Menangle Pedestrian Bridge, Menangle

Visual Impact Assessment

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MIRVAC

Sturt Noble Associates

mirvac

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GLOSSARY

ARTC	Australian Rail Track Corporation
Development*	Proposal that results in a change to the landscape and/or visual environment
Impact	The effect of a proposal, which can be adverse or beneficial, when measured against an existing condition
Landscape	All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.
Landscape architecture	A profession involved with the assessment, design and management of the built and natural environment.
Landscape character	The combined quality of built, natural and cultural aspects that make up an area and provide its unique sense of place.
Magnitude	The measurement of the scale, form and character of a development proposal when compared to the existing condition. In the case of visual assessment this also relates to how far the proposal is from the viewer. Combined with sensitivity, magnitude provides a measurement of impact.
PCT	Plant Community Type. - the master community-level typology used in NSW's planning and assessment tools and vegetation mapping programs
Photomontage*	Computer simulation or other technique to illustrate the appearance of the design
Sensitivity	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 measurement of impact.
Visual Envelope Map	A Visual Envelope Map, also referred to as 'viewshed' or visual catchment, is the area within which a project can be seen at eye level above ground. Its extent will usually be defined by a combination of landform, vegetation and built elements.
View	The sight or prospect of a landscape or scene.
Visibility	The state or fact of being visible or seen.
Visual impact	The impacts on the views from residences, workplaces and public places.

Terminology from
- RMS EIA Practice note 4 and Guidelines for Landscape Visual Impact Assessment 3rd Edition
- Guidelines for Landscape and Visual Impact Assessment* (2013)
- BioNet Vegetation Classification

EXECUTIVE SUMMARY

Sturt Noble Associates were engaged by Mirvac to prepare a Visual Impact Assessment for a proposed pedestrian bridge to be added to the existing Station Street vehicular bridge at Menangle. This report forms part of the Review of Environmental Factors being prepared for this project.

This report is based on the guidelines prepared by RMS for the preparation of landscape character and visual impact assessments, and includes the following:

- Assessment of potential visual impacts on significant views and vistas as a result of the proposed development, including within the site and externally.
- Provide measures to minimise/mitigate any adverse effects from the development

This visual impact assessment found that the greatest visual impacts are considered to be Moderate - Low for employees and commuters at Menangle Train Station, commuters on Moreton Park Road and visitors and residents of the heritage cottage at 54 Station Street. The pedestrian bridge is considered to have a Low impact on the other views as a result of the already significantly modified views and existing screening of the proposed development by built structures and vegetation.

This assessment has been used to inform the design team of the visual impacts of the proposed development. Several mitigation measures have been recommended as part of this report to be considered and addressed as part of the design process.

It is important to note the dramatic changes planned to occur in the Menangle area over the coming years. A new large-scale residential development is proposed to the north, east and west of the site of the pedestrian bridge. This visual impact assessment measures the impact of the proposed pedestrian bridge on the existing landscape only and does not allow for the future changes in its assessment.

Figure 1: Station Street Vehicular Bridge, Menangle, looking north
Source: Mirvac

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

Sturt Noble Associates have been engaged by Mirvac to prepare a Visual Impact Assessment for a proposed pedestrian bridge extension to the existing Station Road vehicular bridge at Menangle. This Visual Impact Assessment will form part of the Review of Environmental Factors being prepared by Calibre Group for the project.

Mirvac are in the process of developing 350 lots at Menangle on either side of the rail line and are seeking to provide a new pedestrian bridge over the Southern Highlands (rail) Line in collaboration with ARTC. The new pedestrian bridge is intended to provide safe access across the sunken railway line for pedestrians who are currently required to traverse the vehicular carriageway.

Although this report recognises the proposed future development in the area, this visual impact assessment for the new pedestrian bridge has been assessed on the existing landscape and views.This report will specifically address the following:

- Identify any visual impacts on significant views and vistas as a result of the proposed development
- Provide measures to minimise/mitigate any adverse effects that were unable to be designed out

This assessment will be used to:

- Inform the design team of any impacts that can then be considered, designed out or reduced throughout the design process
- Inform council and the community about the visual impacts of the proposal and what avoidance, management and mitigation strategies are proposed and have been undertaken

Figure 2: Menangle Masterplan
Source: Six Maps 2021, Mirvac, Calibre

LEGEND

The site

Stage boundaries

2.0 METHODOLOGY

2.1 OVERVIEW

The methodology used to prepare this Landscape Visual Impact Assessment is based on the *Environmental Impact Assessment Practice Note EIA-N04: Guideline for landscape character and visual impact assessment,* Roads and Maritime Services; December 2018.

2.2 ANALYSIS

Landscape analysis has been undertaken to establish an understanding of the site's topography, vegetation, heritage, landscape features and how it fits into its context physically and historically. The analysis has been undertaken via a desktop study, site visits and reviewing documents relevant to the site including site surveys.

2.3 THE PROPOSAL

A review of the proposed development has been undertaken to establish the components, scale and layout that constitute the proposed works.

2.4 VISUAL IMPACT ASSESSMENT

The visual impact assessment will be used to determine the impact of the proposed development on significant views and vistas to and from the bridge. This will be established by:

- Preparing a visual envelope map that illustrates the extent of the area that the proposal will be visible from including private residences, heritage buildings and public places. This will be established by carrying out a review of the site survey, topography, satellite imagery, street views and site visits
- Selecting the key views and vistas located within the visual catchment considering different users, public and private aspects and historically significant views. Photographs of key views were taken during site visits to illustrate existing views. Refer to Section 6.3 for photography methodology
- Assessing how sensitive each view is considering its capacity to absorb change, the type of viewer, number of viewers and length of exposure to the view
- Identifying the proposed changes to each view by identifying the location, extent and bulk of the proposed development to provide an indicator of the likely changes
- Assessing the magnitude of change on each view, looking at the scale, character and proximity to the viewer
- Providing an overall assessment of impact based on the combined measures of sensitivity and magnitude of change to each view as per the table in Figure 02

Impacts will be assessed using a consistent set of criteria as outlined in the following table

CRITERIA	DEFINITION	RATING
View Sensitivity Pristine / Heritage Moderately Modified Significantly Modified		 High Moderate Low
Viewer Resident (from their home) Visitor / Employee (from a place visited regularly) Pedestrian / Motorist / Cyclist / Commuter		 High Moderate Low
Number of Viewers High Moderate Low	 >1000 100-999 <100	 High Moderate Low
Length of Exposure to the View Long term Moderate term Short term	 >30min 15 to 30min <15min	 High Moderate Low
View Distance / Proximity Short Medium Long	 <50m 50m-100m >100m	 High Moderate Low

MAGNITUDE

SENSITIVITY	High	Moderate	Low	Negligible
High	High	High - Moderate	Moderate	Negligible
Moderate	High - Moderate	Moderate	Moderate - Low	Negligible
Low	Moderate	Moderate - Low	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Figure 3: Impact Rating Matrix
Source: RMS EIA-N04 2018

2.5 MITIGATION STRATEGIES

Provide recommendations for mitigating the impacts of the design on the views of the site.

3.0 CONTEXTUAL ANALYSIS

3.1 LOCATION

The site is located 10 kilometres to the southwest of Campbelltown in the suburb of Menangle, within the Wollondilly Shire Council.

The site is located 250m south of the Menangle Train Station and is centred around the Station Street road bridge that crosses the train tracks. To the west of the bridge, Station Street continues in a straight line to meet Menangle Road while to the east it turns into a private road after meeting Moreton Park Road.

The area to the south west of the site consists of large residential blocks that are located on the edge of the suburban centre of Menangle, while the land to the north and east consists of open farmland with scatterings of trees and farmhouses. Running directly through the site and below street level is the Southern Highlands Railway line.

Figure 4: Locality Plan
Source: Google Maps 2021

Figure 5: Site Surrounds Plan
Source: Six Maps 2021

LEGEND

The site

3.2 LOCAL PLANNING

The local area is designated for dramatic change in the coming years with a new residential development consisting of approximately 350 lots proposed to the east and west of the site as shown in Figure 1. The broader area will also be undergoing significant growth with the Greater Macarthur 2040 Growth Area surrounding the Menangle area on three sides.

The land around and within the site is predominantly designated as Low Density Residential (R2) within the Wollondilly LEP, which currently consists of large residential blocks and agricultural land. The land around the train tracks is designated as Infrastructure (SP2) with some Primary Production (RU1) land flanking the rail corridor.

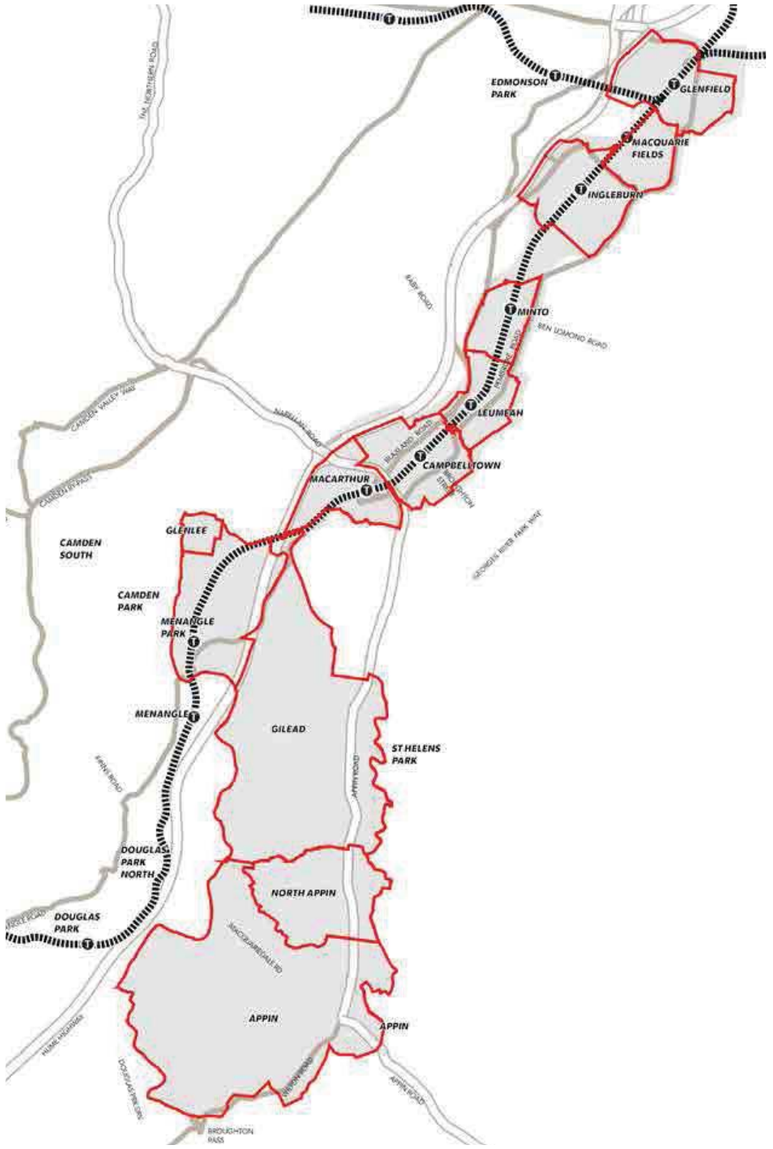

Figure 6: Greater Macarthur Growth Area Interim Plan
Source: NSW Department of Planning and Environment

LEGEND

- Growth Area Precincts
- Highways
- Major Roads
- Train Line and Station

Figure 7: Zoning Plan
Source: NSW Department of Planning, Industry and Environment

LEGEND

- The Site
- R2 - Low Density Residential
- SP2 - Infrastructure
- RU1 - Primary Production
- B1 - Neighbourhood Centre
- RE1 - Public Recreation

3.3 HERITAGE LISTINGS AND SIGNIFICANCE

The site is located within the Menangle Conservation Area and the Menangle Landscape Conservation area, both of which are listed on the Wollondilly Local Environmental plan 2011 (LEP) and subject to specific controls in the Wollondilly DCP.

The site does not contain any items listed on the State Heritage Register, National Heritage List or the Commonwealth Heritage List.

3.4 HISTORIC BACKGROUND

The site is located on the edges of the Gundungurra and Tharawal Nations.

Since European occupation the site had primarily been used for viticulture and the grazing for dairy cows. It was in one of the first land grants in the area. In the 1860's the Great Southern Railway was constructed and the construction of the Menangle station occurred soon after this.

The original road bridge over the railway line was built during the 1890s and was a single lane bridge. At some point during 1951-1978 the bridge was demolished and rebuilt into the bridge that is on the site.

3.5 TOPOGRAPHY

The surrounding area has a gentle slope from a southern mound where the St James Menangle's Anglican Church is situated. From this rise the ground slopes gently away to the north and east where the site is located. The landscape has been steeply cut into to accommodate the train line.

3.6 VEGETATION

The vegetation of the site comprises of two plant communities, the PCT 849 Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion which forms part of Cumberland Plain Woodland which is a critically endangered ecological community and Urban Native/Exotic.

The site has previously been cleared, and the vegetation currently growing around the bridge consists of remnant canopy trees with highly disturbed understorey and ground cover species that are mainly exotic grasses and weeds. Remnant native species and exotic introduced species are distributed linearly along the side of Steven's Road, with smaller remnant patches also occurring at the edges of Station Street.

No threatened species have been recorded on site by Biosis who are carrying out the Flora and Fauna Assessment for the project.

The Wollondilly Shire Council DCP makes specific reference to Stevens Road, stating:

"The row of established vegetation that runs along Stevens Road shall be retained during any future development."

3.7 SIGNIFICANT VIEW CORRIDORS

The Wollondilly Shire Council DCP 2016 Volume 1: Landscape Conservation Area - Menangle lists four significant view corridors that must be maintained. One view is within the vicinity of the subject site and is described in the DCP as:

- North - Railway, Rotolactor, Central Creamery with grazing and cropping land

Figure 8 identifies the view corridor as shown in the DCP. When on site, we investigated this view corridor and found that due to the land form and built form in the area, this view corridor will be unaffected by the proposed pedestrian bridge. Refer to Figure 14 for a view from the Creamery looking towards the subject site.

Figure 8: Context Plan
Source: Six Maps 2021

0 50 100m

LEGEND

- The site
- Heritage site
- Significant view corridor

4.0 SITE ANALYSIS

4.1 BUILT FORM AND LAND USE

The site boundary occurs on either side of the railway tracks and along the northern edge of the road bridge at Station Street, Menangle. Stevens Road is an asphalt road with no kerb on the western side of the rail bridge and the site contains the area from Stevens Road to around 9 metres east into the rail corridor. There is a chainlink fence that separates the road reserve and the rail corridor and contains a vehicle access gate.

Station Street runs perpendicular to the rail corridor and has a guardrail that runs along either side of the vehicular bridge as it crosses the train tracks. The site extends from the Station Street kerb on the northern side of the street to the road reserve boundary.

To the east of the rail corridor is a private track and the site boundary extends between the track and the rail corridor boundary. The private track is gravel with grassed verges to either side and a fence and a gate separating it from Station Street.

4.2 TOPOGRAPHY

The existing road bridge arches over the railway lines, which are cut into the landscape. The grassed verge slopes steeply towards the railway lines along the eastern side. The terrain between the railway lines and Stevens Road is mostly flat but slopes up towards Station Street near the road bridge.

4.3 EXISTING VEGETATION

Along Stevens Road there are two trees located within the rail corridor near the corner of Stevens Road and Station Street. Tree 3 is dead while Tree 2 is a young *Eucalyptus crebra* (Narrow-leaved Ironbark), a dominant canopy tree in the Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain ecological community. The understorey in this area consists of shrubby exotic species and weedy grasses.

Two shrubby exotic *Olea africana* (African Olive) grow immediately next to the vehicular bridge towards the top of the western bank before the land falls away to the railway lines. They are labelled Trees 1A and 2A on the plan and have a weedy grass understorey that continues along the northern edge of the road bridge.

Tree 4A is a *Eucalyptus tereticornis*, (Forest Red Gum) another dominant canopy tree in the Grey Box – Forest Red Gum grassy woodland community, with a mostly exotic shrubby and grassy understorey. This tree is outside of the site boundary within the railway land.

Figure 9: View Looking East at the Vehicular Bridge
Source: Google Maps 2021

Figure 10: The Existing Site
Source: Six Maps 2021

0 20 50m

LEGEND

- Site boundary
- Property boundaries
- Existing chainlink fence
- T2A — Existing trees. Tree numbers correlate with arborist report by Sturt Noble Arboriculture
- Private land
- Rail land
- Road reserve

5.0 THE PROPOSED DEVELOPMENT

5.1 DESCRIPTION

The proposed development consists of a new pedestrian bridge from Stevens Road to a proposed road on the eastern side of the train tracks. The bridge will be universally accessible and grade up from Stevens Road, connecting into the northern side of the existing road bridge and then grade back down to the proposed future road.

The path is 2.5m wide for its full extent, and a set of stairs from Stevens Road provide an alternative and more direct access to the pedestrian bridge. The section of the pedestrian bridge that is over the train tracks will have a protection screen enclosing the walkway to a height of approximately 3.2m with handrails on either side.

As part of the works three existing trees and the dead tree within the site will be removed. New tree planting is proposed to replace the trees and new shrub planting is proposed to screen railway fence. Low planting is proposed along road edges and the future road end of the site to ensure clear sightlines are maintained.

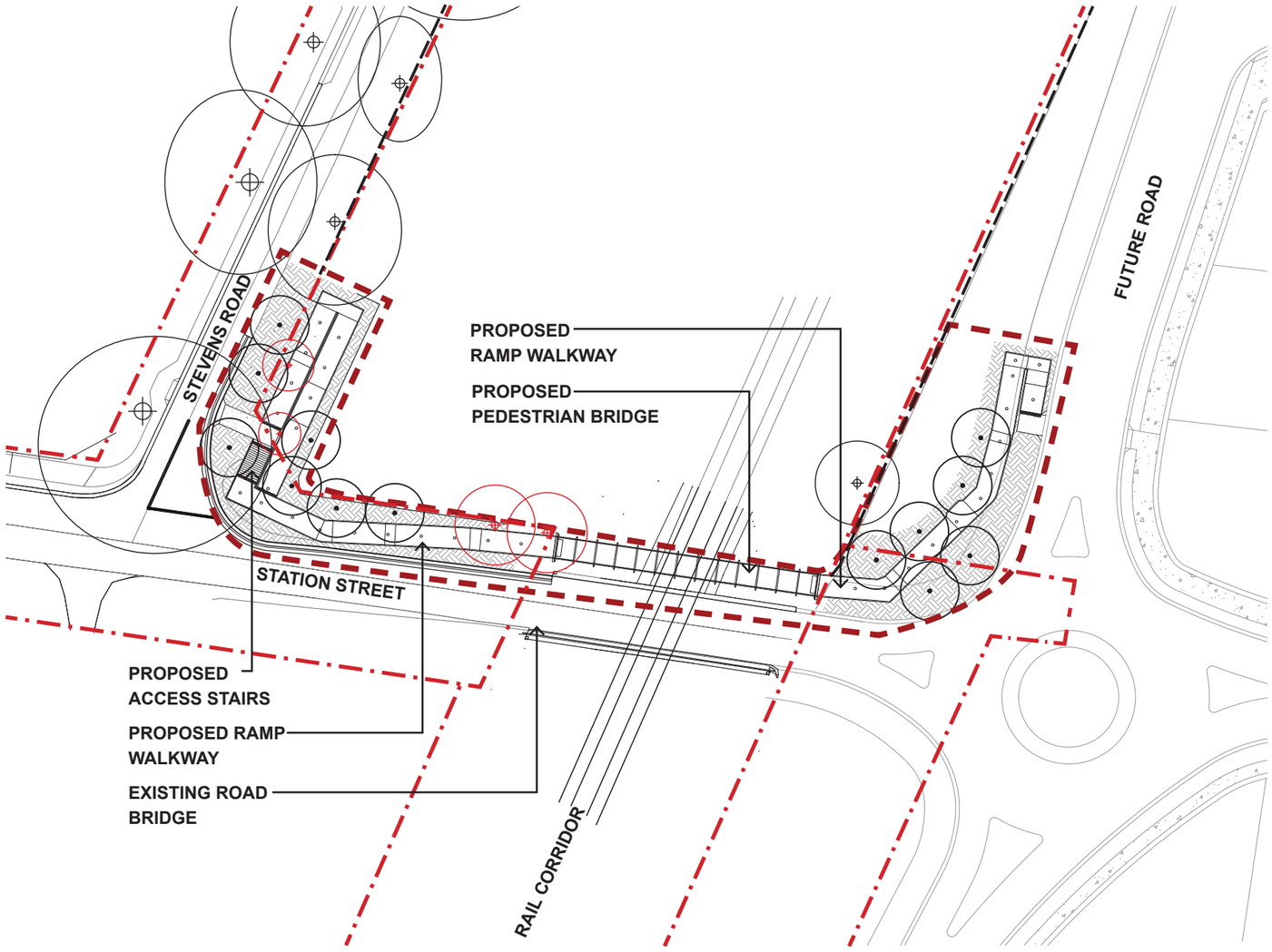

Figure 11: The Proposal
Source: Six Maps 2019

LEGEND

- Site boundary
- Property boundaries
- Fence to be retained
- Proposed trees
- Existing trees to be retained
- Existing trees to be removed
- Proposed planting

6.0 VISUAL IMPACT ASSESSMENT

6.1 VISIBILITY OF THE DEVELOPMENT

The visibility of the proposal is illustrated in the Visual Envelope Map. It identifies where views of the proposal will be visible from important heritage locations, private properties and local roads.

6.2 VIEW SELECTION

Key viewpoints located on private and public land were selected for assessment. The selected viewpoints were chosen for their representation of the following:

- Views that assess the impact of the proposal from a variety of directions and distances around the site and therefore provide a range of visual detail
- The views that are seen by the largest numbers of the various users around the site, including local residents and visitors to Menangle

Prior to visiting the site, the following viewpoints were selected for assessment:

- Viewpoint A – From the historic Menangle train platform, looking south
- Viewpoint B – From the historic Menangle Creamery driveway, looking south
- Viewpoint C – From Stevens Road, looking south-east to present the view travelling to and from Menangle Station
- Viewpoint D – From Moreton Park Road, looking north to present the view approaching the bridge
- Viewpoint E – From the heritage cottage at 27 Station Street, looking east
- Viewpoint F – From Station Street, looking west
- Viewpoint G – From the heritage St James Menangle's Anglican Church, looking north-east
- Viewpoint H – From heritage cottage at 54 Station Street, looking west

All the selected viewpoints are illustrated with a photograph of the view (existing) and a photomontage that illustrates the mass and scale of the proposed development.

6.3 EXISTING AND PROPOSED IMAGES

Photographs were taken at eye-level from the selected viewpoints on a clear day, looking towards the site. A digital representation of the proposed development mass was created using plans and elevations to represent the footbridge in three-dimensional space. The opacity of the bridge fences and handrails was taken in to account and represented using a greater opacity than the base of the footbridge. The image was then digitally imposed over the photograph of each view to represent the scale and massing of the proposed design.

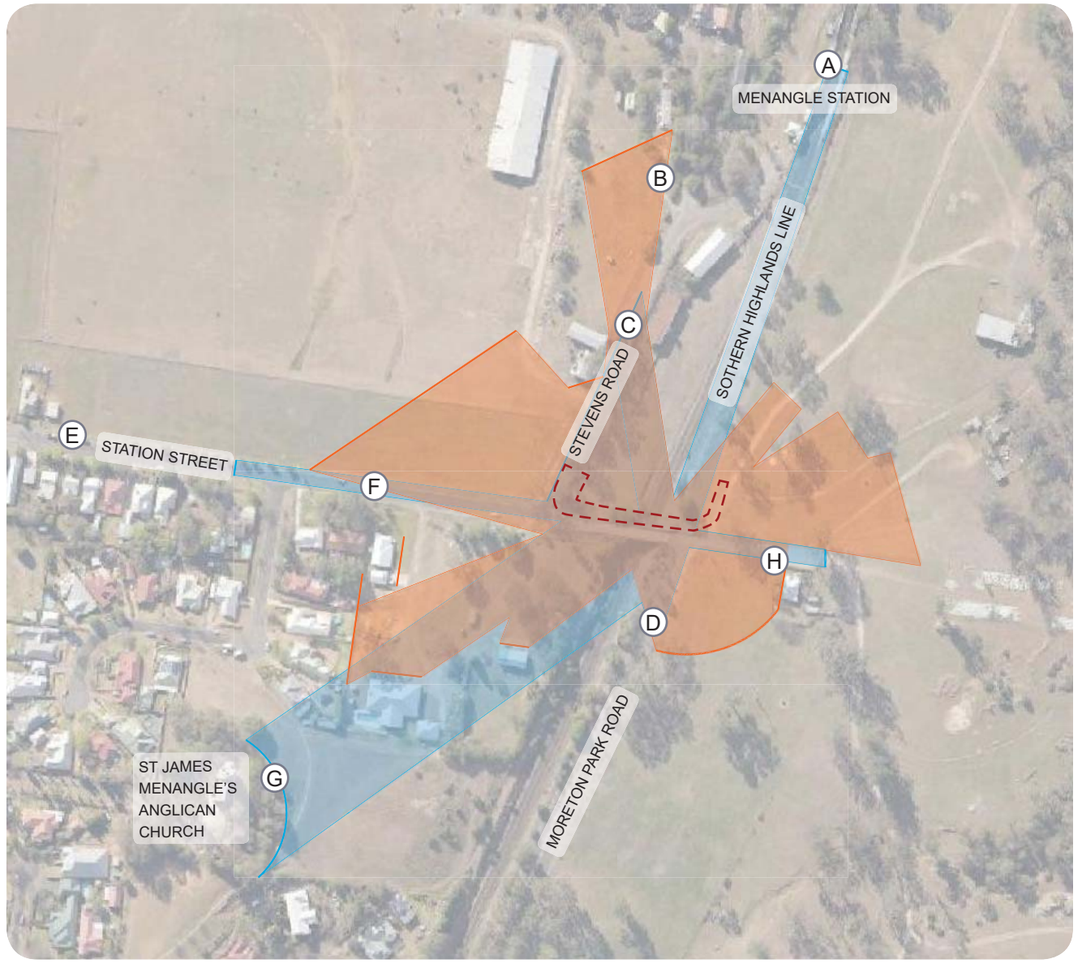

Figure 12: Physical Assessment Plan
Source: Google Maps 2019

LEGEND

- Private view lines
- Public view lines
- (A) Selected view point

6.4 ASSESSMENT OF VIEWS

View A - From historic Menangle train platform, looking south

Sensitivity	**Rating**	**Reason**		
View sensitivity	High	The view is significantly modified in the foreground while retaining a more pristine background. Views of the railway are of heritage significance		
Viewer		Resident	Visitor / Employee	Pedestrian / Motorist / Cyclist / Commuter
Viewer sensitivity	Moderate - Low	n/a	Moderate	Low
No of viewers	Low	n/a	Low	Low
Duration	Moderate - Low	n/a	Moderate	Low
Total Sensitivity	Moderate			
Magnitude	**Rating**	**Reason**		
Proximity to the viewer	Low	Approximately 250m away		
Scale/size of development in the view	Low	Only partially visible due to distance, vegetation and existing structures in the foreground		
Change to the view (how much it changes the view)	Low	The development only slightly increases the massing of the existing vehicular bridge and forms a very small proportion of the view. It very minimally alters the skyline and is more exposed due to the removal of some existing vegetation		
Contrast of the development to the existing (elements in the view)	Low	Similar form, style and position to the existing vehicular bridge		
Total Magnitude	Low			
Resultant rating of visual impact	Moderate - Low	• The pedestrian bridge security fence increases the massing of the bridge • The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view		

Figure 13: View A Existing

Figure 14: View A Indicative Extent and Mass of the Proposal

View B - From the historic Menangle Creamery driveway, looking south

Due to the topography of the site and built elements between the Creamery and the existing road bridge, the proposed development will not be visible. As a result, this viewpoint has not been assessed.

Figure 15: View B Existing

View C - From Stevens Road, looking south-east

Sensitivity	**Rating**	**Reason**		
View sensitivity	Low	The view is significantly modified and the natural landscape in the background is fragmented. Views of the railway are of heritage significance but it is not visible in this view		
Viewer		Resident	Visitor / Employee	Pedestrian / Motorist / Cyclist / Commuter
Viewer sensitivity	Low	n/a	n/a	Low
No of viewers	Low	n/a	n/a	Low
Duration	Low	n/a	n/a	Low
Total Sensitivity	Low			
Magnitude	**Rating**	**Reason**		
Proximity to the viewer	Moderate	Approximately 125m away		
Scale/size of development in the view	Low	Only partially visible due to distance, vegetation and existing structures in the foreground		
Change to the view (how much it changes the view)	Low	The development only slightly increases the massing of the existing vehicular bridge and forms a very small proportion of the view. It very minimally alters the skyline and is more exposed due to the removal of some existing vegetation		
Contrast of the development to the existing (elements in the view)	Low	Similar form, style and position to the existing vehicular bridge		
Total Magnitude	Low			
Resultant rating of visual impact	Low	• The pedestrian bridge security fence increases the massing of the bridge • The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view		

Figure 16: View C Existing

Figure 17: View C Indicative Extent and Mass of the Proposal

View D - From Moreton Park Road, looking north

Sensitivity	**Rating**	**Reason**		
View sensitivity	Moderate	The view has been moderately modified but retains significant natural landscape features		
Viewer		Resident	Visitor / Employee	Pedestrian / Motorist / Cyclist / Commuter
Viewer sensitivity	Low	n/a	n/a	Low
No of viewers	Low	n/a	n/a	Low
Duration	Low	n/a	n/a	Low
Total Sensitivity	Moderate - Low			
Magnitude	**Rating**	**Reason**		
Proximity to the viewer	High	Approximately 50m away		
Scale/size of development in the view	Low	The development is of moderate scale in the view but only partially visible due to existing vegetation in the foreground. The development consists of approximately 2% of the view		
Change to the view (how much it changes the view)	Low	Proposed development is located in the midground of the view with small changes to massing of built structures and very minimal changes to the skyline		
Contrast of the development to the existing (elements in the view)	Low	Similar in form and style to the existing vehicular bridge		
Total Magnitude	Moderate - Low			
Resultant rating of visual impact	Moderate - Low	• The pedestrian bridge security fence increases the massing of the bridge		

Figure 18: View D Existing

Figure 19: View D Indicative Extent and Mass of the Proposal

View E - From heritage cottage at 27 Station Street, looking east

The road bridge is not visible from the heritage cottage at 27 Station Street as a result of the distance from the proposed development and existing vegetation along Station Street. As a result, this viewpoint has not been assessed.

Figure 20: View E Existing

View F - From Station Street, looking west

Sensitivity	**Rating**	**Reason**		
View sensitivity	Moderate	The view has been moderately modified		
Viewer		Resident	Visitor / Employee	Pedestrian / Motorist / Cyclist / Commuter
Viewer sensitivity	Low	n/a	n/a	Low
No of viewers	Low	n/a	n/a	Low
Duration	Low	n/a	n/a	Low
Total Sensitivity	Moderate - Low			
Magnitude	**Rating**	**Reason**		
Proximity to the viewer	Moderate	Approximately 125m away		
Scale/size of development in the view	Low	The development occupies a small portion of the view as a result of the distance and angle of the view point		
Change to the view (how much it changes the view)	Low	The development is located in the background and minimally modifies the view with no changes to the skyline		
Contrast of the development to the existing (elements in the view)	Low	Similar form to existing infrastructure but adds to the amount of built structures visible in the view		
Total Magnitude	Low			
Resultant rating of visual impact	Low	• The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view		

Figure 21: View F Existing

Figure 22: View F Indicative Extent and Mass of the Proposal

View G - From St James Menangle's Anglican Church, looking north-east

The road bridge is barely visible from St James Menangle's Anglican Church as a result of the distance from the proposed development and existing buildings and vegetation in the view. As a result, this viewpoint has not been assessed.

Figure 23: View G Existing

View H - From heritage cottage at 54 Station Street, looking west

Sensitivity	**Rating**	**Reason**		
View sensitivity	Moderate	Although the view has been significantly modified, it holds some significance because it is from a heritage cottage		
Viewer		Resident	Visitor / Employee	Pedestrian / Motorist / Cyclist / Commuter
Viewer sensitivity	High - Moderate	High	Moderate	n/a
No of viewers	Low	Low	Low	n/a
Duration	Moderate	High	Low	n/a
Total Sensitivity	Moderate			
Magnitude	**Rating**	**Reason**		
Proximity to the viewer	High	Approximately 50m away		
Scale/size of development in the view	Low	The development occupies a small portion of the view		
Change to the view (how much it changes the view)	Low	The development increases the massing of built structures and minimally changes the skyline. The overall changes to the view are minimal due to the nature and proportion of the development in the view		
Contrast of the development to the existing (elements in the view)	Low	The development is similar in form and style to existing structures but contrasts with existing vegetation in the view		
Total Magnitude	Moderate - Low			
Resultant rating of visual impact	Moderate-Low	• The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view • The pedestrian bridge security fence increases the massing of the bridge		

Figure 24: View H Existing

Figure 25: View H Indicative Extent and Mass of the Proposal

7.0 MITIGATION MEASURES

7.1 ASSESSMENT SUMMARY

The impacts of the proposed pedestrian bridge on the views assessed are summarised below:

Description	Sensitivity	Magnitude	Impact Rating	Impacts
Viewpoint A - From historic Menangle train platform, looking south	Moderate	Low	Moderate - Low	• The pedestrian bridge security fence increases the massing of the bridge • The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view
Viewpoint B - From the historic Menangle Creamery driveway, looking south	n/a	n/a	Not visible	n/a
Viewpoint C - From Stevens Road, looking south-east	Low	Low	Low	• The pedestrian bridge security fence increases the massing of the bridge • The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view
Viewpoint D - From Moreton Park Road, looking north	Moderate - Low	Moderate - Low	Moderate - Low	• The pedestrian bridge security fence increases the massing of the bridge
Viewpoint E - From heritage cottage at 27 Station Street, looking east	n/a	n/a	Not visible	n/a
Viewpoint F - From Station Street, looking west	Low	Low	Low	• The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view
Viewpoint G - From St James Menangle's Anglican Church, looking north-east	n/a	n/a	Insignificant	n/a
Viewpoint H - From heritage cottage at 54 Station Street, looking west	Moderate	Moderate - Low	Moderate - Low	• The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view • The pedestrian bridge security fence increases the massing of the bridge

7.2 MITIGATION MEASURES

The visual impact assessment highlights a number of impacts of the proposed pedestrian bridge development on the existing Station Street, Menangle area.

The following mitigation measures are proposed to assist in minimising the impacts of the proposal:

Impact	Approach	Residual Impact
The pedestrian bridge security fence increases the massing of the bridge	• Make the fence as perforated as possible to reduce its weight and massing in the landscape • Carefully select materials and colours for the security fence that visually receed and blend into the surroundings as much as possible	Reduced
The new pedestrian bridge approaches are visible and some of the existing vegetation has been removed increasing the hardness of the view	• Screen the bridge approaches with new tree and shrub planting • Soften the proposed pedestrian bridge with a planted edge between the road and bridge • Carefully select materials and colours for the pedestrian bridge to make it blend in with existing built forms	Reduced

8.0 CONCLUSION

This visual impact assessment found that the proposed pedestrian bridge and its approaches result in no High visual impacts to existing views of the site.

Three of the views assessed resulted in Moderate – Low impact ratings (view A, D and H). These were for the views experienced by employees and commuters at Menangle Train Station, commuters on Moreton Park Road and residents of the heritage cottage at 54 Station Street where the pedestrian bridge approaches and security fence are most visible.

Two views were assessed as having Low impact ratings (view C and F), as these views were already significantly modified, and the visibility of the development is partial screened by existing structures and vegetation.

Three views identified for assessment from historic buildings close to the site (View B, E and G) were established as having insignificant or non existent visuals of the development due to distance, topography, existing structures and vegetation.

The resulting assessment has been used to inform the design team of the visual impacts of the proposed development allowing them to be considered and addressed as part of the design process to reduce the visual impacts to the site. Mitigation measures adopted by the design team to reduce visual impacts include incorporating planting to screen the bridge approaches and the careful selection of materials and colours to blend the development into the existing setting.

This visual impact assessment has been carried out by assessing the proposed pedestrian bridge development against the existing site and views. Although not considered in the assessment of the views it should be noted that dramatic changes are planned in the vicinity over the coming years, with a new large-scale residential development proposed to the north, east and west of the site. This new housing community will significantly impact the largely agricultural views within Menangle as the suburb becomes denser and open space is replaced with housing.

Overall, it is considered that the proposed development has a Low impact on the existing surrounding landscape. The design of the proposed pedestrian bridge results in minimal changes to most of the views assessed and the careful positioning of planting and selection of materials will reduce its visual impact and increase its integration into the existing landscape and views.

9.0 REFERENCES

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