

SUBMISSIONS REPORT

Glenwood Pedestrian Link

October 2018

sydneymetro.info 1800 019 989 info@metronorthwest.com.au



Project: Glenwood Pedestrian Link		
Division:	Sydney Metro	
Document:	Submissions Report	
Date:	24 October 2018	
Status:	tus: Final 06	
Author:	Sarah Saunders	
Reference number:	SM-18-00100614	
© Sydney Metro 2018		

Version:	Date:	Description:
01	2 July 2018	First draft submissions report for Sydney Metro review
02	16 August 2018	Second draft submissions report for Sydney Metro review
03	19 September 2018	Final draft submissions report for Sydney Metro review
04	27 September 2018	Final submissions report
05	3 October 2018	Final 1 submissions report
06	24 October 2018	Final 2 submissions report

Author, Reviewer and Approver details			
Prepared by:	Sarah Saunders	Date: 24 October 2018	Signature:
Reviewed by:	Alastair Hammond	Date: 24 October 2018	Signature: A. Harrow
Approved by:	Mark Hather	Date: 24 October 2018	Signature:



Table of Contents

Glossar	у			iv
Executi	ve sumn	nary		v
1.	Introduction			1
	1.1.			
	1.2.	-	osal as described in the Review of Environmental Factors	
	1.3.		I justification	
	1.4.	Key findir	ngs from the Review of Environmental Factors	6
		1.4.1.	Main benefits	6
		1.4.2.	Key impacts	
	1.5.	Purpose a	and content of this Submissions Report	7
	1.6.		of this report	
2.			community consultation	9
	2.1.	Consultation during public exhibition of the Review of Environmental Factors		9
		2.1.1.	Proposal newsletter	9
		2.1.2.	Newspaper advertising	9
		2.1.3.	Community information sessions	9
	2.2.	Proposed	I future engagement	. 10
		2.2.1.	Consultation objectives	. 10
		2.2.2.	Project information	
3.	Overvie		es raised	
	3.1.	,	of issues	
4.	-		Jes	
	4.1.	Traffic, tra	ansport and access	
		4.1.1.	Parking and access	. 15
		4.1.2.	Access to local schools	. 17
		4.1.3.	Traffic and pedestrian safety	. 17
	4.2.	Project de	esign	. 18
		4.2.1.	Pedestrian Link design	. 18
		4.2.2.	Sharrock Avenue/Cramer Place footpath	. 18
		4.2.3.	Opposed to the preferred option - general	. 19
	4.3.	Socio-economic, land use and property		. 19
		4.3.1.	Property value	. 19
		4.3.2.	Vehicle, property and personal safety	. 20
		4.3.3.	Increased litter	.21
		4.3.4.	Maintenance	.21
	4.4.	Noise and vibration		



4.4.2. Noise and vibration impacts during operation. 22 4.5. Consultation			4.4.1.	Noise and vibration impacts during construction	21
4.6. Need for the proposal 24 4.7. Visual impacts 24 4.8. Issues raised outside the scope of the proposal 24 4.8. Issues raised outside the scope of the proposal 24 5. Response to Community Group submissions 24 6. Response to government submissions 24 6. Response to government submissions 24 6.1. Roads and Maritime Services 24 6.2. Blacktown City Council 24 6.2. Blacktown City Council 24 6.2. Blacktown City Council 24 7.1. Environmental management 33 7.2. Management and mitigation measures 33 7.2.1. Construction management 33 7.2.2. Operational management 33 7.2.3. Additional approvals 33 8. Conclusion 44 9. References 44			4.4.2.	Noise and vibration impacts during operation	
4.7. Visual impacts 24 4.8. Issues raised outside the scope of the proposal 24 5. Response to Community Group submissions 26 6. Response to government submissions 26 6.1. Roads and Maritime Services 26 6.2. Blacktown City Council 27 7. Environmental management 33 7.1. Environmental management plans 33 7.2. Management and mitigation measures 33 7.2.1. Construction management 33 7.2.2. Operational management 33 7.2.3. Additional approvals 34 8. Conclusion 44 9. References 44		4.5.	Consult	Consultation	
4.8. Issues raised outside the scope of the proposal 24 5. Response to Community Group submissions 26 6. Response to government submissions 26 6.1. Roads and Maritime Services 26 6.2. Blacktown City Council 27 7. Environmental management. 32 7.1. Environmental management plans. 33 7.2. Management and mitigation measures 33 7.2.1. Construction management. 33 7.2.2. Operational management. 33 7.2.3. Additional approvals. 34 8. Conclusion. 44 9. References. 44		4.6.	Need for	or the proposal	23
5. Response to Community Group submissions 24 6. Response to government submissions 24 6.1. Roads and Maritime Services 24 6.2. Blacktown City Council 24 7. Environmental management 34 7.1. Environmental management plans 34 7.2. Management and mitigation measures 34 7.2.1. Construction management 33 7.2.2. Operational management 34 7.2.3. Additional approvals 34 8. Conclusion 4		4.7.	Visual i	mpacts	24
6. Response to government submissions 24 6.1. Roads and Maritime Services 24 6.2. Blacktown City Council 24 7. Environmental management 34 7.1. Environmental management plans 34 7.2. Management and mitigation measures 35 7.2.1. Construction management 35 7.2.2. Operational management 35 7.2.3. Additional approvals 36 8. Conclusion 44 9. References 4		4.8.	Issues	raised outside the scope of the proposal	24
6.1. Roads and Maritime Services 22 6.2. Blacktown City Council 29 7. Environmental management. 32 7.1. Environmental management plans 33 7.2. Management and mitigation measures 33 7.2.1. Construction management 33 7.2.2. Operational management 33 7.2.3. Additional approvals 34 9. References 4	5.	Response to Community Group submissions		26	
6.2. Blacktown City Council 29 7. Environmental management. 33 7.1. Environmental management plans. 33 7.2. Management and mitigation measures 33 7.2.1. Construction management. 33 7.2.2. Operational management. 33 7.2.3. Additional approvals. 34 9. References. 4	6.	Resp	onse to ge	overnment submissions	
 7. Environmental management		6.1.	Roads	and Maritime Services	
7.1. Environmental management plans		6.2.	Blackto	wn City Council	29
7.2. Management and mitigation measures 33 7.2.1. Construction management 33 7.2.2. Operational management 33 7.2.3. Additional approvals 34 8. Conclusion 44 9. References 44	7.	Environmental management			33
7.2.1. Construction management 33 7.2.2. Operational management 33 7.2.3. Additional approvals 33 8. Conclusion 44 9. References 44		7.1.	Environ	mental management plans	
7.2.2. Operational management		7.2.	Management and mitigation measures		
7.2.3. Additional approvals			7.2.1.	Construction management	
 8. Conclusion			7.2.2.	Operational management	
9. References4			7.2.3.	Additional approvals	
	8.	Conclusion		40	
Appendix A: Summary of respondents4	9.	Refer	ences		41
	Appe	ndix A: S	Summary	of respondents	42



Glossary

	Definitions	
СЕМР	Construction environmental management plan	
CNVMP	Construction noise vibration and management plan	
CPTED	Crime Prevention Through Environmental Design	
CSWMP	Construction soil water management plan	
СТМР	Construction traffic management plan	
DDA	Disability Discrimination Act 1992	
DECC	Department of Energy and Climate Change	
EIS	Environmental impact statement	
EPA	Environment Protection Authority	
ISEPP	State Environmental Planning Policy (Infrastructure) 2007	
LGA	Local government area	
MCA	Multi criteria analysis	
NSW	New South Wales	
REF	Review of Environmental Factors	
ROL	Road occupancy license	
тмс	Transport management centre	



Executive summary

The proposal

The Glenwood Pedestrian Link Review of Environmental Factors ('the REF') was prepared in March 2018 to assess the likely impacts on the environment from the construction and operation of the Glenwood Pedestrian Link (the proposal).

Sydney Metro is delivering a new metro station at Bella Vista as part of the \$8.3 billion Sydney Metro Northwest project. The new Bella Vista Station is under construction north of Celebration Drive and will service the Norwest Business Park, local residential areas and the future Bella Vista Station precinct. As part of the Bella Vista Station works, Sydney Metro is constructing a pedestrian bridge to allow pedestrians and cyclists to safely and conveniently cross Old Windsor Road and access the station. This will provide pedestrian and cyclist access over Old Windsor Road.

It is proposed to construct a new pedestrian and bicycle pathway between Swansea Court/Sharrock Avenue and the existing shared path along Old Windsor Road to provide walking and cycling access to the new pedestrian bridge and Bella Vista Station from the Glenwood residential area (the proposal). The construction of the proposal aims to maximise equal access opportunities to Bella Vista Station for Glenwood residents. Construction of the proposal in conjunction with the Old Windsor Road pedestrian bridge would result in reduced walking time for local people within proximity to Bella Vista Station. The proposal would mean that some 700 Glenwood households and two local schools would be within a 15 minute walk of the new station.

Whilst related, the proposal does not form part of the existing Sydney Metro Northwest project.

Planning approvals process

The proposal comprises an 'activity' for the purposes of Part 5, Division 5.1 of the (NSW) *Environmental Planning and Assessment Act 1979* (EP&A Act) by reason of clause 79 of *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP). This clause specifies that railway infrastructure facilities are permissible without the need for development consent under Part 4 of the EP&A Act when undertaken by or on behalf of a public authority (which includes Sydney Metro).

Sydney Metro is the determining authority for the REF for the purposes of Part 5, Division 5.1 of the EP&A Act.

Purpose of the report

The REF was displayed for a period of six weeks between Friday 6 April 2018 and Friday 18 May 2018. The REF was available online to view or download. Printed copies were available at Blacktown City Council, The Hills Shire Council, the Vinegar Hill Memorial Library and Baulkham Hills Library. This was supported by a community engagement program including distribution of newsletters to all residents of the suburb of Glenwood (around 4500 properties) on 4 and 5 April 2018, and doorknocking residents in nearby streets. Community information sessions were also held at Glenwood Village shopping centre on 11 April, 5 May and 10 May 2018.

This Submissions Report documents and considers the issues raised in community, stakeholder and agency submissions received during the public exhibition of the REF, as



well as Sydney Metro's response to these issues. The Submissions Report also provides an overview of the REF prepared for the proposal, consultation activities undertaken prior to, and during, the public exhibition of the REF and details on additional investigations that have been undertaken since exhibition of the REF (in response to issues raised in submissions).

Overview of submissions

Sydney Metro received 51 submissions from a range of stakeholders. Of the submissions received:

- Forty six (46) submissions were from individuals
- Two submissions were from the Member for Greenway, the Hon Michelle Rowland MP on behalf of two residents
- One submission was from Blacktown City Council
- One submission was from Roads and Maritime Services
- One submission was from a community group (Bike North).

The majority of community submissions were concerned about the proposal's site location, traffic, transport and access, parking, design development, community and noise impacts. A detailed discussion and response to the submissions is provided in Chapter 3.

Roads and Maritime Services raised the following issues:

- Requirement to consult with Roads and Maritime Services and Blacktown City Council regarding proposed works on Old Windsor Road shared path and street lighting amendments
- Requirement to consider the need for permanent barriers due to the regrading of Old Windsor Road shared path
- Request for additional information about utility relocations, landscaping maintenance, work methodology, cross section dimensions, design criteria and traffic impacts during construction
- Requirement for a road occupancy licence
- Comments regarding the proposed width and alignment of the pathway and handrail clearance.

Blacktown City Council raised the following issues:

- The need for parking management strategies to consider the width of streets in the vicinity of the proposal and a request for Sydney Metro to fund the parking management strategies to be implemented
- Residents' access issues as a result of increased on-street parking by commuters
- Impacts on residential amenity due to the predicted increase in traffic and car parking in local streets
- Request for the Construction Traffic Management Plan (CTMP) to be prepared in consultation with Blacktown City Council.

Conclusion

This Submissions Report documents submissions received and outlines Sydney Metro's responses to the issues raised.



To manage the potential impacts identified in the REF and this Submissions Report, a range of management and mitigation measures would be implemented during construction and operation and form an integral part of the proposal. In particular, this includes implementing the Construction Environmental Management Framework (construction stage) and implementing and monitoring outcomes of the Parking Management Strategy (operation stage). As described in Section 2 of this report, Sydney Metro intends to continue to update the community and Blacktown City Council on the proposal.

With the implementation of the proposed management and mitigation measures, potential environmental impacts of the proposal are considered manageable to a level that is not likely to significantly affect the environment.

Next steps

Sydney Metro will consider the responses to submissions discussed in this Submissions Report during its determination of the proposal. This report and Sydney Metro's determination will be made available on the Sydney Metro website at sydneymetro.info/documents following the proposal's determination.

The local community will also be notified of Sydney Metro's determination.

Sydney Metro will write to the community members and organisations who made a submission. This correspondence will include details on how to identify their issue in this Submissions Report, plus contact details to obtain further information. Sydney Metro would continue to engage with the community and government agencies during the proposal's construction phase.



1. Introduction

This section provides a background to the need for the proposal, an overview of the proposal, and an outline of the structure of this report.

1.1. Background

Bella Vista Station is one of the stations being delivered as part of the Sydney Metro Northwest Project. Bella Vista Station is located on the eastern side of Old Windsor Road within the suburb of Bella Vista in The Hills Shire Local Government Area (The Hills Shire LGA). The station is currently under construction and will serve the Norwest Business Park, local schools, surrounding residential areas, and future development within proximity to the station precinct. Due to a historical focus on planning for vehicle usage the station will be delivered in an environment with several access constraints due to the surrounding street network.

A pedestrian bridge (approved as part of the Sydney Metro Northwest Project in 2013) is being constructed across Old Windsor Road connecting Bella Vista Station to the existing shared path on the western side of Old Windsor Road. The bridge will land adjacent to the southern entry of Bella Vista Station on the eastern side of Old Windsor Road, and adjacent to the Emmanuel Baptist Church and Trades Norwest Anglican Senior College on the western side. This will provide improved pedestrian access across Old Windsor Road.

It is proposed that a new pedestrian and cycle link (this proposal) be provided to connect Bella Vista Station and the new pedestrian bridge to the Glenwood residential area.

1.2. The Proposal as described in the Review of Environmental Factors

The proposal would provide a dedicated link to improve pedestrian and cyclist access between the Glenwood residential area and the existing shared path on the western side of Old Windsor Road. The objective of the proposal is to improve pedestrian and cycle access for the Glenwood community to the new Bella Vista Station and pedestrian bridge.

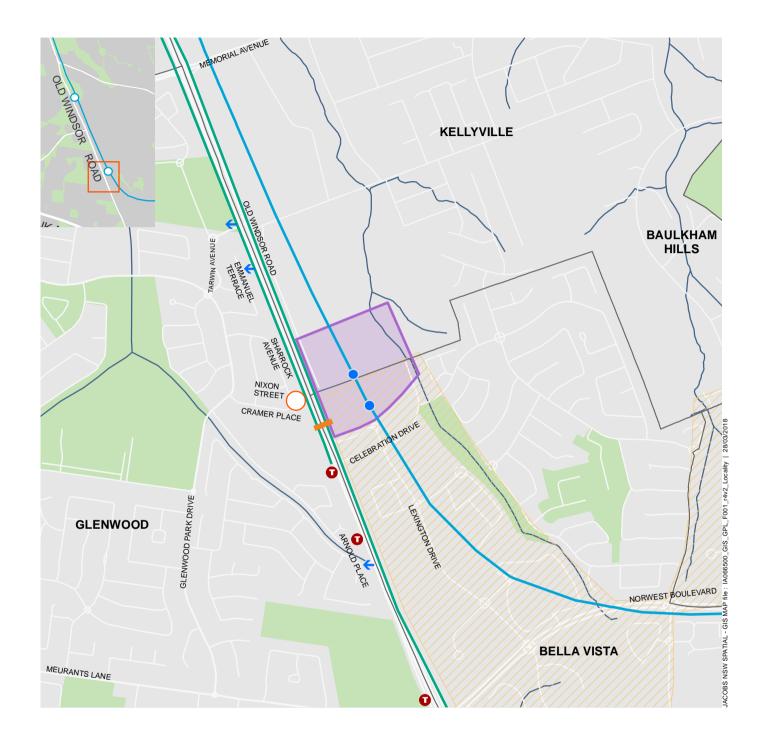
The proposal as described in the Review of Environmental Factors (REF) comprised the following key elements:

- Acquisition and demolition of one residential property (1 Swansea Court, Glenwood)
- Construction of a 2.5-metre-wide shared path (for pedestrians and cyclists) between the Old Windsor Road shared path and Swansea Court, approximately 50 metres in length
- Regrading a section of the existing shared path along Old Windsor Road (to 1 in 20 grade)
- Installation of a new 1.5-metre-wide footpath on the eastern side of Sharrock Avenue between Swansea Court and Nixon Street
- Installation of a new 1.5-metre-wide footpath on the southern side of Cramer Place between Swansea Court and Glenwood Park Drive
- Utility relocations where required
- Installation of retaining walls along Old Windsor Road shared path
- Landscaping and lighting.

[©] Sydney Metro 2018



Figure 1-1 shows the locality of the proposal. Figure 1-2 identified the key features of the proposal. An artist impression of the proposal is provided in Figure 1-3 and Figure 1-4.



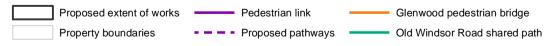
KEY

- Proposed link location
- Bella Vista Station entry locations
- Existing pedestrian access points
- T-Way stop location
- Glenwood pedestrian bridge
- Sydney Metro Northwest alignment
- 6 ----- O
 - Old Windsor Road shared path
 - Bella Vista Station Precinct
 - Norwest Business Park

0

N





0

Ν





Figure 1-3 Artist impression of the proposal showing the shared path and landscaping, view from Swansea Court towards Old Windsor Road



Figure 1-4 Artist impression of the proposal, view from the eastern side of the proposal from Old Windsor Road to Swansea Court



1.3. Need and justification

The NSW Government is committed to facilitating and encouraging the use of public transport by making Sydney Metro stations more accessible, and improving interchange with other modes of transport such as walking, cycling, bus, taxi and private vehicle.

Despite the construction of a new pedestrian bridge over Old Windsor Road (refer above), pedestrian access between the suburb of Glenwood and Bella Vista Station is still constrained. Formal pedestrian access points exist at Emmanuel Terrace, Arnold Place and Miami Street with fences and noise barriers impeding access for almost one kilometre in between.

This access situation allows very few residents of Glenwood, living to the west of Old Windsor Road (within the Blacktown LGA), to walk to Bella Vista Station and T-Way bus services. This produces access inequity when compared to residents living to the east of Old Windsor Road (within The Hills Shire LGA). The proposal aims to maximise equal access opportunities for all residents who live within walking distance of the station.

A number of pedestrians and cyclists currently use informal access through trespassing across the grounds of the Emmanuel Baptist Church, which creates the potential for safety, security and liability issues. The introduction of Sydney Metro services is likely to see an increased demand for pedestrian and cyclist access between Old Windsor Road and the Glenwood residential area. This may potentially increase trespassing through the Emmanuel Baptist Church and other private property. Pedestrian access through the Emmanuel Baptist Church grounds is already restricted at certain times of the day and could potentially be restricted further if impacts increase.

These factors have led to the need to investigate opportunities to improve pedestrian access between the Glenwood residential area and Old Windsor Road.

1.4. Key findings from the Review of Environmental Factors

1.4.1. Main benefits

The proposal would supplement Sydney Metro Northwest and the Bella Vista Station precinct by improving pedestrian access to and from the active core of the Bella Vista Station. The Pedestrian Link would facilitate ease of access to the Old Windsor Road shared path, Old Windsor Road pedestrian bridge and Bella Vista Station precinct for Glenwood residents.

The proposal would create a direct access in and out of the Glenwood residential area, providing connectivity to the regional active transport corridor, T-Way bus services, schools, the Norwest Business Park and future businesses within the development of the Bella Vista Station precinct.

Construction of the proposal in conjunction with the Old Windsor Road pedestrian bridge would result in reduced walking time for local people within proximity to Bella Vista Station. The proposal would mean that some 700 Glenwood households and two local schools would be within a 15 minute walk of the new station. An even greater number of households would be within a short cycling distance. Residents who would currently have a 25 to 30 minute walk at average pace would be able to walk to the new Bella Vista Station in less than 15 minutes.



1.4.2. Key impacts

Potential impacts associated with the proposal were identified in the REF as follows:

- As a new access point to Bella Vista Station and T-Way services, there may be additional commuter parking and pick-up/drop-off pressures on streets adjacent to the proposal, including Sharrock Avenue, Swansea Court, Cramer Place, Nixon Street and Adrian Street. These streets will require appropriate parking management measures to allow safe access to the link such that local amenity is not adversely impacted.
- During construction, the proposal would result in a perceptible but a temporary noise level increase for residential receivers in proximity to the proposal. Construction works would be carried out within standard construction hours (7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturday) where possible. Two residential receivers were identified with potential for a noise level increase of 6 to 7 dBA during operation due to the potential increase in road traffic noise levels associated with the removal of existing screening (removal of the residential dwelling and boundary wall). Community updates would be provided and construction and operational noise management controls put in place to mitigate potential impacts.
- Temporary visual impacts would occur during construction. The site would be enclosed by fencing, and the removal of street trees and vegetation within the proposal site would open up views between Swansea Court and Old Windsor Road. Construction of the proposal is expected to temporarily reduce visual amenity for residents and road/street users in close proximity to the proposal site itself. The change from a residential property to an open space will provide some amenity improvements including opening-up views from the upper storey of the adjacent properties, providing green space and landscaping. Once opened, the Pedestrian Link would provide a permanent outlook onto open space where there is currently a residential dwelling. On balance, this would result in no major changes to visual amenity from the adjacent residential area.
- The proposal would be developed within a previously disturbed/developed area. No remnant vegetation would be impacted or removed during the proposal's construction. Several native plantings within the proposal's area are likely to require removal and replacement. Up to 20 planted Eucalypts and Lomandras located to the rear of 63 and 67 Sharrock Avenue and 1, 3 and 5 Swansea Court may require removal during the regrading of Old Windsor Road shared path. The area surrounding the pathway would be landscaped and revegetated with native plants. There would be some additional vegetation within the proposal site following construction and more potential habitat and foraging material for fauna. The proposal would have some limited overall benefit on biodiversity once completed.

1.5. Purpose and content of this Submissions Report

This Submissions Report has been prepared to address the submissions received from the community and government agencies following the exhibition of the REF. This Submissions Report has been prepared to:

- Summarise issues raised in submissions
- Respond to these issues
- Provide any new information concerning the proposal (where relevant)
- Identify any changes to the proposal and the potential impact of these changes (where relevant)



• Confirm the proposed mitigation and management measures for the proposal.

1.6. Structure of this report

The structure of this Submissions Report is as follows:

- Chapter 1 Introduction: (this chapter) provides background to the Sydney Metro Northwest Project and an overview of the key features of the proposal; a summary of the key conclusions of the REF; and an outline of the structure and purpose of this Submissions Report
- Chapter 2 Stakeholder and community consultation: provides an overview of consultation activities carried out before and during the public exhibition of the REF. Also includes a summary of ongoing and proposed consultation and communications
- Chapter 3 Overview of submissions: provides an overview of the process that was
 used to analyse the issues raised in submissions, as well as an overview of the key
 issues raised by the community, government agencies and stakeholders
- Chapter 4 Response to community and stakeholder submissions: details the key issues raised in community and stakeholder submissions and Sydney Metro's response to these issues
- Chapter 5 Response to community group submissions: summarises the issues raised by community groups and Sydney Metro's response to these issues
- Chapter 6 Response to NSW Government submissions: summarises the issues raised in government representations and local council submissions and Sydney Metro's response to these issues
- Chapter 7 Environmental management: provides a revised set of consolidated environmental management measures for the proposal, which have been amended, where required, in response to submissions received during the public exhibition period
- Chapter 8 Conclusion: provides a summarised justification and conclusion for the proposal
- Chapter 9 References: summary of references used in this report.



2. Stakeholder and community consultation

Sydney Metro carried out consultation with the community, government agencies and key stakeholders during the public exhibition of the REF. Details of these consultation activities and proposed future engagement are documented below.

2.1. Consultation during public exhibition of the Review of Environmental Factors

During the exhibition period, stakeholders, community members and government agencies (including NSW Government agencies and local councils) had the opportunity to comment on the REF. Stakeholders and the community were invited to view the REF, attend community information sessions and make submissions. The REF was displayed for a period of six weeks between Friday 6 April 2018 and Friday 18 May 2018. The REF was available online to view or download. Printed copies were available at Blacktown City Council, The Hills Shire Council, the Vinegar Hill Memorial Library and Baulkham Hills Library. The following sections outline the activities that were undertaken during the public exhibition of the REF.

Contact mechanisms for the proposal were established before the commencement of the exhibition period. Community members and stakeholders were able to direct their enquiries to:

- Enquiries phone line: 1800 019 989
- Email: info@metronorthwest.com.au
- Mail: Sydney Metro, PO Box K659, Haymarket NSW 1240.

2.1.1. Proposal newsletter

A proposal newsletter was sent to all residents in Glenwood. The newsletter provided an overview of the proposal and invited people to view the REF, attend a community information session and make a submission.

The newsletter was delivered on 5 April 2018 to the whole suburb of Glenwood - about 4,500 residences and businesses. Newsletters were also made available at the community information sessions and the REF exhibition locations.

2.1.2. Newspaper advertising

The public display of the REF was advertised in the Blacktown Advocate and the Rouse Hill Times on Wednesday 11 April and Wednesday 2 May respectively. The advertisements provided notification to the community about the proposal and gave details regarding the community information sessions.

In addition, Sydney Metro team members doorknocked households in the streets closest to the proposal site on Wednesday 4 and Thursday 5 April 2018, providing the newsletter and advising residents of the first community information session.

2.1.3. Community information sessions

Three community information sessions were held during the public exhibition of the REF. These sessions were held at the Glenwood Shopping Centre on:

- Wednesday 11 April 2018 (4:00pm to 7:00pm)
- Saturday 5 May 2018 (10:00am to 2:00pm)



Thursday 10 May 2018 (4:00pm to 7:00pm).

Full details of the sessions were advertised in the Blacktown Advocate and the Rouse Hill Times and included in the community newsletter. Copies of the REF document, notification newsletter and enlarged design diagrams were made available to view at these sessions. A number of project team members including representatives from the transport and environmental planning teams were available at each of these sessions to answer questions regarding the proposal and the process for making submissions.

The information sessions were attended by around 208 members of the local residential and business communities.

2.2. Proposed future engagement

Should Sydney Metro approve the proposal, community and stakeholder engagement activities would continue prior to and during construction.

2.2.1. Consultation objectives

The proposal would be delivered under a communications and consultation strategy that describes the key activities that would take place to inform and engage with the local community and key stakeholders across the proposal's lifecycle, including:

- Informing the community and other stakeholders by providing clear, factual and timely information about planned construction and operational work and its associated environmental and social impacts
- Providing a mechanism for prompt issues resolution
- Providing adequate opportunities for community members and other stakeholders to provide feedback
- Ensuring coordinated communications with other relevant agencies and stakeholders including Roads and Maritime Services, Blacktown City Council, Ausgrid, Telstra, Optus and Jemena.

2.2.2. **Project information**

All community and stakeholders would be provided with project updates by the following means:

- Community update to notify residents and stakeholders of the outcome of the REF determination process. This update will be distributed via targeted letterbox drop and uploaded to the project website
- Works notifications, including out-of-hours works schedule, distributed via targeted letterbox drops, email and uploaded to the project website
- Updates to the project website sydneymetro.info
- Clear signage at construction site
- Doorknocking properties where required
- Stakeholder meetings and briefings
- Channels for the community to contact the project team including a 24-hour project information phone line, email and postal address
- Project email list (subscription based)



- Complaints management process
- Community Place Manager for direct community and stakeholder contact.



3. Overview of issues raised

Sydney Metro received submissions from a range of stakeholders including government agencies/representatives, special interest groups and the community. Submissions were received up until 18 May 2018.

A total of 51 submissions were received. Of these submissions, four were responses from government agencies/representatives, comprising:

- One submission from Blacktown City Council
- One submission from Roads and Maritime Services
- Two submissions from the Member for Greenway, the Hon Michelle Rowland MP on behalf of two residents.

One submission was received from a community group, Bike North (Section 5). The other 46 submissions (from 43 individuals) were received from the community, including one petition with 160 signatures (representing 96 households). The petition typically contained signatures from concentrated areas (i.e. neighbouring streets) around the proposal within Glenwood.

The issues raised in each submission have been identified and collated, and corresponding responses to the issues raised have been provided. Appendix A lists the respondents, each respondent's allocated submission number and the relevant section in this report where the issues are addressed. Where similar issues have been raised in different submissions, only one response has been provided.

Responses to the issues raised by Blacktown City Council and Roads and Maritime Services are presented separately to the community responses in Section 6.

A response to the issues raised by Bike North is presented separately to the community responses in Section 5.

An overall breakdown of the submissions in terms of support or objection are as follows:

- Eighteen submissions supported the proposal (36%)
- Twenty three submissions objected to the proposal (45%). Of these objections, 19 were individual respondents, one was a petition, one was from Blacktown City Council and two objections were received through the Member for Greenway, the Hon Michelle Rowland, on behalf of two individuals
- Ten respondents provided no objection or support for the proposal (19%).

3.1. Summary of issues

A breakdown of these issues for all submissions received is provided in Figure 3-1.

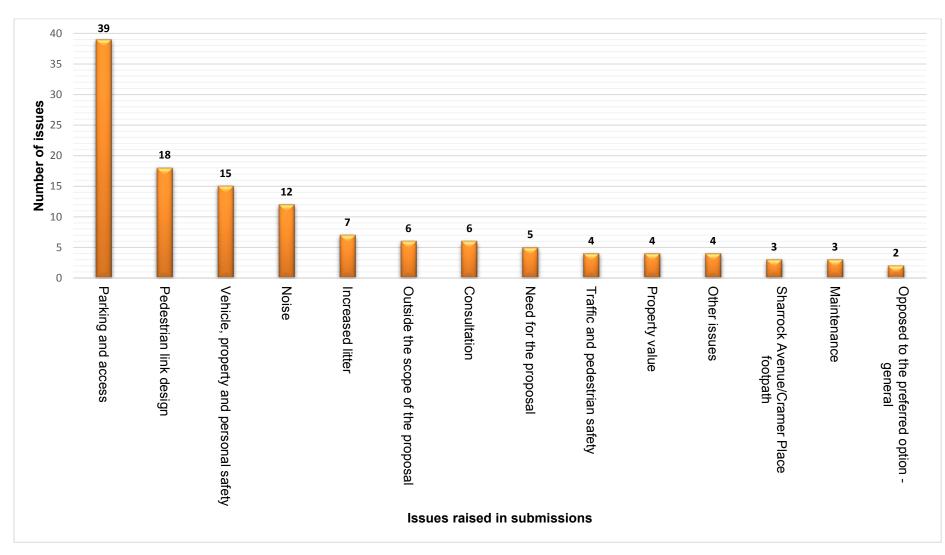


Figure 3-1 Breakdown of key issues raised in submissions





As shown in Figure 3-1, the key issues raised in the submissions were:

- Parking and access (39)
- Pedestrian Link Design (18)
- Vehicle, property and personal safety (15)
- Noise and vibration (12)
- Increased litter (7)
- Issues raised outside of the scope of the proposal (6)
- Adequacy of consultation (6)
- Need for the proposal (5)
- Traffic and pedestrian safety (4)
- Property value (3)
- Maintenance (3)
- Sharrock Avenue/Cramer Place footpath (3)
- Opposed to the preferred option general (2)
- Street appeal (1)
- Option assessment (1)
- Cyclist movements (1)
- Access to local schools (1).



4. **Response to issues**

This chapter describes the issues raised in community submissions received during the public exhibition of the REF and Sydney Metro's response to these issues.

The order of the response to the issues raised reflects the order of the issues as presented in the REF. For each issue (or sub-issue) raised, a summary of the issue is presented, followed by a list of the relevant submission numbers and then Sydney Metro's response.

4.1. Traffic, transport and access

4.1.1. Parking and access

Summary of issues raised

The following issues were raised relating to potential parking and access issues in local streets during operation of the proposal:

- Concerns that the roads are narrow and already difficult to traverse when there are cars parked on both sides of the road. The submissions raised concerns that access would be further restricted for residents, garbage trucks, emergency vehicles and other users of Sharrock Avenue, Cramer Place and Swansea Court due to increased traffic and increased demand for on-street parking as a result of the proposal
- Concerns about the ability to reverse out of driveways if parking increases and if there
 are cars parked on both sides of the street
- Concerns about the impact of increased commuter parking affecting residents on-street parking as most households have multiple cars and need to use on-street parking spaces
- Suggestions for parking restrictions and management of streets in the proposal's vicinity, including residents only parking. Suggestions that parking management be strictly enforced and policed to ensure residents are not adversely impacted
- Concerns about the impacts of parking controls on residents' ability to park on-street, including concerns that parking controls may result in residents not being able to use onstreet parking unless residents can apply for resident parking permits
- Concerns that Blacktown City Council have not been able to manage illegal parking in other areas where there are issues and in most cases fines do not deter people from parking illegally
- Concerns about the current level of non-resident parking in other areas where there is access to a T-Way stop. Non-residents are parking on residents' lawns, blocking driveways and visitors are unable to park nearby. Concerns that this will occur on Sharrock Avenue, Cramer Place and other streets in the proposal's vicinity
- Concerns about there being additional traffic and pedestrians on nearby roads all day and night
- Observation that commuters currently park in streets within close proximity to the proposal which already affects parking and access for residents
- A suggestion that a commuter carpark be provided within the Swansea Court area
- Concerns that the proposal would result in more people driving to the area even if they live within walking distance. More people would park their cars rather than walk and will be less likely to use the commuter carpark provided at Bella Vista Station.



In response to the submissions of the REF, one respondent included previous correspondence on the issue submitted during earlier consultation in October/November 2015. This correspondence included the following:

- Emails to Sydney Metro Northwest Stakeholder and Community team
- Letters informing neighbours of the proposal
- Letter and emails to Michelle Rowland (Federal Member of Parliament), Blacktown City Council, NSW Minister of Transport and Infrastructure, the Hon Andrew Constance, Kevin Conolly (NSW Member of Parliament).

All issues raised as part of this correspondence has been included as part of the respondent's submission to the REF.

Submission number(s)

1, 2, 4, 7, 8, 10, 11, 12, 13, 18, 19, 21, 22, 23, 24, 26, 27, 29, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49.

Response

Sydney Metro recognises that there would be potential for impacts to on-street parking around all of the new Northwest metro stations, including Bella Vista.

Sydney Metro is currently monitoring traffic and parking conditions in the vicinity of the proposal as part of a wider traffic and parking strategy and monitoring program for all Sydney Metro Norwest stations. A comprehensive Parking Management Strategy is being developed for Sydney Metro Northwest to provide recommendations for the management of on-street parking. Consultation with Blacktown City Council regarding the Parking Management Strategy has been carried out over an extended period, including presentations and discussions with officers at Blacktown City Council.

Sydney Metro will continue to monitor traffic and parking conditions for at least 12 months after the operation of Sydney Metro services. Sydney Metro will also monitor pedestrian and cyclist demand between the Glenwood residential area and the Bella Vista Station precinct over the same period. Sydney Metro will consult with Council on the results of the monitoring.

Discussions with Blacktown City Council officers regarding parking management specifically in relation to the streets affected by this proposal are identified in section 7.2.4 of the REF. Blacktown City Council officers have indicated that the following options would be considered:

- Time restricted parking
- Resident parking schemes
- Restricting parking to one side of the road where applicable
- Staggering on-road parking to provide traffic calming benefits and maintain access for emergency vehicles
- Road markings at intersections to delineate statutory no stopping zones
- Driveway protection markings.

Sydney Metro will also monitor traffic and parking conditions for 12 months after the opening of the proposal and will consult with Council on the results of the monitoring, including



recommendations for appropriate mitigation and management measures (if required) such that any residual impacts are consistent with the REF.

Any parking management measures will be required to be carried out in accordance with Austroads and Roads and Maritime Services policies and guidelines.

4.1.2. Access to local schools

Summary of issues raised

The community newsletter suggests the proposal would improve access to and from Parklea Public school. The respondent queried why this is relevant to the proposal as the school already has access to Old Windsor Road and Bella Vista Station.

Submission number(s)

44

Response

Sydney Metro is aware that there is existing pedestrian access at Miami Street and Emmanuel Terrace. The locations of pedestrian access points are shown on Figure 2-2 in the REF. Figure 2-2 in the REF shows the 15-minute walking catchment from Bella Vista Station with and without the proposal in place. Parklea Primary School falls within this catchment and has been considered to benefit from the improved access.

4.1.3. Traffic and pedestrian safety

Summary of issues raised

Four respondents raised concerns about pedestrian safety as the intersection with Sharrock Avenue/Glenwood Park Drive and Cramer Place/Glenwood Park Drive has limited natural surveillance. The respondents also raised concerns that the anticipated traffic increase will cause congestion and may create issues on driveways as sightlines become blocked, which will, in turn, affect safe access.

One respondent suggested that pedestrian safety could be managed through effective traffic and parking management.

Submission number(s)

39, 43, 44, 46

Response

During initial community consultation, residents raised concerns regarding personal safety due to increased pedestrian traffic in streets with existing limited access or thoroughfare. This has been considered during the development of the concept design through the consideration of sight lines to and through the site, as well as pedestrian crossing locations and visibility between vehicles and pedestrians.

Sydney Metro will continue to liaise with Blacktown City Council to address issues raised with the operation of the proposal, including visibility at intersections and driveways. Traffic and parking management on local streets is under the authority of local government, and while the Parking Management Strategy being prepared for Sydney Metro Northwest would provide recommendations for the management of parking impacts, it will be a matter for Council to determine the preferred parking measures to be implemented. Sydney Metro will actively monitor traffic and parking management conditions in the streets surrounding the



proposal for 12 months prior and 12 months after Sydney Metro Northwest commences operations. Sydney Metro will provide Council with regular reports on the outcomes of the monitoring.

4.2. Project design

4.2.1. Pedestrian Link design

Summary of issues raised

Respondents queried the installation of bollards at both ends of the proposal.

One respondent queried the 2.5 metre width of the proposal which is not proportionate to the size of the block being acquired. The respondent suggested that the proposal should be four metres wide to allow efficient two-way cycle, pram and foot traffic to pass each other.

Respondents raised concerns about the winding design of the Pedestrian Link as both pedestrians and cyclists will cut across centre lines, increasing the potential for collision.

One respondent raised a concern that the proposal is not straight and therefore longer than necessary. The winding design will discourage use of the footpath. The respondent also noted that line of sight would be improved if the Pedestrian Link was straight.

One respondent queried whether the 2.5-metre-wide Pedestrian Link would allow cyclists to use the Pedestrian Link without dismounting.

One respondent asked where the proposal would connect to Old Windsor Road.

One respondent suggested high fencing would be required on both sides of the proposal to provide privacy for adjacent residents.

Submission number(s)

5, 8, 11, 25, 36

Response

It is acknowledged there is the potential for pedestrians and cyclists to collide. Risks are not considered to be different to those experienced by pedestrians and cyclists on shared user paths in similar urban locations. Natural surveillance, good sight lines, the short length of the shared path, and lighting would minimise the potential for pedestrians and cyclists to collide with one another. Line marking along the proposal could be provided to indicate separation arrangements between pedestrian and cyclists.

As per Section 3.1 and Appendix A of the REF, concept options were developed to provide a safe and attractive link that also provided DDA compliant access. Due to the slope across the property to be acquired, the proposal was designed to meander to provide the appropriate grade. The 1 in 14 gradient pathway includes handrails, which would comply with disability and accessibility standards.

The proposal would not include bollards at each end.

4.2.2. Sharrock Avenue/Cramer Place footpath

Summary of issues raised

One respondent queried if the footpaths along Sharrock Avenue and Cramer Place would be widened to allow for cyclists, while another suggested the footpaths should be three metres wide rather than 1.5 metres wide. One respondent raised concerns about the potential

[©] Sydney Metro 2018



extension of the footpath on Sharrock Avenue in the future. The respondent is concerned that pedestrians will continue to walk on their lawn and damage it when they reach the end of the Sharrock Avenue footpath.

Submission number(s)

5, 25, 29

Response

The width of the footpaths is considered appropriate for the available space and would provide connections to the existing pedestrian footpath network. The 1.5 metre wide footpaths would comply with Council's standard requirements. The footpaths are not intended to be for shared use. Cyclists will be directed onto the road.

During construction of the 1.5 metre footpaths on Sharrock Avenue and Cramer Place, reinstatement and landscaping would minimise impacts to residents' front lawns. Once the footpaths on Sharrock Avenue and Cramer Place are completed, the visual aesthetic of the adjacent front yards would be typical of a suburban/urban environment.

Any disturbance to residents' front lawns would be avoided wherever possible and kept to the minimum area if required. Any impacted front lawns would be reinstated as part of the proposal's construction.

4.2.3. Opposed to the preferred option - general

Summary of issues raised

One respondent noted that the Emmanuel Baptist Church option was preferred in October 2015 and queried why this was no longer the preferred option.

Submission number(s)

42

Response

Section 3.1 and Appendix A of the REF summarises the rationale for selecting 1 Swansea Court as the preferred location for the proposal. The design process included a multi-criteria analysis to determine the best location based on safety, access, neighbourhood amenity/impacts and design and construction criteria.

During design development, it was noted that formalising the existing informal access through the Emmanuel Baptist Church (Option 3) would encounter significant utility, gradient and easement issues. This option would also create potential safety issues for users due to the length of the pathway and the need for fencing to protect neighbouring properties. The church option could not be made compliant with accessibility standards requirements.

4.3. Socio-economic, land use and property

4.3.1. Property value

Summary of issues raised

Three respondents raised concerns that the proposal will decrease the property values and increase insurance premiums.



Submission number(s)

13, 39, 45

Response

It is not possible to predict with any certainty what impacts the proposal would have on property prices in the surrounding area. This will be dependent on a number of factors and in particular general property market conditions. There is potential that the improved access to the Bella Vista Station would be considered by potential buyers to improve the value of a property.

4.3.2. Vehicle, property and personal safety

Summary of issues raised

Respondents have requested the installation of CCTV and additional lighting to be included as part of the proposal. CCTV and lighting was requested to help ensure the safety of residents and users of the proposal and the Old Windsor Road shared path. One respondent requested a security wall behind houses that back onto the Old Windsor Road shared path. The respondents noted that more pedestrians will result in houses being more prone to potential break-ins and anti-social behaviour.

One respondent noted that due to additional pedestrians and vehicles in the area, children would no longer be safe to walk to school. Parents will have to drive children to school rather than walk so they are safe.

Respondents are concerned about the potential for an increase in crime rates, undesirable people, alcohol and drugs in the area as the result of an increase in pedestrians using the link to access Bella Vista Station. Respondents noted that they enjoy the privacy and security of the streets and not being connected to Old Windsor Road. The respondents consider the streets safe and secure while already being close to Bella Vista Station and Old Windsor Road.

Submission number(s)

15, 21, 22, 27, 32, 36, 39, 40, 42, 44, 45, 46, 48, 49

Response

During community consultation conducted in 2015, residents raised concerns regarding property and personal safety from increased pedestrian traffic in streets with existing limited access or thoroughfare. The proposal has been designed to provide natural surveillance through consideration of sight lines and the inclusion of appropriate lighting and low landscaping, which are details which would be further developed in consultation with Blacktown City Council. The proposal has been designed to deter people from stopping or loitering. The pedestrian link is short and will provide a direct thoroughfare to Old Windsor Road. No street furniture will be provided to encourage pedestrians to stop. Implementation of CCTV would be further considered following consultation with Blacktown City Council.

Pedestrians and cyclist movements are expected to increase on Sharrock Avenue, Cramer Place and Swansea Court, with minor effects on the amenity of the residential area. While the perception of increased anti-social behaviour including graffiti could potentially result from some users congregating in proximity to the link, the design intent includes Crime Prevention Through Environmental Design (CPTED) principles to deter such behaviour. Increased pedestrian activity as a result of the Pedestrian Link is likely to provide passive

[©] Sydney Metro 2018



surveillance of surrounding properties and act as a deterrent to crime and anti-social behaviour, while providing a sense of security for other pedestrians.

4.3.3. Increased litter

Summary of issues raised

Respondents are concerned that the users of the proposal will litter as they pass through the surrounding streets.

Submission number(s)

23, 34, 36, 39, 44, 46, 49

Response

Once commissioned, the proposal would be regularly maintained. Any litter will be regularly removed. Provision of litter bins will be considered at the detail design stage.

4.3.4. Maintenance

Summary of issues raised

Respondents are concerned that graffiti in the area will increase.

Respondents are concerned that the once constructed the proposal will not be maintained because other footpaths in the area are not maintained and that the landscaped areas will become overgrown.

Submission number(s)

23, 39, 42

Response

Once commissioned, the proposal will be regularly maintained. Details of a maintenance schedule and responsibilities will be determined following the completion of a detail design.

4.4. Noise and vibration

4.4.1. Noise and vibration impacts during construction

Summary of issues raised

One respondent raised concerns that the construction of the proposal would result in significant noise from construction vehicles and construction works.

Submission number(s)

29

Response

During construction, construction traffic access would be via Glenwood Park Drive on to Cramer Place or Sharrock Avenue and Swansea Court. Construction traffic is unlikely to increase noise by more than 2 dBA which would typically be imperceptible to the human ear. Up to 10 construction vehicles would typically enter and leave the construction site at regular intervals across the day during standard working hours.

[©] Sydney Metro 2018



Construction is anticipated to be carried out during an indicative four-month period. Potential impacts would be managed in accordance with a Construction Noise and Vibration Management Plan (CNVMP) within the Construction Environmental Management Plan (CEMP). Further measures for the management of noise and vibration impacts are outlined in Table 7-1.

4.4.2. Noise and vibration impacts during operation

Summary of issues raised

Eight respondents raised concerns about additional noise as a result of increased vehicle and pedestrian traffic using the Pedestrian Link, including early mornings, late at night and weekends. Additional noise impacts could include slamming doors, pedestrian and cyclist conversations and barking dogs.

One respondent raised concerns about increased noise associated with the Sydney Metro Northwest project currently under construction and queried the installation of noise barriers.

One submission raised concerns that the additional pedestrian and vehicle traffic would affect the peace for shift workers.

Submission number(s)

21, 22, 29, 36, 38, 39, 44, 45, 48, 49

Response

It is acknowledged that the proposal would result in additional pedestrian and vehicle traffic. Noise levels would be typical of an urban area and should be considered in the context of the proposal's location adjacent to a residential street and Old Windsor Road in which there is some level of existing baseline noise.

The potential increase in road traffic noise levels associated with the removal of existing screening (removal of the residential dwelling and boundary wall), was estimated by modelling noise levels at adjacent receivers (refer to Section 7.1 of the REF). Two residential receivers adjacent to the proposal were identified with potential for a noise level increase of 6 to 7 dBA as shown in Figure 7-2 of the REF. As indicated in the REF, at-property acoustic treatment would be investigated as part of the detailed design process for these two potentially affected properties.

Noise impacts from Sydney Metro trains were considered in the Sydney Metro Northwest Environmental Impact Statement and were not considered further nor considered relevant as part of the assessment for this proposal.

4.5. Consultation

Summary of issues raised

Three respondents raised concerns about the lack of communication with the affected community and requested further information about the proposal's location and design. One respondent also requested further community consultation sessions.

Submission number(s)

11, 44, 48



Response

Sydney Metro is committed to ongoing communication throughout design development and determination of the proposal. Sydney Metro has sought to inform the community and other stakeholders via the Sydney Metro website, doorknocking, newsletters, advertisements in the Rouse Hill Times and the Blacktown Advocate, and the public display of the REF over a six-week period, including three community information sessions at Glenwood Village shopping centre. Sydney Metro has carried out briefing sessions with Roads and Maritime Services, Blacktown City Council and associated stakeholders as part of the consultation process.

Previous consultation seeking feedback on the potential for a new Pedestrian Link occurred between October and November 2015. Consultation at this stage involved the distribution of newsletters, with the community invited to attend drop-in information sessions and provide feedback. Further investigations into the feasibility, location and design of the Pedestrian Link occurred following this consultation period, with a community update provided by way of a newsletter in mid-2017.

4.6. Need for the proposal

Summary of issues raised

Five respondents indicated that the proposal is not needed and that current access points to the Bella Vista Station and T-way are sufficient. The respondents suggested that the 700 households that have been identified within a 15-minute walk to the station may not use the station.

One respondent requested that further assessment be undertaken to determine the need for the proposal. This should include measurement of the street widths and turning space, consensus of residents in the area who would use the Metro and verifying with Glenwood Public School and High School the number of students that would travel to school via the Metro trains.

Submission number(s)

24, 29, 42, 45, 48

Response

The "do nothing" scenario would make no changes to the existing access situation between Glenwood and Old Windsor Road and would not address the project need and objectives. Glenwood residents living within walking distance of Bella Vista Station would continue to have limited access to the pedestrian bridge over Old Windsor Road, T-Way services, Norwest Business Park and Bella Vista Station. The Pedestrian Link would provide access to not only these destinations but also to future retail, businesses and employment opportunities that are likely to develop in the precinct surrounding Bella Vista Station.

There is evidence that a number of pedestrians and cyclists currently access the T-Way stop on Old Windsor Road by trespassing through private property via the Emmanuel Baptist Church grounds as discussed in Section 7.2 of the REF. Surveys conducted in December 2017 indicated that 179 pedestrians and cyclists were observed using this route on an average weekday. Without improved access it is expected that this informal level of use would increase. This would exacerbate issues concerning safety, security and liability for The Emmanuel Baptist Church. Traffic and parking impacts around this informal access point would likely increase once Sydney Metro starts operating. The 'do nothing' scenario would continue to encourage car access to the new station and Old Windsor Road from



Glenwood. This would contribute to an already congested road network into and out of the Glenwood area.

Without access improvements, no residents of Glenwood would be within 600 metres of the station entrance via the existing formal access routes. By not delivering improvements to access, Blacktown LGA residents would be disadvantaged by poorer access to Sydney Metro and T-Way services compared to neighbouring suburbs in The Hills Shire LGA. The proposal would address these access inequities.

Discussion on issues with respect to traffic and parking demands are addressed in Section 4.1.1.

4.7. Visual impacts

Summary of issues raised

One respondent raised concerns about the visual impact of the proposal on the front lawns of affected landowners. The respondent noted that impacted front lawns would require landscaping as a result of the construction of the 1.5 metre footpath on Sharrock Avenue and Cramer Place.

Submission number(s)

13

Response

The proposed Pedestrian Link includes installation of a new 1.5 metre wide footpath on the eastern side of Sharrock Avenue between Swansea Court and Nixon Street, and a new 1.5-metre-wide footpath on the southern side of Cramer Place between Swansea Court and Glenwood Park Drive. The proposed footpath would provide connections to the existing pedestrian footpath network and safer street crossing locations.

Once the footpaths on Sharrock Avenue and Cramer Place are commissioned, the visual street appeal of each potentially impacted front yard is anticipated to be typical of a suburban/urban environment.

Any disturbance to residents' front lawns would be kept to the minimum area required wherever practicable and restored as part of the construction process.

4.8. Issues raised outside the scope of the proposal

Summary of comments

Five respondents provided comments not directly related to the proposal. These comments included:

- Requests for improvements to the footpath at the end of Meurants Lane for improved access to T-way services and Bella Vista Station. The respondent suggested the current informal access is dangerous
- Request for footpath improvements to the Arnold Place footpath
- Request to include lifts on the Old Windsor Road over bridge
- Request for the south option (Option 2) to be provided in addition to the Swansea Court option (Option 1).

[©] Sydney Metro 2018



Submission number(s)

3, 5, 7, 19, 30

Response

Footpath improvement works at Meurants Lane, Glenwood Park Drive and Arnold Place do not form part the proposed Pedestrian Link. As part of this submission report process, Sydney Metro will pass on the respondent's feedback to other government agencies for further consideration.

The Old Windsor Road pedestrian bridge was approved as part of the Stage 2 EIS for Sydney Metro Northwest in 2013. Lifts and stairs will be provided on both sides of the pedestrian bridge.

During design work, a Multi-Criteria Analysis (MCA) was carried out to compare three location options against the 'do nothing' scenario. Section 3 of the REF describes the MCA process and how the preferred option was selected.

The MCA assessment determined that Option 1 (North) would be the best location for the proposal, based on its ability to meet the objectives. Option 1 would improve pedestrian and cyclist access to the widest catchment and would maximise equitable access for the greatest number of households. Of the three proposal location options, Option 2 (South) achieved the least improvement in access and would have the worst traffic impacts on local streets.



5. Response to Community Group submissions

This chapter includes a summary of the submission received from Bike North, a local cycling group. Responses to Bike North are provided in Table 5-1.

Table 5-1 Issues raised by Bike North

Issue raised	Response to issue
Bike North is concerned about pedestrian and cyclist interaction within the proposed Pedestrian Link and suggested that a separate cycle path and pedestrian path would be safer for all users.	The assessment process (detailed in Section 3.1 and Appendix A of the REF) which determined the preferred concept design, focussed on providing a safe and attractive link that provided the required access while minimising impacts to neighbouring properties. Visual impacts to the existing streetscape, along with noise, privacy, safety, passive surveillance, landscaping opportunities and DDA compliance were considered in the design. Due to the ground level differences between Old Windsor Road and Swansea Court and the requirement to meet accessibility gradient requirements, a pathway width wider than 2.5 metres could not be achieved within the footprint of the property. The 2.5 metre wide curved path design is considered appropriate to accommodate passing pedestrians and cyclists. The alignment curvature is not considered to affect sightlines over the 50 metre extent of the link. It is acknowledged there is the potential collision risk between pedestrians and cyclists however risks are not considered different to those experienced by pedestrians and cyclists on shared user paths in similar urban environments. Good visibility and the limited extent of the proposal will minimise collision risk between pedestrians and cyclists.
The artist's impression shows a winding pathway. Whilst this may be aesthetically pleasing, at each bend, both pedestrians and cyclists will cut across any centre line, increasing the potential for collisions. Corners also tend to collect debris off gardens, creating a slippery surface for pedestrians, those with disabilities and cyclists.	The proposal is required to meet the gradient requirements of accessibility standards. There is a significant level difference between Swansea Court and Old Windsor Road which does not allow for a straight path that would also be compliant with accessibility requirements. A number of concept designs were investigated to provide the required access for both pedestrians and cyclists. The concept design selected provided the most direct route of travel for both pedestrians and cyclists while meeting the gradient requirements.
Bike North is concerned about the inclusion of railings along the pathway and have suggested that the first metre on each end of the footpath be grassed either side of the pathway if the pathway remains as a shared path. The grass would be a soft landing should there be a collision between a cyclist and pedestrian on entering and exiting the pathway. Pedestrians may use headphones, be in a rush and increase the potential for near misses and accidents. Bike North queried the need for handrails and noted that pedestrians with accessibility issues would not be reliant on a handrail as handrails are not provided on Old Windsor Road and suggested that a seat would be more suitable so tired pedestrians can rest.	Disability and accessibility standards require handrails to be provided on footpaths with a gradient of 1 in 14. The lower section of the pathway is a 1 in 20 gradient and the proposed design does not require the use of handrails in this section.
Bike North is concerned about the potential hazardous interaction of potential kiss and ride and cyclists in the nearby streets using the pathway. Bike North suggested a no stopping zone and a cycle lane painted	Provisions for 'kiss and ride' are not proposed in the vicinity of the Pedestrian Link. Bella Vista Station will provide 16 spaces for kiss and ride and customers will be encouraged to use these dedicated spaces. There is likely to be some kiss and ride activity on local streets such as Sharrock Avenue as a result of



Issue raised	Response to issue
green be considered 50 metres either side of the pathway to allow for safe egress and access for cyclists. Bike North noted that the kerb ramp should meet Austroads Guidelines for a cycleway access. Bike North also suggested that traffic control signs may be required to control traffic flow into this cul-de- sac in peak periods.	congestion at major traffic intersections into or out of Glenwood, however this is likely to be limited. The distance to Bella Vista Station and the nature of the closed local street network will not easily facilitate passenger drop-off as part of an on-going journey. Kerb ramps would be constructed in accordance with Austroads Guidelines. The implementation of road signage will be the responsibility of the local council.
Bike North queried the property selection for the proposal as it flows onto a corner of Swansea Court/Cramer Place/Sharrock Avenue. Bike North suggested that the property to the north (67 Sharrock Avenue) would be more suitable for safe egress and access.	Section 3.1 and Appendix A of the REF summarises the rationale for the selection of 1 Swansea Court as the preferred location. The option assessment included a multi-criteria assessment to determine the location of the Pedestrian Link based on safety, access, neighbourhood amenity/impacts and design and construction criteria.
Bike North queried the installation of bollards and suggested they should not be installed if proposed as they can cause injuries to cyclists.	The proposal does not include bollards at either end of the proposal.



6. **Response to government submissions**

This chapter includes a summary of the submission received from Roads and Maritime Services and Blacktown City Council. Responses to Roads and Maritime Services are provided in Section 6.1. Responses to Blacktown City Council are provided in Section 6.2.

Road and Maritime Services were notified that the proposal was being considered in November 2015. Roads and Maritime Services provided a response to the REF on 10 May 2018.

6.1. Roads and Maritime Services

The issues raised by Roads and Maritime Services, and Sydney Metro's responses, are identified and addressed in Table 6-1 below.

Table 6-1 Issues raised by Roads and Maritime

Issue raised	Response to issue
The proposed retaining wall, batter works and re-grading of the existing shared path adjacent to Old Windsor Road will require consultation with Roads and Maritime Services and Blacktown City Council throughout the design process.	Roads and Maritime Services and Blacktown City Council will continue to be consulted during the detail design process. Section 5.6 of the REF summarises the potential licences, permits, approvals and notifications that may be required to construct the proposal.
It is unclear from the REF of the certain utilities that would need protecting, adjusting, relocating, installing, testing, and connecting in to, in support of the proposal.	Further utility investigations are being carried out and requirements for relocations /adjustments will be determined as part of the detail design process.
Consider stating in the REF the final maintenance arrangements for landscaping.	Final maintenance arrangements for landscaping have not yet been determined and are to be discussed with Blacktown City Council.
Amendment to Street Lighting Lux levels on Old Windsor Road will require Roads and Maritime Services input	Sydney Metro would seek input from Roads and Maritime Services on lighting during the detail design stage.
The list of design criteria is missing from the REF	The list of design criteria is included in Section 4.2 of the REF.
The cross section shown in the REF is missing crucial dimensions.	The cross section included as Figure 4-4 is indicative only. Surveys were unable to be carried out prior to the REF being publically displayed. Further details will be provided during the detail design stage.
The work methodology within the REF is lacking details.	As for any infrastructure project, more detailed work methodology would be developed following the detail design process.
Supporting infrastructure installations, such as permanent barriers, will be required if the footpath levels are dropped along the Old Windsor Road shared path.	The need for barriers has been considered and will be further investigated during detail design.
A Road Occupancy License (ROL) and permit may be required. Consider amendments to comment on Section 138 to include need for ROL from TMC and Blacktown City Council before specific related works can take place and potentially requiring multiple applications.	Sydney Metro would obtain all necessary permits and licences. Section 5.6 of the REF summarises the potential licences, permits, approvals and notifications that may be required to construct the proposal.



Issue raised	Response to issue		
Austroads Guide Cycling Aspects of Austroads Guides (2017 Edition) recommends a desirable width of 2.5 metre for local access path, three metres for regional path and 3.5 metres for recreational path. Given this new shared path connects to the existing regional shared path along Old Windsor Road and the number of cyclists and pedestrians would probably be very high as it connects to the metro station, the proposed shared path should have a greater width then the 2.5 metres being proposed. At least three metres should be considered.	A DDA compliant path wider than 2.5 metre is unable to be achieved due to the width of the block and the significant level differences between Old Windsor Road and Sharrock Avenue/Swansea Court.		
Construction of this proposed pedestrian and cycle link should coincide with the construction of the new bridge across Old Windsor Road to minimise disruption due to construction.	The new pedestrian bridge across Old Windsor Road was approved as part of the Stage 2 EIS for Sydney Metro Northwest in 2013 and is already under construction. The main span was lifted into place at the start of April 2018. The pedestrian bridge is required to be operational before the commencement of Sydney Metro services in 2019.		
Could the REF provide information and evidence of traffic impacts due to construction for access to the site from the regional road network most likely from the intersection at Old Windsor Road/Balmoral Road.	As detailed in Section 4.7 of the REF, a CTMP would be developed during the detailed design stage. Up to 10 trucks will enter and exit the site at intermittent intervals across the day during the peak construction period. The origin and destination of the construction traffic will depend on construction requirements, program and the requirement to transfer materials and waste from the construction site. In addition, there will be up to 10 workers servicing the proposal during peak construction. Further details of construction traffic impacts would be determined following the detail design process.		
Ensure hand rail clearance width has a minimum width the same as the width of shared path. i.e. clearance width of 2.5 metres.	The preferred concept design shown in the REF is based on a 2.5 metre wide clearance width between hand rails.		
Proposed zig zag design of shared path might pose a safety risk and riding comfort for cyclist and pedestrians.	A number of concept design options were developed (detailed in Section 3.1 and Appendix A of the REF) however a straight DDA compliant path is unable to be achieved due to the length and width of the block and the level differences between Old Windsor Road and Sharrock Avenue/Swansea Court.		

6.2. Blacktown City Council

The issues raised by Blacktown City Council, and Sydney Metro's responses, are identified as addressed in Table 6-2 below.

Table 6-2 Issues raised by Blacktown City Council

Issue raised	Response to issue	
The road network in this area comprises	A comprehensive Parking Management Strategy is being	
Adrian Street, Cramer Place, Nixon Street,	developed for Sydney Metro Northwest to provide	
Sharrock Avenue and Swansea Court.	recommendations for the management of on-street parking	
These local roads have a narrow	around each of the new stations. Consultation with Blacktown	
carriageway width, most measuring less than	City Council regarding the Parking Management Strategy has	
eight metres. Currently the on-street parking	been carried out over an extended period, including	
on these streets is typically low. However,	presentations and discussions with officers at Blacktown City	
with the proposed Pedestrian Link a	Council. Further discussions with Blacktown City Council officers	
significant increase in parking activity is	regarding the most applicable recommendations for streets in	
anticipated. The narrow widths of the streets	the vicinity of the proposal were carried out in January 2018.	
are not suitable for parking on both sides.	This included consideration of:	



Issue raised	Response to issue
Hence a comprehensive parking study needs	Time restricted parking
to be undertaken in consultation with the affected residents, aiming at suitable parking	 Resident parking schemes
management measures within these streets.	 Restricting parking to one side of the road where applicable
	 Staggering on-road parking to provide traffic calming
	benefits and maintain access for emergency vehicles
	 Road markings at intersections to delineate statutory no
	stopping zones
	 Driveway protection markings. Sydney Metro will continue to monitor traffic and parking
	conditions for at least 12 months after the operation of Sydney Metro services. Sydney Metro will also monitor pedestrian and cyclist demand between the Glenwood residential area and the Bella Vista Station precinct over the same period. Sydney Metro will consult with Council on the results of the monitoring. Sydney Metro will also monitor traffic and parking conditions for
	12 months after the opening of the proposal, once constructed. Sydney Metro will consult with Council on the results of the monitoring, including recommendations for appropriate mitigation and management measures (if required) such that any residual impacts are consistent with the REF.
	Affected residents will be consulted on any proposed on-street parking changes in residential streets.
The streets in the immediate vicinity of Glenwood High School, the Trades Norwest Anglican Senior College and Emmanuel Baptist Church (Shaun Street and Glenwood Park Drive) experience higher levels of parking with limited available spots.	Parking monitoring is being carried out at a number of locations within Glenwood, including streets within the vicinity of the proposal, the Emmanuel Baptist Church and the Trades Norwest Anglican Senior College. Data will be collected on both pre- existing demand and parking demand following the commencement of Sydney Metro services.
Appropriate parking management measures also need to be considered for these locations.	These streets have been discussed during consultation with Blacktown City Council around the Parking Management Strategy. The Strategy considers parking management recommendations at each of the above locations.
The REF anticipated that up to 135 additional vehicles could enter and leave this area each day. This assumes that all of the available parking spaces would be used for commuter parking and that no parking management measures are applied. Our view is that this number is an underestimation, even with parking management measures.	Section 7.2.3 of the REF notes that up to 135 additional vehicles could enter and leave the Glenwood area each day. The assessment was based on the on-street parking capacity for 135 vehicles within the local street network. This assumes that all available on-street parking spaces are taken up by commuters and does not account for residents already parked on the streets, or any parking restrictions that may be imposed in the future. Both of these factors would further reduce the number of vehicles entering the local street network due to the reduced supply of available parking.
	This number does not include vehicle movements for the purpose of 'kiss and ride' as these vehicle numbers are difficult to predict. However, these numbers are expected to be limited, as the proposal would be a 400 to 500 metre walk from the station and the nature of the closed local street network would not easily facilitate passenger drop-off as part of an on-going journey. 'Kiss and ride' activity would not be encouraged. Bella Vista Station will provide 16 dedicated spaces for 'kiss and ride'.
Streets in the vicinity of the proposed Pedestrian Link are too narrow and cannot cope with additional traffic attracted by the proposal. It could compromise emergency	The REF acknowledges the narrow road widths of the street network surrounding the proposal. As noted in Section 7.2.4 of the REF, additional parking management strategies have been considered to ensure the unconstrained flow of vehicles for



Issue raised	Response to issue
and service vehicle access.	residents, emergency vehicles and service vehicles alike. These measures include:
	 Restricting parking on one or both sides of local streets
	 Staggering on-road parking to provide traffic calming
	benefits and maintain access
	Delineating statutory no stopping zones at intersections.
The proposal has potential for driveways to be blocked by parked vehicles. Also sightlines along streets/at intersections could be blocked by parked cars, impacting safe access to properties. This would require constant enforcement by our enforcement officers. Council has limited capability to	As outlined in Section 7.2.4 of the REF, driveway protection markings and delineation of statutory no stopping zones at intersections will be considered to reduce the potential for vehicles parking too close to driveways or intersections. Blacktown City Council may prefer to select parking management measures that reduce the requirement for enforcement activity.
enforce parking restrictions in isolated areas during week days, very limited enforcement being undertaken on Saturdays and no enforcement on Sundays.	Enforcement is not expected to be resource intensive as commuter activity will be limited to weekdays and commuter behaviour will be influenced by early enforcement/intervention following the proposal's construction.
We are concerned that a pedestrian/cycle link in this location would compromise amenity for residents due to excessive traffic and car parking in surrounding local streets. Similar issues already exist at Crestview Drive, Glenwood where access of a similar kind is provided to the Norbrik T-Way station.	The REF acknowledges that there would be some impacts to residential amenity as a result of increases in traffic and parking demand on surrounding streets. The Parking Management Strategy for Sydney Metro Northwest provides recommendations to Blacktown City Council for areas experiencing increased commuter car parking activity – which would include areas in Glenwood impacted by Sydney Metro Northwest operations.
	Discussions with Blacktown City Council officers suggested consideration of the following parking management measures for streets in the vicinity of the proposed Pedestrian Link, based on current policy and experience with commuter parking at other railway stations and T-Way stops:
	Time restricted parking
	 Resident parking schemes
	 Restricting parking to one side of the road where applicable
	 Road markings at intersections to delineate statutory no
	stopping zones.
	All of these measures could be considered, however the current Roads and Maritime Services Permit Parking Guidelines indicate that this area is unlikely to be suitable for a Resident Parking Scheme, given the presence of off-street parking.
Any traffic and parking management scheme/strategies must consider issues which are raised during the consultation, construction and operational phases of the proposal. Any changes required in the road network should be funded by Sydney Metro.	Sydney Metro will continue to liaise with Blacktown City Council to address issues raised during the consultation, construction and operation of the proposal. Traffic and parking management on local streets is under the authority of local government, and while the Parking Management Strategy would provide recommendations for the management of parking impacts, it will be up to Council to determine the preferred parking measures to be implemented. Sydney Metro will actively monitor traffic and parking management conditions in the streets surrounding the proposal for 12 months both prior to and after the commencement of Sydney Metro Northwest operations. Sydney Metro will provide Council with regular reports.
	Road network improvements are prioritised and delivered through a number of programs across the transport agency cluster. These are prioritised by need and delivered through the appropriate asset owner. Any detrimental change to network performance as a result of Sydney Metro will be considered



Issue raised	Response to issue	
	through this prioritisation process.	
We strongly recommend that Sydney Metro Northwest undertake monitoring of parking conditions for one year, both prior to and following the commencement of metro services. These surveys should be undertaken every few months. This monitoring may lead to further parking mitigation recommendations around the proposal.	Sydney Metro Northwest will monitor traffic and parking conditions for one year, both prior to and following the start of metro services. These surveys will be carried out every four months and commenced in May 2018. These traffic and monitoring studies are being carried out at each of the eight new Northwest stations. The studies are required as a condition of approval for the Sydney Metro Northwest project.	
A Construction Traffic Management Plan (CTMP) should be prepared in consultation and to the satisfaction of Blacktown City Council. The CTMP would be the primary management tool to manage potential traffic impacts associated with construction.	A CTMP would be prepared as part of the overall CEMP (Construction Environmental Management Plan) as detailed in Section 4.7 of the REF. As noted in Section 7.2.4 of the REF, the CTMP would be prepared by the contractor in consultation with Sydney Metro, Blacktown City Council and Roads and Maritime Services. The CTMP is listed as an environmental management measure to be implemented during the proposal's construction in Table 7-1.	



7. Environmental management

The REF for the proposal identified the framework for environmental management including mitigation measures to be adopted as an integral part of the project to avoid or reduce environmental impacts (refer Section 7 of the REF).

Should the proposal proceed, environmental management requirements during construction and operation will be guided by the framework and measures outlined below.

7.1. Environmental management plans

A number of management and mitigation measures have been identified to minimise adverse environmental impacts, including potential community impacts, which could potentially arise during construction and operation of the proposal. Should the proposal proceed, these management measures would be included in the detailed design and implemented during the proposal's construction and operation.

A Construction Environmental Management Plan (CEMP) will be prepared to include the required management and mitigation measures. The CEMP will provide a framework for establishing how these measures will be implemented and who will be responsible for their implementation.

The CEMP will be prepared prior to the proposal's construction and must be reviewed and certified by environment staff, prior to the start of any on site work. The CEMP will be a working document, subject to ongoing change and updated when required to respond to specific requirements. It is anticipated that the nominated contractor appointed to carry out construction will update the CEMP, which would be reviewed and endorsed by Sydney Metro before the start of construction.

7.2. Management and mitigation measures

The REF identified a range of environmental impacts that are likely to occur as a result of the construction and operation of the proposal. Table 7-1 of the REF provides a summary of the environmental management measures that Sydney Metro has proposed to manage the potential environmental impacts associated with the proposal.

Sydney Metro will consider the final environmental management commitments when determining the proposal. Subject to the proposal's approval, the finalised safeguards and management measures will guide subsequent phases of the proposal's development. The nominated contractor will be required to carry out all works in line with these environmental management measures.

7.2.1. Construction management

Environmental management measures to be implemented during the proposal's construction are listed in Table 7-1.



ID number	Environmental management measures				
Noise and vi	bration				
NV1	Investigation of at property treatment for two residential receivers, identified in Figure 7-2 of the REF for the facades taking into account the use of the rooms in those areas.				
NV2	A CEMP should be prepared prior to construction activities commencing and implemented throu all construction activities. A CNVMP would be included in the CEMP to provide the framework a mechanisms for the management and mitigation of all potential noise and vibration impacts from the project. The CNVMP would be expected to include procedures for dealing with potential impacts during out of hours works.				
NV3	The project should apply all feasible and reasonable work practices to meet the Noise Management Levels (NMLs), where possible, and inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels, duration of noise generating construction works, and contact details during construction.				
NV4	Avoid the coincidence of noisy plant working simultaneously close together and adjacent to sensitive receptors would result in reduced noise emissions.				
NV5	Equipment which is used intermittently is to be shut down when not in use.				
	All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include:				
	All relevant project specific and standard noise and vibration mitigation measures				
	Relevant licence and approval conditions				
	Permissible hours of work				
NV6	 Any limitations on high noise generating activities 				
	Location of nearest sensitive receivers				
	Construction employee parking areas				
	 Designated loading/unloading areas and procedures 				
	 Site opening/closing times (including deliveries) 				
	Environmental incident procedures.				
	 No swearing or unnecessary shouting or loud stereos/radios on site. 				
NV7	 No dropping of materials from height; throwing of metal items; and slamming of doors. 				
	 No excessive revving of plant and vehicle engines 				
	Controlled release of compressed air.				
NV8	A noise monitoring program is to be carried out for the duration of the works in accordance with the CNVMP and any approval and licence conditions.				
NV9	Attended vibration measurements are required at the commencement of vibration generating activities to confirm that vibration levels satisfy the criteria for that vibration generating activity. Where there is potential for exceedances of the criteria further vibration site law investigations would be undertaken to determine the site-specific safe working distances for that vibration generating activity. Continuous vibration monitoring with audible and visible alarms would be conducted at the nearest sensitive receivers whenever vibration generating activities need to take place inside the applicable safe-working distances.				
NV10	High noise and vibration generating activities may only be carried out in continuous blocks, not exceeding 3 hours each, with a minimum respite period of one hour between each block.				
NV11	Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site.				

Table 7-1 Construction environmental management measures



ID number	Environmental management measures				
NV12	Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours' work.				
NV13	Stationary noise sources would be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained where necessary.				
Traffic, transp	port and access				
	Implement a CTMP in consultation with and to meet the reasonable requirements of the relevant road authority and transport operator(s). The plan shall include but not be limited to:				
T 4	A routine CTMP				
T1	 A Parking Management Plan 				
	An Incident Response Plan				
	 Mechanisms for monitoring, reviewing and amending this plan. 				
	Construction vehicles (including staff vehicles) shall be managed to:				
	 Minimise parking or queuing on public roads and non-associated sites 				
	 Minimise the use of local roads (through residential streets and town centres) to gain access 				
T2	to construction sites and compounds;				
	 Minimise traffic past schools and child care centres, particularly during opening and closing periods. 				
	 Adhere to the nominated heavy vehicle routes identified in the CTMP. 				
Landscape a	nd visual				
V1	Retain and protect hedges along east and west neighbouring property boundaries where possible.				
V2	Reinstate the vegetated corridor along the Old Windsor Road shared path with semi-mature tree stock to ensure timely establishment and visual screening.				
V3	Trees within the site to be semi-mature tree stock to ensure timely establishment and visual screening.				
V4	Design of property fencing to be designed to screen views and reduce the potential for overlooking into private property.				
V5	All works equipment and materials will be contained within designated boundaries of the worksite.				
V6	Location of a site toilet to be located with consideration of views from key living and entertaining areas of adjacent properties.				
V7	The construction area will be left tidy at the end of each day				
V8	Dust and dirt will be regularly cleaned from the road surface.				
Biodiversity					
B1	As a precautionary measure, ensure a qualified ecologist would be on call during the removal of the amenity vegetation to identify any manage wildlife that may be disturbed and/or injured. The ecologist would assess the species and then release them to the nearest suitable habitat if uninjured.				
B2	As part of the CEMP, a Vegetation Management Plan would be developed to address potential biodiversity impacts. Weed species within the study area would be managed in order to control them from further spread. Management techniques may include immediate weed removal and disposal without stockpiling, disposal of weed-contaminated soils at appropriate weed disposal facilities and to ensure that all equipment is cleaned prior to and on completion of works to ensure weeds are not introduced or spread to other locations.				
B3	Where possible, the vegetation removed would be replaced.				



ID number	Environmental management measures				
Socio-economic					
S1	A Community Liaison Plan (the plan) (to be developed by the Contractor prior to construction) would identify all potential stakeholders and the best-practice methods for consultation with these groups during construction. The Plan would also encourage feedback and facilitate opportunities for the community and stakeholders to have input to the proposal, where possible.				
Water quality	/, hydrology, drainage				
	Stormwater management controls would be implemented to:				
	 Manage runoff volumes through the use of measures to promote stormwater infiltration 				
WQ1	 Minimise increases in peak flows through the use of detention and retention measures as 				
	appropriate.				
	Treating stormwater through a range of at source and end point measures that are integrated with the urban landscape.				
	A CSWMP would be prepared to manage soil, surface water and ground water. Using the Guidelines (Australian and New Zealand Environment and Conservation Council, 2000):				
	 NSW Water Management Act 2000 (NSW Government, 2000b) 				
WQ2	Applicable Environment Protection Licences.				
	Appropriate erosion control measures would be installed such as sediment fencing, check dams, temporary ground stabilisation, diversion berms or site regrading. Inspection of water quality mitigation controls (e.g. sediment fences, sediment basins) would be carried out regularly and following significant rainfall to detect any breach in performance.				
WQ3	Procedures to quickly address any contaminant spill or accident would be developed and implemented during the proposal's operation.				
	 Storage of hazardous materials such as oils, chemicals and refuelling activities would occur in bunded areas 				
WQ4	 All fuels, chemicals and hazardous liquids would be stored in accordance with Australian standards and EPA Guidelines 				
VVQ4	 Any refuelling undertaken on site would be undertaken in designated areas only 				
	 Spill kits would be available as part of any worksite for use in case of fuels, chemical or other spill(s) which may occur during construction 				
	 All spills or leakages would be immediately contained and absorbed. 				
Soils, geolog	y and contamination				
C1	An Erosion and Sedimentation Control Plan would be developed and maintained for the site in accordance with the <i>Managing Urban Stormwater, Soils and Construction Guidelines</i> (Landcom, 2004) (the Blue Book).				
C2	Excavated material would be reassessed for reuse as backfill material, prior to removal. If all material unable to be used as backfill material would to be appropriately tested and classified against the Waste Classification Guidelines prior to being disposed of off-site (DECC, 2008).				
C3	Diversion of 'clean' run-off from offsite around or through the worksite without it contacting exposed soils or mixing with dirty onsite water.				
C4	Should any signs of contamination be identified during work within the site, the material would be tested against the National Environment Protection Council's National Environment Protection (Assessment of Site Contamination) Measure 1999, and managed accordingly.				
Waste and Resource Management					
WR1	All waste would be assessed, classified, managed and disposed of in accordance with the <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (NSW EPA, 2014).				

ID number	Environmental management measures
WR2	 Excavated material and spoil would be beneficially reused on the proposal site or other sites, where feasible and reasonable, in accordance with the waste hierarchy Recyclable wastes, including paper at site offices, would be stored separately from other wastes Storage facilities would be secure and recyclables collected on a regular basis.
WR3	Initial and ongoing education would be provided to staff and sub-contractors regarding the importance of appropriately managing waste.
Air quality	
AQ1	Dust minimisation measures would be developed and implemented prior to commencement of construction.
AQ2	A mechanism for responding to complaints from the community should be put in place for the duration of the construction phase.
AQ3	Ensure that all construction vehicles are tuned to not release excessive level of smoke from the exhaust and are compliant with OEH's Smokey Vehicles Program under the NSW Protection of the Environment and Operations Act 1997 and NSW Protection of the Environment and Operations Regulations 2010.
AQ4	 All vehicles carrying loose or potentially dusty material to and/or from the site would be covered Waste or any other material would not be burnt on construction sites
	 Dust generating activities would be assessed during periods of strong winds and rescheduled, where required
	 Wind breaks, which may include site hoardings, would be constructed, where construction works are in close proximity to sensitive receptors and where feasible and reasonable
	 Re-vegetating or stabilising disturbed areas would occur as soon as feasible. The proposal shall be constructed in a manner that minimises dust emissions from the site, including windblown and traffic generated dust and tracking of material onto public roads. All activities on the site shall be undertaken with the objective of minimising visible emissions of dust from the site. Should such visible dust emissions occur at any time, all feasible and reasonable dust mitigation measures shall be identified and implemented including cessation of relevant works, as appropriate, such that emissions of visible dust cease.
AQ5	A street-cleaning regime would be implemented to remove any dirt tracked onto roads.
Climate char	nge and greenhouse gases
CC1	Where possible, construction services and materials will be sourced locally to minimise the distance travelled and therefore emissions of vehicles accessing the site.

7.2.2. Operational management

As indicated above, Sydney Metro will continue to monitor traffic and parking conditions for at least 12 months after the operation of Sydney Metro services. Sydney Metro will also monitor pedestrian and cyclist demand between the Glenwood residential area and the Bella Vista Station precinct over the same period. Sydney Metro will consult with Council on the results of the monitoring.

Sydney Metro will also monitor traffic and parking conditions for 12 months after the opening of the proposal. Sydney Metro will consult with Council on the results of the monitoring, including recommendations for appropriate mitigation and management measures (if required) such that any residual impacts are consistent with the REF.



Maintenance of the asset once complete would be carried out on a regular basis and would include the periodic maintenance of the lawns, vegetation and footpaths, removal of rubbish and graffiti where required. The detailed scope of maintenance and frequency would be determined by the asset owner.

7.2.3. Additional approvals

A summary of additional approvals and notifications that may be required for the construction, maintenance and operation of the proposal are outlined in Table 7-2 below.

Table 7-2: Summary of potential licences, per	rmits and approvals
---	---------------------

Legislation	Authority	Requirement	Comment	Responsibility
Environmental Planning and Assessment Act 1979	Sydney Metro	Consideration: clause 79 of the ISEPP outlines that development for the purpose of railways and railway infrastructure facilities are permissible without the need for development consent under Part 4 of the EP&A Act when undertaken by a public authority.	This REF has been prepared to meet the assessment requirements under the EP&A Act.	Sydney Metro
Environmental Planning and Assessment Regulation 2000	Sydney Metro	Consideration: under clause 228, of the factors to take into account concerning the impact on an activity on the environment.	This REF has considered factors under clause 228 in Appendix B of the REF.	Sydney Metro
Electricity Supply Act 1995	Blacktown City Council	Notification: under section 45; 40 days' notice is required for proposed electricity works.	Notification will be given to Blacktown City Council as part of the proposal (refer to Section 5.2.2 and 5.6 of the REF). This will be carried out during detailed design.	Sydney Metro
ISEPP	Blacktown City Council	Notification: under sections 13 to 15, 21 days' notice is required for the following: (a) Substantial impact on council related infrastructure.	Notification will be given to Blacktown City Council as part of the proposal (refer to Section 5.2.2 and 5.6 of the REF) specifically with reference to clause 13 – impacts on council- related infrastructure. This will be carried out at the same time as future community consultation and consultation under the Electricity Supply Act.	Sydney Metro



Legislation	Authority	Requirement	Comment	Responsibility
Roads Act 1993	Roads and Maritime	Approval: under section 138, approval is required for road work on a Classified Road.	The proposal is likely to require approval under section 138 of the <i>Roads Act 1993</i> , as it would be located within the road corridor of Old Windsor Road, and the proposed works would interface and impact the northbound Old Windsor Road shared path owned by Roads and Maritime Services. A Road Occupancy Licence and permit may be required before any works can take place.	Sydney Metro contractor



8. Conclusion

The REF has been prepared having regard to sections 5.5 and 5.7 of the EP&A Act, and clause 228 of the EP&A Regulation, so that Sydney Metro may fulfil its statutory obligation as a determining authority to take into account to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the proposal and decide whether or not the activity is likely to significantly affect the environment.

The REF was exhibited for a period of six weeks from Friday 6 April 2018 to 18 May 2018. The REF exhibition was supported by a community engagement program, which included newsletters, stakeholder meeting and briefings, community information sessions, and doorknocking.

Sydney Metro received 51 submissions from the community, government agencies, stakeholders and a special interest group. This Submissions Report has documented submissions received and outlined Sydney Metro's responses to the issues raised.

Most community submissions were concerned about the proposal's traffic, access and parking impacts. Specific key points were related to:

- An increase in commuter parking in surrounding streets
- Reduced residential access and reduced residential parking from increased commuter parking in the surrounding streets
- Operational noise from increased pedestrian and vehicle traffic
- Safety, security and potential anti-social behaviour.

Sydney Metro has provided responses to these issues.

To manage the potential impacts identified in the REF and this Submissions Report, a range of management and mitigation measures form an integral part of the proposal and would be implemented during construction and operation. In particular, this includes implementing the Construction Environmental Management Framework (construction stage) and monitoring and implementing outcomes of the Parking Management Strategy (operation stage). As described in Section 2 of this report, Sydney Metro intends to continue to update the community and Blacktown City Council on the proposal.

With the implementation of the proposed management and mitigation measures, potential environmental impacts of the proposal are considered manageable to a level that is not likely to significantly affect the environment.

In consideration of the environmental impacts identified and assessed in the REF and submissions raised during exhibition, it is recommended that the proposal be determined by Sydney Metro.



9. References

Sydney Metro, 2018 Glenwood Pedestrian Link Review of Environmental Factors



Appendix A: Summary of respondents

Table A-1 Respondents

Respondent	Submission number	Section where issues are addressed
Individual	1	Section 4.1.1
Individual	2	Section 4.1.1
Individual	3	Section 4.8
Individual	4	Section 4.1.1
Individual	5	Section 4.2.1, Section 4.2.2, Section 4.8
Individual	6	Letter of support
Individual	7	Section 4.1.1 and Section 4.8 (letter of support that included comments of improvement and works out of scope)
Individual	8	Section 4.1.1, Section 4.2.1
Individual	9	Letter of support
Individual	10	Section 4.1.1
Individual	11	Section 4.1.1, Section 4.2.1, Section 4.5
Individual	12	Section 4.1.1 (letter of support that included comments of improvement)
Individual	13	Section 4.1.1, Section 4.3.1, Section 4.7
Individual	14	Letter of support
Individual	15	Section 4.3.2 (letter of support that included comments of improvement)
Individual	16	Letter of support
Individual	17	Letter of support
Individual	18	Section 4.1.1
Individual	19	Section 4.1.1, Section 4.8
Individual	20	Letter of support
Individual	21	Section 4.1.1, Section 4.3.2, Section 4.4.2
Individual	22	Section 4.1.1, Section 4.3.2, Section 4.4.2
Individual	23	Section 4.1.1, Section 4.3.3, Section 4.3.4
Individual	24	Section 4.1.1, Section 4.6
Individual	25	Section 4.2.1, Section 4.2.2
Individual	26	Section 4.1.1
Individual	27	Section 4.1.1, Section 4.3.2 (letter of support that included comments of improvement)
Community group Bike North	28	Section 5 (letter of support that included comments of improvement)
Individual	29	Section 4.1.1, Section 4.2.2, Section 4.4.1, Section 4.4.2, Section 4.6
Individual	30	Section 4.8
Individual	31	Section 4.1.1 (letter of support that included comments of improvement)



Respondent	Submission number	Section where issues are addressed
Individual	32	Section 4.1.1, Section 4.3.2
Michelle Rowland Member of Parliament	33	Section 4.1.1
Michelle Rowland Member of Parliament	34	Section 4.1.1, Section 4.3.3
Individual	35	Section 4.1.1
Individual	36	Section 4.1.1, Section 4.2.1, Section 4.3.2, Section 4.3.3, Section 4.4.2
Individual	37	Letter of support
Individual	38	Section 4.1.1, Section 4.4.2
Individual	39	Section 4.1.1, Section 4.1.3, Section 4.3.1, Section 4.3.2, Section 4.3.3, Section 4.3.4, Section 4.4.2
Individual	40	Section 4.1.1, Section 4.3.2
Individual	41	Section 4.1.1
Individual	42	Section 4.1.1, Section 4.2.3, Section 4.3.2, Section 4.3.4, Section 4.6
Individual	43	Section 4.1.1, Section 4.1.3
Individual	44	Section 4.1.1, Section 4.1.2, Section 4.1.3, Section 4.3.2, Section 4.3.3, Section 4.4.2, Section 4.5
Individual	45	Section 4.1.1, Section 4.3.1, Section 4.3.2, Section 4.4.2, Section 4.6
Individual	46	Section 4.1.1, Section 4.1.3, Section 4.3.2, Section 4.3.3
Individual	47	Letter of support.
Petition with 160 signatures	48	Section 4.1.1, Section 4.3.2, Section 4.4.2, Section 4.5, Section 4.6
Individual	49	Section 4.1.1, Section 4.3.2, Section 4.3.3, Section 4.4.2
Roads and Maritime Services	50	Section 6.1
Blacktown City Council	51	Section 6.2