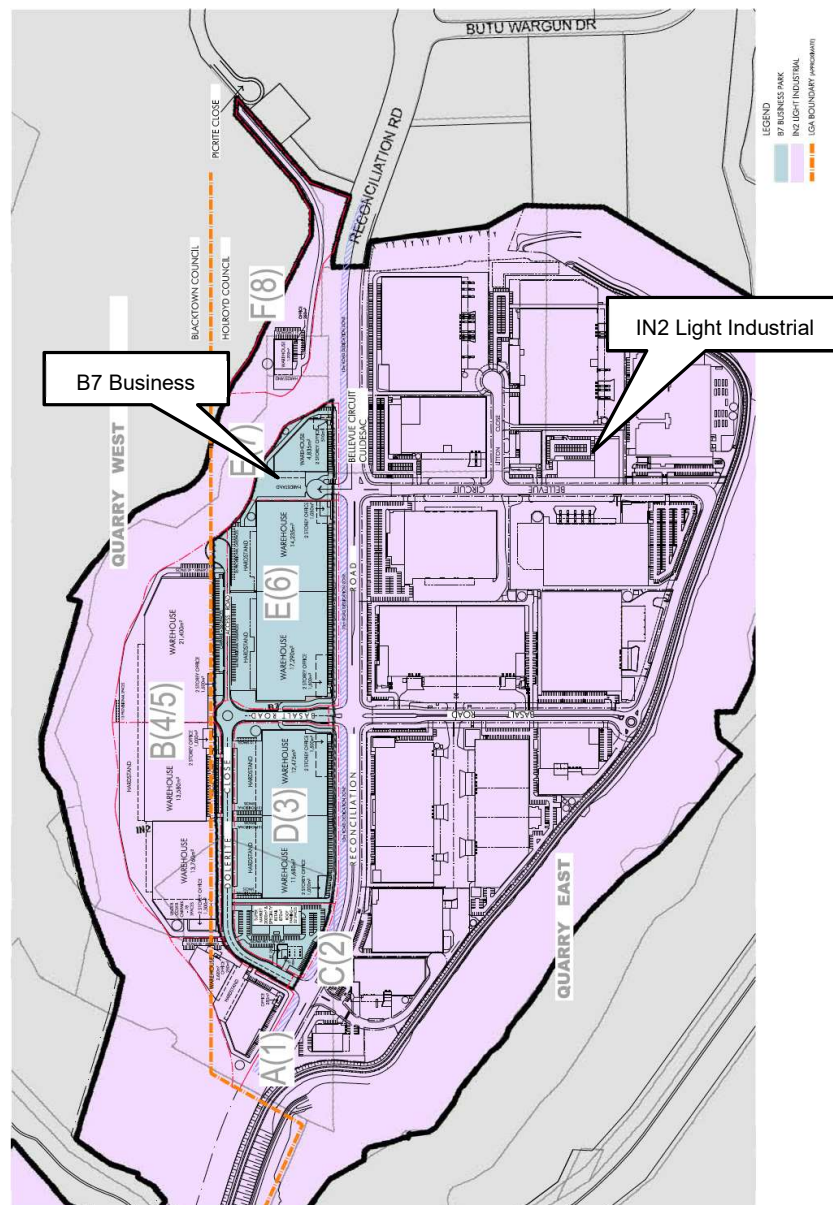


Figure 9: Zoning Plan (showing original masterplan layout) (Source: Nettleton Tribe)



Table 3: State Significant Precincts SEPP Development Standard Compliance

Clause (Part 22, Sch.3)	Issue	Key Controls Summary	Complies (Yes or No)	Comments / EA Reference
13	Building Height	<ul style="list-style-type: none"> • Maximum height in B7 zone is 25 metres • Maximum height in IN2 zone is 15 metres 	No (existing non-compliance)	<ul style="list-style-type: none"> • The approved development generally complies, apart from Warehouse B2 in the IN2 zone which has an approved height of 17.4 metres • The individual buildings associated with the proposed modification (ie. warehouses in Precinct F) have relatively modest building heights (ie. up to 9.5 metres), however the combined building would have a maximum height of up to approximately 20.3 metres in a small area of the site (see discussion below)
14	Gross Floor Area (GFA)	<ul style="list-style-type: none"> • Maximum GFA in B7 zone is 104,000m², of which: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ 50%, for lots within 400 metres of bus stop; and ○ 30%, for lots more than 400 metres of bus stop. 	Yes	<ul style="list-style-type: none"> • The proposal does not involve any change to GFA in the B7 zone • The proposed warehouses in the IN2 zone have ancillary office components less than 30%
15	Floor Space Ratio	<ul style="list-style-type: none"> • Maximum floor space ratio in IN2 zone is 0.75:1 	Yes	<ul style="list-style-type: none"> • The proposed amended warehouses in Precinct F have a combined FSR of 0.54:1 • The proposed amended masterplan has an overall FSR of 0.52:1 in the IN2 zone



Clause (Part 22, Sch.3)	Issue	Key Controls Summary	Complies (Yes or No)	Comments / EA Reference
16	Hotel Accommodation	<ul style="list-style-type: none"> • Development of a hotel is permissible on Precinct F, subject to: <ul style="list-style-type: none"> ○ GFA not exceeding 5,000m²; ○ Height not exceeding 25 metres; and ○ FSR not exceeding 1:1 	Yes	<ul style="list-style-type: none"> • The project does not involve hotel development
17	Child Care Centres	<ul style="list-style-type: none"> • Not applicable 	Yes	<ul style="list-style-type: none"> • The project does not involve child care centre development
18	Car Parking	<ul style="list-style-type: none"> • Car parking rates include: <ul style="list-style-type: none"> ○ Warehouses or distribution centres, 1 space per 300 m²; ○ Light industry, 1 space per 77m²; ○ Offices, 1 space per 40m²; ○ Retail, 1 space per 20m² 	Yes	<ul style="list-style-type: none"> • The proposed modification has been designed to comply with the applicable car parking rates – see Section 4.
21	Design Excellence	<ul style="list-style-type: none"> • Requires buildings to achieve a high level of architectural design merit 	Yes	<ul style="list-style-type: none"> • The proposed amended facilities have been designed by respected industrial architects Nettleton Tribe
22	Architectural Roof Features	<ul style="list-style-type: none"> • Allows decorative architectural roof elements above the maximum building height under certain circumstances 	Yes	<ul style="list-style-type: none"> • The development does not involve architectural roof elements above the proposed heights
23	Public Utility Infrastructure	<ul style="list-style-type: none"> • Requires infrastructure to be provided, including potable water, electricity, gas and sewerage 	Yes	<ul style="list-style-type: none"> • All required infrastructure for the Greystanes SEL has been approved

As outlined in the above table, the proposed modified masterplan complies with all of the development standards in the SEPP, apart from a non-compliance with building height for the combined buildings in Precinct F. It is noted that the approved masterplan already contains a non-compliance with this development standard, which was approved in MOD 3 for Warehouse B2 in Precinct B.

The individual buildings proposed in Precinct F have relatively modest building heights, with maximum heights (from finished ground levels) including:

- Building A – 7.4 metres;
- Building B – 8.1 metres;
- Building C – 14.5 metres (over two levels, plus a parapet in a small area up to 15.4 metres);
- Building D – 9.5 metres; and
- Building E – 8.9 metres.

However, given the stepped nature of the buildings up the slope of the site, the combined building height in the area where Building C overlaps with Buildings D and E is up to



approximately 20.3 metres in one area of the site, which exceeds the 15 metre development standard.

It is noted that the maximum combined building height reduces to approximately 15 to 16 metres if considered from the pre-existing ground level (ie. prior to the proposed excavation works). In this regard, the ground surface would be excavated approximately 4 to 5 metres below the existing ground surface in this area of the site to accommodate the proposal.

Clause 20, Part 22 of Schedule 3 of the State Significant Precinct SEPP 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; and
- (b) obtain the concurrence of the Secretary of the Department.

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.

With regard to the proposed height of the warehouses in Precinct F, it is considered that compliance with the development standard is unreasonable or unnecessary, and that there are sufficient environmental planning grounds to justify contravening the development standard, as:

- the QuarryWEST estate is located at the base of a former quarry, and is surrounded by the quarry walls which have heights of between 40 and 60 metres (see **Figure 1**);
- the QuarryEAST estate, also located within the former quarry, has approved building heights of up to 40 metres for similar industrial buildings. These building heights have been allowed in large part because of the unique nature of the site, within the base of the former quarry, which assists in mitigating any adverse visual amenity impacts associated with taller buildings;
- the majority of the proposed development in Precinct F would comply with the maximum height limit, with the non-compliance only occurring where the footprint of Building C overlaps that of Buildings D and E;
- the proposed maximum combined building height would reduce to approximately 15 to 16 metres if considered from the pre-existing ground levels, given that a considerable amount of excavation is proposed within the site that would assist in lowering relative building heights;
- the proposed maximum building height has a lower relative level (ie. RL 101.5m) than the approved warehouse on the Precinct F site (ie. RL 105m), given the proposed excavation;



- the warehouses in Precinct F are well removed from the main public domain areas of the QuarryWEST estate and the main public thoroughfare associated with Prospect Highway;
- the proposed maximum building height is well below the allowable building height for a hotel development on the site (ie. 25 metres), as permitted under the State Significant Precincts SEPP (Clause 16 of Part 22, Schedule 3);
- the proposed maximum building height complies with the 25 metre maximum identified in the Greystanes SEL Urban Design Plan. In this regard, Clause 4.2.4 of the approved Urban Design Plan does not specify that the 25 metre limit is restricted to hotel development only;
- the warehouse facilities, and in particular the eastern façade, have been designed to a high standard with a range of materials, colours, design elements and articulation. This would assist in minimising the scale and bulk of the facilities, and provide visual interest and relief (see Section 4 below for further detail);
- the combined buildings would assist in improving the sustainability of the facilities and the QuarryWEST estate, by reducing the footprint and land take of the warehouse facilities (relative to providing buildings of the same volume with a lower building height);
- the combined buildings would assist in maximising the employment opportunities associated with the Precinct F facilities, by improving the efficiency of the facilities; and
- visual assessment indicates that the moderately higher combined buildings would not adversely affect any other land users within or outside the QuarryWEST estate (see Section 4 below for further detail).

Consequently, it is considered that the contravention of the development standard is in the public interest and that the proposed QuarryWEST estate as modified would remain consistent with the objectives of the IN2 Light Industrial zone, which 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.'*

Greystanes SEL Concept Plan and Urban Design Plan

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

In summary, it is considered that the project as modified remains generally consistent with the concept plan. The only departures from the development standards in the concept plan and UDP remain generally similar to those departures already identified for the approved project, which include:

- setbacks in some areas of the site;
- streetscape, in particular the width of Basalt Road;
- building heights adjacent Basalt Road and for Warehouse B2; and
- landscaping areas for lots in the business precinct.



The proposed modification does not involve any change to these existing departures. As outlined above, it is noted that the UDP allows building heights of up to 25 metres in Precinct F (unlike the SEPP, the UDP does not restrict the 25 metre height allowance to hotel development only).

4 Environmental Issues

Consideration of the environmental effects of the proposed modification is presented in the following table.

In summary, it is considered that the proposal would not result in any significant change to the environmental effects of the project as approved.

4.1 Design and Visual

The proposed modification is unlikely to result in any significant adverse impacts to the design quality or visual amenity of the QuarryWEST Estate as a whole, given that the proposal is confined to Precinct F which comprises a relatively small portion of the broader estate.

However, the proposal would result in relatively large changes to the approved layout and appearance of Precinct F itself, which would result in some changes to the visual amenity of this precinct. In this regard, Precinct F is located in an elevated area of the estate, and is visible from visual receiver locations including Prospect Highway and some parts of the Prospect Reservoir land to the west.

One of the key changes to the visual appearance of Precinct F associated with the proposal is the development of five warehouse facilities in the precinct, rather than the single warehouse facility under the approved QuarryWEST project. This would result in a more 'developed' visual appearance for the precinct compared to the approved project. However, it is noted that the conceptual masterplan under the originally approved Greystanes SEL concept plan indicated four warehouse facilities in this precinct. This conceptual masterplan is reproduced on **Figure 10** below.

Architectural and Landscape Design

To ensure that the proposed warehouse facilities in Precinct F contribute to the high design quality of the QuarryWEST Estate, and to minimise potential adverse visual impacts, the buildings have been designed to a high standard by respected industrial architects Nettleton Tribe. The key design measures include:

- restricting building heights for individual buildings to relatively modest levels (ie. less than 9.5 metres for Buildings A, B, D & E, and 14.5 metres for the two-level Building C), which is well below the maximum allowable building height in the precinct (ie. 15 metres). The combined building height does increase to up to 20.3 metres from finished ground level in one part of the site (or approximately 15m to 16m from pre-existing ground level), however for the reasons outlined in Section 4 this non-compliance in one part of the site is not considered significant;
- designing the buildings with a split-level design, such that they 'step up' the slope of the site to minimise overall height and bulk;
- providing generous setbacks to the key eastern boundary (ie. min. 4.5 metres for Building B and 10 metres for Buildings C to E), to assist in mitigating visual bulk as viewed from the Prospect Highway (which itself is located around 40 to 60 metres from the proposed buildings);



- restricting FSR for the precinct to relatively low levels (ie. 54%), which is well below the maximum allowable FSR in the precinct (ie. 75%);
- incorporating high quality architectural forms, articulation and materials, particularly to the eastern facades, including:
 - a range of building forms, stepping up the slope;
 - a range of quality building materials, including pre-cast concrete, metal cladding, and in particular, large façade areas of translucent Danpalon wall panelling, which would provide a striking visual feature at night time;
 - a mix of building colours in subtle tones; and
- generous landscaping.

The proposal also involves a considerable amount of excavation and earthworks (up to 14m of cut and 4m of fill), which would also alter the appearance of the Precinct F site. However, these earthworks are consistent with the historic use of the estate for quarrying purposes, and as such are not expected to result in any significant visual impacts. The excavation works would also assist in lowering the relative height of the proposed buildings compared to the pre-existing ground levels.



Figure 10: Conceptual Masterplan under Greystanes SEL Urban Design Plan



Visual Amenity

A specialist visual assessment for the proposed modification, based on the above mitigation measures, has been undertaken by Richard Lamb & Associates (RLA), and is attached as **Appendix F**. The assessment builds on a detailed visual assessment undertaken by RLA in 2009 for the DEXUS QuarryEAST project, which identified the key visual receivers in proximity to the Greystanes SEL.

The assessment notes that 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 to the east, 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 are shown on **Figure 11**, and include:

- the Prospect Hill State Heritage Register (SHR) listed area to the north-east, including the walkway and lookouts on the eastern ridge of the former quarry in Mar-rong Reserve, from which the site would be partly visible;
- the Prospect Reservoir SHR lands to the west, from which the site would be visible (from some areas); and
- commuters on Prospect Highway (and other roads servicing the industrial estates), from which the site would be highly visible for short road sections.

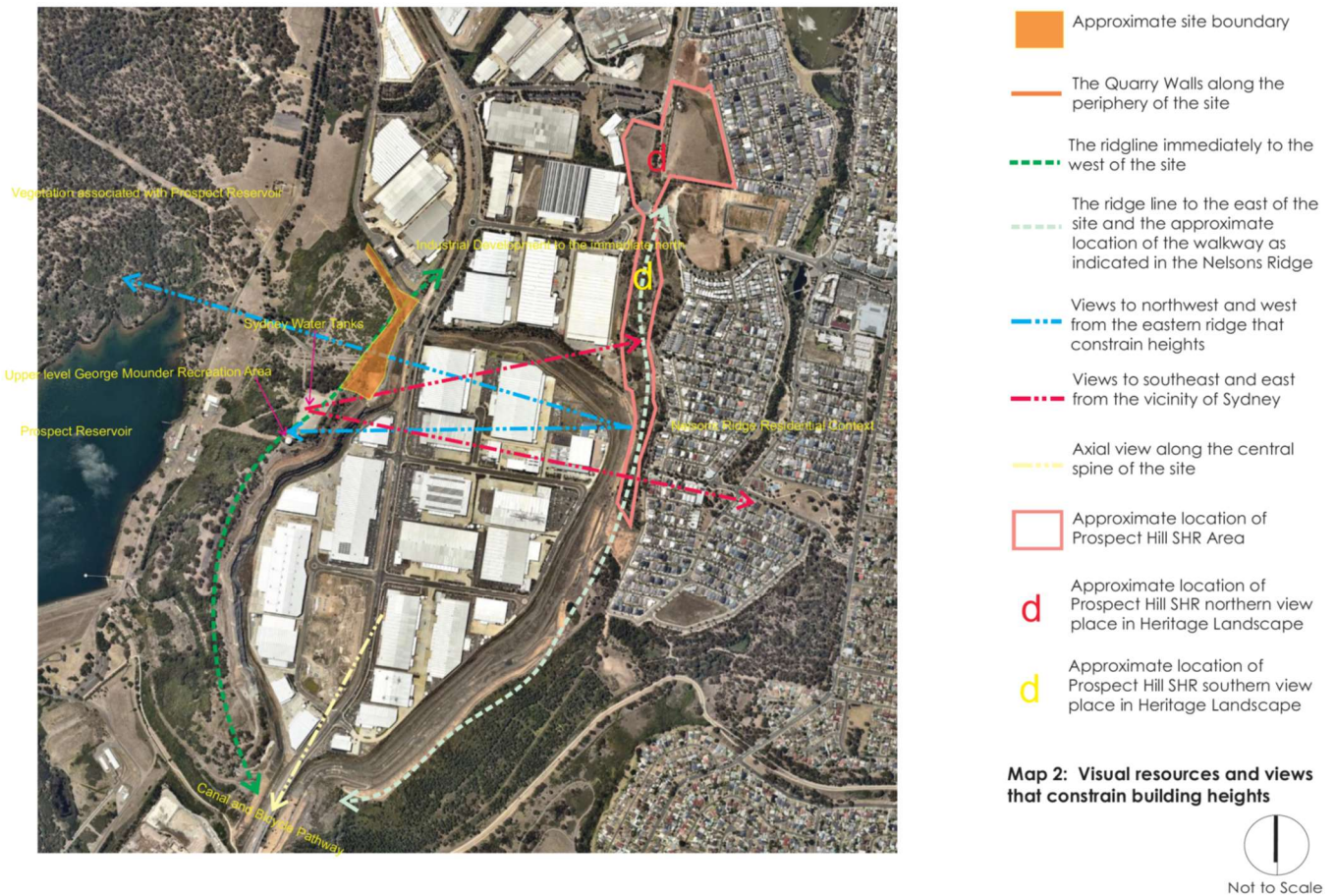


Figure 11: Key Views and Visual Receivers (Source: RLA)



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.

With regard to the Prospect Hill SHR area, the assessment notes that some views are available to the Precinct F site from the southern parts of the area, including from Mar-rong Reserve, but that views from the key northern areas would be restricted. From the southern areas, the proposed buildings would be viewed in the background of other industrial facilities (in the QuarryWEST and QuarryEAST estates), with views predominately set below the background ridgeline within Prospect Reservoir. This ridgeline continues to rise to the south towards two water tanks/reservoirs located within the Prospect Reservoir lands, and the buildings would sit well below the level of these structures. Consequently, the assessment considers that the proposed buildings would not have any significant adverse impacts on views or key view lines from the Prospect Hill SHR area.

With regard to the Prospect Reservoir lands, the assessment notes that the Precinct F site is visible from the eastern areas of the reservoir lands, including parts of the upper level George Maunder Picnic Area, which has been closed to public access since at least 2009. The site is not visible from other parts of the Prospect Reservoir lands. From the visible locations, the proposed buildings would sit well below the height of the viewing locations, and in the vicinity and context of other structures including the existing water tanks on the Prospect Reservoir land, which would have higher elevations than the proposed buildings. As such, the assessment considers that the proposed buildings would not have any significant adverse impacts on views from the Prospect Reservoir SHR lands.

With regard to the views from Prospect Highway and other local roads, the assessment considers that the proposed modification is unlikely to result in any significant impact on the amenity of road users, given the relatively small viewing opportunities, the short duration of views (given the moving nature of commuters), and the industrial setting of the area.

Overall, the assessment considers that the site has a low visual sensitivity for a number of reasons, including:

- the industrial nature of the area, and the historical quarrying land use;
- the urbanised setting and highly trafficked nature of the roads from which the site is visible;
- the lack of visibility from residential areas;
- the minor views from key areas within the Prospect Hill and Prospect Reservoir SHR lands; and
- that the proposed modification has a lower maximum relative level (ie. RL 101.5m) than the approved development (ie. RL 105m), and is generally consistent with the land use envisaged under the original concept plan.

Based on the visual effects and sensitivity analysis, the visual assessment concludes that the proposed modification would have low visual (and heritage) impacts on the existing and future surrounding context, particularly given:

- the high physical absorption capacity of the site and surrounds for the proposed development, due to the excavated nature of the site and its industrial setting;
- the high compatibility of the proposal with the existing and future character of the site and surrounding area; and
- the low overall visual constraints associated with the site.

4.2 Soil and Water

Erosion and Sedimentation

The proposed modification involves additional bulk earthworks in Precinct F to create level building pads for the facilities.



As outlined in the original EIS for the project, stormwater within the QuarryWEST Estate, including Precinct F, generally flows to the precinct detention basin at Widemere West, and as such the development of the QuarryWEST Estate does not entail a significant risk of erosion and sedimentation risks to off-site areas. As discussed below, a part of Precinct F drains separately to Council stormwater infrastructure in Picrite Close to the north.

As required under the development consent, Hannas will implement and maintain erosion and sediment control measures in accordance with Landcom's (2004) *Managing Urban Stormwater: Soils and Construction* manual (the 'Blue Book') for the proposal. In this regard, an Erosion and Sediment Control Plan has been prepared for the proposed Precinct F works and is attached in **Appendix C**.

Site Contamination

The proposed modification does not involve any change to the approved project area, and as such does not change the risks associated with potential site contamination.

As required under the development consent, DEXUS was required to provide a Site Audit Statement to the Department certifying that the relevant part of the site is suitable for commercial/industrial development, prior to construction of the relevant facility. Site Audit Statements confirming that the entirety of the QuarryWEST Estate site is suitable for its intended land use were submitted to the Department on 18 November 2015.

Groundwater Management

The proposal is not expected to result in any significant change to groundwater flows or quality within the QuarryWEST Estate, or affect the operation of the existing Groundwater Management Strategy for the Greystanes SEL.

This Groundwater Management Strategy details measures to drain and treat groundwater from the base of the quarry. The strategy forms part of the concept plan approval, and the construction of the groundwater management infrastructure has been approved as part of Boral's Greystanes SEL project approval (refer to the EIS for the original QuarryWEST project for further information). The proposed modification would not affect this existing groundwater management strategy.

Stormwater Management

As detailed in the EIS for the approved QuarryWEST project, the Greystanes SEL concept plan provides for a detailed Stormwater Management Strategy for the employment lands. The plan was 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 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 flooding.



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 Boral's Greystanes SEL project approval. The Stormwater Maintenance Plan includes a stormwater monitoring program for the estate.

The EIS for the approved QuarryWEST project included a stormwater concept prepared by Costin Roe Consulting, in accordance with the wider Stormwater Management Strategy for the Greystanes SEL.

The stormwater concept included a series of bio-retention basins in the landscaping areas throughout the QuarryWEST site⁴, providing a total of 3,000m² of bio-retention. Modelling undertaken in the EIS demonstrated that the concept would comply with the applicable stormwater quantity and quality requirements.

Costin Roe has amended the stormwater concept to reflect the layout changes associated with the proposed modification, and reviewed the concept to confirm its consistency with the approved stormwater management strategy. The design plans and review are attached as **Appendix C**.

The review notes that the Precinct F site is divided into two catchments, as shown on **Figure 12**.

Catchment A covers the majority of the Precinct F site (2 hectares), and drains to the established estate stormwater system, which includes the 3,000m² of bio-retention and the Widemere East detention basin. Catchment B covers a small area (0.3 hectares) in the northern part of the site, and drains directly to Cumberland Council's stormwater infrastructure in Picrite Close.

In accordance with the estate stormwater strategy, runoff from Catchment A requires pre-treatment only before discharging to the estate stormwater system. This would be provided via two Rocla CDS units (or equivalent) located in the southern and eastern areas of the site.

Catchment B would require additional stormwater management measures due to the catchment not draining to the estate stormwater management system. In this regard, a Rocla CDS unit (or equivalent) and underground detention tank would be provided at the northern end of the site to service flows from this catchment. The on-site detention system would provide storage of 178m³, which has been designed in accordance with Cumberland Council's *Holroyd City On-Site Stormwater Detention Policy 2015*.

⁴ None of these bio-retention basins are located in Precinct F.



Figure 12: Stormwater Catchment Plan (Source: Costin Roe)

The stormwater review also notes that the original Stormwater Management Strategy and stormwater modelling for the QuarryWEST estate was based on the development lots providing an impervious area of up to 86% and a pervious/landscaped area of 14%. This requirement is applicable to Catchment A of Precinct F, which drains to the Widemere East detention basin.

Precinct F achieves a total landscaped area 22% for Catchment A (and 19% for the whole site), which comfortably meets the pervious/landscaped area standard. Whilst the total QuarryWEST Estate is marginally below the 14% modelled standard with the proposed modification (ie. 12%), a number of development lots within the QuarryWEST and QuarryEAST with lower landscape ratios have incorporated pervious pavements and/or water harvesting measures to increase the relative stormwater retention on site.

As required under the development consent (Condition D3 of Schedule D), Hannas is required to prepare a specific Stormwater Management Plan for the facilities to the satisfaction of the Department, prior to the commencement of construction of the facilities.

4.3 Noise

A noise impact assessment was undertaken as part of the EIS for the QuarryWEST project, which found that the project would comfortably comply with the applicable construction, operation, sleep disturbance and traffic noise criteria at the nearest sensitive receiver locations, namely the residential area of Nelsons Ridge to the east of the quarry. The predicted operational noise levels are reproduced in **Table 4** below.

The comfortable compliance 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.



Table 4: Operational Noise Predictions, $dB_{LAeq}(15min)$

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 proposed changes to the layout of the QuarryWEST Estate are not expected to result in any significant change to the operational noise emissions from the estate, and consequently it is expected that the project as modified would continue to comply with the noise criteria in the development consent.

The construction works (including additional earthworks) are also not expected to result in any significant noise impacts, given the:

- distance to sensitive receivers in Nelsons Ridge;
- intervening topography;
- intervening noise sources including Prospect Highway and the industrial land users; and
- results of the original noise assessment which predicted very low noise levels at Nelsons Ridge as a result of the project.

4.4 Air Quality and Greenhouse Gases

The proposed modification does not involve any significant change to air emissions associated with the approved project, although construction-related dust emissions would increase associated with the proposed additional excavation works. These emissions are able to be managed in accordance with standard best practice controls, including:

- minimising the area of disturbance as far as practicable during works;
- minimising drop heights for materials being worked on the site;
- keeping exposed surfaces moist at all times;
- rehabilitating/revegetating disturbed surfaces as soon as practicable; and
- ensuring that trucks are covered and do not track sediment onto public roads.

As required under the development consent, Hannas is required to implement all reasonable and feasible measures to minimise and manage dust, odour and visual air pollution associated with the project.

The proposal is not expected to significantly change the total GHG emissions associated with operation of the QuarryWEST Estate. As required under the development consent (Condition C22 of Schedule C), Hannas is required to minimise energy use and GHG emissions on site.

4.5 Flora and Fauna

As a former quarry, the QuarryWEST site is largely devoid of vegetation and has no significant fauna habitat. However, there is some vegetation within the Precinct F site, as shown on **Figure 13**.



Figure 10: Vegetation Communities (Source: Eco Logical)

Much of this vegetation comprises exotic species and weeds, however there is a small amount of native treed vegetation in the sloped areas in the south-western area of the site. This area of vegetation was outside the portion of Precinct F that was proposed to be disturbed under the approved masterplan, and therefore the flora and fauna values of the area were not assessed under the original EIS for the QuarryWEST project.

To assess the biodiversity impacts of this clearing, an ecological assessment for the proposed modification has been undertaken by Eco Logical Australia, and is attached as **Appendix G**.

The assessment identified the following vegetation communities within the site that may be directly disturbed by the proposal:

- 0.06 hectares of poor condition Cumberland Plain Woodland (Shale Hills Woodland);
- 0.02 hectares of planted *Eucalyptus crebra* (Narrow-leaved Ironbark) and regenerating eucalypts;
- 0.01 hectares of the native reed *Typha orientalis* and other exotic species in a narrow linear patch; and
- 1.53 hectares of exotic vegetation.



Cumberland Plain Woodland (CPW) is listed as a Critically Endangered Ecological Community (CEEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

No other threatened flora and fauna species, populations or ecological communities were identified on the site, although the assessment noted that the site could provide at least some marginal hunting and/or foraging habitat for 8 threatened bird, bat and flying fox species.

The ecological assessment includes consideration of the impacts of the proposed vegetation clearing on the ecological values of the site, and the need for biodiversity offsetting. The assessment found that the proposal would not trigger the biodiversity offset scheme triggers in the BC Act, given that:

- the minor amount of clearing of native vegetation (0.09 hectares) does not exceed the area threshold;
- the proposal does not involve clearing of any areas of mapped high biodiversity value; and
- a 5-part test of significance indicates that the proposal would not have any significant impact on the CPW CEEC, given:
 - the small area of clearing (0.06 hectares) in relation to CPW within the locality; and
 - its poor condition, due to the presence of invasive species within and adjacent the site.

The assessment also notes that CPW is a potential ecological community that meets the principles and criteria for a Serious and Irreversible Impact (SAIL) under the *Biodiversity Conservation Regulation 2017*. While thresholds for SAILs have not yet been released, the assessment notes that it would be unlikely that the proposed clearing would be considered a SAIL given the small area of CPW clearing and its poor condition.

The ecological assessment concludes that the proposed modification is unlikely to result in any significant ecological impacts on the locality. In accordance with the recommendations of the assessment, the Landscape Plan for the proposal has been designed using CPW species.

4.6 Heritage

Aboriginal Heritage

As a former hard rock quarry, the QuarryWEST site has been highly disturbed and does not 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 proposed modification does not involve any disturbance of the Widemere East area, and is not expected to result in any adverse impacts to Aboriginal heritage of the area.



Historical Heritage

Previous heritage assessments for the Greystanes SEL concept plan have identified a number of heritage items in the area, including (see **Figure 14**):

- 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 associated the former quarry itself, including a 'Traylor' jaw rock crusher and associated rocks.

Essentially, the Prospect Hill and Prospect Reservoir heritage sites encircle the Greystanes SEL, with the curtilage of the Prospect Reservoir heritage site located immediately to the west of Precinct F of the QuarryWEST Estate.

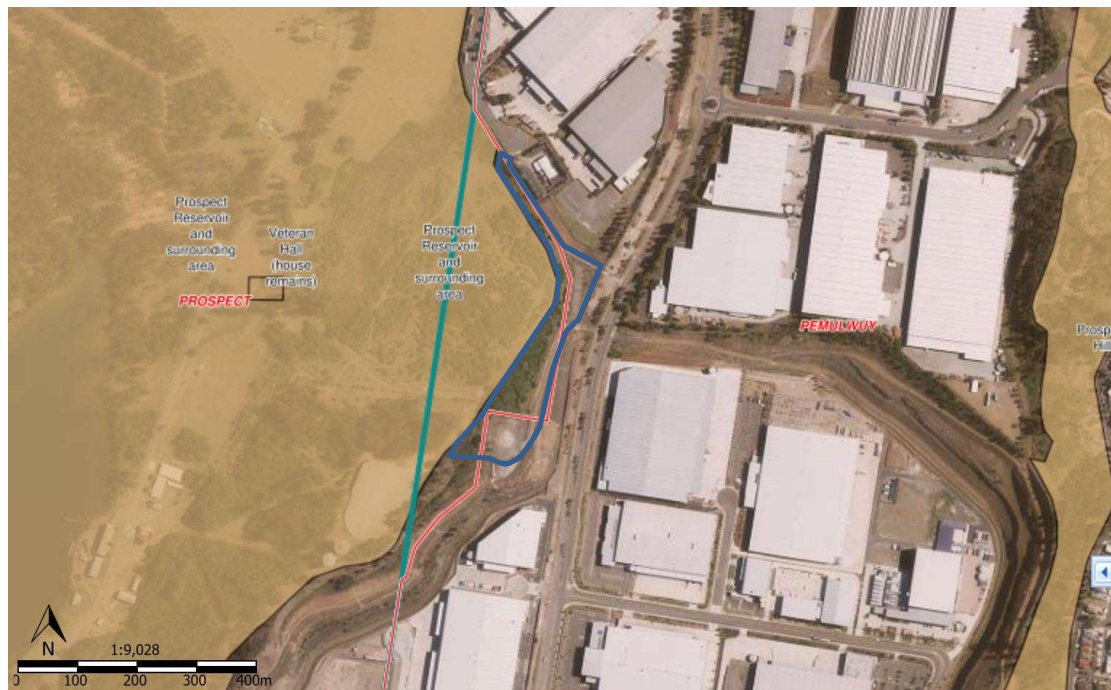


Figure 14: Heritage Sites (Source: DP&E Planning Portal, Dec 2017)

The heritage assessment for the Greystanes SEL concept plan concluded that the development of the 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 2010⁵), in accordance with the concept plan approval.

⁵ The Heritage Interpretation Plan is attached in the QuarryWEST Project EIS.



The Heritage Interpretation Plan provides for the installation of interpretive heritage elements associated with the former Prospect Quarry within the QuarryWEST Estate, including the Traylor jaw crusher and associated rocks. The QuarryWEST project approval provides for these elements to be located towards the southern end of the estate, between Warehouses C and D1⁶.

The Heritage Interpretation Plan does not involve any works in Precinct F of the estate, and as such the proposal would not affect the implementation of heritage measures under the plan. Further, the proposal is not expected to result in any significant impacts on existing heritage sites outside the QuarryWEST estate, given that:

- the proposal involves development of the precinct in a manner that is generally consistent with the concept plan approval, the Greystanes SEL Urban Design Plan and the QuarryWEST project approval; and
- the proposed buildings have heights that are below the maximum allowable heights in the precinct (ie. 25 metres for hotel development).

4.7 Traffic

A traffic assessment for the proposed modification has been undertaken by Transport & Urban Planning Pty Ltd (T&UP), and is attached in **Appendix H**. The assessment supplements the detailed traffic assessment undertaken by T&UP for the approved QuarryWEST project.

Existing and Proposed Road Network

Unlike other precincts in the QuarryWEST Estate, the approved Precinct F site is accessed via Picrite Close to the north of the estate, which provides access to the Prospect Highway via Reservoir Road. Picrite Close intersects with Reservoir road via a priority-control T-junction, and Reservoir Road intersects with the Prospect Highway via a roundabout.

The RMS is currently proposing to upgrade the Prospect Highway/Reservoir Road intersection, including provision of additional approach lanes and traffic signals to replace the existing roundabout.

The proposed modification does not involve any change to the existing access arrangements for Precinct F. The traffic assessment notes that sight distances associated with the approved and proposed access route are satisfactory.

Traffic Generation and Impacts

Based on the traffic generation rates in the RMS' *Guide to Traffic Generating Developments*, the proposed development in Precinct F would generate approximately 62 two way vehicle trips per hour in the AM and PM peak hours. This represents an increase of 54 vehicle trips over the approved development in Precinct F.

Assuming an 80:20 split between peak and non-peak directions of travel, the proposed traffic generation in Precinct F would result in 50 inbound and 12 outbound trips in the AM peak hour and 12 inbound trips and 50 outbound trips in the PM peak hour.

⁶ As approved in MOD 5.



The traffic assessment includes SIDRA modelling⁷ to assess the impacts of the additional traffic on the key Picrite Close/Reservoir Road intersection.

The assessment found that the proposed modification would not result in any significant traffic impacts, with the intersection continuing to perform at a Level of Service (LoS) of A for all movements, with acceptable delays (less than 3 seconds average) and queue length (less than 6 metres).

The traffic assessment also includes consideration of the cumulative traffic impact of the QuarryWEST Estate with the proposed modification.

In this regard, the traffic assessment for the original QuarryWEST project predicted that the project would generate some 888 two way trips in the AM peak hour and 1,158 two way trips in the PM peak hour.

Since this time, subsequent modifications to the QuarryWEST approval have reduced the overall traffic generation within the estate with changes to floor areas and use (in particular, the removal of service retail uses). The traffic assessment for the recently approved MOD 5 predicted that overall estate would generate some 653 trips in the AM peak and 660 trips in the PM peak.

While the proposed modification would result in an increase of some 54 vehicle trips in the AM and PM peak hour (from MOD 5), the predicted overall estate traffic generation would be some 707 trips in the AM peak and 714 trips in the PM peak, which is still well below the traffic generation for the originally approved project.

Internal Circulation

The traffic assessment confirms that all driveways and internal roads are/would be designed to fully comply with Australian Standard (AS2890.2) requirements for the largest vehicle that would visit the development, and that driveway locations would provide adequate sight distances.

The Precinct F site is proposed to be accessed by vehicle sizes up to and including Medium Rigid Vehicles only (ie. 8.8 metres length), which is considered adequate given the small size of the warehouse units. The traffic assessment includes swept path analysis for key vehicle turning movements within the precinct.

Car Parking

The QuarryWEST masterplan has been designed to comply with the applicable car parking rates in the development consent (Condition C5 of Schedule C) and the State Significant Precincts SEPP for each development lot. As indicated in **Table 1**, proposed parking supply for the QuarryWEST Estate comfortably meets the minimum parking requirements. Parking requirements and supply for each development lot within the estate is shown in **Appendix D**, and car parking requirements and supply for each of the proposed buildings in Precinct F is shown in the following table.

Disabled parking spaces have been designed and would be provided in accordance with AS 2890.6 (2009).

⁷ The assessment also included additional traffic surveys undertaken in December 2017.



Table 5: Precinct F Car Parking Provision

Building	No. Units	Gross Floor Area (m²)		Required Spaces¹	Proposed Spaces
		Warehouse	Office		
A	7	1,275	210	10	21 ²
B	7	1,407	210	10	12
C	9	1,910	270	14	21
D	12	2,374	360	17	29
E	21	3,681	630	29	30
Total	56	10,647	1,680	80	113

1 Based on the parking controls in the development consent (condition C5) and the State Significant Precincts SEPP, namely 1 space per 300m² of warehouse floor space and 1 per 40m² of office floor space.

2 Each unit would include 2 internal parking spaces.

Pedestrian and Bicycle Facilities

The proposed modification does not involve any change to the estate pedestrian and bicycle facilities, other than minor changes associated with the proposed changes to the masterplan layout. Bicycle parking and changing facilities would be provided in accordance with Condition C5 of Schedule C of the development consent.

4.8 Hazards

Bush Fire

The land within the Prospect Reservoir to the west of the site comprises predominately weedy shrubland with some taller trees, and is mapped as bush fire prone land under Cumberland Council's bush fire maps.

The vegetation and other land use surrounding the site is shown on **Figure 15**. The proposed buildings would be located between 2 metres (for Building A) and more than 10 metres (for other buildings) from the bush fire prone vegetation.

To assess the bush fire risk associated with this hazard, a bush fire assessment has been prepared for the proposed modification by Eco Logical, and is attached as **Appendix I**.

The assessment confirms that the proposed development is able to comply with the aims and objectives of the Rural Fire Services' (RFS') *Planning for Bush Fire Protection* (PBP) guidelines, subject to a number of recommendations including:

- implementation of ember protection measures for the buildings, including:
 - weepholes, vents and openable portions of windows be screened against the entry of embers with steel mesh with maximum aperture of 2 mm;
 - weather strips to external doors or similar measure to prevent the entry of embers through gaps greater than 3 mm; and
 - nylon brush seals around roller doors or similar measure to prevent the entry of embers through gaps greater than 3 mm;
- an emergency vehicular access be provided between the site and Prospect Highway via the existing access track on the eastern side of the site (see **Figure 15**) (Nb. This access would be locked during normal operations);
- internal roads less than 8 metres wide be signposted as 'No Parking' on one side with the services (hydrants) located on this side to ensure accessibility to reticulated water for fire suppression;



- water, electrical and gas supplies to be installed in accordance with applicable Australian Standards;
- an Emergency and Evacuation Plan to be prepared consistent with the RFS' *Preparation of Emergency/Evacuation Plan* guideline; and
- landscaping to be installed and maintained in consideration of the performance requirements of an Inner Protection Area (IPA) as described in Appendix 5 of the PBP guideline.

Hannas would undertake the proposed modification in accordance with these recommendations, which would be detailed in a Bush Fire Management Plan for the proposal.

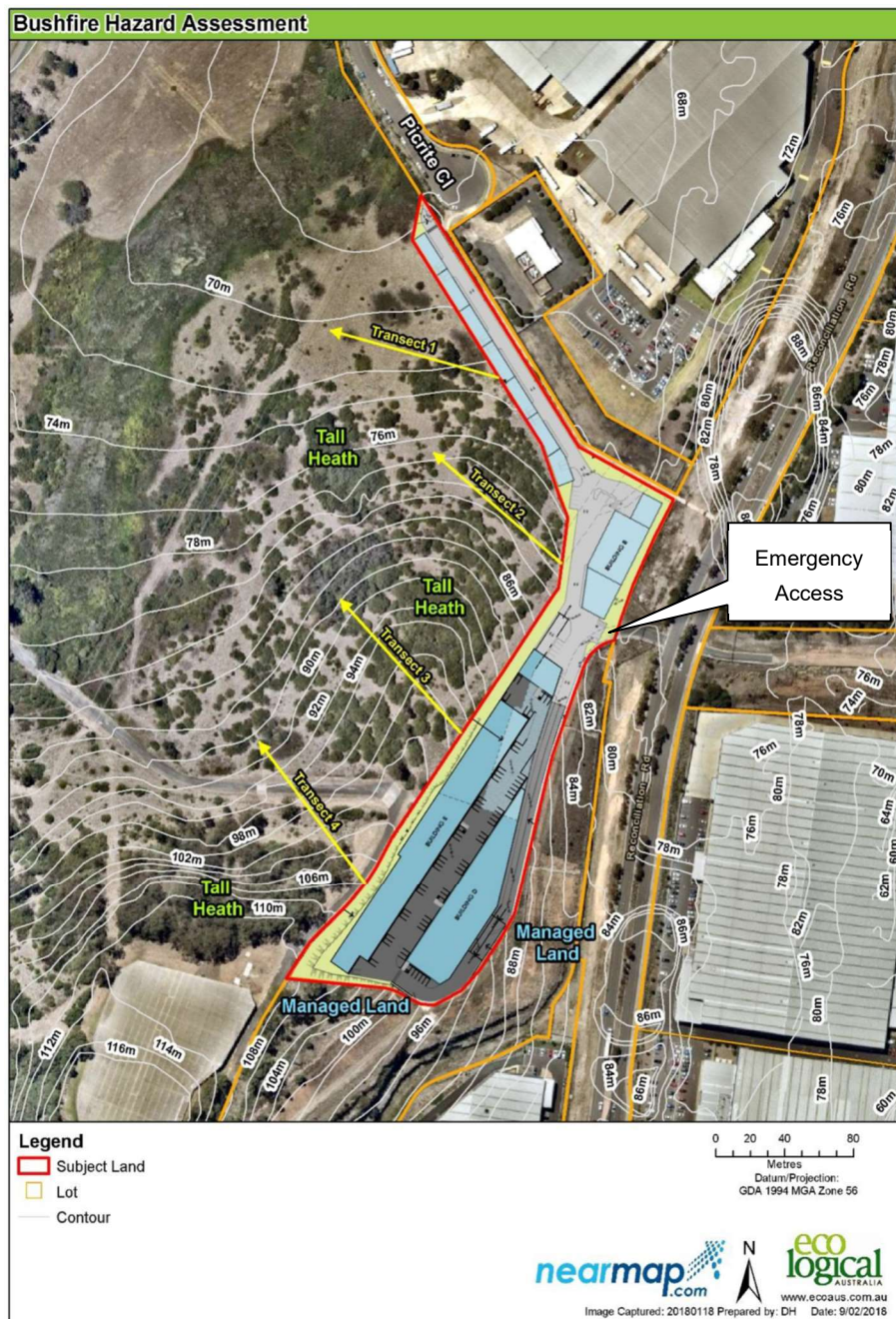


Figure 15: Bush Fire Prone Vegetation and Emergency Access (Source: Eco Logical)



Dangerous Goods and Hazardous Materials

The proposed modification does not involve any significant change to hazardous or dangerous goods storage within the QuarryWEST Estate.

As required under the development consent (Conditions C21 and C22 of Schedule C), Hannas is required to ensure that dangerous goods storage does not exceed the thresholds in the Department's *Applying SEPP 33* guidelines, and to store and handle all dangerous goods in accordance with relevant Australian Standards.

4.9 Wastes and Services

The proposed modification would not significantly alter the generation or management of wastes associated with the approved QuarryWEST project, although it would increase operational wastes generated in Precinct F. The proposed earthworks would also generate approximately 40,900m³ of excess rock, which would be removed from site for beneficial re-use.

All wastes would be classified and managed in accordance with the estate Waste Management Plan, which formed part of the original EIS for the project.

As required under the development consent (Condition C24 of Schedule C), Hannas is required to monitor and minimise waste generation associated with the project.

4.10 Socio-Economics

As outlined in the EIS for the original QuarryWEST project, the approved masterplan for the estate involves warehouses that are generally larger and have less ancillary office component than envisaged under the Greystanes SEL concept plan.

The proposed modification reverses this to a relatively small extent, with the proposal involving the development of some 56 small warehouse units ranging in size from approximately 175m² to 330m². These units are considerably smaller than other approved warehouses in the QuarryWEST Estate.

In this regard, the proposal would provide for a greater diversity of warehouse and light industrial facilities within the estate, which would benefit smaller end-user businesses.

The proposal is also likely to result in a considerable increase in employment in Precinct F and the QuarryWEST Estate in general, given the provision of 56 warehouse units (as opposed to the single approved warehouse in Precinct F), and the increase in floor area associated with the proposal.

5 Conclusion

It is considered that the proposed MOD 6 modification represents a relatively minor modification of the QuarryWEST project as approved.

Having regard to all the salient environmental, social and economic issues, it is considered that the proposed modification represents continued orderly use of the land. It is respectfully



requested that the Department, having due regard for the information submitted in this document, grants approval to the proposed modification.

Should you have any enquiries in relation to this matter, please do not hesitate to contact me on 0400 392 861.

Yours faithfully,

PJEP – Environmental Planning

Phil Jones

Principal Environmental Planner

Cc: Hannas

Attachments:

Appendix A	Revised Architectural Design Plans
Appendix B	Revised Landscape Design Plans
Appendix C	Revised Civil Design Plans/Review
Appendix D	Detailed Area Schedule
Appendix E	Greystanes SEL Concept Plan Consideration
Appendix F	Visual Assessment
Appendix G	Ecological Assessment
Appendix H	Traffic Assessment
Appendix I	Bushfire Assessment



APPENDIX A



APPENDIX B



APPENDIX C



APPENDIX D



APPENDIX E



APPENDIX F



APPENDIX G



APPENDIX H



APPENDIX I