



Welshpool Concrete Plant Upgrade Visual Assessment

Holcim

June 2025

DATE FILE
25-Jun-2025 SD-035-25

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This document should be cited as:

Ecoscape (Australia) Pty Ltd (2025) Welshpool Concrete Plant Upgrade Visual Assessment Prepared for Holcim

Revision	Author	QA Reviewer	Approved	Date
0 Draft	P Jordan			11/06/2025
1 Draft	P Jordan	S Bateman	S Bateman	17/06/2025
2 Final	P Jordan	S Bateman	S Bateman	18/06/2025

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Acknowledgements

Ecoscape would like to thank the following for their assistance in the preparation of this Visual Assessment report:

- Jenny Moro, Planning Manager WA | Holcim
- Viewport XR.

Executive summary

Holcim Australia Pty Ltd (Holcim) engaged Ecoscape to prepare a visual impact assessment to describe the potential visual impacts of the upgrades to the Welshpool Concrete Plant located at 12 Cohn Street, Carlisle.

Holcim is seeking approval to make upgrades to the Plant to meet the existing market. As part of the upgrade, the existing wastewater management system and the Cohn St perimeter wall will be retained on the site, with all other structures to be demolished.

Major pieces of new Plant infrastructure will include:

- Aggregate storage tower (~17m height) housing six 100 t special aggregate bins
- 2 x GP cement silos to a maximum capacity of 120 t (maximum height of 31m)
- 1 x EcoCem silo to a maximum capacity of 120 t (maximum height of 31m)
- 1 x split silo cream cement and silica fume to a maximum capacity of 120 t (maximum height of 31m height)
- 2 x additional silos to a maximum capacity of 120 t (maximum height of 31 m height) to accommodate future anticipated demand.

The Study Area for visual impact assessment encompasses publicly accessible streets immediately surrounding the Plant, from which the proposed upgrades may be seen. Ecoscape identified public viewing locations adjacent to the site for analysis. The approximate locations of the view locations assessed are shown in **Figure 1**.



Figure 1: Welshpool Concrete Plant site and view locations

Visual landscape evaluation

Ecoscape applied a methodology based on the *Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design* (WAPC, 2007) to undertake the visual impact assessment (VIA) of the proposed development. The manual specifies a two-stage process to the visual assessment:

- 1. visual landscape evaluation
- 2. visual impact assessment.

Ecoscape used a combination of desktop analysis and site investigations to evaluate the landscape surrounding the Welshpool Concrete Plant site.

Landscape character analysis

As part of the visual impact evaluation, Ecoscape undertook a landscape character analysis of the existing landscape character surrounding the Plant. This process identified two distinct Landscape Character Units (LCU) that comprise a geographic area sharing common characteristics. The LCUs identified are:

- Residential LCU north of Cohn St.
- Light industrial LCU south of Cohn St.

Landscape values

The Residential LCU contains five of the most preferred landscape characteristics for built environments, as identified by WAPC (2007):

- presence of trees, greenery, gardens, street trees, canopied streets
- diverse building styles in neighbourhoods
- well maintained gardens (native and exotic)
- incorporation of significant cultural and environmental features into urban design
- services being underground to reduce cabling and severance of street trees.

The Light Industrial LCU contains three of the most preferred landscape characteristics for built environments:

- presence of greenery and street trees
- coherence of industrial buildings in one area (e.g. industrial parks and buffers)
- services being underground to reduce cabling and severance of street trees.

Both LCUs also contain a smaller number of the least preferred landscape characteristics for built environments.

View significance

Both LCUs were determined to have Significance level 3: Local significance. They encompass local roads with low levels of vehicle usage (compared with regionally or nationally significant roads) and views that are only of local importance.

Visual management objective

The aim of Visual Management Objectives (VMOs) is to provide criteria that enable the assessment of visual impacts for each Landscape Character Unit (LCU).

The 'Best practice siting and design' VMO has been assigned to both the Residential LCU and Light Industrial LCU within the Study Area as they contain a moderate degree of scenic amenity and available views are significant only in a local context.

Visual impact assessment

Photo montage analysis

Photo montages prepared by Viewport XR were analysed using visual impact criteria to determine dominant visual elements, which include line, form, colour and texture. The outcome of this analysis is a percentage score that determines the level of visual impact (magnitude of change), either being not visible (not evident), moderately visible (blending) or highly visible (prominent).

To determine the overall impact level or the significance of the impact, the result of the visual impact analysis is combined with the Significance Level and the Visual Management Objective (VMO) of the Study Area.

Visual impact assessment outcomes

The visual impact assessment process indicated that the proposed development is 'blending' with the existing landscape character from all viewpoints assessed, although in some locations the line and form of the proposed Plant appear prominent. Overall, the landscape character, view experience and landscape values identified in the visual landscape evaluation are retained.

Therefore, the proposed Welshpool Concrete Plant upgrades will meet the Best Practice Siting and Design management objective as the proposal attempts to integrate the development with the existing character. The proposed landscape plan (**Appendix C**) will also mitigate visual impacts by increasing the level of screen planting such as the addition of Eucalypt trees.

The outcomes of the visual impact assessment are summarised in **Table 1** below.

Table 1: Visual impact assessment outcomes summary

ANTICIPATED VISUAL IMPACT					
View Location A: 11	Cohn St				
Magnitude of visual impact	Blending				
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible from view location A. The colour and texture of the proposal blend with the existing character of the site, whereas the line and form appear prominent in the view at this location.				
Visual Impact Rating	Level 3				
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The siting and design of the proposal includes measures that attempt to integrate it with its surrounding landscape character, including the colouring of the silos and access gate, and the extension of the existing verge landscape approach.				
	Mitigation strategies to further improve the blending of the Plant into the site include the selection of <i>Eucalyptus victrix</i> as the tree species for verge planting, which grows to approximately 8m high and 4m wide, which will increase screening of the silos as the trees establish.				
View Location B: Cor	rner of Cohn St and Downing St				
Magnitude of visual impact	Blending				

Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible but blending with the existing character of the site.			
Visual Impact Rating	Level 3			
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The landscape character, view experience and landscape values identified in the visual landscape evaluation are retained using colours and textures that blend with the existing industrial character of the site, and the siting behind other built form contributes to the segmented line of the horizon.			
View Location C: Cor	rner of Briggs St and Downing St			
Magnitude of visual impact	Blending			
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible from view location A. The colour and texture of the proposal blend with the existing character of the site, whereas the line and form appear prominent in the view at this location.			
Visual Impact Rating	Level 3			
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The siting and design of the proposal includes measures that attempt to integrate it with its surrounding landscape character, including the colour and texture of the visible built form.			
	The visual impact is lessened by the view location being located within the Light Industrial LCU, where the viewer is likely to be travelling by car and moving through the area, not lingering.			
	Mitigation strategies would be difficult to implement in this location given the height of the proposed Plant above other built form, and the corner location being unsuitable for the planting of trees to screen views.			
View Location D: Cor	rner of Cohn St and Jupiter St			
Magnitude of visual impact	Blending			
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible but blending with the existing character of the site.			
Visual Impact Rating	Level 3			
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The landscape character, view experience and landscape values identified in the visual landscape evaluation are retained using colours and textures that blend with the existing industrial character of the site, and the siting behind other built form contributes to the segmented line of the horizon. Screening of the Plant from an existing tree helps reduce the visual impact of the proposal.			

Acronyms and abbreviations

Table 2: Acronyms and abbreviations

Acronym	
CALM	Western Australian Department of Conservation and Land Management (1985-2006, now DBCA)
DBCA	Western Australian Department of Biodiversity, Conservation and Attractions
DPaW	Western Australian Department of Parks and Wildlife (2013-2017, now DBCA)
EPA	Environmental Protection Authority
EP Act	Environmental Protection Act 1986
Ecoscape	Ecoscape (Australia) Pty Ltd
LCT	Landscape Character Type
LCU	Landscape Character Unit
m	metre/metres
RBA	Rodrigues Bodycoat Architects
VAC	Visual Absorbance Capacity
VIA	Visual Impact Assessment
VLE	Visual Landscape Evaluation
VMO	Visual Management Objective
WAPC	Western Australian Planning Commission

1 Introduction

1.1 Project scope

Holcim Australia Pty Ltd (Holcim) engaged Ecoscape to prepare a visual impact assessment to describe the potential visual impacts of the upgrades to the Welshpool Concrete Plant and identify potential mitigation strategies where appropriate.

The visual impact assessment will form part of Holcim's submission to the Department of Planning, Lands and Heritage's Significant Development Assessment Unit.

1.2 Project description

Holcim owns and operates the Welshpool Concrete Plant (the Plant). The Plant is approaching its operational end of life and, as Holcim's East Perth concrete plant is set to close, the premises need to be upgraded to continue to service the inner suburbs of the Perth.

Holcim is seeking approval to make upgrades to the Plant to meet the existing market for supply of grey concrete only for both the East Perth and Welshpool plants.

As part of the upgrade, the existing wastewater management system and the Cohn St perimeter wall will be retained on the site, with all other structures to be demolished.

Major pieces of new Plant infrastructure will include:

- Aggregate storage tower (~17m height) housing six 100 t special aggregate bins
- 2 x GP cement silos to a maximum capacity of 120 t (maximum height of 31m)
- 1 x EcoCem silo to a maximum capacity of 120 t (maximum height of 31m)
- 1 x split silo cream cement and silica fume to a maximum capacity of 120 t (maximum height of 31m height)
- 2 x additional silos to a maximum capacity of 120 t (maximum height of 31 m height) to accommodate future anticipated demand.

Refer to **Appendix 3** for the proposed Welshpool Concrete Plant upgrade plans.

1.3 Study area

The Welshpool Concrete Plant is located at 12 Cohn Street, Carlisle.

The Study Area for visual impact assessment encompasses publicly accessible streets immediately surrounding the Plant, from which the proposed upgrades may be seen (refer **Figure 2**).

Views from private property have not been considered in this assessment.



Figure 2: Study area

2 Methodology

2.1 Assessment process

It is recognised by the EPA (2023) that amenity values may be highly subjective, therefore, the WAPC (2007) methodology had been adopted to provide a clear and systematic approach to assessing the visual landscape. The WAPC (2007) specifies a two-stage process to the visual assessment:

- 1. visual landscape evaluation
- 2. visual impact assessment.

The Visual Landscape Evaluation (VLE) stage is undertaken to understand the context of the project and the surrounding landscape. It is also undertaken to set objectives for managing the visual landscape character. The Visual Impact Assessment (VIA) describes the potential impacts in context of the landscape evaluation. The elements of the assessment are outlined below:

- A description of the proposed project and visual elements of proposed infrastructure (Section 1.2)
- Landscape Character Analysis: The identification and evaluation of the existing landscape and Landscape Character Units based on desktop and site analysis (**Section 3**)
- View Experience: The assessment of viewing locations, view experience and valued landscape characteristics to identify appropriate visual management objectives for the Study Area for the purpose of assessing visual impacts (Section 3.3)
- Visual Management Objectives: used as criteria for assessing potential visual impacts on the landscape (Section 0)
- Visual Impact Analysis: an assessment of viewsheds and photo montages to identify the level of visibility and potential visual impacts on the landscape, including potential mitigation strategies where appropriate (Section 5).

2.2 Landscape Values

The Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design (WAPC, 2007) identified key character indicators that can be used as a basis for classifying the landscape into two preference categories; 'most' preferred and 'least' preferred landscapes. These preference categories were established for natural, rural and built landscapes. All landscape character units described above fall within the 'built' landscapes category for preference indicators.

'Most' preferred characteristics are defined as landscape features that are highly valued by the community and contribute to the visual character. 'Least' preferred are features not valued by the community and detract from the visual character (WAPC, 2007). The preference indicators for built landscapes are summarised in **Appendix 1**.

2.3 Assessment criteria

To assess visual impact, a visual landscape evaluation must be undertaken to understand the landscape values of an area and the significance level of viewing locations. The Landscape Institute (2013) developed criteria to determine the level of impact which were based on landscape values and viewer sensitivity. These impact levels are based on:

- Visibility rating which relates to the magnitude of change and the visual prominence of the development
- Significance Level which refers to the significance of the viewing location and the degree of public sensitivity to change
- Visual Management Objective (VMO) which reflects landscape values and public sensitivity.

These assessment criteria are further discussed below.

2.3.1 Visibility rating

The visibility rating is identified through the analysis of photo montages (Section 5). The visibility of a development is categorised into three levels, outlined in **Table 3** below:

Table 3: Visibility rating

Visibility Rating	Description
Prominent	The development is a dominant feature in the field of view and contrasts with the surrounding landscape. Subsequently there is a significant change to the view experience and may also change the landscape character depending on the nature of the development.
Blending	The development is visible but does not dominant the view or draw attention to itself, visual elements of the development do not contrast with the surrounding landscape.
None	The development is not visible.

2.3.2 Significance level

Significance level refers to the level of use of an area which is outlined in **Appendix 2**. WAPC (2007) notes that significance of a view increases with:

- importance of views, including type, features and rarity
- volume of use of roads, trails and navigable waterways
- degree of sensitivity of viewers; those who are more likely to be more sensitive include wilderness
 users, other recreational users, tourists, people who choose to live in an area because of its landscape
 character and views (e.g. assessed by noting how vocal observers are about specific travel routes or
 use areas, indicated in letters, protests etc.)
- degree to which experiencing the landscape is integral to enjoyment of a travel route or site, i.e. Is it the focus of the use, as in recreational use, or just incidental, as is more likely with people using a route to work?
- length of duration of a view; range could include glimpses from a high-speed road to longer duration views obtained from roads used for sightseeing or from recreation sites and lookouts and very long and frequent views from the main living areas of homes.

Significance is categorised into three levels, outlined in **Table 4** below:

Table 4: Significance level

Significance Level	Description
S1	High use areas such as State Highways, designated tourist routes and sites, designated recreation sites and trails of national or state significance.
S2	Moderate use areas such as main roads with moderate vehicle use (sealed or unsealed), recreation sites and trails of regional or high local significance.
S3	Low use areas, locally significant roads or tracks, locally significant recreation sites and trails.

2.3.3 Visual management objectives

Visual Management Objectives (VMOs) are assigned to manage the visual landscape. A proposed development is assessed against these VMOs to identify if the visual change will be appropriate for the landscape setting. The VMOs developed by the WAPC (2007) are listed in **Table 5**.

Table 5: Visual management objectives (WAPC, 2007)

VMO	Description					
Protection and Maintenance	This objective is the maximum retention of the existing visual character and applies to highly valued landscapes.					
	This is the baseline objective for all landscapes, therefore a prominent impact may not meet this objective. Mitigation strategies may deem the impact acceptable such as:					
Best Practice Siting	the application of practical and sensitive siting and design techniques					
and Design	retaining dominant landscape features and characteristics					
	enhancing or restoring landscape features.					
Restoration and Enhancement	This objective applies to degraded landscapes that require rehabilitation to restore visual amenity. Enhancement may also refer to identifying opportunities to improve key views e.g. providing roadside lookouts to take advantage of a scenic view, clearing overgrown vegetation to enhance a view corridor etc.					

2.4 Visual impact analysis

The visual impact level matrix (**Table 5**) combines the assessed visual criteria to determine the level of impact a proposed development may have on the visual character of a landscape. The resulting visual impact levels (**Table 7**) been developed by Ecoscape to reflect current assessment guidelines with the aim of providing a clear interpretation of visual impact.

The visual impact level matrix has been developed conservatively and should be used as a guide for further investigation and discussion of the acceptability of impacts with stakeholders, particularly if viewpoints are identified as a Level 1 impact.

Table 6: Visual impact level matrix

Visibility rating			Prominent	ninent		Blending		Not Visible
Significance level		S1	S2	S3	S1	S2	S3	S1-S3
Visual Management Objective	Protection and Maintenance	L1	L1	L1	L2	L2	L2	No impact
	Best Practice Siting and Design	L1	L2	L2	L3	L3	L3	No impact
	Restoration and Enhancement	L2	L2	L2	L3	L3	L3	No impact
				VISU	JAL IMPA	ACT LEV	EL	

Table 7: Visual impact levels

Impact Level	Description
L1	A Level 1 impact occurs where the proposed development is 'prominent' at all view locations that have been assigned the Protection and Maintenance VMO and at Significance Level 1 view locations that have been assigned the Best Practice Siting and Design VMO.
	The visual impact is considered a change that may not adhere to the assigned VMOs as the development is a dominant feature that contrasts with the surrounding landscape. Subsequently, a Level 1 impact results in an obvious change to the view any may also impact and alter key views and landscape character.

-	
L2	A Level 2 impact occurs where the proposed development is visible but not dominant i.e. 'blending' for landscapes and views that have been assigned a VMO of Protection and Maintenance.
	A Level 2 impact also occurs where proposed development is visually prominent from view locations that are lower in sensitivity i.e. Significance Level 2 and 3 sites that have been assigned the Best Practice Siting and Design VMO. The impact may not adhere to this VMO depending on the nature of the development.
	A Level 2 impact also occurs where proposed development is visually prominent from view locations that have been assigned the Restoration and Enhancement VMO.
	The visual impact is unlikely to be at variance with the VMO as the development is not a dominant feature in the view but blends in with the landscape setting.
L3	It is assumed that 'blending' developments are more likely to meet the Best Practice Siting and Design VMO and the Restoration and Enhancement VMO.
None	The development is not visible, therefore no visual impact to landscape character or view experience is expected.

2.5 Visual Absorbance Capacity

The Visual Absorbance Capacity (VAC) of a landscape will affect the visual impact level of the Project. VAC is the ability of the landscape to absorb a visual change, which is associated with the dominance and variable elements which have been used to assess the impact from each viewpoint. Views with simple form and line may be more sensitive to change compared to views that are more detailed in form, line and colour, such as varied and undulating landform and variable vegetation structure (FPA, 1990). In the latter example, infrastructure can be strategically placed within the landscape using the topography and vegetation to minimise its visual impact. Other factors that affect the level of VAC are listed in Table 8 (FPA, 1990).

Table 8: Factors influencing Visual Absorbance Capacity (VAC) of a landscape

Factor	Increased VAC	Decreased VAC
Biophysical	 Landform: variable, undulating landform Vegetation: greater vegetation diversity in structure, colour and form 	 Slope: increased slope Soil: greater contrasting soil colour with surrounding vegetation Site recovery: slower site recovery rate
Perception	 Increased distance from site Slope facing away from observer Lower public sensitivity level Short view duration (e.g. from moving vehicle) 	 Close distance to site Slope facing the observer Greater public sensitivity level Long view duration Development in direct line of sight
Proposed Development	 Similar visual elements to surrounding landscape, i.e. shape, colour, texture Short term activity 	Large scale developmentLonger duration activity

2.6 Distance zones

The distance between the observer and the proposed development can affect the level of visual impact. The further the distance the less space the target occupies in the observer's field of view and therefore the visual impact may not be as significant (WAPC, 2007). The WAPC (2007) guidelines adopt the following categories which have been based on the amount of colour and textural detail that is visible:

Foreground zone: 0 – 500 metres
 Mid-ground zone: 0.5 – 6.5 kilometres
 Background zone: beyond 6.5 kilometres.

3 Landscape character analysis

3.1 Site analysis

Ecoscape undertook a site analysis to assess the landscape character and view experience from the areas surrounding the project. The main purpose was to assess the view experience for public users of the area and to identify potential impacts to view experience resulting from the upgrades to the Plant.

3.2 Visual terminology

The visual landscape of the Study Area was described using terminology that have been adapted from CALM (1994), WAPC (2007) and The Landscape Institute (2013).

Visual terminology such as line, form, colour and texture are used to assist in describing landscape character (**Figure 3**). This description allows for the comparison of the visual elements of a proposed development with the surrounding landscape to assist in the visual impact analysis.

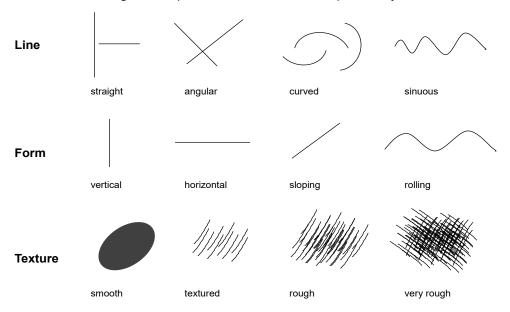


Figure 3: Visual terminology to describe landscape character (CALM 1994)

3.3 Landscape character units

A Landscape Character Unit (LCU) is a geographic area sharing common characteristics such as landform, vegetation and cultural land use patterns relevant to human interaction and experience.

Two LCU have been identified within the Study Area:

- Residential LCU north of Cohn St.
- Light industrial LCU south of Cohn St.

Refer to Figure 4 for the extent of the identified Landscape Character Units.

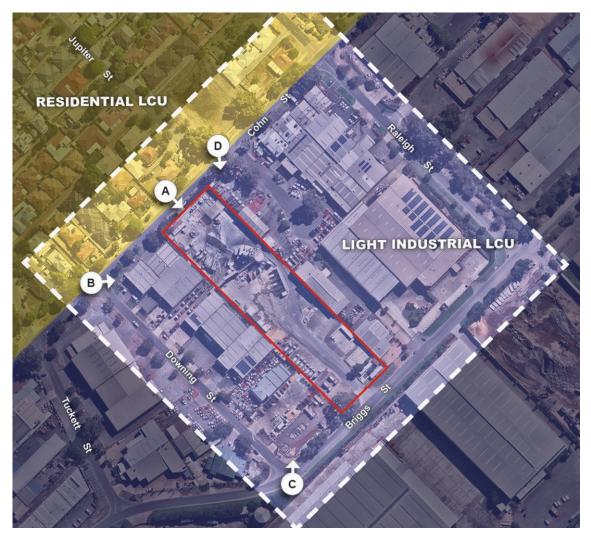


Figure 4: Landscape Character Units

3.3.1 RESIDENTIAL LCU

3.3.1.1 Character description

The Residential LCU encompasses the area north of Cohn St within the Study Area.

A summary of the visual characteristics is provided below:

- Scale: Houses are predominantly single-storey dwellings with low or no front fences, allowing views
 through to the front façades of the residences. Established street trees in a range of species provide a
 sense of verticality and enclosure to the streets.
- Texture: At a close viewing range, the Residential LCU has a wide variety of textures including smooth
 concrete paving, repeating geometric textures of bricks and paving, and the rough, random texture of
 foliage of trees and shrubs. The difference between textures becomes less distinct as the distance from
 the view increases.
- Form: The Residential LCU has variable forms, generally attributed to being either natural or built landscape elements. The natural elements (trees and vegetation) have rounded, random forms. Built forms (houses, walls, fences, paving) have geometric, straight-line forms.
- Line: The horizon line is dominated by tree canopy, giving it a rounded, irregular line, occasionally punctuated by the angular lines of rooflines. The straight and angular lines of the built form and roads are more evident below the horizon, closer to the viewer.

Colour: The established trees and vegetation within the Residential LCU account for a range of greens
within the view, from dark to bright. Houses are built in a variety of materials and architectural styles,
resulting in a broad range of colours with no cohesive palette.

3.3.1.2 View significance

The Residential LCU is designated as Significance level 3: Local significance. This LCU contains local roads with low levels of vehicle usage (compared with regionally or nationally significant roads) and views that are only of local importance.

3.3.1.3 View experience

The view experience from the streets within the Residential LCU is typical of established residential suburbs of Perth. Viewers will typically experience the views at low speed, either walking or driving through the streets, which increases the view duration.

Generally, two view types are present:

- Tightly enclosed views are enclosed by surrounding tree canopies and built form (Figure 5)
- Axial long views down straight roads (Figure 6)



Figure 5: Residential LCU – tightly enclosed view northwest along Jupiter St



Figure 6: Residential LCU – axial view northeast along Cohn St

3.3.1.4 Landscape values

The Residential LCU contains some of the most preferred landscape characteristics for built environments, as identified by WAPC (2007):

- · presence of trees, greenery, gardens, street trees, canopied streets
- diverse building styles in neighbourhoods
- well maintained gardens (native and exotic)
- incorporation of significant cultural and environmental features into urban design
- services being underground to reduce cabling and severance of street trees.

The Residential LCU also contains some of the least preferred landscape characteristics for built environments, as identified by WAPC (2007):

- run-down areas (bare sand, abandoned and/or trashed cars)
- poorly maintained drains prone to stagnation, pollution and littering.

3.3.1.5 Visual absorbance capacity

VAC is the ability for a landscape to absorb a proposed change. Factors that may contribute to the decreased capacity to absorb the proposed Welshpool Plant Upgrade include proximity to site, long duration of the activity and the industrial land use.

Factors which may accommodate the proposed change include the a like for like land use change, i.e. it is anticipated that the upgrade will be visually similar in land use to the current land use. The restricted viewshed, where it is expected that views of the development are restricted to the immediate surroundings due to the flat terrain and presence of screening objects including street trees and built form. The lower visual sensitivity of the viewing locations where impacts will be restricted to a local use area.

3.3.1.6 Distance zone

The Welshpool Concrete Plan is located within the foreground zone (0 - 500 m) of all view locations in the Residential LCU study area. The close proximity of the development to the viewer may increase potential visual impacts.

3.3.2 LIGHT INDUSTRIAL LCU

3.3.2.1 Character description

The Light Industrial LCU encompasses the area south of Cohn St within the Study Area.

A summary of the visual characteristics is provided below:

- Scale: The Light Industrial LCU has a mix of single and double-storey buildings, interspersed with large warehouses. The building are set back from the road and tree canopy is sporadic, providing an open feel to the viewer.
- Texture: At a close viewing range, the Light Industrial LCU has a variety of textures. The smooth texture
 of building façades and concrete paving represents a large proportion of the view. Other textures
 include repeating geometric textures of paving bricks, and the rough, texture of foliage, gravel and
 disturbed ground. The difference between textures becomes less distinct as the distance from the view
 increases.
- Form: The Light Industrial LCU predominantly has the geometric, straight-line forms of the built environment (buildings, fences, car parks, walls). The rounded, random forms of natural elements (trees and vegetation) make up only a small proportion of the view.
- Line: The horizon line is dominated by the straight and angular lines of built form, occasionally punctuated by rounded, irregular line of tree canopies. The straight and angular lines of the built form and roads dominate the view below the horizon, closer to the viewer.
- Colour: The built form of the Light Industrial LCU has a palette of lighter colours including white, crème, light grey/green, and pale peach/yellow colours. These are typically applied in large, flat expanses with little variation within each building. Warmer browns and greys are present in the gravel treatments and disturbed earth on the verges. Greens are visible in the tree canopies, vegetation and turf, most notably along Briggs St.

3.3.2.2 View significance

The Light Industrial LCU is designated as Significance level 3: Local significance. This LCU contains local roads with low levels of vehicle usage (compared with regionally or nationally significant roads) and views that are only of local importance.

3.3.2.3 View experience

Viewers will typically experience the views at low/medium speed from within a vehicle. No footpaths are provided in the Light Industrial LCU to support pedestrian movement.

Generally, as single view type is present:

• Broadly enclosed – views are enclosed by surrounding built form set back from the road, and by sporadic tree canopies (**Figure 7** and **Figure 8**).



Figure 7: Light industrial LCU – broadly enclosed view southeast along Downing St



Figure 8: Light industrial LCU – broadly enclosed view on the corner of Downing St and Briggs St

3.3.2.4 Landscape values

The Light Industrial LCU contains some of the most preferred landscape characteristics for built environments, as identified by WAPC (2007):

- · presence of greenery and street trees
- coherence of industrial buildings in one area (e.g. industrial parks and buffers)
- services being underground to reduce cabling and severance of street trees

The Light Industrial LCU also contains some of the least preferred landscape characteristics for built environments, as identified by WAPC (2007):

- run-down areas (bare sand)
- utilities (overhead powerlines)
- graffiti.

3.3.2.5 Visual absorbance capacity

The Light Industrial LCU has an increased capacity to absorb the visual change of the Welshpool Concrete Plant upgrades because it is similar in visual character and function to the existing Plant infrastructure and includes other industrial businesses.

The low significance (Level 3: Local significance) of views within the Light Industrial LCU further increases its capacity to absorb visual change.

3.3.2.6 Distance zone

The Welshpool Concrete Plan is located within the foreground zone (0 - 500 m) of all view locations in the Light Industrial LCU study. The close proximity of the development to the viewer may increase potential visual impacts.

4 Visual management objective

The aim of Visual Management Objectives (VMOs) is to provide criteria that enable the assessment of visual impacts for each Landscape Character Unit (LCU).

The VMOs adopted by WAPC (2007) to manage landscape character are:

- best practice siting and design, which should be the baseline objective for all landscapes. To meet this
 VMO, it is expected that any proposed development is blending; that is, development may be evident
 but generally not prominent in that it borrows from the existing landscape setting.
- protection and maintenance, the maximum retention of the existing visual character
- restoration of degraded character and/or enhancement of opportunities, applies to degraded landscapes that require rehabilitation to enhance the visual amenity.

4.1 Best practice siting and design

The 'Best practice siting and design' VMO has been assigned to both the Residential LCU and Light Industrial LCU within the Study Area as they contain a moderate degree of scenic amenity and available views are significant only in a local context.

With this VMO applied, the existing character of the landscapes should be taken into account, but not necessarily maintained in its existing form. (WAPC, 2007). With regard to urban landscapes, the main objective should be on achieving good design outcomes. WAPC offers some strategies to meet this objective, including:

- Employ best practice planning and design processes.
- Protect, enhance or restore individual landscape components or features that require attention.
- Retain dominant existing visual landscape characteristics.
- Develop strategies to address specific landscape issues for the Study Area.

5 Visual impact assessment

5.1 Photo montage analysis

Photo montages were analysed using visual impact criteria to determine dominant visual elements, which include line, form, colour and texture. The outcome of this analysis is a percentage score that determines the level of visual impact (magnitude of change), either being not visible (not evident), moderately visible (blending) or highly visible (prominent). To determine the overall impact level or the significance of the impact, the result of the visual impact analysis is combined with the Significance Level and the Visual Management Objective (VMO) of the Study Area.

Photo montages of the proposed Welshpool Concrete Plant were prepared from four view locations with direct views of the Welshpool Concrete Plant (refer **Figure 4** for view locations).

5.2 Visual impact summary

5.2.1 View location A: 11 Cohn St

LOCATION AND VIEW DESCRIPTION						
View Location and	Location: Outside the residence at 11 Cohn St, directly across from the entry gate.					
Direction	Direction: Looking southeast toward the Plant.					
Landscape	This viewpoint located at border of the Residential LCU and Light Industrial LCU.					
Character Units	The view includes the Light Industrial LCU.					
	The view is divided into visually distinct areas, separated into roughly horizontal bands.					
	The grey asphalt road occupies the lower part of the view. It has a very consistent appearance, both in its grey colour and stippled visual texture, with only minor variations through cracks and stains on the road surface.					
Existing view	The lefthand and righthand sides in the middle of the view are dominated by vegetation. This provides an appealing mix that varies in height (approximately 1m to 20m), form (manicured shrubs to natural tree habit), texture (small and large leaves) and colour (bright greens to dull blue-grey foliage).					
	Left-of-centre in the view is the driveway and access gate, with the silos visible above. These elements are all light coloured (white and light grey) with a flat visual texture.					
	The top of the view is the sky, which will change considerably depending on weather conditions and time of day.					
	VISUAL SENSITIVITY					
View Significance	+ Significance Level 3 – local significance.					
Most preferred	+ presence of trees, greenery, street trees					
characteristics (Landscape Values)	 + well maintained gardens + services being underground to reduce cabling and severance of street trees 					
Least preferred characteristics	+ none					

Visual Management Objective	+ Employ the 'Best practice siting and design' VMO to ensure that the proposed upgrades consider the existing landscape character and retain dominant existing visual landscape characteristics.					
		VISIB	ILITY ANALY	SIS		
Visual descriptor	Not Evident	Blending	Prominent	Comment		
Line			Х	The vertical lines of the silos contrast clearly against the predominantly horizontal lines of the road, screening vegetation and access gate.		
Form			Х	The tall, cylindrical form of the proposed silos protrudes above the line of the screening vegetation and is markedly different to other forms within the view.		
Colour		X		The light colours selected for the visible silos and Cohn St entry gate are consistent with existing silos and gate and with other built form in the Light Industrial LCU. The continuation of the existing planting regime along the Cohn St verge reinforces the green horizontal band through the middle of the view.		
Texture		x		The flat textures of the silos and gate are similar to those in the existing view, and consistent with other built form in the Light Industrial LCU. The proposed planting continues the variable texture of the verge vegetation.		
Visibility Score		50%	50%	Blending / Prominent		
ANTICIPATED VISUAL IMPACT						
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible from view location A. The colour and texture of the proposal blend with the existing character of the site, whereas the line and form appear prominent in the view at this location.					
Visual Impact Rating	Level 3					
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The siting and design of the proposal includes measures that attempt to integrate it with its surrounding landscape character, including the colouring of the silos and access gate, and the extension of the existing verge landscape approach. Mitigation strategies to further improve the blending of the Plant into the site include the selection of <i>Eucalyptus victrix</i> as the tree species for verge planting, which grows to approximately 8m high and 4m wide, which will increase screening of the silos as the trees establish.					



Figure 9: View Location A – existing view towards the Welshpool Concrete Plant



Figure 10: View Location A – proposed view towards the Welshpool Concrete Plant

5.2.2 View Location B: Corner of Cohn St and Downing St

	I	OCATION A	ND VIEW DES	SCRIPTION		
View Location and	Location: The corner of Cohn St and Downing St.					
Direction	Direction: Looking east toward the Plant.					
Landscape	This viewpoint located at border of the Residential LCU and Light Industrial LCU.					
Character Units	The view inclu	des the Light I	Industrial LCU			
	The grey asphalt road occupies a large proportion in the lower part of the view. It has a very consistent appearance, both in its grey colour and stippled visual texture, with only minor variations through stains and sand on the road surface.					
Existing view	The centre and far righthand side of the view encompass a variety of buildings associated with the light industrial use of the area. These exhibit geometric, straight-line forms that create a segmented, irregular horizon line. The buildings are generally lighter colours applied in large, flat expanses with little variation within each building. Visual texture is provided by the details on the buildings (awnings, windows) and smaller elements including signage and fencing.					
	The lefthand and righthand sides in the middle of the view provides views to vegetation. The vegetation to the left of the view is more appealing, with large, healthy trees and an understorey of bright green, well-maintained lawn. The vegetation to the right of the view appears to be in poorer condition, with the trees having dead branches and an understorey of unkempt verge and bare sand.					
The top of the view is the sky, which will change considerably depending on w conditions and time of day.				nange considerably depending on weather		
		VISU	AL SENSITIVI	TY		
View Significance	+ Significance Level 3 – local significance.					
Most preferred characteristics (Landscape Values)	 + presence of trees, greenery + coherence of industrial buildings in one area + services being underground to reduce cabling and severance of street trees 					
Least preferred characteristics	+ run-down areas (bare sand)					
Visual Management Objective	 Employ the 'Best practice siting and design' VMO to ensure that the proposed upgrades consider the existing landscape character and retain dominant existing visual landscape characteristics. 					
		VISIB	ILITY ANALY	sis		
Visual descriptor	Not Evident	Blending	Prominent	Comment		
Line		Х		The vertical lines of the silos and aggregate store are consistent with lines in the façades of the buildings in the foreground of the view. The proposed Plant maintains the irregular, segmented horizon line above the buildings.		

Form			Х	The tall, cylindrical form of the proposed silos protrudes above the roofline of existing buildings and is markedly different to the flat-sided forms of the buildings and irregular forms of vegetation in the view. However, the box-like form of the aggregate store blends with the buildings in front of it.			
Colour		Х		The light colours selected for the silos and aggregate store are consistent with the built form in the foreground of the view, and typical of those found in the Light Industrial LCU.			
Texture		Х		The flat textures of the silos and aggregate store are consistent with the flat featureless panels of the built form in the foreground of the view.			
Visibility Score		75%	25%	Blending			
	ANTICIPATED VISUAL IMPACT						
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible but blending with the existing character of the site.						
Visual Impact Rating	Level 3						
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The landscape character, view experience and landscape values identified in the visual landscape evaluation are retained using colours and textures that blend with the existing industrial character of the site, and the siting behind other built form contributes to the segmented line of the horizon.						



Figure 11: View Location B – existing view towards the Welshpool Concrete Plant



Figure 12: View Location B – proposed view towards the Welshpool Concrete Plant

5.2.3 View Location C: Corner of Briggs St and Downing St

LOCATION AND VIEW DESCRIPTION						
View Location and	Location: The	corner of Brigg	gs St and Dow	ning St.		
Direction	Direction: Looking north toward the Plant.					
Landscape	This viewpoint located within the Light Industrial LCU.					
Character Units						
		=		oportion in the lower part of the view. It has a very our and stippled visual texture.		
	Because of the view location on the corner of Briggs St and Downing St, and the topography that drops away along Downing St, the built form only takes up a small horizontal band in the centre of the view. The visual texture here is very detailed due to the open, vertical lines of garrison fencing that allows views through to the yard of building materials at Slab and Garden City. The colours are a range of grey, blacks, yellows and browns.					
Existing view	The central band of build form continues to the left of the view at roughly the same height, transitioning into a view of canopies in Downing St and the suburb beyond. The tree canopies exhibit rounded forms in a range of light and dark green colours.					
	In the view northeast along Briggs St, large trees on the verge provide a cluster of vertical forms not found elsewhere in the view. The trees appear to be in poor condition, some possibly dead, however the turn and vegetation on the opposite verge is healthy and well-maintained.					
	The top of the conditions and	-	y, which will ch	hange considerably depending on weather		
VISUAL SENSITIVITY						
View Significance	+ Significance Level 3 – local significance.					
Most preferred characteristics (Landscape Values)	presence of trees, greenery coherence of industrial buildings in one area					
Least preferred characteristics	+ run-down areas (bare sand)					
Visual Management Objective		e existing land		esign' VMO to ensure that the proposed upgrades oter and retain dominant existing visual landscape		
		VISIBI	LITY ANALY	SIS		
Visual descriptor	Not Evident	Blending	Prominent	Comment		
Line			х	The vertical lines of the proposed silos, plant core, and aggregate store contrast clearly against the predominantly horizontal banding of built form in the view. Additionally, the strong diagonal line of the conveyor stands out against other built form and the sky behind.		
Form			X	The vertical forms of the proposed silos, plant core, aggregate store and conveyors protrude high above the horizontal band of existing built form in the view.		

Colour		Х		The light colours selected for the silos and aggregate store are consistent with built form in the view, and typical of those found in the Light Industrial LCU.		
Texture		Х		The flat textures of the silos and aggregate store are consistent with the flat panels of other built form in the view.		
Visibility Score		50%	50%	Blending / Prominent		
	1	ANTICIPAT	TED VISUAL	IMPACT		
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible from view location A. The colour and texture of the proposal blend with the existing character of the site, whereas the line and form appear prominent in the view at this location.					
Visual Impact Rating	Level 3					
Pennance to Vigual	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The siting and design of the proposal includes measures that attempt to integrate it with its surrounding landscape character, including the colour and texture of the visible built form.					
Response to Visual Management Objectives	The visual impact is lessened by the view location being located within the Light Industrial LCU, where the viewer is likely to be travelling by car and moving through the area, not lingering.					
	Mitigation strategies would be difficult to implement in this location given the height of the proposed Plant above other built form, and the corner location being unsuitable for the planting of trees to screen views.					



Figure 13: View Location C – existing view towards the Welshpool Concrete Plant



Figure 14: View Location C – proposed view towards the Welshpool Concrete Plant

5.2.4 View Location D: Corner of Cohn St and Jupiter St

	ı	LOCATION A	ND VIEW DES	SCRIPTION			
View Location and	Location: The corner of Cohn St and Jupiter St.						
Direction	Direction: Looking south toward the Plant.						
Landscape	This viewpoint located at border of the Residential LCU and Light Industrial LCU.						
Character Units	The view inclu	des the Light	Industrial LCU	L.			
	The grey asphalt road occupies a large proportion in the lower part of the view. It has two distinct appearances; the lighter grey portion has a smoother appearance, and the darker grey portion appears rougher. Both exhibit minor variations through stains and sand on the road surface.						
Existing view	In the centre of the view a solid red Colorbond fence draws the eye. Visible above the fence are buildings and walls associated with the light industrial use of the area. Their geometric, straight-line forms that create a segmented, irregular horizon line. The buildings and walls on the right are lighter in colour, predominantly grey and white, while the building on the left has cream-coloured walls and a red roof to match the fence panels. While the buildings and walls appear generally flat, visual texture is provided by vertical banding of the fence panels, and the sea container behind it.						
	Vegetation in the view provides partial screening to the built form. Large trees in the left and centre of the view break up views of the built form, and the large shrubs in the right of the view obscures the high wall behind it. The mix of foliage varies in height, form, texture and colour. The top of the view is the sky, which will change considerably depending on weather conditions and time of day.						
		VISU	AL SENSITIV	TY			
View Significance	+ Significance Level 3 – local significance.						
Most preferred characteristics (Landscape Values)	 + presence of trees, greenery + coherence of industrial buildings in one area + services being underground to reduce cabling and severance of street trees 						
Least preferred characteristics	+ graffiti						
Visual Management Objective	 Employ the 'Best practice siting and design' VMO to ensure that the proposed upgrades consider the existing landscape character and retain dominant existing visual landscape characteristics. 						
		VISIB	ILITY ANALY	SIS			
Visual descriptor	Not Evident	Blending	Prominent	Comment			
Line		Х		The vertical lines of the silos and plant core are consistent with the lines of the buildings and walls in the foreground of the view. The silos are partially screened by a large existing tree.			

Form			х	The tall, cylindrical form of the proposed silos protrudes above the roofline of existing buildings and is markedly different to the flat-sided forms of the proposed plant core, existing buildings and irregular forms of vegetation in the view. The impact is reduced by partial screening from a large existing tree.		
Colour		Х		The light colours selected for the silos and aggregate store are consistent with the built form in the foreground of the view, and typical of those found in the Light Industrial LCU.		
Texture		Х		The flat textures of the silos and aggregate store are consistent with the flat featureless panels of the buildings and walls in the foreground of the view.		
Visibility Score		75%	25%	Blending		
	ANTICIPATED VISUAL IMPACT					
Anticipated visual change	The photo montage analysis has revealed that the proposed Welshpool Concrete Plant upgrade is visible but blending with the existing character of the site.					
Visual Impact Rating	Level 3					
Response to Visual Management Objectives	The development is compatible with the 'Best practice siting and design' VMO assigned to this view. The landscape character, view experience and landscape values identified in the visual landscape evaluation are retained using colours and textures that blend with the existing industrial character of the site, and the siting behind other built form contributes to the segmented line of the horizon. Screening of the Plant from an existing tree helps reduce the visual impact of the proposal.					



Figure 15: View Location D – existing view towards the Welshpool Concrete Plant



Figure 16: View Location D – proposed view towards the Welshpool Concrete Plant

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Appendix 1: Preference indicators

The table below lists the visual preference indicators for built environments (WAPC 2007).

Most preferred built landscape characteristics

- · presence of trees, greenery, parks and gardens, street trees, canopied streets, median strip vegetation
- complementary building styles in neighbourhoods
- diverse building styles in neighbourhoods
- built developments that do not impinge on dominant natural features (for example, the Darling Scarp, river foreshores and coastal landscapes)
- coherence of industrial buildings in one area (e.g. industrial parks and buffers)
- · elevated landforms and undulating terrain
- presence of water bodies
- presence of natural rock features (ego limestone cliffs, granite outcrops)
- · historic features including land uses that strengthen the local urban character
- well maintained gardens (native and exotic)
- incorporation of significant cultural and environmental features into urban design
- urban water management (water bodies that are well maintained, and open drains with a complementary appearance to the surrounding built form)
- development sites supporting and enhancing the urban context in which they are located
- development sites designed so they strengthen local character and promote a sense of community
- · design which takes account of landscape features, vegetation and landform
- services being underground to reduce cabling and severance of street trees
- unobtrusive mobile phone towers and other utility towers
- unobtrusive advertising
- presence of community artworks
- multi-storey buildings that maintain the CBD character (graduated skyline and gaps between clusters of buildings to allow views).

Least preferred built landscape characteristics

- · derelict industrial areas (junkyards)
- · large carparks without trees
- run-down areas (dead grass, bare sand, dead vegetation, derelict housing and/or buildings, abandoned and/or trashed cars)
- graffit
- intrusive billboards (particularly along roads and railway reserves)
- buildings which contrast sharply from the surrounding built character (large isolated shopping centres, apartments, hotels)
- arterial highways with strip commercial and light industrial developments, lacking trees and other vegetation
- utilities (towers, transmission lines, overhead powerlines)
- severed or badly pruned street trees
- lack of vegetation
- degraded areas prone to depreciative uses and unregulated vehicle activities
- poorly maintained waterways and drains prone to stagnation, pollution and littering
- extensive areas of urban sprawl lacking vegetation or public open space
- · extensive retaining walls which result in concrete canyon effects on roadways
- buildings that create a solid wall effect (no gaps to allow views between buildings).

Appendix 2: Significance levels

The table below lists the significance levels which also refer to public sensitivity (WAPC, 2007).

Level 1: national / state significance

- State highways and other main roads (sealed or unsealed) with high levels of vehicle usage
- designated tourist routes, scenic drives
- recreation, conservation, cultural or scenic sites, areas, viewpoints and lookouts of state or national significance, including their access routes
- walking, cycle or bridle tracks of national or state significance
- towns, settlements or residential areas
- passenger rail lines
- navigable waterways of national or state recreation importance
- ocean sites of national or state recreation importance e.g. surf breaks
- views of national or state importance.

Level 2: regional significance

- main roads with moderate levels of vehicle usage (sealed or unsealed)
- recreation, conservation, cultural or scenic sites, areas, viewpoint, and lookouts of regional or high local significance (including their access routes)
- navigable waterways of regional recreation significance
- walk, cycle or bridle paths of regional significance
- views of regional importance.

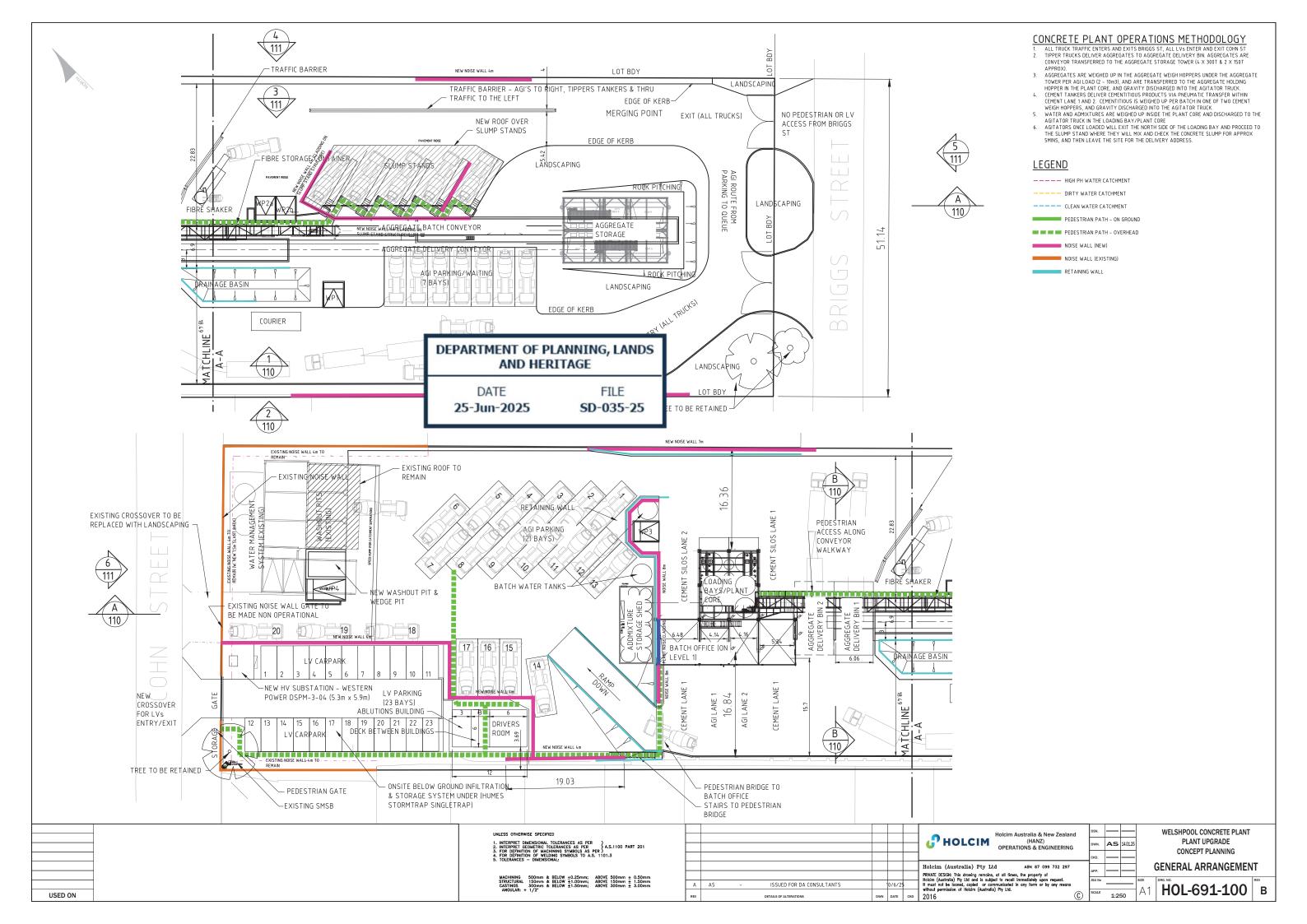
Level 3: local significance

- all remaining roads with low levels of vehicle usage
- locally significant roads or tracks
- recreation and other use areas of local significance
- navigable waterways of local recreational significance
- walk, cycle or bridle paths of local significance
- views of local importance.

Explanatory note - significance increases with the:

- · importance of views, including type, features and rarity
- volume of use of roads, trails and navigable waterways
- degree of sensitivity of viewers; those who are more likely to be more sensitive include wilderness users, other recreational users, tourists, people who choose to live in an area because of its landscape character and views (e.g. assessed by noting how vocal observers are about specific travel routes or use areas, indicated in letters, protests etc.)
- degree to which experiencing the landscape is integral to enjoyment of a travel route or site is it the focus
 of the use, as in recreational use, or just incidental, as is more likely with people using a route to work?
- length of duration of a view; range could include glimpses from a high-speed road, longer duration views
 obtained from roads used for sightseeing or from recreation sites and Lookouts and very long and
 frequent views from the main living areas of homes.

Appendix 3: Proposed development



Landscape Concept Design

WELSHPOOL CONCRETE PLANT UPGRADE

04.06.2025 Draft Landscape Concept Design Package

12.06.2025 Development Application





KEY INFORMATION

Site address: **Local Authority:** Zoning:

Light Industry / Industrial 1 Local Planning Policy: Local Planning Scheme No. 2

Briggs Street, Welshpool

Town of Victoria Park

TOWN OF VICTORIA PARK LOCAL PLANNING SCHEME NO. 2 REQUIREMENTS

Street Setback: Landscaping:

Minimum of NIL

1. Where a street setback is provided, a minimum of 25% of the street setback area between the site boundary and the building(s) shall be landscaped.

2. Where parking bays are provided between the site boundary and the buildings, shade trees shall be provided at a rate of one tree per four bays.

TOWN OF VICTORIA PARK VERGE TREATMENT REQUIREMENTS

Verge: For verges without footpath, all verge treatment are to be set back

1.5m from the road frontage.

No plant is to be more than 750mm when mature, or of hazardous nature. Landscaping:

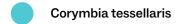
Paving: 25% of the verge area, excluding crossover.

Scale 1:2500 @A3 CaPA Landscape DA, WELSHPOOL CONCRETE 12.06.2025

Page 2



EXISTING STREET TREES



Corymbia ficifolia

Eucalyptus gomphocephala

Melaleuca styphelioides

Ficus macrocarpa

- **Brachychiton populneus**
- Melaleuca saligna
- Jacaranda mimosifolia
- Lopphostemon confertus
- Corymbia calophylla

- Agonis flexuosa
- Eucalyptus marginata
- Bauhinia acuminata
- Eucalyptus camaldulensis
- Syzygium + Radermachara hedging

Eucalyptus gomphocephala to be removed

- Corymbia ficifolia tobe removed due to poor health
- Deceased verge tree to be removed
- //// Hibiscus Cottonwood hedging

EXISTING SITE TREES

Mature corymbia sp. to be retained

Corymbia maculata to be removed

Mature corymbia sp. to be retained





Street tree (DECEASED) Ficus macrocarpa



Site Tree Briggs Street Mature corymbia sp.



Neighbouring hedging on Briggs Street
Syzygium and radermachera hedge with lawn /////



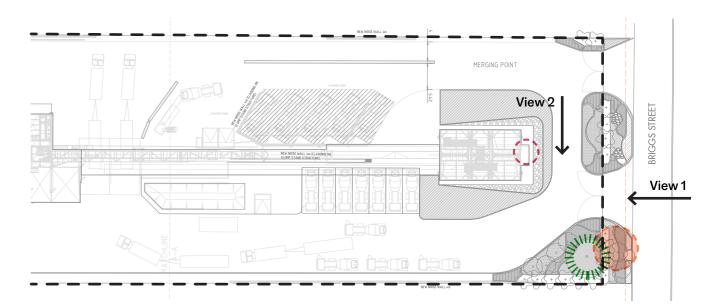
Site Tree Corymbia maculata



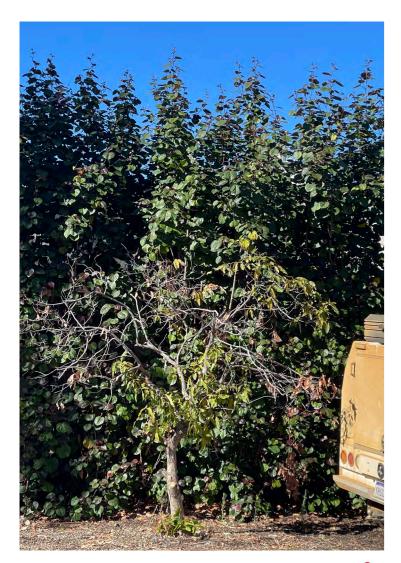
View 1 - Briggs Street Entrace



View 1 - Briggs Street Entrace











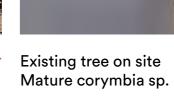
Street trees

Eucalyptus gomphocephala







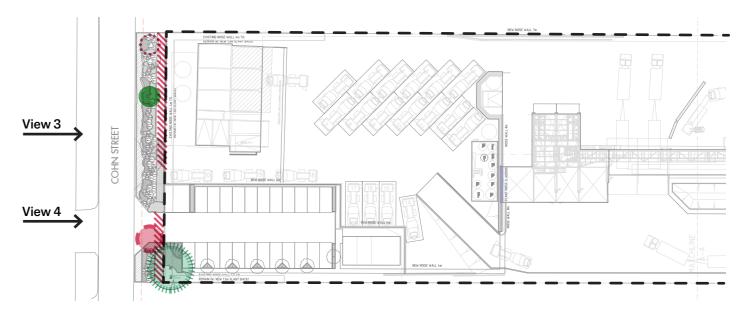


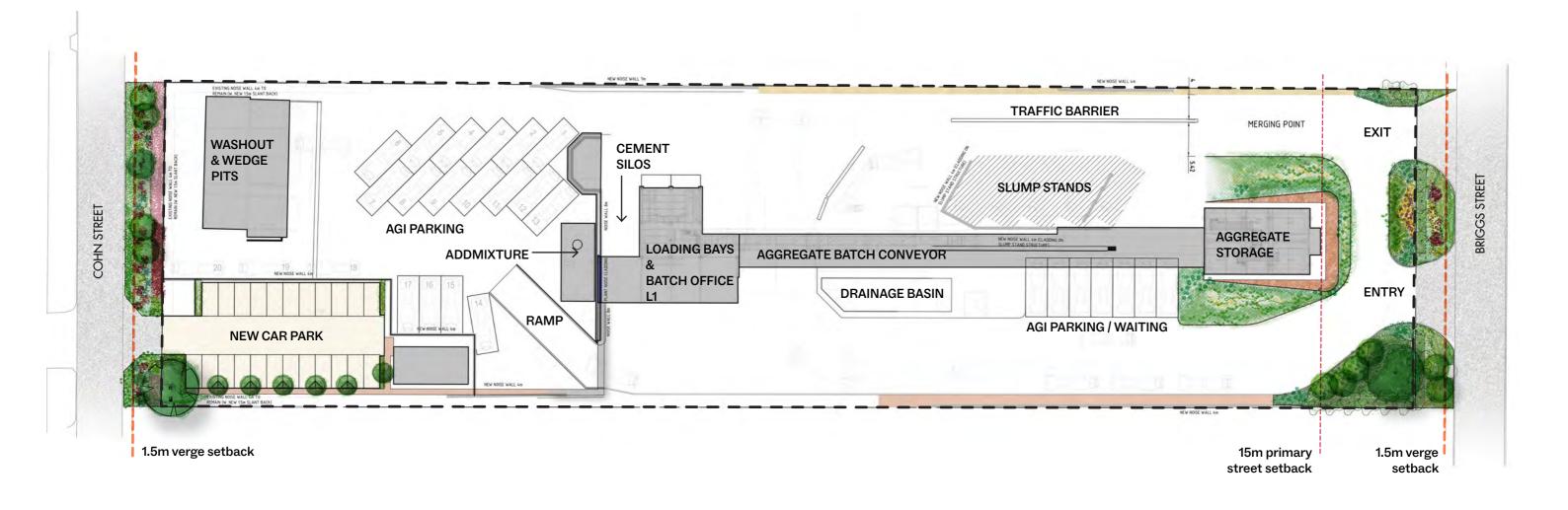


View 3 - Cohn Street



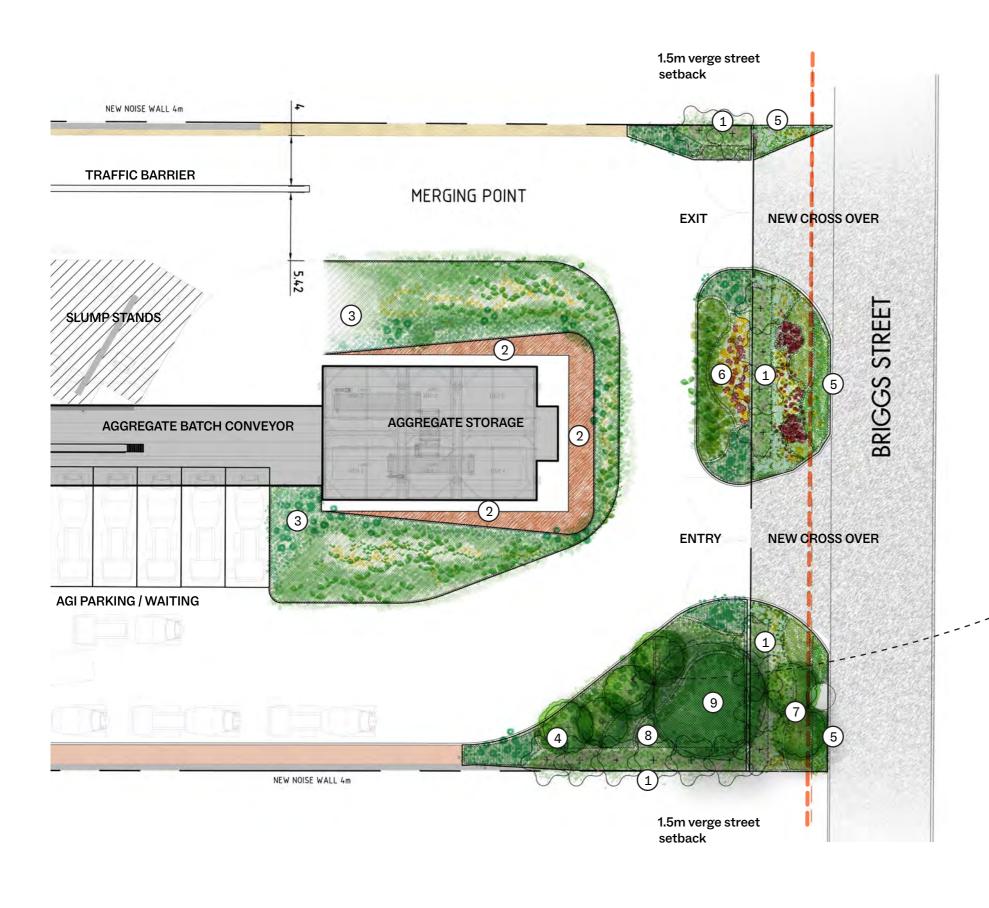
View 4 - Cohn Street





Scale 1:600 @A3

CaPA



COHN STREET KEY ITEMS

- 1. New screening trees_ Hakea laurina 'Pin cushions'
- 2. Rock pitching zone
- 3. New swale planting mix_

Atriplex nummularia 'Oldman Salt Bush', Scaevola crasscifolia, Ficinia nodosa, Lepidosperma calcicola 'Coastal sedge'

- 4. New large site trees _ Eucalyptus Victrix
- 5. Verge planting to Town Of Victoria Park verg requirements and guidelines' satisfactory_ planting within 1.5m verge street setback to be low level ground cover.
- 6. New feature landscaping with lush colourful foliage and flowering shrubs _

Ficinia nodosa, Westringia mundi Anigozanthos flavidus Yellow & Bush endeavor Lepidosperma calcicola 'Coastal sedge' Correa alba

- 7. New street trees _ Eucalyptus Victrix
- 8. Mid tiered shrub planting underneath existing mature trees _ mixed species of

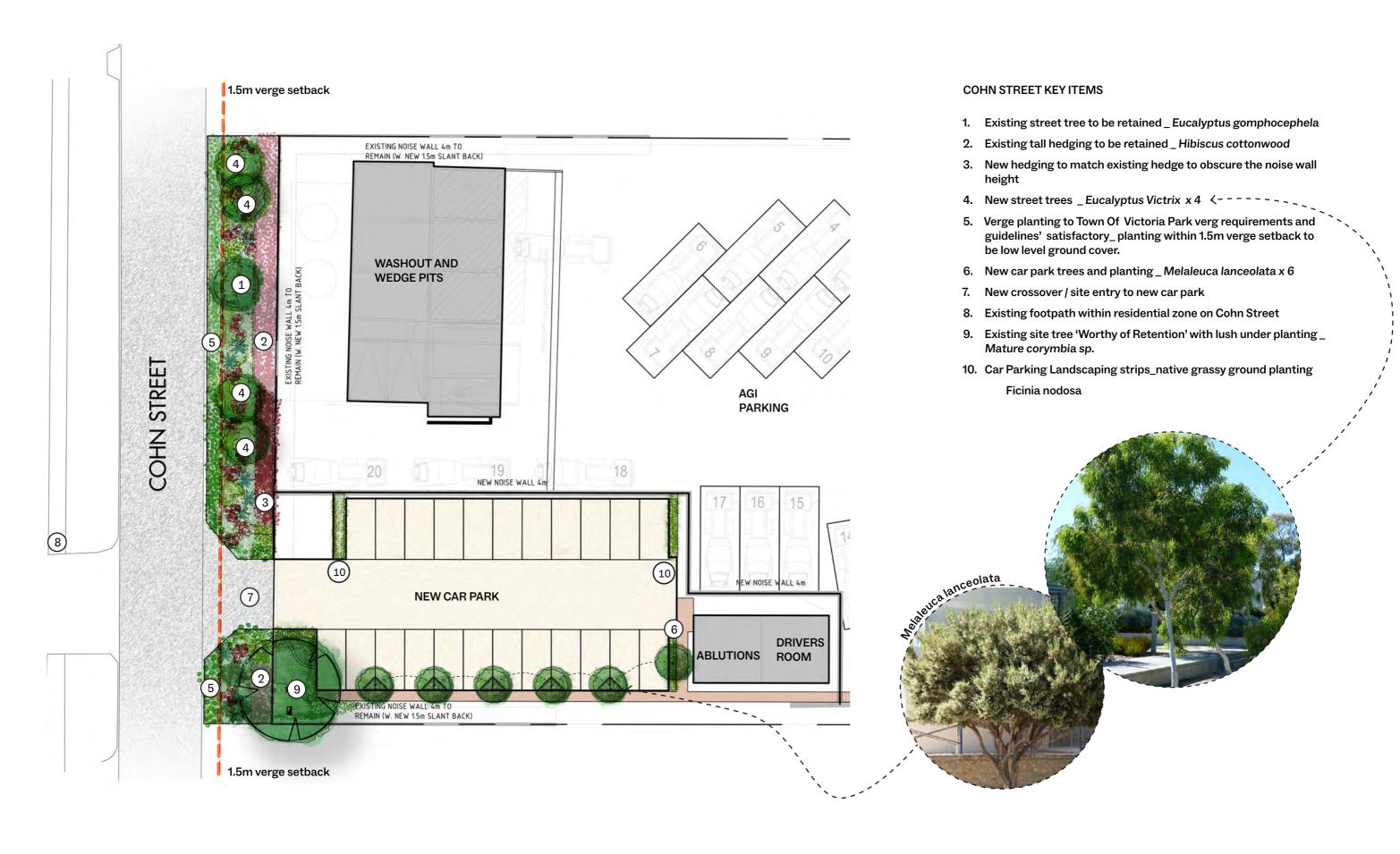
Atriplex nummularia 'Oldman Salt Bush', Scaevola crasscifolia, Correa alba, Ficinia nodosa, Westringia Mundi and Poa labillardieri Eskdale.

9. Existing site tree 'Worthy of Retention'_Mature corymbia sp.

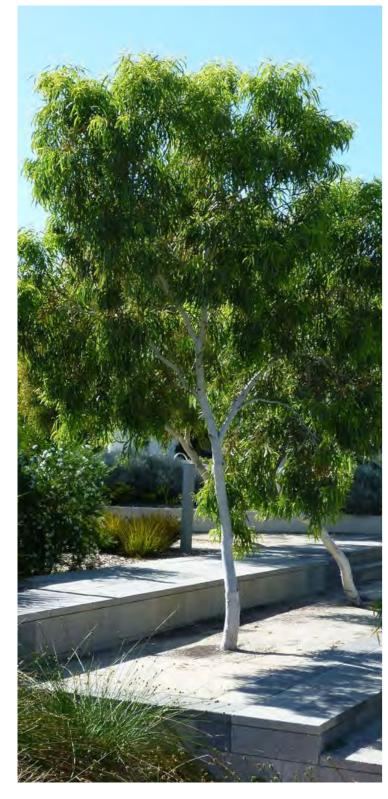


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Scale 1:300 @A3



12.06.2025



Feature Trees Briggs Street Entry Eucalyptus Victrix Snow Queen 8m h x 4m w AUS native

Town of Victoria Park Suggested Tree Species List



Cohn Street Car Park Trees Melaleuca lanceolata 7m h x 3m w WA native

Town of Victoria Park Suggested Tree Species List



Screening Briggs Street Hakea laurina 'Pincushion Hakea' 6m h x 5m w AUS native

Town of Victoria Park Suggested Tree Species List



Feature Flowers
Anigozanthos 'Bush Endeavour' – Kangaroo Paw
2m h x 1.5m w
AUS native



Feature Flowers Anigozanthos flavidus Yellow 2m h x 1.5m w Aus native



Ground cover Eremophila glabra 'Kalbarri Carpet' 0.2m h x 2m w WA native



Ground cover Myoporum parvifolium 'Creeping Boobialla' 0.3m h x 2m w AUS native



Under Planting Atriplex nummularia 'Oldman Salt Bush' 3m h x 3m w AUS native



Under Planting Scaevola crassifolia 1.5m h x 1.5m w WA native



Shrub Correa alba 1.5m h x 1.5m w AUS native



Shrub Westringia fruticosa Mundi 0.5m h x 1.5m w AUS native



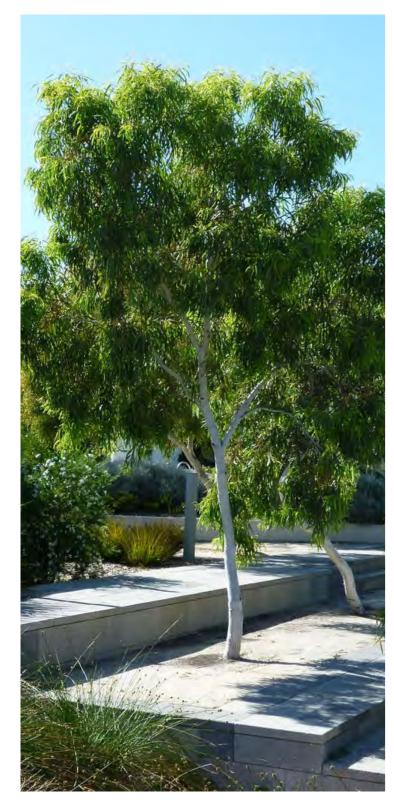
Native grass Ficinia nodosa 1m h x 1m w AUS native



Soft foliage Poa labillardieri Eskdale 1m h x 1m w AUS native



Grass shrub Lepidosperma calcicola 'Coastal sedge' 0.6m h x 0.5m w AUS native



New Street Trees Eucalyptus Victrix Snow Queen 8m h x 4m w AUS native

Town of Victoria Park Suggested Tree Species List



Screening Treees Briggs Street Hakea laurina 'Pincushion Hakea' 6m h x 5m w AUS native

Town of Victoria Park Suggested Tree Species List



Hedging Cohn Street Hibiscus Cottonwood

Hedging to match existing on Cohn Street



Feature foliage
Banksia blechnifolia
0.5m h x 3m w
AUS native
ToVP recommended species



Feature Shrub Anigozanthos Bush Pizzazz 0.7m h x 0.8m w AUS native



Groundcover within 1.5m Verge Setback Zone Acacia saligna prostrate 0.3m h x 3m w AUS native



Shrub
Westringia grey box
0.5m h x 0.5m w
AUS native



Groundcover
Grevillea Gin Gin Gem
0.3m h x 2m w
AUS native
ToVP recommended species



Flowering Shrub Conostylis candicans 0.3m h x 0.5m w AUS native

ToVP recommended species

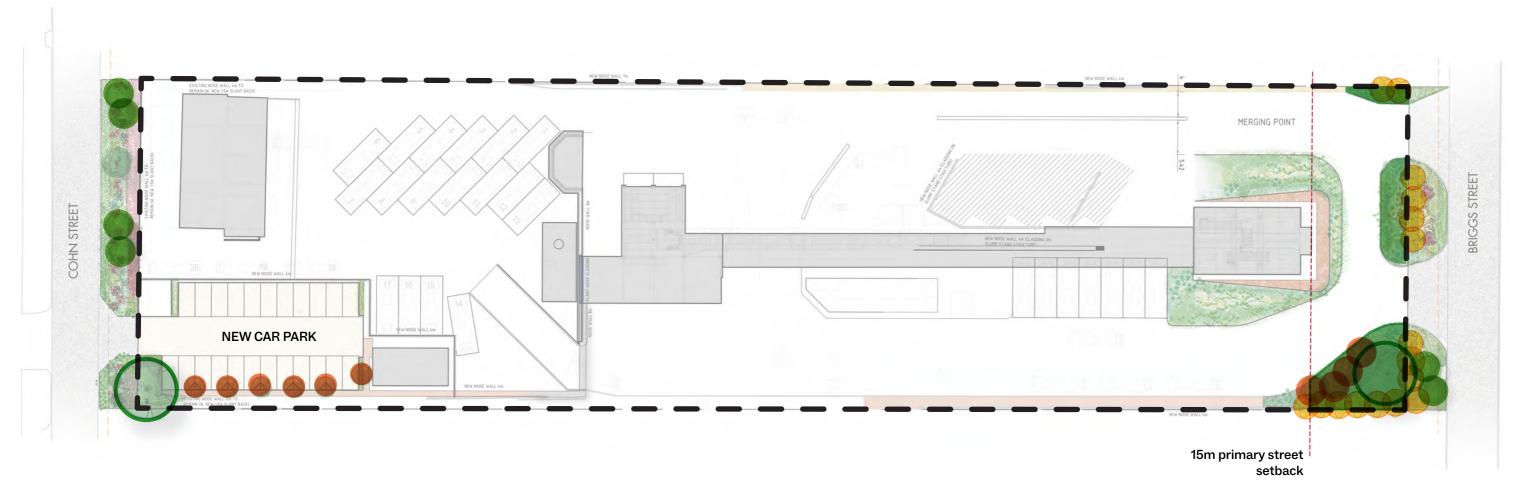


Shrub
Olearia lanuginosa 'Ghost Town'
0.7m h x 1m w
AUS native
ToVP recommended species



Soft foliage Lomandra tanika 0.7m h x 0.7m w AUS native

Grass shrub Lepidosperma squamatum 0.7m h x 0.7m w AUS native



LEGEND

Existing trees 'Worthy of Rentention'

New Site trees - Large

New Site trees - medium

New Street trees - Large

Landscape area provision

Verge treatment

Site Boundary

— — Site Street Set Back

LANDSCAPE METRIC CALCULATIONS

Lot Size	10321m ²
Local Authority	Town of Victoria Park
LPS Zoning	Light Industrial
Total area within primary street setback zone	787 m ² (15m setback from boundary to edge of building on Briggs Street)
Landscape Area Requirement	236m² 25% of total area within primary street setback zone
Landscape Area Provision with primary street setback zone	300m2 (30% above requirement)

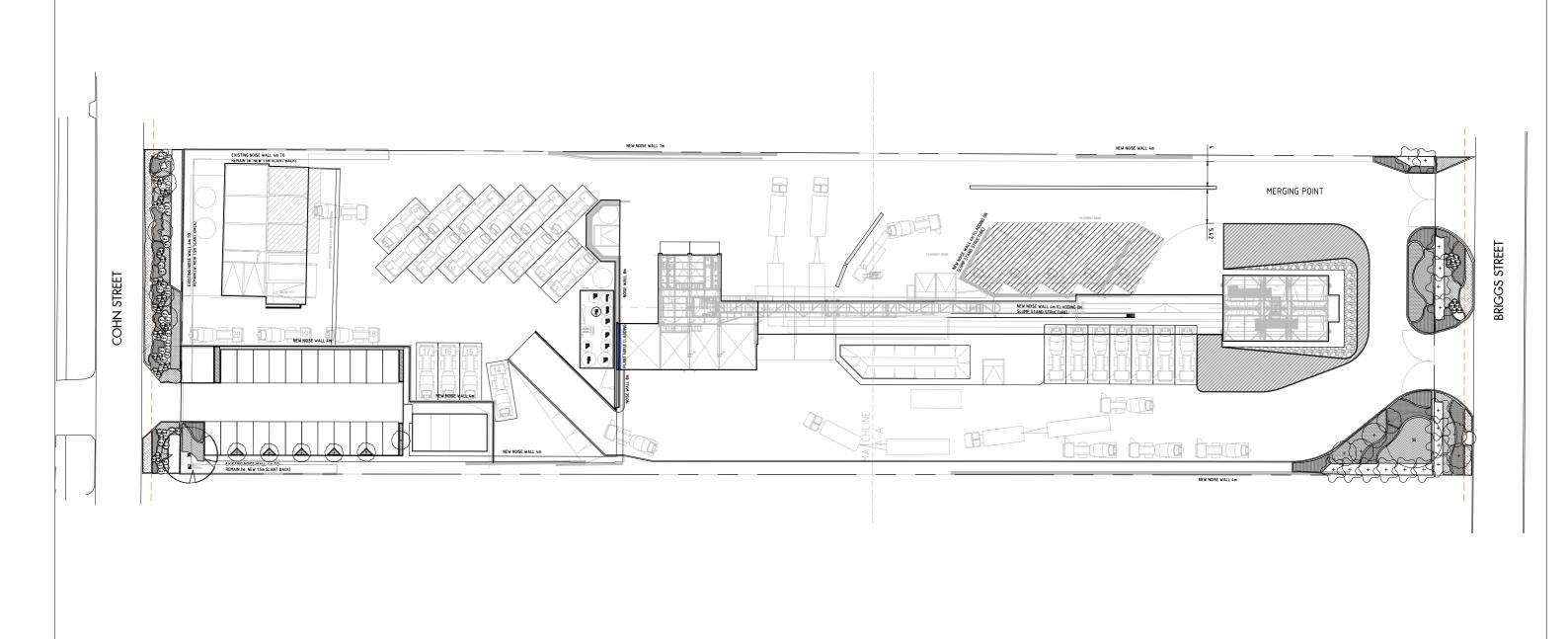
SUMMARY

The proposed development has exceeded the required landscaping area within the primary street setback by 30%. The total number of trees provided also exceeds the minimum requirement, contributing positively to the streetscape and urban

The tree provision calculation and size definition has been guided by Town of Victoria Park - Local Planning Policy no. 39

Overall New Trees Requirement	14 new trees Local Planning Policy no. 39 calculations: 'Total number of trees required may be reduced to a rate of 1 tree for every 500m2 for each 'tree worthy of retention' that is retained on site, or 'large tree' that is provided. 2 x trees worthy of retention = 1000m² 10 x large tree provision = 5000m² Total number of new tree required are calculated based on the reduced lot size due to having trees worthy of retention and large trees provision on site. Hence total lot size = 4321m²
Trees Retention	2 tree 'Worthy of Retention' within site boundary
Landscape Trees Requirement within New Car Park	6 new trees (1 per 4 car bays, 23 car bays provided on Cohn Street)
Street Trees Provision	6 large street trees 8 medium street trees Total Street Trees provision = 14 new trees
Site Trees provision	6 large trees to Cohn Street New Car Park 4 large trees 8 medium trees Total Site Trees provision = 18 new trees
Total New Trees Provision	32 new trees (16 large tree + 16 medium trees)

Landscape DA, WELSHPOOL CONCRETE Scale 1:600 @A3 12.06.2025 Page 14



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DEPARTMENT OF PLANNING, LANDS AND HERITAGE DATE 25-Jun-2025 FILE SD-035-25 Holcim

NON. NOMINAL
DEC. OR APPROVED EQUIVALENT
10F 10P OF GRAVEL
10F 10P OF PLANTE
10F 10P

WELSHPOOL CONCRETE Brigg Street, WELSHPOOL OVERALL LANDSCAPE PLAN CONCEPT DESIGN

JC DESIGNED

JC PRINCIPAL

ILISTIN DATE MAY 2025
CLIENT PROJECT No. 2510 L1.01

DFTSC	APE SC	HEDULE PROVIDE PLANT STABLISATION , R	EF. SPEC		(XX-XX) TAG: MUL	S SHUWN UN CH AS SPEC.	DRAWINGS AF TO ALL AREA:	S IN THIS SCI	HEDULE.
MBOL		GROUND LEVEL TREES	DESCRIPT/REMARKS	ENVIROMENT	MATURITY	POT SIZE	SUPPLIER	SPACING	QTY
$\overline{\cdot}$	EX	Existing tree	Existing tree to remain. Protect during construction.						as show
*****	EX-H	Existing hedging	Portion of existing hedging to be retained.						as show
$\overline{\odot}$	Me-L	Melaleuca lanceolata 'Moonah'	WA native small tree with fine green foliage and clusters of small creamy-white bottlebrush flowers in Spring.	Full-sun position. Most soils	7m high 3m wide	150l†	ELLENBY	as per dwgs	as show
÷)	Eu-V	Eucalyptus victrix	Small native tree with open pendula habit. Smooth white bark, cream white flowers.	Full-part sun position. Most soils	8m high 4m wide	150l†		as per dwgs	-
€3	Ha-L	Hakea laurina Pin-cushion hakea'	Evergreen tall shrub or small tree with long, leathery blue-green foliage and ball-like red flowers in Autumn to Winter.	Full sun to part shade. Well drained soil.	6m high 5m wide	75l†		as per dwgs	
YMBOL		FEATURE PLANTING	DESCRIPT/REMARKS	ENVIROMENT	MATURITY	POT SIZE	SUPPLIER	SPACING	QTY
	Mix A	Westringia fruticosa grey box	Native shrub with masses of white flowers and green-grey foliage.	Full sun to part shade. Well drained soil.	45cm high 45cm wide	5lt	Contractor to nominate	4 per sqm	xx m²
		Lomandra longfolia 'Tanika'	Native evergreen grass shrub with fine strappy deep green leaves and small yellow flowers spikes Spring-Summer.	Full sun to full shade position. Well drained soil. Drought tolerant	70cm high 60cm wide	14cm		X per sqm X per lm	
		Lepidosperma squamatum	WA native grass shrub with strappy green foliage and creamy white flowers during winter.	Full-part sun position. Most soils	70cm high 60cm wide	14cm		as per dwgs	
		Conostylis candicans 'Cotton Heads'	Native evergreen shrub with strappy green weeping foliage and clusters of yellow flowers on long thin stems in Winter	Full-sun to part-shade position Well drained soil. thrives in salty, windy, coastal enviroments.	50cm high 50cm wide	14 cm		as per dwgs	
	Mix B	Scaevola crassifolia 'Flat Fred'	Native evergreen ground cover with round bright-green foliage and masses of small blue flowers in Summer	Full to part-sun position. Well drained soil. Suitable for coastal areas. Drought tolerant	1m high 1.5m wide	14cm		X per sqm X per lm	xx m²
		Atriplex nummularia 'Oldman Salt Bush'	Native shrub with silver foliage that are edible.	Full sun position. Well drained soil. Suitable for coastal areas.	3m high 3m wide	14cm		X per sqm X per lm	
	Mix C	Ficinia nodosa	Native evergreen grass with upright growth habit and brown flower spikes.	Full to part sun position. Well drained soil.	1m high 1m wide	14cm		4 per sqm	xx m²
		Lepidosperma calcicola 'Coastal Sedge'	Native WA evergreen grass with dense glossy green foliage and russet red-brown flowers during winter and spring.	Full-sun. Well drained soil.	60cm high 50cm wide	14cm			
		Anigozanthos 'Yellow gem'	WA native plant with green foliage and bright yellow flowers that appear in Spring and Summer.	Full sun – light shade. Sandy loam soil in well-drained position.	2m high 1m wide	14cm			
		Anigozanthos 'Bush endeavor'	WA native plant with green foliage and bright red flowers on highly branched stems.	Full sun – light shade. Sandy loam soil in well-drained position.	2m high 1.5m wide	14cm			
	Mix D	Ficinia nodosa	Native evergreen grass with upright growth habit and brown flower spikes.	Full to part sun position. Well drained soil.	1m high 1m wide	14cm		4 per sqm	xx m²
		Lepidosperma calcicola 'Coastal Sedge'	Native WA evergreen grass with dense glossy green foliage and russet red-brown flowers during winter and spring.	Full-sun. Well drained soil.	60cm high 50cm wide	14cm			
		Scaevola crassifolia 'Flat Fred'	Native evergreen ground cover with round bright-green foliage and masses of small blue flowers in Summer	Full to part-sun position. Well drained soil. Suitable for coastal areas. Drought tolerant	1m high 1.5m wide	14cm			
		Atriplex nummularia 'Oldman Salt Bush'	Native shrub with silver foliage that are edible.	Full sun position. Well drained soil. Suitable for coastal areas.	3m high 3m wide	14cm	-		
		Myoporum parvifolium alba 'creeping boobialla'	Native evergreen low spreading ground cover with prostrate nature, green ground leaves with small white flowers.	full sun to part shade position Well drained soil	15cm high 150cm wide	14cm			
		Eremophila glabra 'Kalbarri Carpet'	Native evergreen low spreading perennial with silvery foliage and yellow/orange tubular flowers from Spring-Summer.	full sun to part shade position Well drained soil	20cm high 2m wide	14cm			

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YMBOL		GROUND LEVEL PLANTING	DESCRIPT/REMARKS	ENVIROMENT	MATURITY	POT SIZE	SUPPLIER	SPACING	QTY
(кр-В)	Кр-В	Anigozanthos Kangaroo paw 'Bush Pizzazz'	Australian native ornamental flowering shrub with stems red flowers.	Full sun position. Well drained soil.	70cm high 80cm wide	14cm	Contractor to nominate	as per dwgs	xx m²
Ol-L	Ol-L	Olearia 'Little smokie'	Native, tough, compact growing shrub. Dense grey/silver/white foliage.	Full sun – semi shade. Well drained soil, will tolerate limestone soils.	1m high 1m wide	13cm		as per dwgs	xx m²
	Po-L	Poa labillardieri 'Eskdale'	Native perennial grass with ornamental blue foliage.	Full-Sun to part shade	60cm high 50cm wide	14cm		3 per sqm	xx m²
1 1 1	Fi-N	Ficinia nodosa	Native evergreen grass with upright growth habit and brown flower spikes.	Full to part sun position. Well drained soil.	1m high 1m wide	14cm		4 per sqm	xx m²
	Gr-G	Grevillea gin gin gem	Native low spreading shrub with bright green foliage and red flowers.	Full to part sun position. Well drained soil.	30cm high 2m wide	14cm		4 per sqm	xx m²
	Со-В	Correa alba 'White Correa'	Native evergreen shrub with rounded grey-green leaves. White flowers from Summer-Winter	Full sun to part shade position. Well drained soil. Coastal areas.	1-2m high 1-2m wide	14cm		X per sqm X per lm	xx m²
	We-M	Westringia fruticosa Mundi	Native small shrub with masses of white flowers and green-grey foliage.	Full sun to part shade. Well drained soil. Drought tolerant once established	40cm high 1.5m wide	14cm		4 per sqm	xx m²
	Hi-C	Murraya paniculata 'Orange Jessamine'	Evergreen dence shrub with fragrant flowers. Suitable for hedge.	Full sun to part sun position. Well drained soil.	3m high 3m wide	5lt		as per dwgs	7 no.
	Ва-В	Banksia blenchnifolia	Dwarf spreading native evergreen shrub with upright green leathery foliage and large pink-red flower cones producing in spring to summer	Full sun position. Well drained soil.	30cm high 2m wide	121†		as per dwgs	xx m²
	Ac-S	Acacia saligna prostrate	Native evergreen shrub with a low spreading nature. Fine weeping lime-green foliage with mass of golden yellow flowers in Spring.	Full to part sun position. Well drained soil.	30cm high 3m wide	20cm		4 per sqm	xx m²

LANDSCAPE PLANTING NOTES

- ALL GARDEN BEDS TO FINISH SOMM BELOW ADJACENT PAVEMENT AND TOP OF WALL LEVELS UNLESS OTHERWISE STATED ON DRAWINGS.

 ALL LAWN TO FINISH 40mm BELOW ADJACENT PAVEMENT LEVELS MULCH TO ALL GARDEN BEDS UNLESS NOTED OTHERWISE.

 MULCH TO FINISH 50MM LOWER FROM FLOOR LEVEL (FL) GENERALLY.

LANDSCAPE GENERAL NOTES

- EXISTING TREES ARE TO BE RETAINED AND PROTECTED WITH APPROPRIATE FENCING TO TREES PARAMETER.
 ALL ITEMS AND QUANTITIES NOTED IN THE SCHEDULE MAY NOT CONSTITUTE THE FULL
- EXTENT OF WORKS IN THE CONTRACT DOCUMENTS AND IS FOR GENERAL GUIDANCE OF THE TENDERER ONLY. REFER TO DRAWINGS

 ALL MEASURED AREAS TAKE PRECEDENCE OVER WRITTEN AREAS FOR PLANTING. WHERE
- THERE IS A DISCREPANCY BETWEEN THE TWO, CONTRACTOR IS TO TAKE THE LARGER AREA ROUNDED UP TO THE NEAREST WHOLE NUMBER. WRITTEN AREAS FOR COORDINATION PURPOSES ONLY.

 SITE MEASURE ALL METAL EDGING, SEATING, WALLING PRIOR TO FABRICATION AS PER
- LANDSCAPE SPECIFICATION. SITE MEASURE TO INCLUDE CHECKING OF EXISTING AND NEW FOOTING LEVELS OF ADJACENT BUILDINGS AND OTHER UNKNOWN SERVICES.

 CHECK ON SITE FOR EXACT EXTENT AND LOCATION FOR ALL SERVICE LOCATIONS
- INCLUDING DOWN PIPES, DRAIN LOCATION, DRAIN PITS AND SOAK WELLS.
- IRRIGATION TO BE DESIGN AND CONSTRUCT. CONTRACTOR TO SUBMIT IRRIGATION DESIGN DRAWINGS PRIOR TO COMMENCING INSTALLATION.



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DEPARTMENT OF PLANNING, LANDS AND HERITAGE 25-Jun-2025 SD-035-25 Holcim

NOM. NOMINAL
ONE OR APPROVED EQUIVALENT
ONE TOP OF GRAVEL
TOP TOP OF PLANTER
P. PLANTING LEVEL TOP OF MALCHS
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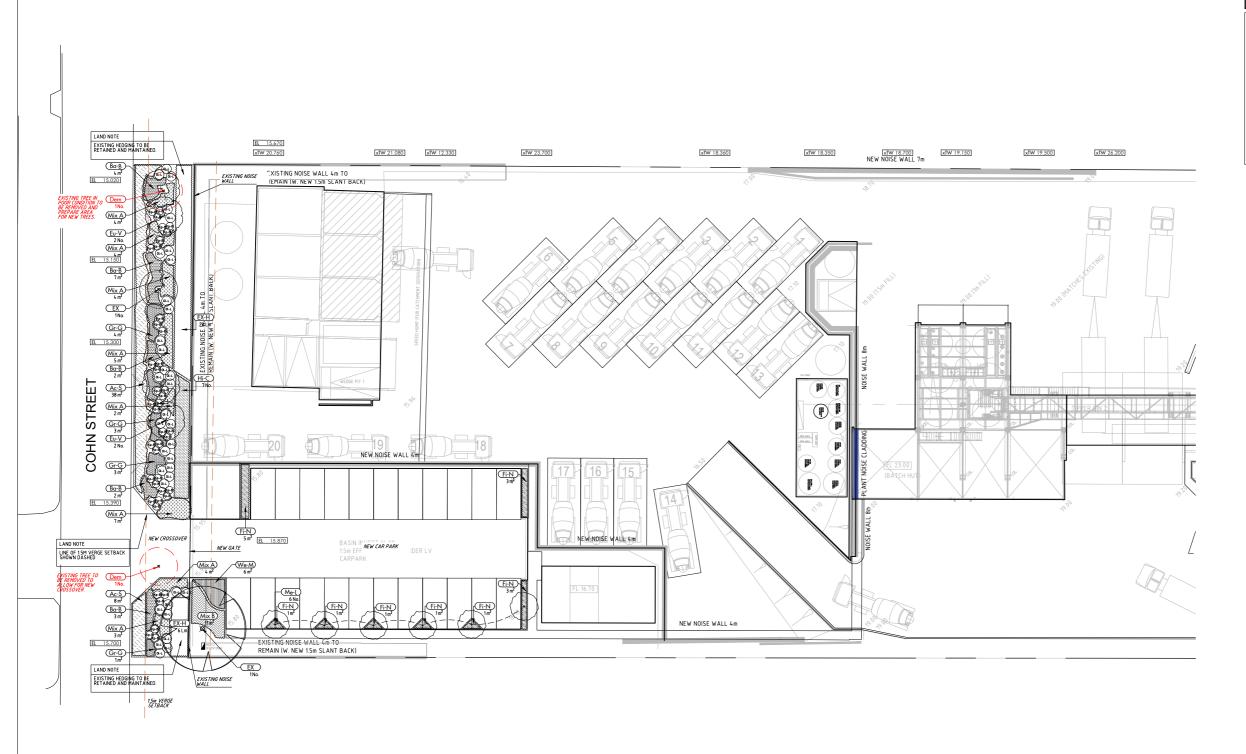
BY LARGE SCALE DWGS TAKE PRECEDENCE OVER SMALLER SCALE DWGS

SOFTSCAPE SCHEDULE

JC PRINCIPAL JUSTIN JUSTIN CARRIER DATE MAY 2025
CLIENT PROJECT No. CAPA PROJECT No.

CONCEPT DESIGN

L1.02



LANDSCAPE PLANTING NOTES

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