GREEN BEAN DESIGN landscape architects

Erskine Park Landfill Mechanically Stabilised Earth Wall

VISUAL IMPACT ASSESSMENT

Prepared for:

ENVIROGUARD PRIVATE LIMITED

Prepared by:

GREEN BEAN DESIGN
landscape architects

GREEN BEAN DESIGN PTY LTD
PO Box 3178 Austral NSW 2179
Principal: Andy Homewood BSc (Dual Hons), DipLM, DipHort, Registered Landscape Architect, AILA
(ABN: 86 603 575 702)

DOUCMENT CONTROL

Item	Detail
Project Name:	**Erskine Park Landfill – MSE Wall**
Report Title:	**Visual Impact Assessment**
Project Number:	**20-282**
Version Number:	**v2**
Status:	**Final**
Author:	**Andrew Homewood**, Registered Landscape Architect, AILA *Graduate Diploma Landscape Management, Bachelor Science (Dual Honours) Landscape Design and Archaeology, National Diploma Horticulture*
Date:	**7 April 2020**

Contents Page

Contents Page

Figures

Glossary

This Visual Impact Assessment has adopted the following definitions from *Guidelines for Landscape and Visual Impact Assessment*[1] (2013) and the Roads and Maritime Services (RMS) *Environmental Impact Assessment Practice Note Guideline for Landscape Character and Visual Impact Assessment EIA-N04*[2] (2013).

Table 1 Glossary

Cumulative effects[1]	*The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.*
Element (urban landscape)[1]	*Individual parts of the developed landscape which make up the urban environment (e.g. buildings, roads, bridges and parks).*
Indirect Impacts[1]	*Impacts on the environment, which are not a direct result of the development but are often produced away from it or as a result of a complex pathway.*
Magnitude[2]	*The measurement of scale, form and character of a development proposal when compared to the existing condition. In the case of visual assessment this relates to how far the proposal is from the viewer. Combined with sensitivity, magnitude provides a measurement of impact.*
Photomontage (Visualisation) [1]	*Computer simulation or other technique to illustrate the appearance of a development.*
Sensitivity[2]	*The sensitivity of a landscape character zone or view and its capacity to absorb change. In the case of visual impact this also relates to the type of viewer and number of viewers. Combined with magnitude, sensitivity provides a measure of impact.*
Visibility[2]	*The state or fact of being visible or seen*
Visual Absorption Capacity[1]	*The degree to which a particular landscape character type or area is able to accommodate change without unacceptable adverse effects on its character.*
Visual amenity[1]	*The value of a particular area or view in terms of what is seen.*
Visual envelope[1]	*Extent of potential visibility to or from a specific area or feature.*
Visual impact[2]	*The impacts on the views from residences, workplaces and public places.*

Table 1 Glossary

Visual Impact Assessment[1]	*A process of applied professional and methodical techniques to assess and determine the extent and nature of change to the composition of existing views that may result from a development.*
View location[1]	*A place or situation from which a proposed development may be visible.*
Visual receiver[1]	*Individual and/or defined groups of people who have the potential to be affected by a development.*

Section 1 Introduction

1.1 Introduction

Green Bean Design Pty Ltd (GBD) has been commissioned by EME Advisory Pty Ltd (EME) to prepare a Visual Impact Assessment (VIA) on behalf of Enviroguard Pty Ltd for the Erskine Park Landfill Mechanically Stabilised Earth Wall (MSE Wall).

This VIA Modification has been prepared to:

- identify and describe the proposed MSE Wall works
- assess the potential visual impacts associated with the MSE Wall works and
- determine the significance of visual effects.

Section 2 VIA objectives and methodology

2.1 VIA objectives

A key objective of this VIA is to determine the likely visual significance of the MSE Wall on people living and working in or travelling through the urban/rural landscape within and surrounding the existing landfill site. This VIA has also been undertaken to:

- assess the existing visual character of the landfill precinct as well as the surrounding urban/rural landscape
- determine the extent and nature of the potential visual significance of the MSE Wall on surrounding receivers and
- identify measures to mitigate and minimise any potential visual impacts.

2.2 VIA Guidance

This VIA has been prepared with regard to industry standards including:

- *Environmental Impact Assessment Practice Note – Guideline for Landscape Character and Visual Impact Assessment EIA–N04* (RMS March 2013) and
- *Guidelines for Landscape and Visual Impact Assessment* (Landscape Institute and Institute of Environmental Management & Assessment 2013).

2.3 The Penrith Development Control Plan 2006 section 6.10 'Erskine Business Park'

The Penrith Development Control Plan 2006 section 6.10 'Erskine Business Park' (the DCP) sets out a number of controls which relate to the urban design, visual impact and landscape design of this site. The objectives of the DCP include measures to minimise the visual impact of development on residential areas. The measures include:

- encouraging building forms that respond to the topography of the site and the relative position of the allotment to other allotments and the street
- ensuring a scale of buildings which minimises the impact of development on adjoining residential areas
- minimising the impact of development on views from adjoining residential areas
- encouraging a high standard of architectural design utilising quality materials and finishes
- establishing varied and articulated frontages facing or visible from public roads
- minimising perceived scale and mass to prevent monotonous building forms resulting from poor design of walls and rooflines and
- ensuring that new development contributes to the creation of a visually cohesive urban environment.

2.4 VIA methodology

This VIA methodology included the following activities:

- desktop study addressing visual character and identification of view locations surrounding the landfill site

- fieldwork and photography and
- assessment and determination of the MSE Wall visual impact

2.4.1 Desktop study

A desktop study was carried out to identify an indicative viewshed for the MSE Wall. This was carried out by reference to topographic maps as well as aerial photographs of the landfill site location and surrounding landscape. Topographic maps and aerial photographs were also used to identify potential locations and categories of view locations that could be verified during the fieldwork component of the assessment. The desktop study also outlined the visual character of the surrounding landscape including features such as landform, elevation, landuse and the distribution of residential dwellings.

2.4.2 Fieldwork and photography

The fieldwork involved:

- a site inspection in March 2020 to determine and confirm the potential extent of visibility of the proposed MSE Wall and
- determination and confirmation of the various view location categories and receiver locations from which the proposed MSE Wall could potentially be visible.

2.4.3 Assessment of visual impact

The level of visual impact that may result from the proposed MSE wall construction has been determined by combining the assessment and determination of surrounding receiver sensitivity and the visual magnitude of the MSE Wall when compared to the existing visual environment. The assessment and determination of visual impact has been determined in accordance with the *Environmental Impact Assessment Practice Note – Guideline for Landscape Character and Visual Impact Assessment EIA–N04,* Roads and Maritime Services 2013 (RMS practice note).

The determination of visual impact is also subject to other factors which are considered in more detail in this VIA.

Section 3 MSE Wall location

3.1 MSE Wall location

The proposed MSE Wall would be located at the existing Erskine Park landfill facility owned and operated by Enviroguard Pty Ltd. The existing landfill site is located within the Erskine Business Park in the Sydney metropolitan suburb of Erskine Park, around 42 kilometres (km) west of the Sydney central business district.

The landscape that immediately bounds the landfill site, is predominantly defined by industrial development, large scale buildings and factories, associated structures and access roads allowing for traffic movement through and within the business park.

General amenity landscape works and mature tree cover within the business park assist in some visual separation and 'softening' of industrial development from various streetscape locations. Broader and more significant stands of tree cover also form a component of biodiversity corridors within the business park.

Beyond the immediate surrounds of the business park, the landscape can be broadly defined by urban and residential development to the north and semi-rural landscape areas to the east, south and west. The landscape to the east and south east of the business park is undergoing development for industrial purposes with works extending to Wallgrove Road. In a broader context, this area forms part of the New South Wales Government Strategic Western Sydney Employment Area.

The location of the business park, the landfill site and the MSE Wall are illustrated in **Figure 1**.

Section 4 MSE Wall description

4.1 MSE Wall description

The MSE Wall would extend for approximately 930 metres (m) along the east, south and west perimeter of the existing landfill site. The MSE Wall would reach a maximum height of around 81m AHD along the southern extent and then taper to existing ground levels at the eastern and western terminal points. The top of the landfill waste surface would remain at the approved 92m Australian Height Datum (AHD) together with the approved landfill side slope gradient at 1 (horizontal) to 4 (vertical).

A 10 to 15m wide two-way access road would be located on top of the MSE Wall to provide vehicular access into and out of the landfill site. The access road would incorporate stormwater drainage and traffic barriers. The MSE Wall would incorporate a likely stone filled steel mesh structure that is visually like a traditional gabion structure. Plate 1 illustrates a typical stone filled steel mesh structure similar to the proposed MSE Wall.

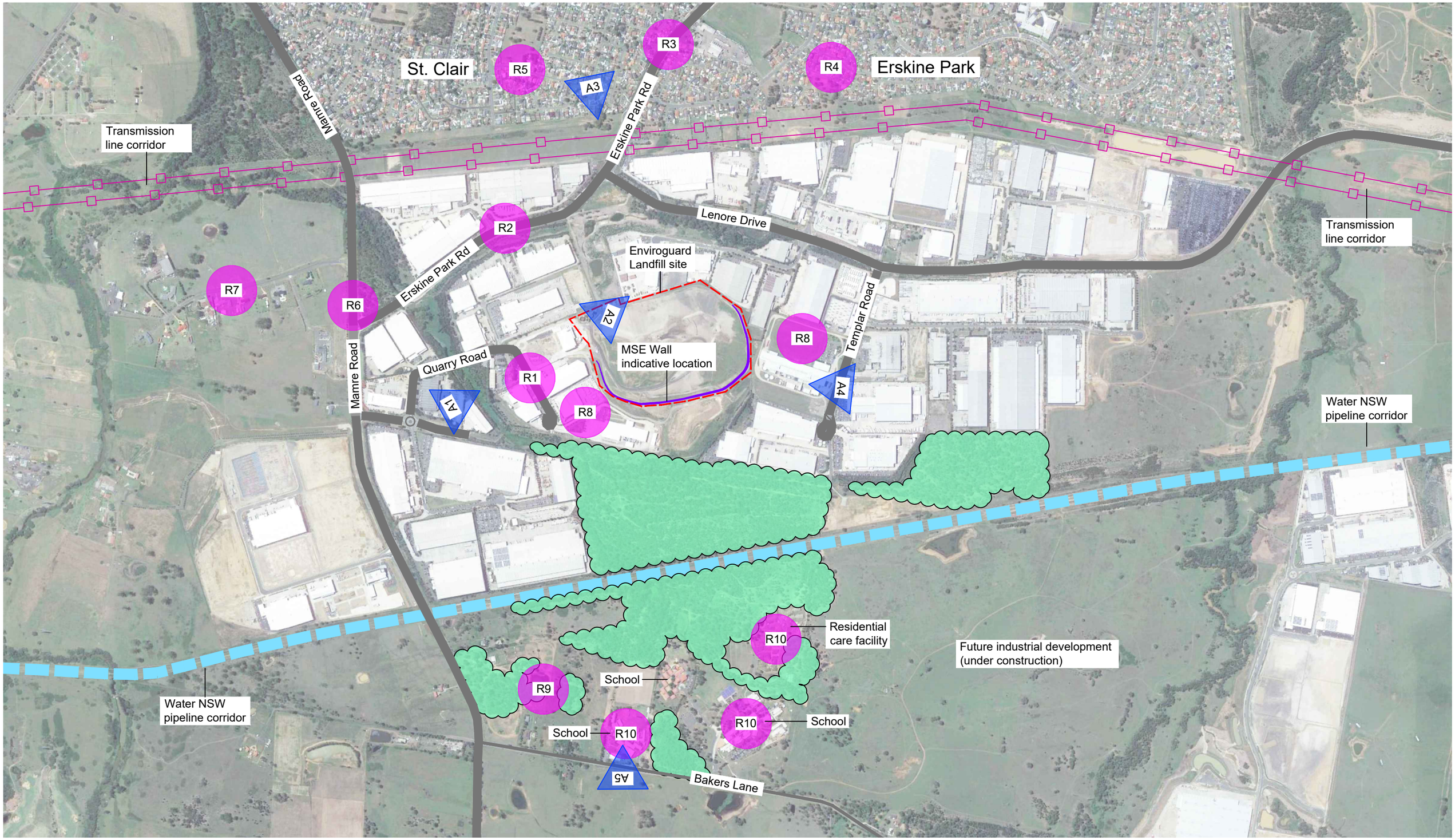
Plate 1 Typical stone filled steel mesh structure to face of wall (Photo supplied: Enviroguard Pty Ltd)

Section 5 Site aerial photographs

5.1 Site aerial photographs

Site aerial photographs were taken during the fieldwork to illustrate existing views in the general vicinity of view locations inspected as part of this VIA.

The site aerial photographs presented in this VIA have been annotated to identify existing built elements and roads located within the existing view and surrounding the existing landfill site. The aerial photograph locations are illustrated in **Figure 1**, and the site aerial photographs illustrated in **Figures 2** to **6**.



Legend

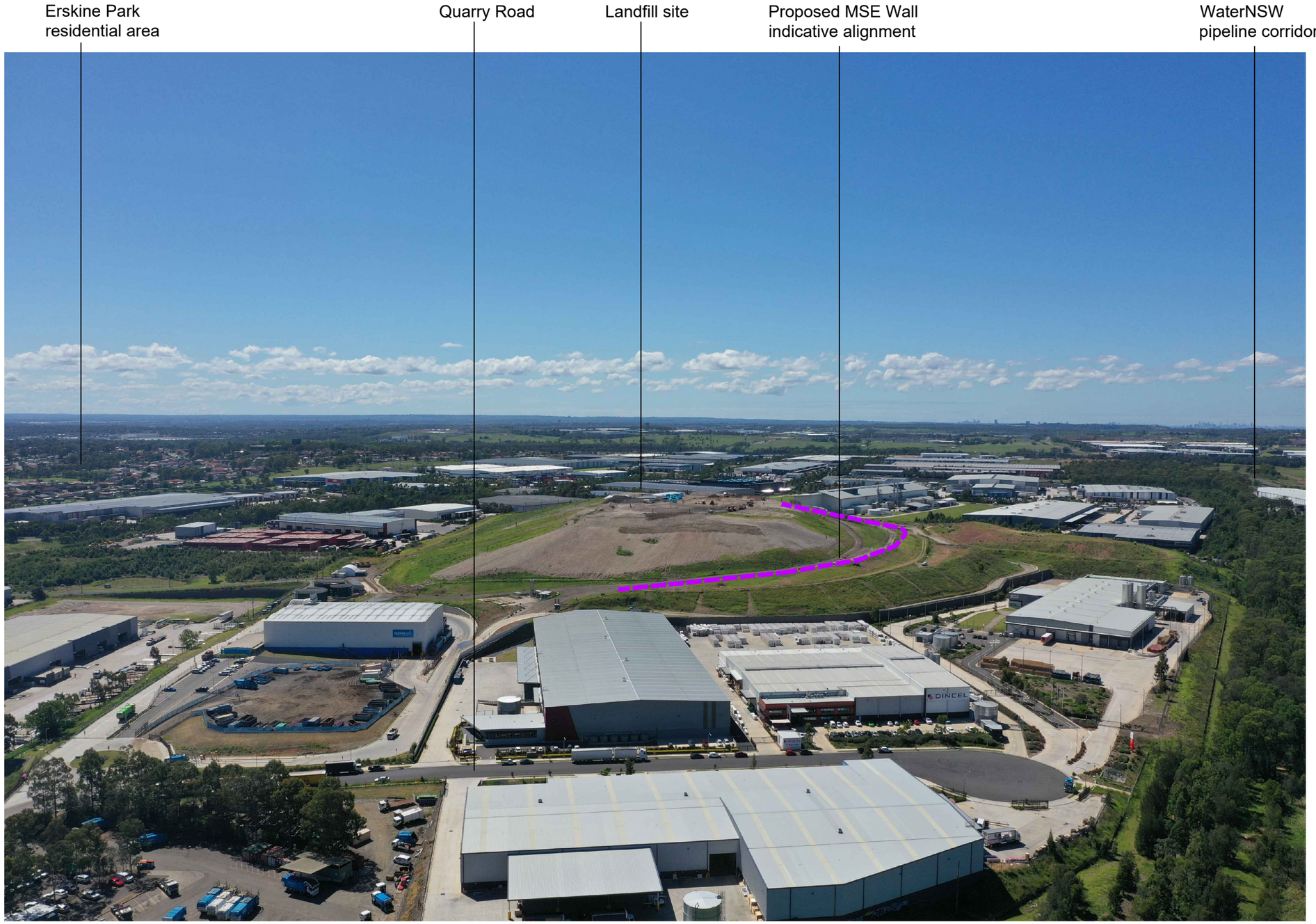
- Enviroguard Landfill Site (indicative location)
- Proposed MSE Wall (indicative location)
- R2 Receiver viewpoint
- Existing tree cover with screening potential
- A1 Aerial photograph location

0m 500m

Figure 1
MSE Wall and receiver location

GREEN BEAN DESIGN
landscape architects

Erskine Park Landfill - MSE Wall Visual Impact Assessment



Aerial photo 1 - View east toward Quarry Road and the landfill site beyond

Notes:

Views toward the proposed MSE Wall from local roads and service roads within the Erskine Park Industrial Estate will be largely screened by factory/warehouse buildings as well as other large scale structures fronting Quarry Road, Erskine Park Road and Templar Road within the industrial estate.

Views from north to south toward the proposed MSE Wall, including views from the St. Clair and Erskine Park residential areas and Erskine Park Road, would be effectively blocked by the existing landfill site landform rising above the level of the proposed MSE Wall.

Figure 2
Aerial photo 1

Erskine Park Landfill - MSE Wall Visual Impact Assessment

GREEN BEAN DESIGN
landscape architects

Aerial photo 2 - View north west from above the existing landfill site toward Erskine Park residential area

Notes:

Views toward the proposed MSE Wall from areas to the north west of the proposed MSE Wall will be blocked by a combination of industrial buildings within the Erskine Park Industrial Estate and tree cover within and beyond residential areas.

Views toward the proposed MSE Wall from the Mamre Road and the Erskine Park Road corridors within and bounding the industrial estate will be blocked by built structures and tree cover.

Figure 3
Aerial photo 2

Erskine Park Landfill - MSE Wall Visual Impact Assessment

GREEN BEAN DESIGN
landscape architects

Aerial photo 3 - View south to south east from St. Clair residential area toward and beyond the existing landfill site

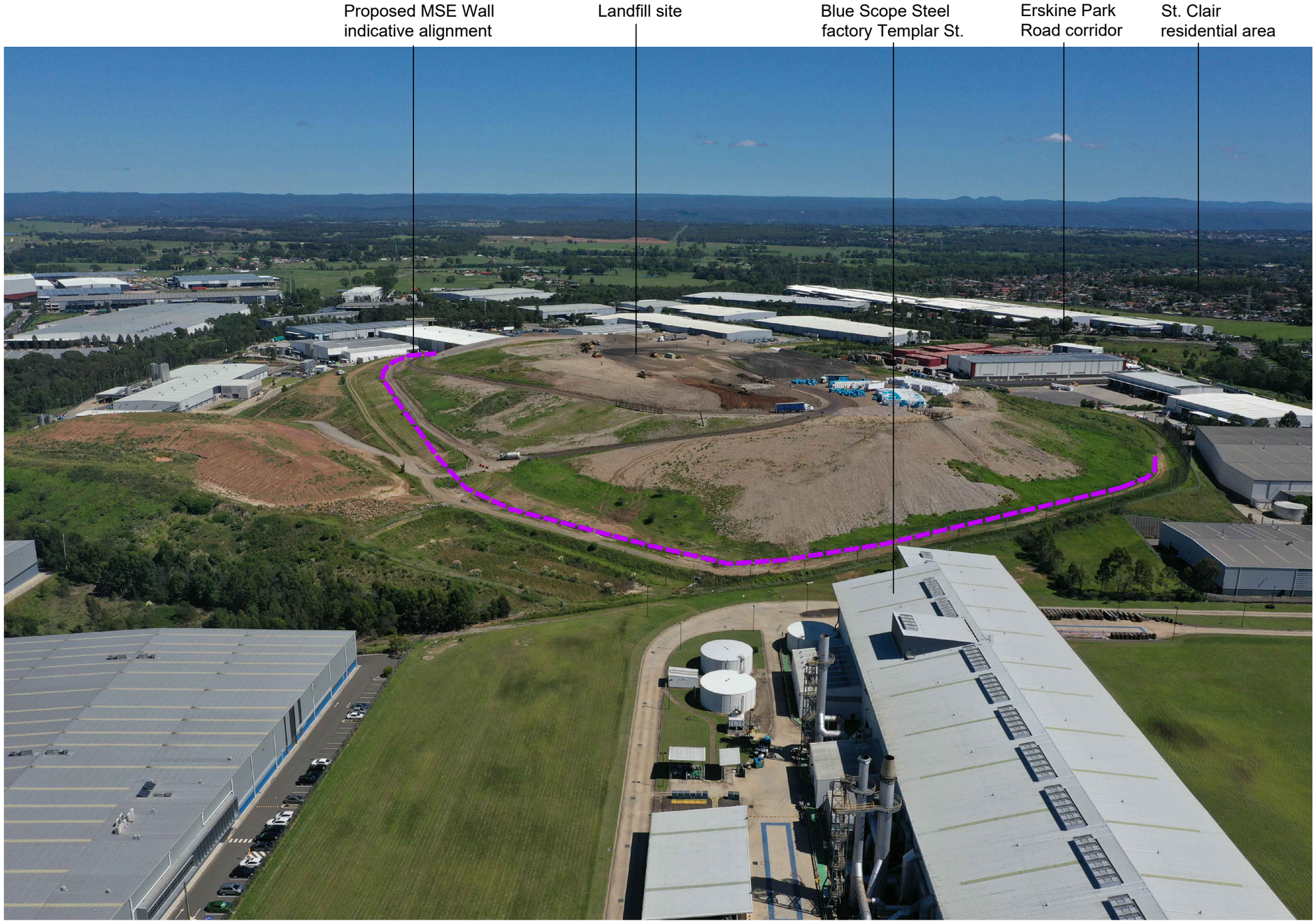
Notes:

Views toward the proposed MSE Wall from residential areas to the north of the existing landfill site will be screened by the landfill landform which, at approved final levels, will be above the finished level of the proposed MSE Wall.

Figure 4
Aerial photo 3

GREEN BEAN DESIGN
landscape architects

Erskine Park Landfill - MSE Wall Visual Impact Assessment



Aerial photo 4 - View west from Templar Road (outside Blue Scope Steel factory) toward existing landfill site

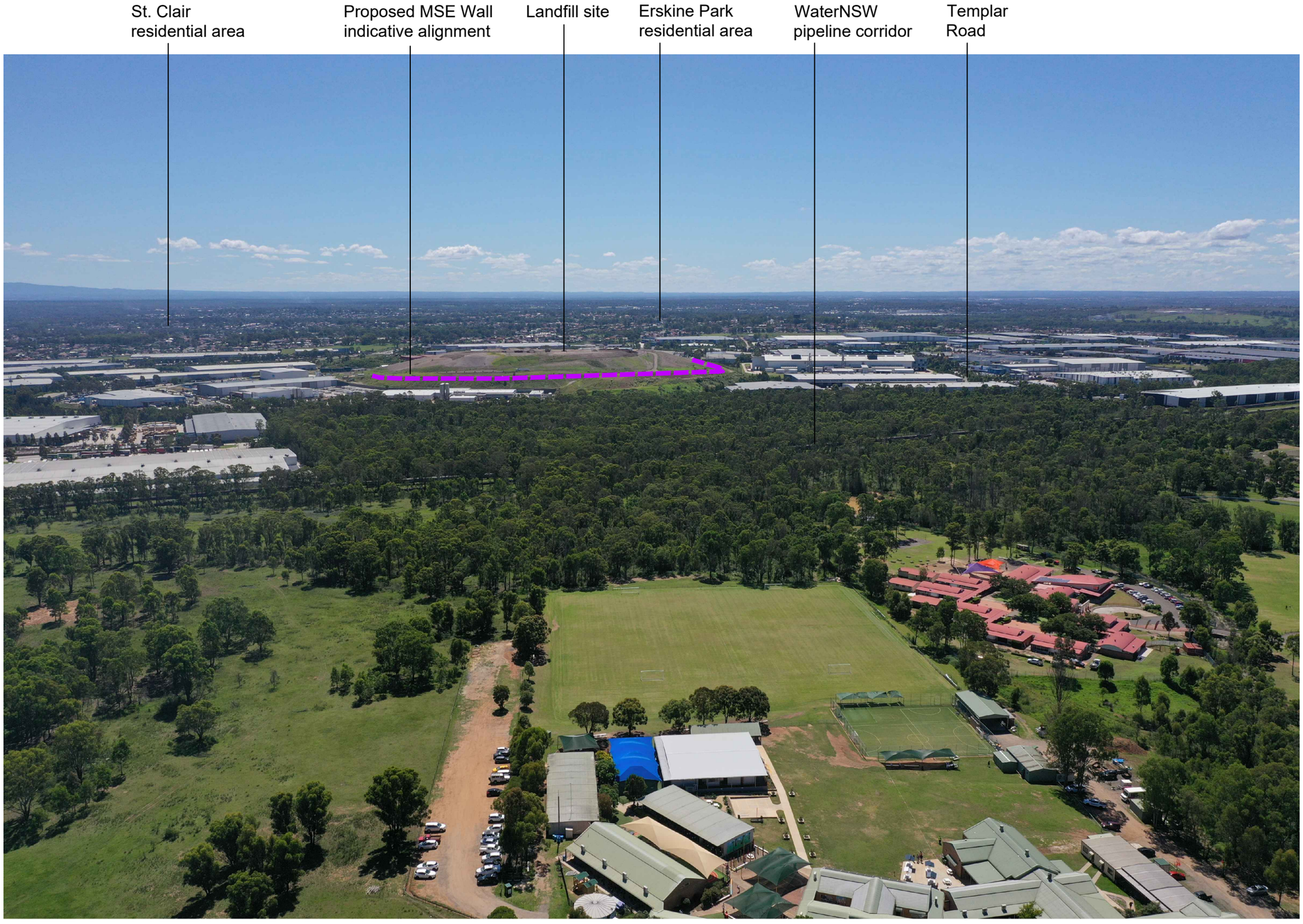
Notes:

Views toward the proposed MSE Wall from industrial areas to the east of the landfill site would extend toward sections of the wall. Views toward sections of the proposed MSE Wall would also occur from other industrial buildings to the south and south west of the landfill site.

Views toward the proposed MSE Wall will be confined to access roads, storage areas and car parks surrounding factory units. The majority of factory units and warehouse buildings do not have windows overlooking the landfill site.

This aerial photograph illustrates the degree to which the proposed MSE Wall will be visually contained by industrial development surrounding the landfill site.

Figure 5
Aerial photo 4



Aerial photo 5 - View north from Bakers Lane at the Mamre Anglican School looking toward the landfill site

Notes:

Views toward the proposed MSE Wall from sensitive view locations to the south of the landfill site, including schools, care facilities and rural dwellings will be largely screened from ground level views by tree cover within bio-diversity areas either side of the WaterNSW pipeline corridor.

Partial views toward the existing landfill site from the Bakers Lane road corridor provide limited views toward upper portions of the landfill, however the majority of the proposed MSE Wall will be screened by tree cover. Where visible the proposed MSE Wall would not be significantly distinguishable from the approved landfill landform above the proposed MSE Wall.

Figure 6
Aerial photo 5

GREEN BEAN DESIGN
landscape architects

Section 6 Visual Absorption Capability

6.1 Visual Absorption Capability

Visual Absorption Capability (VAC) is a classification system used to describe the relative ability of the urban landscape to accept modifications and alterations without the loss of character or deterioration of visual amenity. VAC relates to the physical characteristics of the urban landscape that are often inherent and quite static in the long term. In essence the VAC indicates the ability of an urban landscape setting to accommodate new development.

The VAC of an urban landscape is largely determined by inherent physical factors which include:

- the degree of visual penetration (view distance without obstruction) through surrounding buildings and tree cover
- the complexity of the urban landscape through bulk, scale, form and line.

Urban landscapes with a low visual penetration would have higher VAC values. Complex urban landscapes which include a mix of scale, form and line (together with some degree of vegetative screening) would also have high VAC values. The VAC of the urban landscape surrounding the existing landfill site and the area of proposed MSE Wall exhibits a relatively high VAC.

6.2 Urban landscape character impacts

The MSE Wall and the associated infrastructure elements would have an overall low impact upon the existing urban character of the built environment surrounding the landfill site. The bulk and scale of constructed elements associated with the proposed MSE Wall would be partially visually contained by existing mature tree planting beyond the landfill site as well as existing development within the business park. As a moderate scale constructed element, the MSE Wall would not modify the character of the industrial visual environment surrounding the landfill site.

The MSE Wall would result in an overall balanced visual outcome where modern materials and sympathetic colours applied to the MSE Wall would combine to create a visually legible element within the surrounding industrial landscape.

Section 7 Viewshed

7.1 Viewshed

For the purpose of this VIA the viewshed is defined as the area of landscape surrounding and beyond the MSE Wall locality which could be potentially directly affected by the MSE Wall. The viewshed defines this VIA study area.

Following desktop and site inspection works, the viewshed for this Project has been divided into a series of concentric bands (between 200 metres and up to 1.5km distance offsets) extending across the landscape from the location of the MSE Wall. It is considered unlikely that any significant views will extend toward the Project Area from view locations at distances beyond 1.5km from the proposed MSE Wall.

The primary viewshed extends to the south of the Project Area across vacant land and extending to existing industrial buildings along either side of Quarry Road. Immediate views to the east are dominated by the modified landform of the adjoining landfill facility. The viewshed to the north is responsive and influenced by industrial development and results in a restricted extent of visual penetration to landscape and urban areas beyond. The main urban and residential interface to the landfill site is generally setback and visually separated by industrial buildings and tree planting alongside road corridors.

Section 8 Visual impact assessment

8.1 Introduction

In accordance with the RMS practice note (RMS 2013), the significance of visual impact that would result from the construction and operation of a project is a composite of the *sensitivity* of the view and *magnitude* of the project in that view.

8.2 Quantifying impacts

The RMS practice note states that:

'Sensitivity refers to the qualities of an area, the type and number of receivers and how sensitive the existing character of the setting is to the proposed change. For example, a pristine natural environment would be more sensitive to change that a built-up industrial area'.

'Magnitude refers to the nature of the project. For example, a large interchange would have a very different impact on landscape character than a localised road widening in the same area'.

The combination of sensitivity and magnitude provide the rating of visual impact for a viewpoint. **Table 2** sets out the RMS practice note relative visual impact grading values which combine sensitivity and magnitude.

Table 2 Proposal visual impact grading matrix

		Magnitude			
		High	**Moderate**	**Low**	**Negligible**
Sensitivity	**High**	High impact	High-Moderate	Moderate	Negligible
	Moderate	High-Moderate	Moderate	Moderate-Low	Negligible
	Low	Moderate	Moderate-Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

The RMS practice note determines that '*a judgement must be made as to the quality and extent of the design solution in assessing magnitude and impact. Determining a low impact based on the assumption that the very highest quality design outcome would be achieved could be unrealistic and misleading. However, it is equally misleading to determine impacts based on the very worst outcomes. A balance must be found but it is usually better to err on the side of caution*'. To be in accordance with the RMS practice note, this VIA has erred on the side of caution given that the assessment is based on a concept design that would be further refined during the following stages of the design process.

8.3 Key existing viewpoints

In accordance with the RMS practice note, this VIA has developed a schedule of representative viewpoints which are within a reasonable distance of the Proposal and within the view catchment. The representative viewpoints include residential dwellings, commercial properties, road corridors and pedestrian footpaths. The representative viewpoints are illustrated in **Figure 1.**

8.4 Visual sensitivity

Following selection, the receiver viewpoints have been rated as to their sensitivity to change by the Proposal. The RMS practice note states that '*visual sensitivity refers to the quality of the existing view and how sensitive the view is to the proposed change. Visual sensitivity is related to the direction of view and the composition of the view'*.

Table 3 identifies:

- receiver viewpoints (R) and receiver types for the Proposal
- the view direction and approximate distance to the Proposal for each receiver viewpoint
- description of the existing view from each receiver viewpoint
- an assessment of the visual sensitivity and visual magnitude (erring on the side of caution) for each receiver viewpoint.

8.5 Visual magnitude

In accordance with the RMS practice note magnitude is *'the measurement of scale, form and character of a development proposal when compared with the existing condition. In the case of visual assessment this also relates to how far the proposal is from the viewer'.*

Table 3 identifies:

- receiver viewpoints
- the approximate distance from the receiver viewpoint to the Proposal
- a judgement on comparable scale, form and character between existing and proposed conditions
- an assessment of the visual magnitude (erring on the side of caution) for each receiver viewpoint.

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
R1 Quarry Road	Looking east to north east toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the closest point of the MSE Wall is around 280 metres.	The receiver viewpoint incorporates views from the Quarry Road corridor toward the landfill site from vehicles, and for occasional pedestrians, travelling west to east along Quarry Road within the Erskine Business Park. Available views toward the MSE Wall include both framed and directed views between the Cleanaway waste transfer building and the Stockland industrial building. Views become open and extend directly into the Project Area from the Quarry Road frontage to the Project Area.	**Low to Moderate**	The MSE Wall would not form a significant visible element from this receiver viewpoint. Views toward the MSE Wall would be largely blocked by industrial development to the east and south east of the receiver viewpoint.	**Low**
R2 Erskine Park Road (within the business park)	Looking south to south west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint	The receiver viewpoint includes views along and within the Erskine Park Road corridor located within the general extent of the Erskine Business Park. Views extend south west to north east from vehicles travelling along the road corridor. There is limited pedestrian activity along the road corridor.	**Low**	The MSE Wall would not form a visible element from this receiver viewpoint. Views are blocked by mature trees to the south of the receiver location.	**Negligible**

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
	and the Proposal is around 500 metres.	Views toward the MSE Wall are screened and blocked by tree planting alongside the road corridor as well as industrial buildings south of the road corridor.			
R3 Erskine Park Road (north)	Looking south to south west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is around 800 metres.	Elevated views south to south west from the receiver location extend toward and beyond the Erskine Business Park from vehicles, and for pedestrians, travelling south west along the road corridor. Views toward proposed MSE Wall will be screened by existing industrial buildings within the business park.	**Low**	The MSE Wall would not form a visible element from this receiver viewpoint. Views are blocked by the landfill facility.	**Negligible**
R4 Erskine Park (residential suburb)	Looking south east to south west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint	Views toward the MSE Wall from residential dwellings within urbanised localities of the Erskine Park suburb (along the interface with the transmission line corridor) will be effectively screened by industrial development south of the transmission line corridor. Views	**Moderate to High**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and the landfill landform.	**Negligible**

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
	and the MSE Wall is around 750 metres.	toward the MSE Wall from residential dwellings extending to the north of the transmission line corridor are screened by built form within urban areas.			
R5 St Clair (residential suburb)	Looking east to south west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is around 750 metres.	Views toward the Project Area from residential dwellings within urbanised localities of the St Clair suburb (along the interface with the transmission line corridor) are effectively screened by industrial development south of the transmission line corridor. Views toward the Project Area from residential dwellings extending to the north of the transmission line corridor are screened by built form within urban areas. Views from upper storey locations within residential dwellings may afford views toward industrial structures within the Erskine Business Park; however, views toward the Project Area will be generally restricted by existing structures.	**Moderate to High**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and the landfill landform.	**Negligible**

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
R6 Mamre Road	Looking east to south west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is around 750 metres.	Receiver viewpoint incorporates views from vehicles travelling north and south along the Mamre Road corridor immediately to the west of the Erskine Business Park. Views toward the MSE Wall will be blocked by a combination of industrial development and planting alongside the boundary between the business park and road corridor.	**Low**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and the landfill landform.	**Negligible**
R7 Semi-rural residential dwellings (west of Mamre Road)	Looking east to south east toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is in excess of 900 metres.	Receiver viewpoint incorporates views from a small number of rural residential dwellings to the west of the Mamre Road corridor. Views toward the MSE Wall from rural residential dwellings will be blocked by a combination of industrial development and planting alongside the boundary between the business park and road corridor.	**Moderate to High**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and the landfill landform.	**Negligible**

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
R8 Industrial workplaces/factories (off Quarry Road and Templar Road)	Looking through north east to north west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoints and the MSE Wall is between 50 metres and 150 metres.	Receiver viewpoint incorporates views from industrial workplaces including factories and warehouse facilities surrounding the landfill site. Views from these localities would extend directly toward the MSE Wall.	**Low**	The MSE Wall would be visible from various areas surrounding industrial workplaces and factories, including laydown and storage areas. Views from within industrial buildings would be blocked by large scale-built elements. The MSE Wall would occupy areas currently defined by landfill batters.	**Low**
R9 Residential dwellings (north of Bakers Lane)	Looking north to north east toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is in excess of 1,000 metres.	Receiver viewpoint incorporates views from a small number of rural residential dwellings to the north of the Bakers Lane Road corridor. Views toward the MSE Wall from rural residential dwellings will be blocked by a combination of industrial development and tree cover between the business park and road corridor.	**High**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and tree cover between the Erskine Business Park and Bakers Lane.	**Negligible**

Table 3 – Proposal visual sensitivity and magnitude matrix

Receiver viewpoint (Refer Figure 1)	View direction and distance	Existing view description	Visual sensitivity grading	Comparable judgement between the existing and proposed condition	Visual magnitude grading
R10 Schools & residential care facilities off Bakers Lane	Looking north to north west toward the direction of the landfill site/MSE Wall locality. The distance between the receiver viewpoint and the MSE Wall is in excess of 1,000 metres.	Views toward the MSE Wall are largely blocked by industrial development extending along the south boundary of the Erskine Business Park as well as tree cover within and to the south of the business park.	**High**	The MSE Wall would not form a visible element from this receiver viewpoint as views are blocked by industrial development within the Erskine Business Park and tree cover between the Erskine Business Park and Bakers Lane.	**Negligible**

8.6 Assessment of visual impacts

The RMS practice note stipulates that the impact of the Proposal on each viewpoint be assessed and that the visual impact should be based on a composite of the sensitivity of the view and magnitude of the Proposal in that view. A composite visual impact grading has been determined for each receiver viewpoint by reference to the visual impact grading matrix set out in **Table 2**.

Table 4 identifies:

- receiver viewpoints
- the visual sensitivity grading for each receiver location
- the visual magnitude grading for each receiver location
- an assessment of the visual impact (erring on the side of caution) for the MSE Wall.

Table 4 – Proposal visual impact assessment matrix

Receiver viewpoint (Refer Figure 1)	Visual sensitivity grading	Visual magnitude grading	Visual impact
R1 Quarry Road	**Low to Moderate**	**Low**	**Low**
R2 Erskine Park Road (within the business park)	**Low**	**Negligible**	**Negligible**
R3 Erskine Park Road (north)	**Low**	**Negligible**	**Negligible**
R4 Erskine Park (residential suburb)	**Moderate to High**	**Negligible**	**Negligible**
R5 St Clair (residential suburb)	**Moderate to High**	**Negligible**	**Negligible**

Table 4 – Proposal visual impact assessment matrix

Receiver viewpoint (Refer Figure 1)	Visual sensitivity grading	Visual magnitude grading	Visual impact
R6 Mamre Road	**Low**	**Negligible**	**Negligible**
R7 Semi-rural residential dwellings (west of Mamre Road)	**Moderate to High**	**Negligible**	**Negligible**
R8 Industrial workplaces/factories (off Quarry Road and Templar Road)	**Low**	**Low**	**Low**
R9 Residential dwellings (north of Bakers Lane)	**High**	**Negligible**	**Negligible**
R10 Schools & residential care facilities off Bakers Lane	**High**	**Negligible**	**Negligible**

8.7 Summary of visual impact

This VIA has determined that:

- 2 of the 10 receiver viewpoints would likely experience a low visual impact
- 8 of the 10 receiver viewpoints would likely experience a negligible visual impact.

Two receiver viewpoints have been determined to have an overall low visual impact with regard to the proposed MSE Wall. The low visual impact occurs from proximate views (within and between 50 metres to 150 metres from the MSE Wall) which results in potential direct views toward the MSE Wall structure. Whilst the MSE Wall would be visible and reasonably prominent within the available but limited viewshed, the MSE Wall would be visible within the context of existing large-scale industrial development.

Eight of the receiver viewpoints have been determined to have an overall negligible visual impact with regard to the MSE Wall. The negligible visual impact results from the screening and blocking effect of buildings within the Erskine Business Park as well as mature tree cover between some receiver viewpoints and the landfill site.

Whilst some visible elements associated with the MSE Wall may change the visual character of the landfill site (including form and colour), the overall visible scale of the MSE Wall within the context of the surrounding industrial environment would leave the existing visual character of the landfill site relatively unchanged.

Most surrounding receivers around the landfill site would not be impacted by the MSE Wall. This would include receivers travelling between industrial buildings or along local road corridors. Views would be generally screened by built development within the surrounding industrial areas.

Views toward the landfill facility occur from the entry to the Mamre Anglican School on Bakers Lane

8.8 Construction activities

Whilst construction activities would tend to be more visible than the operational stage of the MSE Wall, the construction activities would be temporary and transient in nature. Views toward construction activities would be partially restricted by surrounding industrial development.

8.9 Overshadowing

The location of the MSE Wall in relation to the offset distance to public domain areas, road corridors and residential areas would result in shadows cast by new infrastructure being largely contained within the landfill site. The MSE Wall is unlikely to create any significant cumulative shadowing in addition to existing shadowing from buildings adjoining the landfill site.

Section 9 Cumulative impact assessment

9.1 Cumulative Impact Assessment

A cumulative visual impact could result from elements of the MSE Wall being constructed in conjunction with other existing or proposed infrastructure which could be either associated or separate to it. Separate developments could occur or be located within a local context where visibility is dependent on a journey between each site or within the MSE Wall viewshed.

The MSE Wall would be located within the visual envelope of the existing landfill site and Waste Transfer Facility which contains industrial buildings and associated utility infrastructure. Constructed elements associated with the MSE Wall would be similar in scale, line and form to existing infrastructure within the existing business park precinct. The potential for an associated cumulative impact between the MSE Wall and existing infrastructure would be minimised by the visual relationship between the proposed and existing constructed elements, with the MSE Wall forming an integral component to the landfill site rather than being viewed and recognised as a standalone feature.

The MSE Wall is considered to have limited potential to increase the significance of cumulative visual impact with regard to existing large-scale visual elements located beyond the landfill site. This is largely due to visual screening surrounding the landfill site for the most sensitive receiver locations and the location of proposed constructed elements relative to existing infrastructure.

Section 10 Conclusion

10.1 Summary

This VIA concludes that overall, the proposed MSE Wall will have a negligible to low visual impact on the majority of people living in or travelling through the landscape within and surrounding the existing landfill site. Views toward the MSE Wall would be predominantly contained by existing large-scale industrial development within the Erskine Business Park as well as modified landforms associated with the landfill facility.

The overall negligible to low visual impact will be due to a combination of the following factors:

- built forms associated with the proposed MSE Wall will respond appropriately to existing site levels and to the relative position of existing industrial developments located along Quarry Road and Templar Road
- the scale of the MSE Wall will not impact on views from residential suburban areas to the north of the Erskine Business Park, or semi-rural residential dwellings to the west and south of the business park
- there will be an overall low to negligible impact on views from residential care and school facilities to the south of the landfill site with existing mature tree cover screening the bulk of the MSE Wall
- there will be negligible impact of the development on views from local road corridors within and beyond the Erskine Business Park and
- the MSE Wall will form a visually cohesive element within the context of existing and established industrial development within the Erskine Business Park.