NSW GOVERNMENT

Transport Access Program

Wollstonecraft Station Upgrade

Determination Report

Artist's impression of the proposed Wollstonecraft Station Upgrade, subject to detailed design

July **2020**

Wollstonecraft Station Upgrade – Determination Report

Transport Access Program

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Glossary and abbreviations

Term	Meaning
BC Act	*Biodiversity Conservation Act 2016* (NSW)
BDAR	Biodiversity Development Assessment Report
CEMP	Construction Environmental Management Plan
CLMP	Community Liaison Management Plan
Construction Contractor	The Construction Contractor for the Proposed Activity would be appointed by Transport for NSW to undertake the detailed design and construction of the Proposed Activity.
CPTED	Crime Prevention Through Environmental Design
DDA	*Disability Discrimination Act 1992* (Cwlth)
Detailed design	Detailed design broadly refers to the process that the Construction Contractor undertakes (should the Proposed Activity proceed) to refine the concept design to a design suitable for construction (subject to Transport for NSW acceptance).
Determination Report	This document – a report prepared by Transport for NSW to assess and address certain matters to allow for a determination of the Proposed Activity under, and in accordance with Division 5.1 of the EP&A Act.
DSAPT	*Disability Standards for Accessible Public Transport (2002)*
EMF	Electric and Magnetic Fields
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000* (NSW)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
Infrastructure SEPP	*State Environmental Planning Policy (Infrastructure) 2007* (NSW)
NES	Matters of 'National Environmental Significance' under the EPBC Act
NSW	New South Wales
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in this instance, Transport for NSW.
Proposed Activity	The construction and operation of the Wollstonecraft Station
REF	Review of Environmental Factors
Transport for NSW	Transport for New South Wales (the Proponent)

Executive summary

Overview of Proposed Activity

The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The program provides:

- stations that are accessible to those with disabilities, are less mobile and parents/carers with prams and customers with luggage
- modern buildings and facilities that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers for all customers
- safety improvements including extra lighting, lift alarm, fences and security measures at stations.

Wollstonecraft Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the *Disability Standards for Accessible Public Transport 2002* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

As an operator of public transport under the DDA, Transport for NSW is required to upgrade the public transport precincts to ensure equitable access is provided for all customers.

Some public transport stations, wharves and stops do not currently meet the requirements of the federal DSAPT.

The Standards set out minimum accessibility requirements for public transport providers and ensure that people with disability have equivalent access to public transport services.

Upgrading public transport precincts will make the public transport network accessible to people with additional mobility requirements, parents/carers with prams and customers with luggage.

The Proposed Activity would provide:

- two new lifts connecting to Platform 1 and 2
- one unisex family accessible toilet and two ambulant toilets
- accessible entry and level access to the waiting areas on both platforms
- a new canopy at the boarding assistance zones including new seating and allocated spaces for wheelchairs on Platform 1 and 2
- raising, stabilising and regrading of station platforms to comply with requirements of the DSAPT
- widened and re-graded northern footpath along Shirley Road Overbridge and new compliant handrails and accessible entry points
- one accessible new kiss and ride bay and one accessible car space to Australian Standards on Shirley Road.

Transport for NSW, as the Proponent for the Proposed Activity, has undertaken a Review of Environmental Factors (REF) that details the scope of works and environmental impacts associated with the Proposed Activity. The REF was prepared by WSP on behalf of Transport for NSW in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

Modifications to the Proposed Activity

Since the public display of the REF, the following design change has been made to the Proposed Activity:

- the construction compound and laydown area located within the rail corridor to the north west of the site would be extended by about 25 metres into the cleared vegetated area to the north (see Inset A in Figure 3-1). This extension is proposed to provide additional space for construction compound and laydown equipment which would avoid the need for continuous use of the existing commuter car park located south of the station during construction. In addition, a refinement of construction plant and equipment assumptions were included.

Impacts associated with design changes have been considered in accordance with Section 5.5 and 5.7 of Division 5.1 of the EP&A Act and clause 228 of the EP&A Regulation (refer to Chapter 3).

Should further design modifications be required as a result of the detailed design process, these modifications would be assessed to determine consistency with Conditions of Approval for the Proposed Activity, including significance of impact on the environment. Additional mitigation measures and/or consultation would be undertaken where necessary.

Purpose of this report

The purpose of this Determination Report is for Transport for NSW, as Proponent of the Wollstonecraft Station Upgrade, to comply with its obligations under Division 5.1 of the EP&A Act and determine whether or not to proceed with the Proposed Activity. Transport for NSW must make a determination in accordance with the provisions of Division 5.1 of the EP&A Act.

This report also presents a summary of submissions received during public display of the REF and Transport for NSW's response to issues and comments raised in these submissions.

Conclusion

Based on assessments in the REF and the Determination Report, along with a review of submissions received from the community and other stakeholders, it is recommended that the Proposed Activity be approved, subject to mitigation measures included in the REF and the proposed Conditions of Approval (refer to Appendix B). Transport for NSW would continue to liaise with the community and other stakeholders as the Proposed Activity progresses through detailed design and into the construction phase.

1. Introduction

1.1. Background

The Transport Access Program (TAP) is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The program provides:

- stations that are accessible to those with disabilities, are less mobile and parents/carers with prams and customers with luggage
- modern buildings and facilities that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers for all customers
- safety improvements including extra lighting, lift alarm, fences and security measures at stations.

Wollstonecraft Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

As an operator of public transport under the DDA, Transport for NSW is required to upgrade the public transport precincts to ensure equitable access is provided for all customers.

The upgrades would improve access for people with reduced mobility, parents/carers with prams or customers with luggage. The Proposed Activity includes installation of new lifts, accessible ramp to the station entrance, widened footpath along the Shirley Road overbridge, modification of accessible toilet facilities and new accessible kiss and ride bay and an accessible parking space.

Transport for NSW is the Proponent for the Wollstonecraft Station Upgrade (referred to as the 'Proposed Activity' for the purposes of this document). Also refer to Section 1.4 for a description of the Proposed Activity.

1.2. Review of Environmental Factors

A Review of Environmental Factors (REF) has been prepared by WSP on behalf of Transport for NSW in accordance with Sections 5.5 and 5.7 of the *Environmental Planning and Assessment 1979* (EP&A Act), and clause 228 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), to ensure that Transport for NSW takes into account to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposed Activity. A link to the REF is included in Appendix A.

The Wollstonecraft Station Upgrade REF was placed on public display from 18 May 2020 to 1 June 2020. During this period, 117 submissions were received, including one submission from North Sydney Council. Issues raised in these submissions are addressed in Section 2.3 of this report.

1.3. Determination Report

Prior to proceeding with the Proposed Activity, the Secretary for Transport for NSW must make a determination in accordance with Division 5.1 of the EP&A Act (refer Figure 1-1).

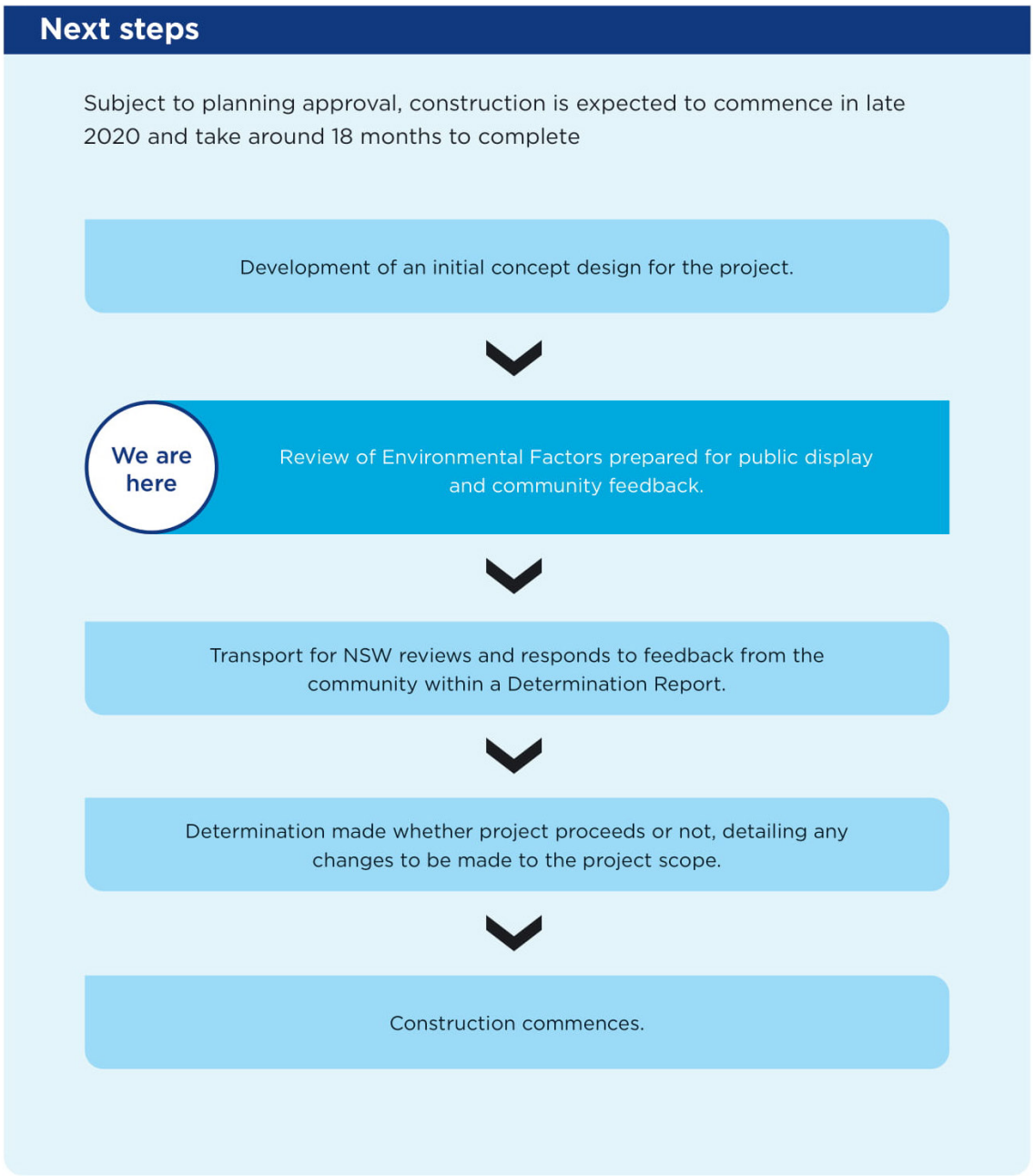

Figure 1-1 Planning approval process

The purpose of this Determination Report is to address the following to allow for a determination of the Proposed Activity:

- present a summary of submissions received during public display of the REF and Transport for NSW's response to issues and comments raised in these submissions
- assess environmental impacts with respect to the Proposed Activity, which are detailed in the environmental impact assessment (and any proposed modifications, as detailed and assessed in this Determination Report)
- identify mitigation measures to minimise potential environmental impacts
- determine whether potential environmental impacts are likely to be significant

- address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposed Activity.

This report has been prepared having regard to, among other things, the objectives of Transport for NSW under the *Transport Administration Act 1988*:

a) to provide an efficient and accountable framework for the governance of the delivery of transport services

b) to promote the integration of the transport system

c) to enable effective planning and delivery of transport infrastructure and services

d) to facilitate the mobilisation and prioritisation of key resources across the transport sector

e) to co-ordinate the activities of those engaged in the delivery of transport services

f) to maintain independent regulatory arrangements for securing the safety of transport services.

1.4. Description of the Proposed Activity in the REF

Wollstonecraft Station is located within the North Sydney Council about four kilometres north of the Sydney Central Business District. The station consists of two side platforms and associated station buildings. Heritage components of the station include two heritage listed station signs on Platform 1 and 2. The station is also directly adjacent to the Wollstonecraft Conservation Area.

Wollstonecraft Station does not currently meet key requirements of the DSAPT or DDA. It also does not allow for equitable access to the station platforms.

A detailed description of the Proposed Activity is provided in Chapter 3 of the Wollstonecraft Station Upgrade REF, with the key features of the Proposed Activity as follows:

- two new lifts connecting to Platform 1 and 2
- one unisex family accessible toilet and two ambulant toilets
- accessible entry and level access to the waiting areas on both platforms
- a new canopy at the boarding assistance zones including new seating and allocated spaces for wheelchairs on Platform 1 and 2
- raising, stabilising and regrading of station platforms to comply with requirements of the DSAPT
- widened and re-graded northern footpath along Shirley Road Overbridge and new compliant handrails and accessible entry points
- one new kiss and ride bay and one accessible car space to Australian Standards on Shirley Road.

A schematic outlining key features of the Proposed Activity is provided in Figure 1-2.

The need for, and benefits of, the Proposed Activity are outlined in Chapter 2 of the REF.

Construction is expected to commence in late 2020 and take up to 18 months to complete.

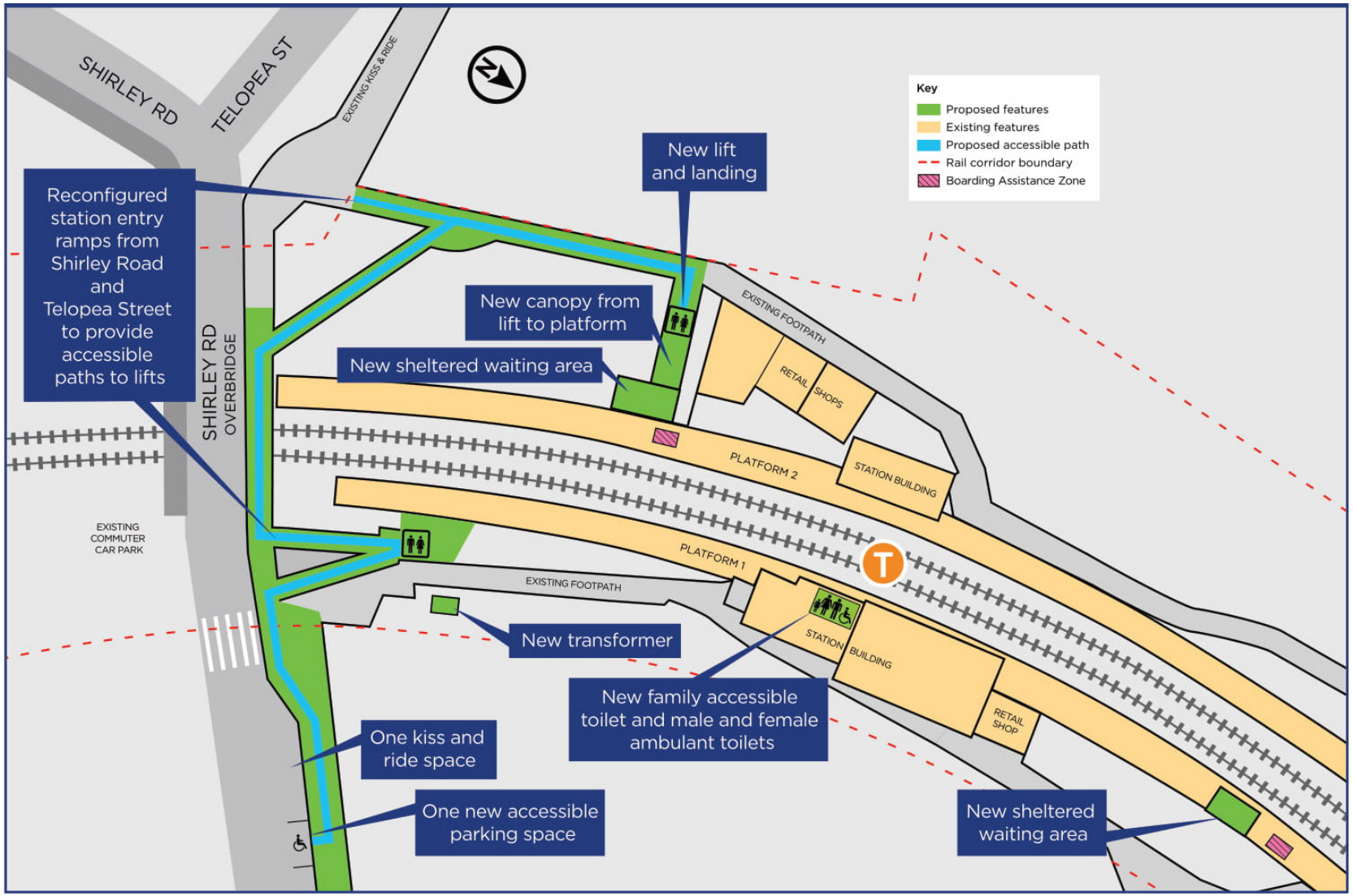

Figure 1-2 Key features of the Proposed Activity (indicative only, subject to detailed design)

2. Consultation and assessment of submissions

2.1. REF public display

The Wollstonecraft Station Upgrade REF was placed on public display from 18 May 2020 to 1 June 2020 on the Transport for NSW corporate website[1] and https://www.transport.nsw.gov.au/wollstonecraft.

Under normal circumstances, printed copies of the REF would have been available at various locations; however due to impacts of COVID-19, the REF was available online in digital format only with printed copies available on request.

A range of other community consultation activities were undertaken during the public display period which included:

- distribution of around 200 newsletters at the station
- 4700 newsletters were distributed to the entire suburb of Wollstonecraft
- a geo-targeted social media post via Facebook was posted on the Transport for NSW Facebook page for the duration of the public display period
- geo-targeted digital advertising across the News Limited newspapers from 18 May to 25 May, outlining scope of the Proposed Activity, information on where to view the REF and specialist studies on the Transport for NSW website, along with details on how to make a submission
- a dedicated project webpage on the Transport for NSW corporate site. The webpage included an online feedback form, artist's impressions of the Proposed Activity, copies of the REF and supporting studies and contact details (phone and email) to contact the project team.
- a briefing to the North Sydney Council officers in December 2019 and May 2020.
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the Transport for NSW website, along with details on how to make a submission was sent to the North Sydney Council as per the consultation requirements under clause 13, 14, 15, 15A or 16 of the State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the Transport for NSW website, along with details on how to make a submission was sent to the NSW State Emergency Service as per the consultation requirements under clause 15AA of the Infrastructure SEPP.

2.2. REF submissions

A total of 117 submissions were received during the public display period via letter, email or online submissions. A submission was also received from North Sydney Council regarding the Proposed Activity. Community submissions are addressed in Table 2-1, while the submission received from North Sydney Council is addressed in Table 2-2.

Submissions included feedback on a range of issues in relation to the Proposed Activity. The key issues raised in submissions were:

- project design considerations, including:
  - justification for proposed lifts due to the perception the platforms can be accessed by existing ramps

[1] http://www.nsw.gov.au/wollstonecraft-station-upgrade

- consideration of opportunities to re-grade existing ramps without installing lifts
- widening the footpath and narrowing the roadway lane on the Shirley Road overbridge
- inclusion of additional toilets on Platform 2
- proposed location of accessible kiss and ride bay and accessible parking.

- concerns regarding potential environmental impacts, including:
  - impacts from installation of proposed lifts on the adjacent Wollstonecraft Conservation Area and heritage landscape of the existing station from installation of the lifts
  - visual impacts from the scale, bulk and unsympathetic palette of lifts
  - ongoing operational noise impacts
  - increases in traffic during the construction period.

2.3. Consideration and response to submissions

Community submissions

A summary of all issues and associated responses is provided in Table 2-1.

Table 2-1 Response to community submissions received

No.	Submission no.	Issue/s raised	Transport for NSW response
1	**General**		
1.1	WOLL001, WOLL003, WOLL004, WOLL005, WOLL006, WOLL013, WOLL015, WOLL019, WOLL028, WOLL030, WOLL031, WOLL032, WOLL032, WOLL038, WOLL040, WOLL047, WOLL049, WOLL052 WOLL055, WOLL057, WOLL059, WOLL060, WOLL062, WOLL070, WOLL086, WOLL088, WOLL114	Support for the Proposed Activity was expressed in 27 submissions including references to: • the Proposed Activity as a whole • upgrading of the existing toilet facilities • regrading of the footpath and improved levels from platform raising to reduce the height between platform and train carriages.	Support for the Proposed Activity is noted.
1.2	WOLL073, WOLL077	Two submissions expressed support for the retention of the historic Wollstonecraft Station signs.	Support for this aspect of the Proposed Activity is noted.
1.3	WOLL27, WOLL41	Two submissions questioned the purpose of the station upgrade.	Wollstonecraft Station does not currently meet the requirements of DSAPT. As an operator of public transport under the DDA, Transport for NSW is required to upgrade the station precinct to ensure equitable access is provided for all customers. As noted in Chapter 2 of the REF, Wollstonecraft Station has been identified for an accessibility upgrade. The proposed upgrade of Wollstonecraft Station would maintain the existing station entry points, minimise need for new infrastructure while making the station accessible and DSAPT compliant. The upgrade would make Wollstonecraft Station easier for customers to use, including those with

No.	Submission no.	Issue/s raised	Transport for NSW response
			a disability, who are less mobile, parents/carers with prams and customers with luggage. Details of the Proposed Activity are provided in Chapter 3 of the REF.
1.4	WOLL45	One submission questioned how station upgrades are prioritised in the Transport Access Program.	Transport for NSW determines the priority of upgrades using evidence-based criteria, including current and future patronage; needs and demographics of customers who use the location; whether important services such as hospitals or educational facilities are nearby; cumulative impacts of other construction projects; and the accessibility of other nearby transport interchanges and facilities. To receive updates on any future projects at other stations, please refer to the current projects webpage.
2	**Design – Lifts**		
2.1	WOLL002, WOLL006, WOLL009, WOLL011, WOLL012, WOLL013, WOLL014, WOLL015, WOLL017, WOLL018, WOLL019, WOLL022, WOLL023, WOLL024, WOLL025, WOLL026, WOLL028, WOLL029, WOLL034, WOLL037, WOLL040, WOLL042, WOLL044, WOLL046, WOLL049, WOLL050, WOLL051, WOLL053, WOLL056, WOLL061, WOLL064, WOLL069, WOLL071, WOLL072, WOLL073, WOLL077, WOLL079, WOLL082, WOLL083, WOLL087, WOLL088, WOLL089, WOLL090, WOLL093, WOLL095, WOLL097, WOLL098, WOLL099, WOLL100, WOLL102, WOLL106, WOLL108, WOLL109	Fifty-three (53) submissions raised the concern of the purpose of the new lifts as the existing station includes ramps.	A key objective of the Transport for NSW TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. The slope of the current ramps is too steep to meet DSAPT and DDA legislation and is not easily accessible for all customers, including those with additional mobility requirements. Modifying or constructing a new ramp was assessed as a potential option but was not progressed as the difference in height between the station platform and the surrounding area would have resulted in a switchback ramp that was about 84 metres long, with a further 15 metres to the boarding assistance zone. The distance required for disabled or less mobile customers to access Platform 2 was not considered to be reasonable or in line with the objectives of the Transport Access Program. A new ramp would be located in what is currently the grassed area, having potential privacy and light spill issues on neighbouring properties. Lifts were identified as the preferred option - given their ability to meet the requirements of the legislation while minimising as much as practicable, the impact to the station. The proposed lifts would satisfy DSAPT requirements and achieve compliant access to and from each of the platforms as well as providing customers an easier and alternative method of travel to the platforms. Further information on the options considered is in section 2.4 of the REF.
2.2	WOLL007, WOLL008, WOLL019, WOLL061, WOLL065, WOLL084	Six submissions recommended relocating the lifts away from the Shirley Road overbridge due to its scale near the station entrance.	The location of the lifts was selected following review of several design options and a detailed options analysis as outlined in Section 2.4 of the REF. The nominated locations of the proposed lifts would allow for improved access to and from Shirley Road at the station entrance and takes into consideration topographical constraints of the area. These locations would be in close proximity to the existing commuter car park and new accessible car parking space. Lift 1 is located close to the eastern entrance to provide a direct and efficient link to the platform,

No.	Submission no.	Issue/s raised	Transport for NSW response
			while maintaining the existing pedestrian pathway (footpath along Shirley Road and existing ramp) to Platform 1. The location of the lift on Platform 2 has been positioned to minimise visual impact on the parkland setting and retains the existing grassed area as much as practicable.
	Design – Overbridge		
2.3	WOLL007, WOLL012, WOLL013, WOLL014, WOLL017, WOLL018, WOLL019, WOLL019, WOLL022, WOLL023, WOLL073, WOLL087, WOLL088, WOLL110	Due to concerns of potential pedestrian and vehicular safety, 14 submissions requested the reasoning behind the footpath widening and reduced lane widths along the Shirley Road overbridge.	A key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. To provide DSAPT compliance, it is proposed that new accessible entrances are provided from Shirley Road to each platform. Minor footpath widening modifications would be made to the Shirley Road overbridge on the north side only. The upgraded path would provide the most direct and accessible path between the proposed kiss and ride bay and accessible parking spaces on Shirley Road and the proposed lift locations without introducing new infrastructure such as a new footbridge. The reduced road width would still comply with relevant road guidelines and accommodate for two-way traffic (i.e. one traffic lane in each direction). As noted in Section 6.1 of the REF, there would be minor traffic impacts during construction due to the temporary one-lane closure of Shirley Road to accommodate the footpath widening and road width configuration. During operation, the road width would still accommodate two-lane traffic with no expected traffic impacts. The existing pedestrian crossing on the east side of the Shirley Road overbridge would be maintained to provide safe access for pedestrians crossing this road. The final width of the traffic lanes would be confirmed during the detailed design stage in consultation with North Sydney Council.
2.4	WOLL023	One submission questioned the concern of the overbridge grade exceeding 1:20 or 1:40.	In section 2.3.1, the REF noted a mislabelled description of the grades. The grade of Shirley Road Overbridge exceeds 1:20 at 1:14 and the connected footpath grading exceeds 1:40 crossfall. The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. The Proposed Activity includes improving these grades along the overbridge and pathways making the station accessible and DSAPT compliant.
2.5	WOLL019	One submission noted that the design of the footpaths should not include steps.	There are currently no steps on the existing footpaths at the station and no steps are included as part of the Proposed Activity. Proposed upgrades to the footpath would include resurfacing and regrading of existing ramps to

No.	Submission no.	Issue/s raised	Transport for NSW response
			achieve compliance with DDA and DSAPT requirements. The detailed scope of works for the Proposed Activity are provided in Section 3.2 of the REF.
	Design – Ramps		
2.6	WOLL007, WOLL015, WOLL016, WOLL023, WOLL025, WOLL077 WOLL087, WOLL088 WOLL109, WOLL110 WOLL111	Eleven (11) submissions recommended that the design should modify the existing ramps instead of installing lifts.	As part of the project's design development process, a number of alternative options were explored to address the station's accessibility challenges without installation of lifts. That is, options to regrade and/or install new ramps. Modification of the ramps was considered in earlier designs and whilst it could meet requirements of DDA and DSAPT and improve access to the retail shops and Opal card sellers, this option was not progressed further due to the following: • scale and bulk of the work would result in negative visual and urban design impacts • modifying or constructing a new ramp was assessed as a potential option but was not progressed as the difference in height between the station platform and the surrounding area would have resulted in a switchback ramp that was about 84 metres long, with a further 15 metres to the boarding assistance zone. The distance required for disabled or less mobile customers to access Platform 2 was not considered to be reasonable or in line with the objectives of the Transport Access Program. • increased potential privacy and light spill issues on neighbouring properties due to the ramp location in the grassed area. The distance required for disabled or less mobile customers to access the platforms was not considered to be reasonable or in line with the objectives of the TAP. Details of the options assessment are provided in Section 2.4 of the REF.
2.7	WOLL006, WOLL023	Two submissions inquired about the justification of the ramp upgrade along the Shirley Road overbridge.	The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. Wollstonecraft Station is currently accessible via non-compliant pathways and an underpass. The upgrade at Wollstonecraft Station would maintain main station entrances and minimise need for new infrastructure, making the station accessible including upgrading the ramp along the Shirley Road overbridge to achieve DSAPT compliance.
2.8	WOLL061, WOLL081	Two submissions requested more information regarding the justification of footpath modifications and addition of handrails.	The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. The current entry pathways are not compliant with DSAPT and DDA.

No.	Submission no.	Issue/s raised	Transport for NSW response
			Upgrades as part of the Proposed Activity include the provision of handrails and modifications to the existing footpaths in order for the station to be DSAPT compliant.
	Design – Station building		
2.9	WOLL001, WOLL002, WOLL003, WOLL052	Four submissions enquired if the Proposed Activity includes toilet upgrades on Platform 1.	The current station includes separate toilet facilities (one male and one female). The Proposed Activity includes the reconfiguration of Platform 1 station building to accommodate additional toilet facilities, including one unisex family accessible toilet and two ambulant toilets as noted in Section 3.1 of the REF.
2.10	WOLL004, WOLL007, WOLL014, WOLL017, WOLL018, WOLL019, WOLL022, WOLL027, WOLL043, WOLL077, WOLL107, WOLL110	Twelve (12) submissions requested additional toilet facilities on Platform 2.	The Proposed Activity does not include provision of toilet facilities on Platform 2. As part of the Proposed Activity, Platform 1 would be upgraded to include one unisex family accessible toilet and two unisex ambulant toilets. The installation of lifts would provide easier connections for customers to access the upgraded toilets on Platform 1.
2.11	WOLL022	One submission noted the door location of the Platform 1 toilet building should be re-considered due to potential odours near the seating.	The final layout of the proposed upgrade to the toilets of the separate ambulant toilet facilities would be further investigated in the detailed design stage. Feedback regarding maintenance of the station toilets will be provided to Sydney Trains.
2.12	WOLL047	One submission requested that the toilets include a baby change facility.	The Proposed Activity includes reconfiguration of Platform 1 station building to accommodate one unisex family accessible toilet which includes a baby change table.
	Design – Platform		
2.13	WOLL002, WOLL030	Two submissions inquired if the platform would be level with the train.	The focus of the Proposed Activity is to improve accessibility in accordance with DDA and DSAPT. Upgrades to the platform would include raising, stabilising and regrading of the platforms to improve accessibility to the train carriages. Platform raising would bring platforms closer to the level of the train carriages.
2.14	WOLL022	One submission requested that the platform include a floor marking noting the smallest gap between the platform and train for eased access.	Additional platform markings would be discussed with Sydney Trains and considered through the detailed design stage.
2.15	WOLL029	One submission requested the curve of the platform be modified to reduce the gap.	The focus of the Proposed Activity is to improve accessibility at the station in accordance with DDA and DSAPT. Upgrades to the platform are limited to stabilisation works, localised raising to improve access and regrading to comply with DSAPT. Improvement to the platform curve is limited by other rail infrastructure such as rail alignment, tracks and platform curve and require substantial track work. As part of the Proposed Activity there are no proposed works to alter or change the current curvature of the platform as platform curve works are outside of the scope.

No.	Submission no.	Issue/s raised	Transport for NSW response
2.16	WOLL010, WOLL030, WOLL042, WOLL047, WOLL056, WOLL058, WOLL062, WOLL072, WOLL076, WOLL078, WOLL083, WOLL087, WOLL098, WOLL110, WOLL114	Fifteen (15) submissions requested the gap between the platform and train be reduced.	The focus of the Proposed Activity is to improve accessibility in accordance with DDA and DSAPT. Upgrades to the platform is limited to raising, stabilising and regrading the platforms to comply with DSAPT which would resolve some height differences between the platform and the train carriages. However, the Proposed Activity does not include amendments to existing gaps between the platform and train carriages. The improvement to the platform / train gap is limited by other existing rail infrastructure such as rail alignment, tracks and platform curve). Rail operations, including track alignment, is overseen by Sydney Trains; however, this feedback will be provided to Sydney Trains for consideration.
	Design – Other		
2.17	WOLL002, WOLL010, WOLL051	Three submissions requested that station upgrades include accessible parking, kiss and ride, toilets, CCTV and lighting.	The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. TAP objectives also include safety improvements including extra lighting, help points, lift alarm, fences and security measures for car parks and stations. In addition, and as described in Section 3.2 of the REF, the Proposed Activity would include improvements to toilet facilities on Platform 1, CCTV, lighting and addition of accessible parking and kiss and ride along Shirley Road.
2.18	WOLL007, WOLL017, WOLL024	Three submissions questioned the justification of the suspended walkway connection to the Shirley Road overbridge.	The existing Shirley Road overbridge has steep gradients from Telopea Street. The Proposed Activity's inclusion of the new walkway would allow compliant access from Shirley Road to the new lift on Platform 1 and Platform 2 entrance. This design option was determined as part of the options assessment with the least amount of environmental impacts as described in Section 2.4 of the REF. The design of the Proposed Activity would provide the following benefits compared to other options considered: • reduced vegetation and tree removal • no heritage impacts to the adjacent Wollstonecraft Conservation Area • reduced visual impacts from Shirley Road / Telopea Street intersection. The Proposed Activity would also provide easier and more efficient access to Platform 2 from the east coming from the existing commuter car park.
2.19	WOLL007, WOLL053, WOLL089, WOLL105	Four submissions questioned the location of the kiss and ride and accessible parking due to the concern of moving the mail zone, community board and phone box.	The additional kiss and ride bay and accessible parking space on the eastern side of the station would provide direct access to the station in accordance with TAP objectives and compliance with DDA and DSAPT. The phone box would not be affected. The postal drop off would be relocated in consultation with

No.	Submission no.	Issue/s raised	Transport for NSW response
			Australia Post. The community notice board may be affected and a new location would be determined during the detailed design stage.
2.20	WOLL008, WOLL023, WOLL065	Three submissions questioned if any upgrades were proposed for the existing underpass.	Upgrades of the existing underpass is considered outside the scope of TAP. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The underpass is not in scope as it does not form part of the new accessible path from the new DDA parking on Shirley Road to the new lifts and platforms. The new accessible entrances are provided for the main station entrance from Shirley Road to each platform. There are current lighting and CCTV arrangements in the underpass which Sydney Trains are operating and maintaining.
2.21	WOLL019, WOLL044, WOLL050, WOLL080	Four submissions requested additional shelter on the platforms.	As part of the Proposed Activity, the provision of additional sheltered waiting areas at the Boarding Assistance Zones on Platform 1 and 2 as noted in Section 3.1 of the REF.
2.22	WOLL036, WOLL073	Two submissions requested the station include bike upgrades like secure bicycle storage, facilities and access.	The Proposed Activity would relocate the existing bicycle hoops to accommodate the Platform 1 station building modifications and located near the Platform 1 entrance. The Proposed Activity would not reduce the number of bike parking. Additional bike parking on Platform 2 would be considered through the detailed design stage. The exact location and type of bicycle parking would be determined in the detailed design stage and documented in the Public Domain Plan which would be prepared by the Construction Contractor, in consultation with North Sydney Council and any other relevant stakeholder as required.
2.23	WOLL019, WOLL041, WOLL072, WOLL089	Four submissions requested car parking modifications in the existing commuter car park (e.g. additional spaces).	The Proposed Activity does not include any modifications to the existing commuter car park. The traffic assessment undertaken as part of preparation of the REF confirmed that, to date, current operations of the commuter car park, as well as the availability of off-street parking in the area, are sufficient to meet existing demands of the station. Upgrades to parking include the additional accessible parking space and kiss and ride bay along Shirley Road in accordance with TAP objectives and compliance with DDA. Refer to Chapter 6.1 of the REF or Technical Paper 1 for further details.
2.24	WOLL059	One submission requested an additional set of stairs from Shirley Road for quicker access to the platforms.	The Proposed Activity included an options assessment in which one option (identified as Option 4) proposed a design that included direct stair access to Platform 2 along the retail shops. Details of the options assessed are noted in Section 2.4 of the REF. As the Proposed Activity follows compliance with the DDA and DSAPT, addition of stairs would not align with these regulations and the TAP objectives. Through consultation, this option was not recommended as the preferred option, as the stairs would inhibit

No.	Submission no.	Issue/s raised	Transport for NSW response
			mobility impaired users from using the existing ramp and require all mobility impaired users to use the lifts. The construction of providing the additional set of stairs would also have increased biodiversity impacts due to removal of trees and increased visual impacts of increased construction equipment and laydown areas.
2.25	WOLL23	One submission recommended that the Proposed Activity to not impact the top of the east footpath for placement of the AusGrid transformer.	The Proposed Activity includes installation of an Ausgrid transformer at the Platform 1 entrance at the top of the east footpath as its preferred location. Other locations for the transformer were investigated, however the proposed location was identified as the most appropriate to limit energy losses, reduce cable runs and allow efficient access for maintenance. The selected location of this transformer had the least amount of excavation and earthworks required as well as avoiding impacts to the grassed area near Platform 2. Mitigation measures as noted in Chapter 7 of the REF would be implemented to manage impacts from the transformer including the following (refer to Condition of Approval 31): • minimising the area of hardstand surrounding the transformer • consideration of minimising tree removal and existing vegetation • providing screening vegetation to limit views to the transformer.
3	**Constructability**		
3.1	WOLL003	One submission questioned how the platform construction works would occur.	Construction would be performed through a staged approach for various activities including platform stabilisation and upgrade work. Details of construction staging are detailed in Section 3.3 of the REF. Nominated steps for platform work include the following: • excavate platforms and construct in-situ concrete surfaces including raising platform height and grading platform surface as required for accessible path • floor lowering to existing entrances and shelters • relocate platform furniture along accessible paths • install new yellow line and tactile along platforms. Major construction activities like the platform works would primarily be completed during rail shutdown periods. Final construction staging would be determined by the Construction Contractor during the detailed design stage. Details of the construction staging process for the Proposed Activity are provided in Section 3.3 of the REF.
3.2	WOLL003, WOLL006, WOLL012, WOLL066	Four submissions raised concern regarding station disruptions during construction.	There would be no long-term closure of the station during standard construction hours (7:00am to 6:00pm Monday to Friday, 8:00am to 1:00pm Saturdays). Access to the station and car park would remain open during these times with implementation of a Construction Traffic

No.	Submission no.	Issue/s raised	Transport for NSW response
			Management Plan which also includes a Pedestrian Management Plan. Closure of the station would occur during scheduled rail shut down periods to accommodate major construction activities (e.g. installation of lifts). No train service would operate during rail shut down periods and the community would be notified in advance prior to construction. Details of construction methodology, timing and activities are noted in Section 3.3 of the REF.
4	**Consultation**		
4.1	WOLL007	One submission inquired about the public display period and if late responses would be accepted.	The REF was placed on public display of the Proposed Activity was for two weeks from 18 May to 1 June. Transport for NSW have accepted late submissions and have included this feedback in this Determination Report.
4.2	WOLL008, WOLL065	Two submissions raised concern that the community was not consulted on the design of the Proposed Activity.	Key stakeholders such as North Sydney Council and Sydney Trains have been consulted during early stages of development for the Proposed Activity. The purpose of the public display of the REF is to allow customers and community opportunity to provide feedback on the proposed. Feedback received during the public display of the REF are included and responded to in this Determination Report. Further consideration of feedback will be undertaken and occur during the detailed design stage. The community would be updated about the project via newsletters, updates via social media, newspaper advertisements, posters at the station, phone calls and emails, and regular updates on the project website.
4.3	WOLL023, WOLL111	One submission questioned if other design options could be consulted on.	Transport for NSW considered a number of options to upgrade Wollstonecraft Station. Each of the options were quantitatively and qualitatively assessed by Transport for NSW representatives and other key stakeholders using Transport for NSW's Multi Criteria Assessment (MCA) framework. The options assessment process included consideration of factors such as building and design, engineering, environment, traffic and movement, customer experience, constructability and safety. After the MCA, a short list of options were available and Option 3 was identified as being the preferred option based on the following: • achieve DSAPT compliance without significant negative environmental impacts • locate Platform 2 lifts closer to the Boarding Assistant Zone • reduce visual hazards for train drivers and viewing of platform services • reduce the number of station closures during construction therefore minimising disruption to the community • reduce overall work required to construct the Proposal including less regrading/widening between the proposed lift and Platform 2 Boarding Assistant Zone

No.	Submission no.	Issue/s raised	Transport for NSW response
			• reduce need for major structural work to the Shirley Road overbridge • provide a better customer experience with direct, stair-free access to Platform 2 • minimise impacts to neighbouring properties when compared to other options assessed. Design options were also discussed with key stakeholders such as North Sydney Council and Sydney Trains during early development of the Proposed Activity. The design of the Proposed Activity would continue to be refined during the detailed design stage with consideration of ongoing consultation.
4.4	WOLL018	One submission requested to be part of the ongoing design process.	Transport for NSW will continue to work with key stakeholders including Sydney Trains, North Sydney Council, accessibility groups, customers and adjacent residents to develop the detailed design as appropriate.
4.5	WOLL007, WOLL025, WOLL111	Three submissions requested additional public meeting to be hosted with eased COVID-19 restrictions.	The Wollstonecraft Station Upgrade project team is available by calling 1800 684 490 or by emailing projects@transport.nsw.gov.au. Community meetings and pop up sessions at the station will be considered as restrictions ease for COVID-19. The project webpage is also updated regularly as new information and project updates become available.
5	**Biodiversity**		
5.1	WOLL020, WOLL023, WOLL073, WOLL103	Four submissions raised concern regarding the loss of vegetation and opportunities for replanting.	The Proposed Activity would require removal of about 0.14 hectares of urban native/exotic ornamental plantings, environmental weeds, and exotic lawn and 13 trees. Ten of these trees would be identified as requiring offset planting of 42 replacement trees in accordance with the Transport for NSW *Vegetation Offset Guide*. Refer to Chapter 6.6 and Technical Paper 5 of the REF for further details.
6	**Heritage**		
6.1	WOLL007, WOLL009, WOLL012, WOLL017, WOLL019, WOLL022, WOLL023, WOLL027, WOLL032, WOLL071, WOLL022, WOLL087, WOLL103, WOLL110	Fourteen (14) submissions raised concerns that the station design (e.g. lifts) is not sympathetic and compatible with the heritage design of the station.	The artist's impression and photomontages depicting the lift design are indicative only and subject to the detailed design stage. The REF identified that the Proposed Activity would have an overall minor adverse visual heritage impact (refer to Section 6.5 of the REF or the Statement of Heritage Impact, Technical Paper 4). The Wollstonecraft Conservation Area is directly adjacent to the station but does not extend into the area of the Proposed Activity. As recommended by the Statement of Heritage Impact, the historic Wollstonecraft Station sign would be maintained throughout construction and operation as well as preserve the three brick drains during platform works. The design of the lifts and heritage compatibility would be further explored through the detailed design stage and include material and palette compatibility. Consideration would include the following (refer to Condition of Approval 30):

No.	Submission no.	Issue/s raised	Transport for NSW response
			• development and implementation of an Urban and Landscape Design Plan which would address the Proposed Activity's integration with surrounding built form. • development and implementation of a Public Domain Plan which identifying the materials, finishes and colour schemes. The Proposed Activity also includes vegetation screening opportunities and tree offset considerations in following the Transport for NSW *Vegetation Offset Guide* (refer to Condition of Approval 23). The Proposed Activity would include 42 replacement trees to offset the removed trees. The location of the vegetation offsets would be identified during detailed design. In addition, Transport for NSW's in-house Heritage specialist would be part of the detailed design process to provide recommendations with respect to heritage.
6.2	WOLL022	One submission recommended no alterations to the station building occur due to potential heritage impact.	The Proposed Activity would include internal station building works for modification of accessible toilets and storage room. No heritage impacts are expected from these works as noted in Technical Paper 4 and Section 6.5 of the REF.
6.3	WOLL075	One submission advised the station is within the Wollstonecraft Heritage Conservation Area.	The Wollstonecraft Conservation Area is located directly adjacent to the station as shown in the ePlanning Spatial Viewer portal, However the footprint of the Proposed Activity does not extend into this area.
7	**Landscape and visual amenity**		
7.1	WOLL020, WOLL103	Two submissions raised concerns of construction and operational light pollution and glare from the station upgrades.	The existing Wollstonecraft Station is classified as having moderate district brightness from the existing station elements. Increased night lighting would occur primarily during construction due to removal of vegetation and some limited night works and lighting of construction compounds for security. Overall lighting impacts during construction would result in a minor reduction in the amenity of views at night as noted in Section 6.2 of the REF. During operation of the Proposed Activity, there may be minor additional sky glow as well as some light spill near the new lifts. However, there would be no direct light spill onto adjacent residences. Offset vegetation would also include 42 replacement trees which would filter light spill generated from the Proposed Activity. Operational impacts of the Proposed Activity at from lights at night are detailed in Section 6.2 of the REF.
7.2	WOLL007, WOLL009 WOLL013, WOLL014 WOLL017, WOLL018 WOLL021, WOLL022 WOLL023, WOLL024 WOLL025, WOLL032, WOLL071, WOLL074, WOLL075, WOLL076, WOLL077, WOLL084, WOLL087, WOLL088, WOLL099, WOLL109, WOLL111	Twenty-three (23) submissions raised concerns that the station design (e.g. lifts, throw screens) would not be sympathetic to the landscape or character and have adverse visual impacts.	The overall visual impact of the station for the Proposed Activity would range from negligible to minor. The new structures would have a recessive colour palette as the dominant element in the context is the landscape and dark recessive colours to minimise contrast with the backdrop of green foliage. The design would be further detailed and refined throughout the detailed design process and include the following (refer to Condition of Approval 30):

No.	Submission no.	Issue/s raised	Transport for NSW response
			• development and implementation of an Urban and landscape design plan which includes integration of the Proposed Activity with surrounding built form • development and implementation of a Public Domain Plan which includes addressing materials, finishes and colour schemes. The Proposed Activity also includes vegetation screening opportunities and tree offset considerations in following the Transport for NSW *Vegetation Offset Guide*. The Proposed Activity would include 42 replacement trees to offset the removed trees (refer to Condition of Approval 23). The location of vegetation offsets would be identified during the detailed design stage. Further details of visual impacts are described in Chapter 6.2 of the REF or Technical Paper 2.
7.3	WOLL020, WOLL103	Two submissions raised the concern of loss of privacy for the adjacent residences due to removed vegetation.	The Proposed Activity would include some tree removal which would open up views to the station and increase views of the construction of the Proposed Activity. There are not expected to be significant impacts to residential privacy. However, in accordance with the Transport for NSW *Vegetation Offset Guide*, 42 replacement trees would be planted to offset the removed trees. The increased tree canopy would provide increased coverage to reduce views from the station (refer to Condition of Approval 23). The location of the vegetation offsets would be identified during the detailed design stage.
7.4	WOLL023	One submission raised the concern of a blocked view of retail shops from the lift.	The lift on Platform 2 is offset from the footpath entrance from Shirley Road / Telopea Street. The lift shaft would not significantly alter views of retail shops.
7.5	WOLL054	One submission questioned the minimalist artist impression.	The depicted photomontages of the Proposed Activity are indicative only. The design would be further detailed and refined throughout the detailed design process to consider the following (refer to Condition of Approval 30): • development and implementation of an Urban and landscape design plan which includes integration of the Proposed Activity with surrounding built form. • development and implementation of a Public Domain Plan which includes addressing materials, finishes and colour schemes • additional trees required for offset per the Transport for NSW *Vegetation Offset Guide* (refer to Condition of Approval 23). Based on the design, heritage impacts are not likely to change.
8	**Noise and vibration**		
8.1	WOLL007, WOLL103	Two submissions advised that operational noise impacts were limited in the assessment.	Operation of the Proposed Activity is expected to be similar to existing conditions with the addition of new lifts and reconfigured toilet facilities. Significant operational noise impacts are not expected as mechanical noise emissions from the new lifts would be minimal. The use of standard controls such as quiet plant selection and duct lining and/or attenuators, would allow

No.	Submission no.	Issue/s raised	Transport for NSW response
			mechanical plant noise to be reduced to acceptable levels. Operational noise impacts from the upgraded footpaths and ramps are not expected to have any impacts as it would remain similar to existing conditions. Noise impacts and mitigation measures during both construction and operation of the Proposed Activity are described in Section 6.3 of the REF or Technical Paper 3.
8.2	WOLL007, WOLL012, WOLL019	Three submissions requested that no station sounds should be allowed during operations (e.g. platform announcement, lift operation).	The Proposed Activity is not expected to result in additional noise during operation as noted in Section 6.3 of the REF. Concerns regarding existing rail operations, including train announcements and opening/closing door noises would be communicated to Sydney Trains.
8.3	WOLL020, WOLL103	Two submissions raised the concern of construction and traffic noise during day time and night time.	Noise levels generated by construction vehicle movements for the Proposed Activity are anticipated to comply with relevant criteria during the day periods. Measures for traffic noise would be identified in a Traffic Management Plan that would recommend heavy vehicle movements to and from the site be restricted to daytime hours where feasible. However, noise from construction work activities is predicted to exceed the applicable Noise Management Levels (NMLs) for all construction scenarios, with notable impacts anticipated during the night time period and shut down periods as noted in Section 6.3 of the REF. It is acknowledged that, where required, night time works would be likely to generate some sleep disturbance impacts at some residential receivers. Measures to mitigate night time impacts primarily involve limiting hours of construction and when heavy machinery can be used as well as respite periods. A detailed list of mitigation measures can be found in Chapter 7 of the REF. No operational noise impacts from traffic would occur as it would be similar to existing conditions.
	WOLL002, WOLL010, WOLL019, WOLL020, WOLL030, WOLL035, WOLL040, WOLL042, WOLL048, WOLL056, WOLL058, WOLL060, WOLL063, WOLL064, WOLL066, WOLL067, WOLL068, WOLL069, WOLL075, WOLL076, WOLL078, WOLL079, WOLL081, WOLL082, WOLL085, WOLL090, WOLL091, WOLL092, WOLL093, WOLL097, WOLL099, WOLL100, WOLL101, WOLL103, WOLL104, WOLL106, WOLL108, WOLL112, WOLL113, WOLL115, WOLL116	Forty-one (41) submissions raised the concern of the existing rail screech due to the curvature of the rail and if the Proposed Activity would address this issue.	The focus of the Proposed Activity is to improve accessibility of station facilities in accordance with DDA and DSAPT. The Proposed Activity is aligned with TAP objectives. Existing rail operations, including noise associated with train movements, is overseen by Sydney Trains. Rail screech issues are managed through Sydney Trains noise reduction program; however, this feedback would be communicated to Sydney Trains.

No.	Submission no.	Issue/s raised	Transport for NSW response
9	**Traffic**		
9.1	WOLL013, WOLL087	Two submissions raised the concern of traffic impacts from the one-lane closure of Shirley Road during construction.	During construction, the Proposed Activity would require additional plant and equipment to install the lifts including a crane and other heavy vehicles. Temporary closure of one lane would be required to accommodate this equipment, while keeping one lane available for residential access. The closure of one lane would be during rail shutdown periods over nominated weekends only and advanced notice to the community would be provided. As noted in Section 6.1 of the REF, there are minor expected traffic impacts with implementation of mitigation measures as existing traffic conditions on Shirley Road were observed as minimal during the day. The closure of one lane in Shirley Road would have some minor increase in traffic with longer delays and queuing. If substantial increased traffic impacts are observed, lane closures may be limited to night time periods. Further details of mitigation measures can be found in Chapter 7 of the REF or Technical Paper 1.
9.2	WOLL007, WOLL017, WOLL103	Three submissions raised the concern of traffic impacts along the local roads and nearby driveways.	As noted in Section 6.1 of the REF and Technical Paper 1, minor traffic impacts are expected to occur during construction of the Proposed Activity. Traffic along the roads and surrounding driveways would managed through mitigation measures found in Chapter 7 of the REF. During operation, the Proposed Activity is expected to have negligible traffic impacts as it would return to existing conditions.
9.3	WOLL018	One submission questioned if the Shirley Road overbridge would become a permanent one-way road.	Shirley Road would remain a two-lane road as noted in Section 6.1 of the REF. Temporary closure of one lane on Shirley Road would only occur during construction in rail shutdown periods over nominated weekends. Details of construction activities and work methodology are included in Section 3.3 of the REF.
10	**Environmental - other**		
10.1	WOLL018, WOLL019, WOLL088	Three submissions raised concern of cumulative noise and traffic impacts on nearby projects.	Section 6.16.3 of the REF identifies that potential cumulative impacts associated with the Proposal would be further considered as the design develops, and as further information regarding location and timing of potential concurrent developments is released. Consultation with North Sydney Council and proponents of other projects in the area would be undertaken to minimise construction impacts as appropriate for traffic and noise. Cumulative impacts would be managed as part of the Construction Environmental Management Plan and be considered as part of the detailed design stage.

No.	Submission no.	Issue/s raised	Transport for NSW response
10.2	WOLL15, WOLL89	Two submissions raised the concern of vandalism and safety around the new station elements (e.g. lifts).	The design process for the Proposed Activity has been undertaken with regard to Crime Prevention through Environmental Design (CPTED) principles. The Proposed Activity would include provision of additional lighting and CCTV which would provide positive CPTED outcomes for the area as noted in Section 3.1 of the REF. Further CPTED principles would be explored through detailed design in consultation with North Sydney Council.
10.3	WOLL20, WOLL103	Two submissions raised the concern of electromagnetic radiation from the proposed AusGrid transformer.	Ausgrid has advised that its systems operate at extremely low frequencies and Electric and Magnetic Field (EMF) do not normally radiate from their source. They merely exist in the space surrounding their source and the strength of the fields decrease rapidly with distance from their source. The Ausgrid transformer design is aligned with international EMF health guidelines. Further details of Ausgrid's community engagement and EMF health information are available on its website.
11	**Other**		
11.1	WOLL027, WOLL037, WOLL048, WOLL078, WOLL105	Five submissions included recommendations for additional services and works within and around the station, including: • reallocation of funding to other community services (e.g. postal service) • upgrading of cycleways • realignment of the rail line under the station • retail prices of products being sold at fair price • addition of shops and cafes • transformation of the grassed area adjacent to the billboard into an elevated park	The focus of the Proposed Activity is to improve accessibility in accordance with the DSAPT and DDA requirements. As noted in Chapter 2 of the REF, Wollstonecraft Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the DSAPT or the DDA. The proposed upgrade of Wollstonecraft Station would maintain the station entry points, minimise need for new infrastructure and make the station accessible and DSAPT compliant. The additional works and services identified recommended by the submissions are not within the scope of the Proposed Activity.
11.2	WOLL020, WOLL103	Two submissions raised the concern of potential loss of property values.	The Proposed Activity is expected to have only minimal visual and traffic impacts on surrounding properties. The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage.
11.3	WOLL023	One submission requested more rail staff at the station to improve customer experience.	Rail operations, staffing and customer experience is overseen by Sydney Trains. This feedback would be forwarded to Sydney Trains for consideration.

No.	Submission no.	Issue/s raised	Transport for NSW response
11.4	WOLL023	One submission noted the naming of Telopea street was mislabelled in the visual impact report.	Text amendment has been noted.
11.5	WOLL007, WOLL017, WOLL019, WOLL047, WOLL088, WOLL094	Six submissions recommended that additional road upgrades be implemented, including speed limit reductions, street lighting, roundabout and pedestrian crossing lights.	The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. Additional road upgrades and related features are outside of the scope of the Proposed Activity, however these recommendations would be communicated to North Sydney Council for their consideration.
11.6	WOLL007, WOLL016, WOLL019, WOLL039	Three submissions requested upgrades to the café and retail area of the station.	The focus of the Proposed Activity is to improve accessibility at the station, in accordance with DDA and DSAPT. The key objective of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. Upgrades to the café and retail area of the station are outside the scope of the Proposed Activity.

Other stakeholder submissions

Table 2-2 outlines issues raised by the North Sydney Council along with Transport for NSW's response. The main issues raised by the North Sydney Council included the following:

- clarification on the design of the Proposed Activity along Shirley Road (e.g. road modifications)
- assessment and views of the landscape and visual impact
- design of the Proposed Activity is not sympathetic in scale and colour to the landscape and surrounding neighbourhood
- access for garden maintenance in leased areas (e.g. location of the Ausgrid transformer)
- ongoing stakeholder and Council engagement through the detailed design stage.

Table 2-2 Response to the North Sydney Council submissions received

Issue no.	Issue/s raised	TfNSW response
1	**Design**	
1.1	Requested that the station have wayfinding signage, accessible seating and Tactile Ground Surface Indicators (TGSIs).	The Proposed Activity includes TGSIs and wayfinding at key accessible areas, including pedestrian pathways along Shirley Road, lifts, accessible parking and the upgraded platforms as noted in Section 3.1 of the REF. Additional wayfinding signage and accessible seating would be considered during the detailed design stage.

Issue no.	Issue/s raised	TfNSW response
1.2	Noted the footpath works of the entry paths along the Shirley Road overbridge are within the Council road reserve and not subject to DSAPT.	One of the key objectives of the TAP is to provide stations that are accessible to people with disabilities, limited mobility, parents/carers with prams, and customers with luggage. The current entry pathways are not compliant according to DSAPT and DDA. The Proposed Activity includes regrading of the footpath along Shirley Road that would provide improved accessibility, a new accessible kiss and ride bay, and accessible car parking space. This would improve access for all customers including those with a disability, who are less mobile, parents/carers with prams and customers with luggage. Further consultation would be undertaken with Council regarding these design elements for works proposed within Council managed road reserves during the detailed design stage.
1.3	It was recommended handrails not be installed along the regraded footpath as they are considered to be a visual barrier.	Handrails have been included in the regrading of the footpath in accordance with requirements of the DSAPT. Selection of materials and colour palette would be further considered during through the detailed design stage to minimise the visual impacts.
1.4	Request for additional detail and plans of the Shirley Road overbridge footpath widening and lane modifications, as well as ongoing co-ordination and Council review of these items.	Design of the widened footpath and the Shirley Road overbridge lane modifications, including the pedestrian refuge would be confirmed during the detailed design stage. Plans would be consistent with applicable standards. Further consultation would be undertaken with Council regarding these design elements for works proposed within Council managed road reserves during the detailed design stage.
1.5	Requested that the relocation of the bicycle hoops to be within a secure bicycle storage and installed near the station entrance.	The bicycle hoops would be relocated from Platform 1 to a new location within the station precinct. No reduction of bike parking would occur. The location and type of bicycle parking would be determined during the detailed design stage.
1.6	Recommended that the accessible parking to be located in the existing commuter car park, and if required, upgrade the ramp for DSAPT compliance connecting to the station.	The location of the new accessible car parking space provides access closer to the station entrance. The Proposed Activity does not include upgrades to the commuter car park. The additional upgrade of the commuter car park would also require ramp modifications to be DSAPT and result in negative customer journeys due to increased distance for disabled and less mobile customers to the station entrance. This design option was not further considered and disregarded.
2	**Landscape and visual amenity**	
2.1	Noted the landscape character and format of the visual impact assessment (LCVIA), and existing site conditions were not adequate due to the following: • similar format with other TAP assessments • minimal discussion of existing site conditions	The format of the Wollstonecraft LCVIA assessment has followed the same report structure across all TAP projects and relevant visual assessment guidelines (see Technical Paper 2) as the scope is quite similar. Assessment for Wollstonecraft includes site specific viewpoints, photomontages, impacts and mitigation measures (e.g. vegetation around the Ausgrid transformer) Existing conditions are described in Chapter 5 of the LCVIA. For example, *"residential areas, to the south west of the station, have a leafy character with mature gardens and street trees..."*. Similarly, the assessment also acknowledges the tree canopy and proximity to the Heritage Conservation Area.
2.2	It was considered that the photomontages of the LCVIA were inadequate due to the following: • curated photomontage views • no representation of anti-throw screens	Photomontages were selected to illustrate the main areas of potential visual impact of the Proposed Activity. Three of the four photomontages are from the adjacent streetscape (Shirley Road and Telopea Street). These images were taken at eye height and at relatively close range appropriately identify the detail and elements in these views. Throw screens have been considered in the assessment and are shown in the photomontages prepared for viewpoints 1 and 4 and Figure 5-24 of the LCVIA. The view from the Shirley Road

Issue no.	Issue/s raised	TfNSW response
	• no representation of the AusGrid transformer • no translated before and after images for comparison.	overbridge illustrates the view that would be seen without the throw screen as digitally rendering the view through the throw screen is limited to the design software. The Ausgrid transformer is shown in viewpoint 1 and includes vegetation screening which minimises the visual impact. In the other views the transformer is out of view. It is general practice to include photomontages for the views which are likely to experience the greatest visual impact. Accordingly, preparation of photomontages for all views is not warranted. The four photomontages were selected to focus on the largest scale elements of the Proposed Activity. Existing condition images are shown in the LCVIA within Chapter 5 at each of the identified viewpoints along with a description of the existing conditions shown at a given viewpoint including ornamental gardens, tree canopy and station features.
2.3	It was considered that the LCVIA was not adequate due to the omission of the following streetscape impacts: • views along Shirley Road • scale and bulk of lifts • the removal of vegetation • scale and palette of the throw screens.	Views along Shirley Road are shown in five of the eight views. They are considered in the LCVIA and from surrounding streets along Shirley Road, Telopea Street and the overbridge. The bulk and scale of the lifts was included in the assessment of views from Shirley Road, which identified a minor adverse visual impact. This conclusion is considered appropriate as the lift structures are set back from the road (particularly the lift on Platform 2) and would not rise prominently in views to the station. The existing Wollstonecraft Station is surrounded by medium density development with heavy brick construction. The lifts would be lower in height than the adjacent residential buildings as well as being set back from Shirley Road. It is therefore considered that there would be minor visual impacts on the streetscape. During the detailed stage, opportunities to lower the lift shafts height would be explored. Four small trees (T1, T2, T23, T28 as shown in Section 6.6 of the REF) removed along Shirley Road, with the prominent palms being retained. Provision of throw screens is a requirement of Australia Standards. While the screens would introduce a new element within the catchment along Shirley Road, it is considered that the resultant visual impact would be minor. It is proposed that the throw screens would be perforated and would utilise a deep colour to minimise contrast to the existing station. The final dimensions, detailing, materials and colour of the screens would be confirmed during the detailed design process, with the objective of minimising the bulk and scale of these elements.
2.4	Considered that the LCVIA was inadequate in providing mitigation measures related to material selection, scale and bulk of the Proposed Activity.	The new structures are expected to blend into the existing station character and be partially screened by existing vegetation, landform or buildings as noted in Section 6.2 of the REF. The selection of materials would be sympathetic in nature and are not considered to clash with the character with the existing station architecture. In addition to the mitigation measures identified in the REF, a number of conditions of approval (refer to Condition of Approval 30) relating to urban design and landscape character have been proposed as follows: • development and implementation of an Urban and landscape design plan which addresses integration with surrounding built form • development and implementation of a Public Domain Plan which would address materials, finishes and colour schemes. These measures are ongoing throughout the detailed design stage, with the aim of minimising overall impacts to the precinct,

Issue no.	Issue/s raised	TfNSW response
		and to ensure the character of the new infrastructure integrates with the existing character of the station.
3	**Heritage**	
3.1	Noted a concern regarding heritage impacts to the adjacent Wollstonecraft Conservation Area due to the scale of the Proposed Activity.	The Proposed Activity is adjacent to the Wollstonecraft Conservation Area and was assessed as having minor impacts due to the removal of vegetation and trees to accommodate the regrading and resurfacing of the footpath as well as the installation of the lifts. Details of the heritage impacts from construction and operation are detailed in Section 6.5 of the REF and Technical Paper 4. In addition, Transport for NSW's in-house Heritage specialist would be part of the detailed design process to provide recommendations with respect to heritage.
3.2	Noted that the ancillary retail shops along the Platform 2 are within the Wollstonecraft Conservation Area.	A review of the mapping within the ePlanning Spatial Viewer identified that the retail group is not located within the Wollstonecraft Conservation Area.
4	**Traffic, transport and access**	
4.1	It was requested that Council be consulted regarding all road and footpath upgrades.	Transport for NSW would consult with North Sydney Council regarding road and footpath upgrades under their control.
4.2	The submission included recommendations for the Construction Traffic Management Plan (CTMP).	A CTMP would be developed for the Proposed Activity prior to the commencement of construction, which would include consultation with North Sydney Council. The recommendations of North Sydney Council would be considered as part of the preparation of the CTMP by the Construction Contractor.
4.3	It was recommended the proposed kiss and ride not be exclusively used for this purpose, but as a time restricted parking area only.	Flexible parking restrictions for the Proposed Activity's accessible kiss and ride bay would be explored through the detailed design stage and through ongoing consultation and review with North Sydney Council.
5	**Biodiversity**	
5.1	Noted the Arboricultural impact assessment was very detailed.	Noted.
5.2	Council considers that the Arboricultural impact assessment is not adequate due to the following: • lack of existing tree conditions and environmental contributions • no landscape plans identifying the location of the replanted trees.	The Arboricultural Impact Assessment (Technical Paper 5) considered a range of factors, including: landscape significance, environmental significance, heritage significance, amenity value, tree retention values and tree protection zones. Details of these factors are provided in Appendix 1–4 of the technical paper. The location of replacement tree planting would be determined during the detailed design stage and provided to North Sydney Council for review.
5.3	Concern regarding the justification for the removal of the tree canopy (e.g. Cabbage Tree Palms) and potential permanent loss with reduced green space.	The REF identified 13 trees for removal to accommodate the proposed works. Two Cabbage Tree Palms (T23 & T26) are nominated for removal. T23 is proposed to be removed to facilitate the regrading of the Shirley Road footpath toward the entrance of Platform 1, with T26 to be removed to accommodate the new Ausgrid transformer. The Proposed Activity would also remove about 0.14 hectares of urban native/exotic ornamental plantings, environmental weeds and exotic lawn as noted in Section 6.6 of the REF. Removal of vegetation and trees would be in accordance with required offsets in the Transport for NSW *Vegetation Offset Guide* (refer to Condition of Approval 23). Location of replanted trees

Issue no.	Issue/s raised	TfNSW response
		would be determined during the detailed design stage and in consultation with North Sydney Council and Sydney Trains.
5.4	Council expressed concern regarding replanting opportunities, including issues of the existing low soil fertility and poor soil drainage.	Forty-two (42) replacement trees would be planted as a vegetation offset in accordance with the Transport for NSW *Vegetation Offset Guide* (refer to Condition of Approval 23). The methodology for the offset would include the following: • location of replanted trees and vegetation (as required) would be developed through the detailed design stage • consultation with a specialist to prepare revegetation planting schemes, advise on soil and planting viability and provide controls for maintenance and tree planting • the replanting strategy and soil rehabilitation.
6	**Miscellaneous**	
6.1	North Sydney Council has leased areas within the station precinct dating back to 1963, which has included renewal of a lease in 2016.	Transport for NSW acknowledges the ongoing commitment of North Sydney Council, in collaboration with the community, to create and maintain the urban amenity of areas in the vicinity of Wollstonecraft Station. In addition to the noted leased area, Transport for NSW notes under an additional tenure in the form of the 2017 Beautification Licence, this area is under investigation by Transport for NSW for provision of new infrastructure. While Transport for NSW has broad powers to act under Section 8.3 of the Beautification Licence, no formal notices of impending action are proposed until such time as appropriate consultation has been completed.
6.2	Council noted a concern regarding maintenance access to the following locations: • eastern entry • western entry	For the eastern entry, Transport for NSW acknowledges that proposed positioning of the new transformer has been located in an area recently developed by Council for the community as public open space. Other locations for the Ausgrid transformer were investigated; however, this location was identified as the most appropriate to limit energy losses, reduce cable runs and allow easy access for maintenance of the transformer. The selected location of this transformer had the least amount of excavation and earthworks required as well as avoiding impacts to the grassed area near Platform 2. Availability of space for a transformer is reduced by the physical, topographic constraints of Wollstonecraft Station. The remote, second tier location was considered to have least impact and would be naturally screened by vegetation. Access for North Sydney Council garden maintenance around this area would be explored and Council would be consulted during the detailed design stage. For the western entry maintenance, the Proposed Activity is not located within the leased space. Impacts would be mitigated as described in Chapter 7 of the REF to minimise access in and around this area.
6.3	It was requested that additional opportunity be provided for community input regarding the Proposed Activity, similar to the development of Council's Landscape Master Plan.	Transport for NSW recognises the requirement for community input into the projects design stages. The early stage design was presented to the Council's Urban Design team on 8 May 2020. This early stage design has helped guide the REF. Transport for NSW will continue to work with key stakeholders including Sydney Trains, North Sydney Council, accessibility groups, customers and adjacent residents to develop the detailed design as appropriate.

2.4. Future consultation

Should Transport for NSW proceed with the Proposed Activity, consultation activities would continue, including consultation with North Sydney Council and other relevant stakeholders regarding design development. In addition, Transport for NSW would notify residents, businesses and community members before and during construction.

The proposed consultation activities would help to ensure that:

- local council and other stakeholders have an opportunity to provide feedback on the detailed design
- the community and stakeholders are notified in advance of any upcoming works, including changes to pedestrian or traffic access arrangements and out of hours construction activities
- accurate and accessible information is made available
- a timely response is given to issues and concerns raised by the community
- feedback from the community is encouraged.

The Transport for NSW email address[2] and Transport for NSW Infoline (1800 684 490) would continue to be available during the construction phase. Targeted consultation methods, such as use of letters, notifications, signage and verbal communications, would continue to occur. The Transport for NSW project website[3] would also include updates on the progress of construction.

[2] projects@transport.nsw.gov.au

[3] http://www.nsw.gov.au/wollstonecraft-station-upgrade

3. Changes to the Proposed Activity

3.1. Summary of design changes

Further design development, along with consultation with the community and stakeholders, has resulted in one change since the Wollstonecraft Station Upgrade REF was prepared. The following design change has been made to the Proposed Activity:

- the construction compound and laydown area located within the rail corridor to the north west of the site would be extended by about 25 metres into the cleared vegetated area to the north (see Inset A in Figure 3-1). This extension is proposed to provide additional space for construction compound and laydown equipment which would avoid the need for continuous use of the existing commuter car park located south of the station during construction. In addition, a refinement of construction plant and equipment assumptions were included.

Figure 3-1 Changes to the Proposed Activity of the construction compound and laydown areas

3.2. Assessment of design changes

Assessment of the design change and its impacts are outlined in Table 3-1.Unless explicitly stated otherwise in the table below, it is considered that impacts related to other aspects are considered to be consistent with the findings of the REF including with respect to Section 5.5 and 5.7 of Division 5.1 of the EP&A Act and clause 228 of the EP&A Regulation and impacts to matters of national environmental significance (NES). Where additional mitigation measures are required, these have been included as Conditions of Approval in Appendix B.

Table 3-1 Assessment of design changes

Aspect of the Proposed Activity	Design change	Discussion of impacts
Construction compound and laydown area	Further construction planning has identified an improved location for a construction compound and laydown area which would remove potential impacts on the existing commuter car park. Changes include: • the construction compound and laydown area located within the rail corridor to the north west of the site would be extended by about 25 metres into the cleared vegetated area to the north the existing commuter car park to the south of Wollstonecraft Station would no longer be required to be used as a construction compound and laydown area during the normal construction hours[1] and only used during rail shut down periods • update of construction plant and equipment during construction.	Additional re-assessment for traffic and noise has been undertaken by WSP to consider these changes (refer to Appendix C and D, respectively). **Traffic** During normal construction hours, the existing commuter car park would no longer be required for construction vehicle parking and construction vehicles would avoid using Shirley Road / Newlands Street / Belmont Avenue for haulage routes. The haulage routes for the north-west rail corridor area would be through Falcon Street / Shirley Road / Milner Crescent with access entering on Russell Street. Haulage route impacts would be similar to that previously assessed. Mitigation measures presented in Chapter 7 of the REF are therefore considered appropriate for managing haulage routes (e.g. traffic controllers, swept path analysis). The existing commuter park would no longer be impacted and would be accessible to commuters throughout construction. The construction workforce would park within the compound area. Any overflow parking would be accommodated along Russell Street. The re-assessment confirmed Russell Street would have available parking for this design change. During the rail shut down periods, the existing commuter car park would be used temporarily as additional parking for the construction workforce . However, as previously assessed, the Construction Contractor would consider organising a shuttle bus to and from the Proposed Activity as there would not be enough parking to accommodate the assumed 100 workers (refer to Condition of Approval 32). As the station would be closed, it is expected that there would be limited impacts to parking. For access to the existing commuter car park, the previously identified haulage route would use Shirley Road / Newlands Street / Belmont Avenue route. Similar mitigation measures of haulage routes would be applied. Overall, there are no increased traffic impacts compared to the REF. **Noise and vibration** In addition to the compound and laydown area changes, the noise modelling method has also been updated to reduce the degree of conservatism including a revised plant equipment list and modelling noise sources individually to refine and update noise impacts. The updated predicted noise levels are not expected to result in further exceedances to those previously assessed in the REF. The mitigation measures presented in Chapter 7 of the REF therefore remain appropriate and valid.

[1]Construction normal working hours: 7.00am to 6.00pm Monday to Friday, 8.00 am to 1.00pm Saturdays, no work on Sundays or public holidays.

Matters of NES and clause 228

Matters of NES under the EPBC Act and clause 228 of the EP&A regulation were considered as part of the changes to the Proposed Activity. The Proposed Activity remains consistent with Appendix A and B of the REF.

4. Consideration of the environmental impacts

4.1. NSW Environmental Planning and Assessment Act 1979

The REF addresses requirements of Section 5.5 of the EP&A Act. In considering the Proposed Activity, all matters affecting or likely to affect the environment are addressed in the REF and this Determination Report and associated documentation.

In accordance with the checklist of matters pursuant to clause 228(3) of the EP&A Regulation, an assessment is provided in Chapter 6 and Appendix B of the REF.

In respect of the Proposed Activity an assessment has been carried out regarding potential impacts on critical habitat, threatened species, populations or ecological communities or their habitats, under Section 5.7 of the EP&A Act.

The likely significance of environmental impacts of the Proposed Activity has been assessed in accordance with the then NSW Department of Planning's 1995 best practice guideline *Is an EIS Required?*[4] It is concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Accordingly, an environmental impact statement under Division 5.2 of the EP&A Act is not required.

4.2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

As part of the consideration of the Proposed Activity, all matters of NES and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to NES matters, this evaluation has been undertaken in accordance with Commonwealth Administrative Guidelines on determining whether an action has, will have, or is likely to have a significant impact. A summary of the evaluation is provided in Chapter 6 and Appendix A of the REF.

It is considered that the Proposed Activity described in the REF is not likely to have a significant impact on any Commonwealth land and is not likely to have a significant impact on any matters of NES.

[4] Refer to the National Library of Australia's 'Trove' website http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648

5. Conditions of Approval

If approved, the Proposed Activity would proceed subject to the Conditions of Approval included at Appendix B.

6. Conclusion

Having regard to the assessment in the REF, consideration of submissions received and design change subsequent to the public display of the REF, it can be concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Consequently, an environmental impact statement is not required to be prepared under Division 5.2 of the EP&A Act.

It is also considered that the Proposed Activity does not trigger any approvals under Part 3 of the EPBC Act.

The Proposal including the proposed design change would provide a series of benefits to the community including:

- no commuter car park impacts for rail users during normal construction hours
- provision of a station that is accessible to customers with a disability, limited mobility, parents or carers with prams and customers with luggage
- improved customer experience by improving accessibility for people with mobility issues including improved access to station facilities such as toilets, waiting room and accessible parking spaces
- improved pedestrian connectivity between accessible car parking and station
- improved customer safety
- improved wayfinding in and around the station
- respond to heritage values of the site with preservation of station signage.

The environmental impact assessment (REF and Determination Report) is recommended to be approved subject to the proposed mitigation and environmental management measures included in the Conditions of Approval (refer to Appendix B).

Determination

Wollstonecraft Station Upgrade

APPROVAL

I, Louise Sureda, as delegate of the Secretary, Transport for NSW:

1. Have examined and considered the Proposed Activity in *the Wollstonecraft Station Upgrade Review of Environmental Factors* (May 2020) and the *Wollstonecraft Station Upgrade Determination Report* (July 2020) in accordance with Section 5.5 of the NSW *Environmental Planning and Assessment Act 1979.*

2. Determine on behalf of Transport for NSW (the Proponent) that the Proposed Activity may be carried out in accordance with the Conditions of Approval in this Determination Report (July 2020), consistent with the Proposed Activity described in the *Wollstonecraft Station Upgrade Review of Environmental Factors* (May 2020).

Louise Sureda
Director Planning and Environment
Environment and Sustainability
Safety, Environment and Regulation Division
Transport for NSW

Date: 8 July 2020

References

Transport for NSW (May 2020), *Transport Access Program Wollstonecraft Station Upgrade: Review of Environmental Factors*, Sydney

NSW Department of Planning (1995), *Is an EIS required?*, Sydney

Appendix A Review of Environmental Factors

Please refer to the Transport for NSW website to access the Wollstonecraft Station Upgrade REF (Desksite 6468999):

Link to Transport for NSW website: https://www.transport.nsw.gov.au/projects-tap

Appendix B Conditions of Approval

CONDITIONS OF APPROVAL

Wollstonecraft Station

Note: these Conditions of Approval must be read in conjunction with the final mitigation measures in the Wollstonecraft Station Upgrade Review of Environmental Factors.

Schedule of acronyms and definitions used:

Acronym	Definition
ADEIA	Transport for NSW Associate Director Environmental Impact Assessment (or nominated delegate)
ADEM	Transport for NSW Associate Director Environmental Management (or nominated delegate)
ADSPD	Transport for NSW Associate Director Sustainability, Planning and Development (or nominated delegate)
AFC	Approved For Construction
CECR	Construction Environmental Compliance Report
CEMP	Construction Environmental Management Plan
CIR	Contamination Investigation Report
CLMP	Community Liaison Management Plan
CMP	Contamination Management Plan
CoA	Condition of Approval
dBA	Decibels (A-weighted scale)
ECM	Environmental Controls Map
EIA	Environmental Impact Assessment
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPL	Environment Protection Licence issued by the Environmental Protection Authority under the *Protection of the Environment Operations Act 1997*.
EMR	Environmental Management Representative
EMS	Environmental Management System
HIS	Heritage Interpretation Strategy
ISCA	Infrastructure Sustainability Council of Australia
ISO	International Standards Organisation
OEH	Former NSW Office of Environment and Heritage
ONVMP	Operational Noise and Vibration Management Plan
OOHWP	Out of Hours Works Protocol
PECM	Pre-Construction Environmental Compliance Matrix
POCR	Pre-Operational Compliance Report
RBL	Rating Background Level
REF	Review of Environmental Factors
SMP	Sustainability Management Plan
Transport for NSW	Transport for New South Wales
TMP	Traffic Management Plan
UDLP	Urban Design and Landscaping Plan

Term	Definition
Construction	Includes all work in respect of the Project, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the Transport for NSW ADEM to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected, unless otherwise agreed by the ADEM).
Contamination	The presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
Designated Works	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction, for Construction.
Emergency Work	Includes works to avoid loss of life, damage to external property, utilities and infrastructure, prevent immediate harm to the environment, contamination of land or damage to a heritage (Aboriginal or non-Aboriginal) item.
Environmental Impact Assessment (EIA)	The documents listed in Condition 1 of this approval.
Environmental Management Representative (EMR)	An independent environmental representative appointed to the Project or a delegate nominated by Transport for NSW.
Feasible	A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given project constraints such as safety and maintenance requirements.
Noise Sensitive Receiver	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios, places of worship/religious facilities (e.g. churches), and other noise sensitive receivers identified in the Environmental Impact Assessment.
Project	The construction and operation of the Wollstonecraft Station Upgrade as described in the Environmental Impact Assessment.
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in the case of the Project, Transport for NSW.
Reasonable	Selecting reasonable measures from those that are feasible involves making a judgment to determine whether the overall benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the measure.

CoA	Condition
	General
1.	**Terms of Approval** The Project shall be carried out generally in accordance with the environmental impact assessment (EIA) for this Project, which comprises the following documents: a) *Wollstonecraft Station Upgrade – Review of Environmental Factors* (WSP, May 2020) b) *Wollstonecraft Station Upgrade – Determination Report* (WSP, July 2020). In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.
2.	**Project Modifications** Any modification to the Project as approved in the EIA would be subject to further assessment. This assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised. The assessment shall be subject to approval under delegated authority by Transport for NSW, and any additional requirements from the assessment of the Project modification must be complied with.
3.	**Statutory Requirements** These conditions do not remove any obligation to obtain all other licences, permits, approvals and land owner consents from all relevant authorities and land owners as required under any other legislation for the Project. The terms and conditions of such licences, permits, approvals and permissions must be complied with at all times.
4.	**Construction Environmental Compliance Report** A Construction Environmental Compliance Report (CECR) for the Project shall be prepared which addresses the following matters: a) compliance with the Construction Environmental Management Plan (CEMP) and these conditions b) compliance with any approvals or licences issued by relevant authorities for the construction of the Project c) implementation and effectiveness of environmental controls (the assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP) d) environmental monitoring results, presented as a results summary and analysis e) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused f) number and details of any complaints, including summary of main areas of complaint, actions taken, responses given and intended strategies to reduce recurring complaints (subject to privacy protection) g) details of any review and amendments to the CEMP resulting from construction during the reporting period h) any other matter as requested by the ADEM. The CECR shall: (i) be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review and provide any comments to Transport for NSW in relation to the CECR (ii) be submitted to the ADEM for approval upon completion of the EMR review period. The first CECR shall report on the first six months of construction and be submitted within six weeks of expiry of that period (or at any other time interval agreed to by the ADEM). CECRs shall be submitted no later than six months after the date of submission of the preceding CECR (or at other such periods as requested by the ADEM) for the duration of construction. The final CECR shall detail compliance with all Conditions of Approval, licences and permits required to be obtained under any other legislation for the Project.
5.	**Graffiti and Advertising** Hoardings, site sheds, fencing, acoustic walls around the perimeter of the site, and any structures built as part of the Project shall be maintained free of graffiti and advertising not authorised by Transport for NSW during the construction period. Graffiti and unauthorised advertising shall be removed or covered within the following timeframes: a) offensive graffiti will be removed or concealed within 24 hours b) highly visible (yet inoffensive) graffiti will be removed or concealed within a week c) graffiti that is neither offensive or highly visible will be removed or concealed within a month d) any unauthorised advertising material will be removed or concealed within 24 hours.

CoA	Condition
	Communications
6.	**Community Liaison Management Plan** A Community Liaison Management Plan (CLMP) shall be prepared and implemented to engage with government agencies, relevant councils, landowners, community members and other relevant stakeholders (such as utility and service providers, bus companies, Taxi Council and businesses). The CLMP shall comply with the obligations of these conditions and should include, but not necessarily be limited to: a) a comprehensive, project-specific analysis of issues and proposed strategies to manage issues through the duration of the Project b) details of the communication tools (traditional and digital) and activities that will be used to inform and engage the community and stakeholders c) a program for the implementation of community liaison activities relating to key construction tasks with strategies for minimising impacts and informing the community d) policies and procedures for handling community complaints and enquiries, including the Contractor's nominated 24 hour contact for management of complaints and enquiries e) analysis of other major projects/influences in the area with the potential to result in cumulative impacts to the community and strategies for managing these. The CLMP shall be prepared to the satisfaction of the Director Community Engagement (or nominated delegate) prior to the commencement of construction and implemented, reviewed and revised as appropriate during the construction of the Project.
7.	**Community Notification and Liaison** The local community shall be advised of any activities related to the Project with the potential to impact upon them. Prior to any site activities commencing and throughout the Project duration, the community is to be notified of works to be undertaken, the estimated hours of construction and details of how further information can be obtained (i.e. contact telephone number/email, website, newsletters etc.) including the 24 hour construction response line number. Construction-specific impacts including information on traffic changes, access changes, detours, services disruptions, public transport changes, high noise generating work activities and work required outside the nominated working hours shall be advised to the local community at least seven days prior to such works being undertaken or other period as agreed to by the Director Community Engagement or as required by the Environment Protection Authority (EPA) (where an Environment Protection Licence (EPL) is in effect).
8.	**Website** Project information shall be made available to members of the public, either on dedicated pages on the Transport for NSW/Project website or details provided as to where hard copies of this information may be accessed. Project information to be provided includes: a) a copy of the documents referred to under Condition 1 of this approval b) a list of environmental management reports that are publicly available c) 24 hour contact telephone number for information and complaints. All documents uploaded to the website must be compliant with the *Web Content Accessibility Guidelines Version 2.0*.
9.	**Complaints Management** A 24 hour construction response line number shall be established and maintained for the duration of construction. Details of all complaints received during construction are to be recorded on a complaints register. A verbal response to phone enquiries on what action is proposed to be undertaken is to be provided to the complainant within two hours during all times construction is being undertaken and within 24 hours during non-construction times (unless the complainant agrees otherwise). A verbal response to written complaints (email/letter) should be provided within 48 hours of receipt of the communication. A detailed written response is to be provided to the complainant within seven calendar days for verbal and/or written complaints. Information on all complaints received during the previous 24 hours shall be forwarded to the Environmental Management Representative (EMR) each working day.

CoA	Condition
	Environmental Management
10.	**Construction Environmental Management Plan** A Construction Environmental Management Plan (CEMP) shall be prepared prior to the commencement of construction which addresses the following matters, as a minimum: a) traffic and pedestrian management (in consultation with the relevant roads authority) b) noise and vibration management c) water and soil management d) air quality management (including dust suppression) e) Aboriginal and non-Aboriginal heritage management f) biodiversity management g) storage and use of hazardous materials h) contaminated land management (including acid sulphate soils) i) weed management j) waste management k) bushfire risk l) environmental incident reporting and management procedures m) non-compliance and corrective/preventative action procedures n) details of approvals, licences and permits required to be obtained under any other legislation for the Project. The CEMP shall: i. comply with the Conditions of Approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management ii. comply with the relevant requirements of *Guideline for Preparation of Environmental Management Plans* (Department Infrastructure, Planning and Natural Resources, 2004) iii. include a pre-construction environmental compliance matrix for the Project (or such stages of the Project as agreed to by the EMR) that details compliance with all relevant conditions and mitigation measures iv. include an Environmental Policy. In preparing the CEMP the following shall be undertaken: 1. consultation with government agencies and relevant service/utility providers (as required) 2. a copy of the CEMP submitted to the EMR for review 3. a copy of the CEMP submitted to the Associate Director Environmental Management (ADEM) for approval upon completion of the EMR review period 4. review and update the CEMP at regular intervals, and in response to any actions identified as part of the EMR's audit of the document 5. ensure updates to the CEMP are be made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document, and be submitted to the EMR for approval. The CEMP must be approved by the ADEM prior to the commencement of construction work associated with the Project.
11.	**Environment Personnel** Suitably qualified and experienced environmental management personnel shall be available and be responsible for implementing the environmental objectives for the Project, including undertaking regular site inspections, preparation of environmental documentation and ensuring the Project meets the requirements of the Environmental Management System (EMS). Details of the environmental personnel, including relevant experience, defined responsibilities and resource allocation throughout the project (including time to be spent on-site/off-site) are to be submitted for the approval of the ADEM, at least 21 days prior to commencement of construction of the Project (or such time as otherwise agreed by the ADEM). Any adjustments to environmental resource allocations (on-site or off-site) are to be approved by the ADEM.

CoA	Condition
12.	**Environmental Management Representative** Prior to the commencement of construction, the ADEM shall appoint an EMR for the duration of the construction period for the Project. The EMR shall provide advice to the ADEM in relation to the environmental compliance and performance of the Project. The EMR shall have responsibility for: a) considering and advising Transport for NSW on matters specified in these conditions and compliance with such b) reviewing and where required by the ADEM, providing advice on the Project's induction and training program for all persons involved in the construction activities and monitoring implementation c) periodically auditing the Project's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by the ADEM d) reporting weekly to Transport for NSW, or as required by the ADEM e) issuing a recommendation for work to stop immediately, if in the view of the EMR circumstances so require. The stop work recommendation may be limited to specific activities if the EMR can easily identify those activities f) requiring reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts g) reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections h) providing reports to Transport for NSW on matters relevant to the carrying out of the EMR role as necessary i) where required by the ADEM, providing advice on the content and implementation of the CEMP and Environmental Controls Map (ECM) in accordance with the conditions j) reviewing and approving updates to the CEMP. The EMR shall be available during construction activities to inspect the site(s) and be present on-site as required.
13.	**Environmental Controls Map** An Environmental Controls Map (ECM) shall be prepared and implemented in accordance with Transport for NSW's *Guide to Environmental Controls Map* (SD-015) prior to the commencement of construction for implementation for the duration of construction. The ECM is to be endorsed by the EMR and may be prepared in stages, as set out in the CEMP. A copy of the ECM shall be submitted to the EMR for review and endorsement. The EMR is to be given a minimum period of seven days to review and endorse the ECM. Following receipt of the EMR's endorsement, the ECM shall be submitted to the ADEM for approval, at least 14 days prior to commencement of construction (or such time as is otherwise agreed by the ADEM). The ECM shall be prepared as a map – suitably enlarged (e.g. A3 size or larger) for mounting on the wall of a site office and included in site inductions, supported by relevant written information. Updates to the ECM shall be made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document and submitted to the EMR for approval.
	Hours of Work
14.	**Standard Construction Hours** Construction activities shall be restricted to the hours of 7:00 am to 6:00 pm (Monday to Friday); 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except for the following works which are permitted outside these standard hours: a) any works which do not cause noise emissions to be more than 5dBA higher than the rating background level (RBL) at any nearby residential property and/or other noise sensitive receivers b) out of hours work identified and assessed in the EIA or the approved Out of Hours Work Protocol (OOHWP) c) the delivery of plant, equipment and materials which is required outside these hours as requested by police or other authorities for safety reasons and with suitable notification to the community as agreed by the ADEM d) Emergency Work to avoid the loss of lives, property and/or to prevent environmental harm e) any other work as agreed by the ADEM and considered essential to the Project, or as approved by EPA (where an EPL is in effect).

CoA	Condition
15.	**High Noise Generating Activities** Rock breaking or hammering, jack hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel and any other activities which result in impulsive or tonal noise generation shall not be undertaken for more than three hours, without a minimum one hour respite period unless otherwise agreed to by the ADEM, or as approved by EPA (where relevant to the issuing of an EPL).
	Noise and Vibration
16.	**Construction Noise and Vibration** Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with Transport for NSW's *Construction Noise and Vibration Strategy* (ST-157) and the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The mitigation measures shall include, but not limited to: a) details of construction activities and an indicative schedule for construction works b) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly sensitive noise receivers c) detail what reasonable and feasible actions and measures shall be implemented to minimise noise impacts (including those identified in the EIA) d) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise and vibration complaints e) an Out of Hours Work Protocol (OOHWP) for the assessment, management and approval of works outside the standard construction hours identified in Condition 12 of this approval, including a risk assessment process which deems the out of hours activities to be of low, medium or high environmental risk, is to be developed. All out of hours works are subject to approval by the EMR and/or ADEM or as approved by EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with the Transport for NSW *Construction Noise and Vibration Strategy* (ST-157) f) a description of how the effectiveness of actions and measures shall be monitored during the proposed works, identification of the frequency of monitoring, the locations at which monitoring shall take place, recording and reporting of monitoring results and if any exceedance is detected, the manner in which any non-compliance shall be rectified.
17.	**Vibration Criteria** Vibration (other than from blasting) resulting from construction and received at any structure outside of the Project shall be limited to: a) for structural damage vibration - German Standard *DIN 4150: Part 3 – 1999: Structural Vibration in Buildings: Effects on Structures* b) if a heritage building or structure has potential for being structurally integrity sensitive to vibration (following assessment by a suitably qualified and experienced structural engineer) a more conservative cosmetic damage objective of 2.5 mm/s peak component particle velocity (from German Standard *DIN 4150:Part 3 – 1999: Structural Vibration in Buildings: Effects on Structures)* shall be considered c) for human exposure to vibration – the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006) which includes British Standard *BS 7385-2:1993 Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz).* These limits apply unless otherwise approved by the ADEM through the CEMP.
18.	**Non-Tonal Reversing Beepers** Non-tonal reversing beepers (or an equivalent mechanism) shall be fitted and used on all construction vehicles and mobile plant regularly used on-site (i.e. greater than one day) and for any out of hours work.

CoA	Condition
	Contamination and Hazardous Materials
19.	**Unidentified Contamination (Other Than Asbestos)** If previously unidentified contamination (excluding asbestos) is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA guidelines, including the *Guidelines for Consultants Reporting on Contaminated Sites* (Office of Environment and Heritage, 2011). A copy of any contamination report shall be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review. A revised copy of the report shall be submitted to the ADEM for consideration upon completion of the EMR review period. The ADEM shall determine whether consultation with the relevant council and/or EPA is required prior to continuation of construction works within the affected area. ***Note:*** *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing is these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 17 and Condition 18.*
20.	**Asbestos Management** If previously unidentified asbestos contamination is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of the asbestos contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA, Safe Work Australia and SafeWork NSW guidelines and include the proposed methodology for the remediation of the asbestos contamination. Remediation activities must not take place until receipt of the investigation report. Works may only recommence upon receipt of a validation report from a suitably qualified contamination specialist that the remediation activities have been undertaken in accordance with the investigation report and remediation methodology. ***Note:*** *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 17 and Condition 18.*
21.	**Storage and Use of Hazardous Materials** Construction hazard and risk issues associated with the use and storage of hazardous materials shall be addressed through risk management measures, which shall be developed prior to construction as part of the overall CEMP, in accordance with relevant EPA guidelines, Transport for NSW's *Chemical Storage and Spill Response Guidelines* (SD-066) and Australian and ISO standards. These measures shall include: a) the storage of hazardous materials, and refuelling/maintenance of construction plant and equipment are to be undertaken in clearly marked designated areas designed to contain spills and leaks b) spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits are to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits are to be kept in close proximity to potential discharge points in support of preventative controls c) all hazardous materials spills and leaks to be reported to site managers and actions to be immediately taken to remedy spills and leaks d) training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.
	Erosion and Sediment Control
22.	**Erosion and Sediment Control** Soil and water management measures shall be prepared, implemented and maintained as part of the CEMP for the mitigation of water quality impacts during construction of the Project. The management measures shall be prepared in accordance with *Managing Urban Stormwater: Soils and Construction Volume 1 4th Edition* (Landcom, 2004).

CoA	Condition
	Flora and Fauna
23.	**Removal of Trees or Vegetation** Separate approval, in accordance with Transport for NSW's *Removal or Trimming of Vegetation Application* (FT-078), is required for the trimming, cutting, pruning or removal of trees or vegetation where the impact has not already been identified in the EIA for the Project. The trimming, cutting, pruning or removal of trees or vegetation shall be undertaken in accordance with the conditions of that approval.
24.	**Replanting Program** All cleared vegetation shall be offset in accordance with Transport for NSW's *Vegetation Offset Guide* (ST-149*)*. All vegetation planted on-site is to consist of locally endemic native species, unless otherwise agreed by the ADEM, following consultation with the relevant council, where relevant, and/or the owner of the land upon which the vegetation is to be planted.
	Heritage Management
25.	**Aboriginal and Non-Aboriginal Heritage** If previously unidentified Aboriginal or non-Aboriginal heritage/archaeological items are uncovered during construction works, the procedures contained in the Transport for NSW *Unexpected Heritage Finds Guideline* (SD-115) shall be followed and all works in the vicinity of the find shall cease. The EMR shall be immediately notified to co-ordinate a response, which may include seeking appropriate advice from a suitably qualified and experienced Heritage Advisor (in consultation with Heritage NSW, and/or the Energy, Environment and Science Group of the Department of Planning, Industry and Environment, as applicable). Works in the vicinity of the find shall not re-commence until clearance has been received from Transport for NSW and/or the Heritage Advisor.
	Sustainability
26.	**Sustainability Officer** A suitably qualified and experienced Sustainability Officer shall be appointed who is responsible for implementing the sustainability objectives for the Project, in line with the Program's overarching Sustainability Strategic Management Plan. Details of the Sustainability Officer including defined responsibilities, duration and resource allocation throughout the appointment are to be submitted to the satisfaction of the Associate Director Sustainability, Planning & Development (ADSPD) prior to the preparation of the Sustainability Management Plan.
27.	**Sustainability Management Plan** A Sustainability Management Plan (SMP) which details the approach to managing sustainability requirements and opportunities during design and construction shall be prepared. The SMP shall include the following as a minimum: a) a completed electronic checklist demonstrating compliance with the Infrastructure Sustainability Council of Australia (ISCA) scorecard demonstrating credits targeted to meet an Infrastructure Sustainability Rating Scheme (v1.2) of Excellent b) a statement outlining the Construction Contactor's own corporate sustainability policies, obligations, goals, targets and commitments c) a description of the processes and methodologies for encouraging and identifying innovative sustainability outcomes on the Project, and the areas targeted for innovative sustainable solutions to be explored and/or implemented on the Project d) the approach to the identification of opportunities to reduce carbon emissions, energy use and embodied lifecycle impacts of the Project. This should include a summary of initiatives proposed for implementation to meet energy and carbon management objectives and targets e) the approach to sustainable procurement including how procurement processes have taken in to account the principles of *ISO 20400: 2017 – Sustainable Procurement* in the selection of all materials, products and services f) a description of the processes, standards and procedures for undertaking climate change risk assessments and strategies for mitigation of risks associated with climate change and extreme weather events. A copy of the SMP shall be submitted to the ADSPD at least 30 days prior to the commencement of construction, for approval (or such time as is otherwise agreed by the ADSPD).

CoA	Condition
	Traffic, Transport and Access
28.	**Traffic Management Plan** A construction Traffic Management Plan (TMP) shall be prepared as part of the CEMP which addresses, as a minimum, the following matters: a) ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised b) maximising safety and accessibility for pedestrians and cyclists c) ensuring adequate sight lines to allow for safe entry and exit from the site d) ensuring access to Wollstonecraft station, businesses, entertainment premises and residential properties (unless affected property owners have been consulted and appropriate alternative arrangements made) e) managing impacts and changes to on and off street parking and requirements for any temporary replacement provision f) parking locations for construction workers away from stations and busy residential areas and details of how this will be monitored for compliance g) routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses h) details for relocating kiss-and-ride, taxi ranks and rail replacement bus stops if required, including appropriate signage to direct customers, in consultation with the relevant bus operator. Particular provisions should also be considered for the accessibility impaired i) measures to manage traffic flows around the area affected by the Project, including as required regulatory and direction signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the TMP. Consultation with the relevant roads authority must be undertaken during the preparation of the TMP, as required. The performance of all Project traffic arrangements must be monitored during construction.
29.	**Road Condition Reports** Prior to construction commencement, road condition surveys and reports on the condition of roads and footpaths to be affected by construction shall be prepared. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear, shall be repaired at the Proponent's expense.
	Urban Design and Landscaping
30.	**Urban Design and Landscaping Plan** An Urban Design Plan and Landscaping Plan is to be submitted to Transport for NSW and endorsed by the Precincts and Urban Design team. The Urban Design Plan is to address the fundamental design principles as outlined in *'Around the Tracks' – urban design for heavy and light rail*, (TfNSW, Interim 2016). The Urban Design Plan and Landscaping Plan shall: a) demonstrate a robust understanding of the site through a comprehensive site analysis to inform the design direction, demonstrate connectivity with street networks, transport modes, active transport options, and pedestrian distances b) identify opportunities and challenges c) establish site specific principles to guide and test design options d) demonstrate how the preferred design option responds to the design principles established in *Around the Tracks*, including consideration of Crime Prevention through Environmental Design Principles. The Urban Design Plan and Landscaping Plan is to include the Public Domain Plan for the chosen option and will provide analysis of the: a) landscape design approach including design of pedestrian and bicycle pathways, street furniture, interchange facilities, new planting and opportunities for public art b) materials schedule including materials and finishes for proposed built works, colour schemes, paving and lighting types for public domain, fencing and landscaping c) an Artist's Impression or Photomontage to communicate the proposed changes to the precinct.

CoA	Condition
	The following design guidelines are available to assist and inform the Urban Design Plan and Landscaping Plan for the Proposal: a) *TAP Urban Design Plan, Guidelines* (TfNSW, Draft 2018) b) *Commuter Car Parks, Urban Design Guidelines* (TfNSW, Interim 2017) c) *Managing Heritage Issues in Rail Projects Guidelines* (TfNSW, Interim 2016) d) *Creativity Guidelines for Transport Systems* (TfNSW, Interim 2016) e) *Water Sensitive Urban Design Guideline SD-106* (TfNSW,2017) Endorsement of the Urban Design Plan and Landscaping Plan will demonstrate compliance with the Conditions of Approval in the Review of Environmental Factors (REF) Determination Report. The Urban Design Plan and Landscaping Plan shall be: 1. prepared in consultation with councils and relevant stakeholders 2. prepared by a registered architect and/or landscape architect 3. prepared to inform/support the concept design and submitted to Transport for NSW for review at this design milestone 4. finalised and submitted to TfNSW at the completion of design documentation.
	Site-specific Conditions
31.	**Minimising Ausgrid transformer impacts** The following shall be considered to minimise visual impacts from the Ausgrid transformer: a) minimise area of hardstand surrounding the transformer b) locate the transformer to avoid removal of the existing vegetation that screens adjacent residential properties c) provide screening vegetation to limit views to the transformer particularly from adjacent residences and Shirley Road.
32.	**Construction workforce transport** In order to minimise construction workforce traffic impacts during rail shut down periods, the provision of shuttle bus services shall be considered by the Construction Contractor during rail shut down periods to accommodate the workforce.
33.	**Minimising noise for the Tresillian Centre** The following shall be considered to minimise noise impacts to the Tresillian Centre: a) consultation be undertaken to determine feasible construction staging to manage impacts, effectively communicate likely impacts, potential periods of high intensity works, and to develop a schedule of consultation to program intensive works outside the most sensitive night time periods. Respite periods should be negotiated and a community consultation strategy developed to ensure a complaints hotline and feedback pathway is established b) noise intensive construction works near the Tresillian Centre is to be minimised as far as reasonably possible. It is also recommended that where reasonable and feasible the use of the concrete saw is limited to standard hours or when the premises are not in use as a sleep clinic (e.g. between 7.00am and 9.00am, and 5.00pm and 6.00pm), to minimise the impact on this receiver.

Appendix C Revised traffic impact assessment

TECHNICAL MEMO

TO:	Transport for NSW
FROM:	WSP – Chris Chun, Sam McCormick, Todd Nguyen
SUBJECT:	**Wollstonecraft Station Upgrade – Transport Access Program (Amendment to Traffic, Transport and Access assessment)**
OUR REF:	PS118200-WSC_TIA_Update
DATE:	**19 June 2020**

Transport for New South Wales (TfNSW) proposes to provide accessibility upgrades at Wollstonecraft Station (the 'Proposal'). The Proposal forms part of the Transport Access Program (TAP). The TAP is a New South Wales (NSW) Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The primary aim is to improve station access in accordance with the *Commonwealth Disability Discrimination Act* 1992 (DDA), so they are more accessible for the mobility impaired, elderly person, parents, carers and persons with a disability.

WSP Australia was commissioned by Transport for NSW to prepare a Traffic, Transport and Access Impact Assessment for the Proposal. This technical memo is an addendum to that assessment to address the changes in construction compound site locations and car parking conditions at the existing commuter car park based on design changes and construction assumptions from Transport for NSW.

1. UPDATES AND CHANGES

WSP was requested to assess traffic, transport and access impacts on the following Proposal changes:

- The commuter car park would no longer be used for a compound and laydown area and by the construction workforce. The existing commuter car park would maintain access to the public during typical construction hours noted as the following:
  - 7.00 am to 6.00 pm Monday to Friday
  - 8.00 am to 1.00 pm Saturdays
  - no work on Sundays or public holidays.
- The construction workforce would use the commuter car park only during rail shutdown periods.

The following assumptions were provided by TfNSW and adopted in this assessment.

- All workers and officers are expected to park their vehicles within the north-west site compound during typical construction hours.
- The north-west compound would provide 12 car parking spaces with overflow parking along Russell Street.
- There is no change in workforce numbers assessed in the Traffic, Transport and Access Impact Assessment of the REF.

The location of the study area for this assessment and the proposed construction compounds are shown in Figure 1, including:

- Compound site north of the station on TfNSW owned land which can be accessed from Russell Street (referred to in this memo as the north-west site compound). The site layout has not been finalised yet, but a site office, storage area for materials, parking for workforce would be provided at this compound (see Figure 2).
- Additional sites, including grassed areas on the western side of Wollstonecraft Station.

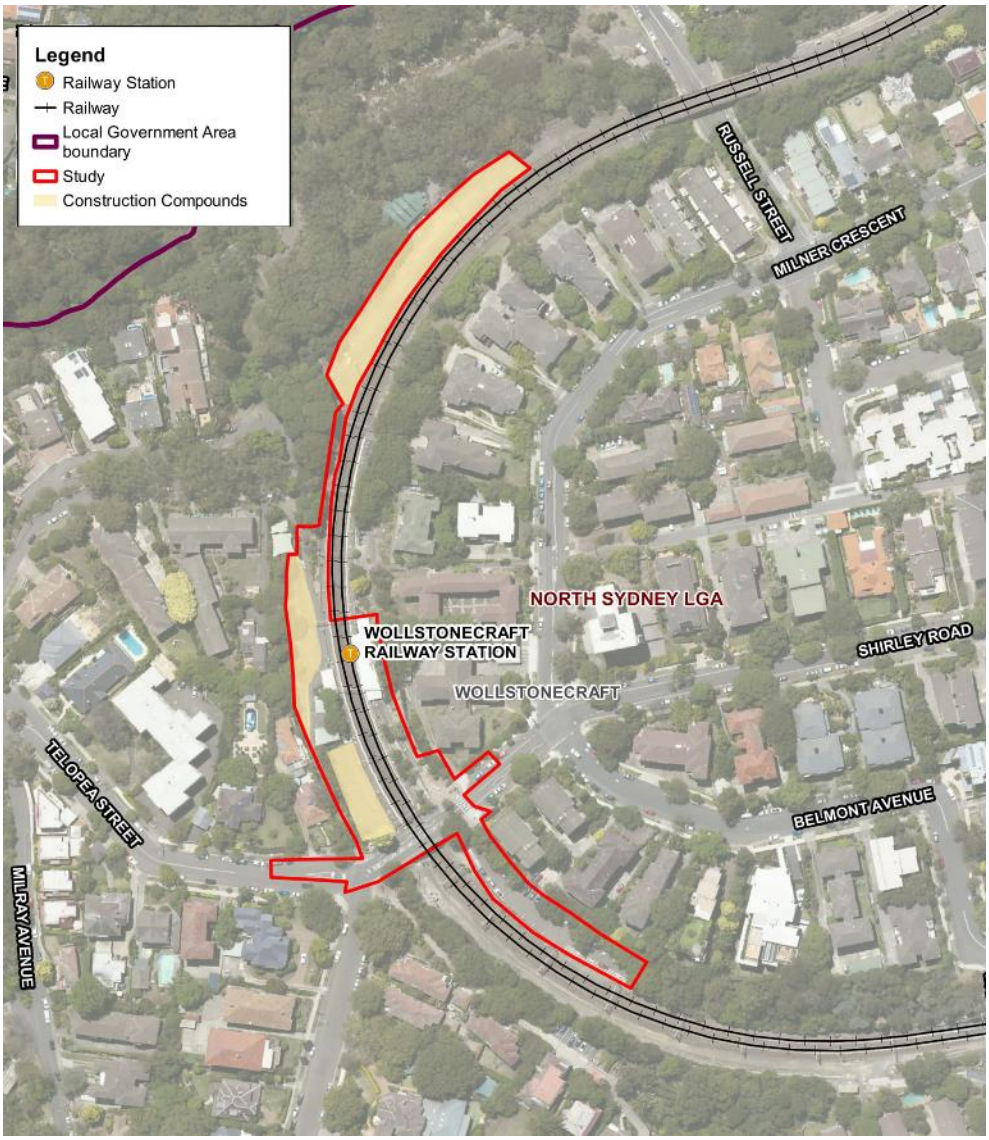

Figure 1 Wollstonecraft Station Study Area

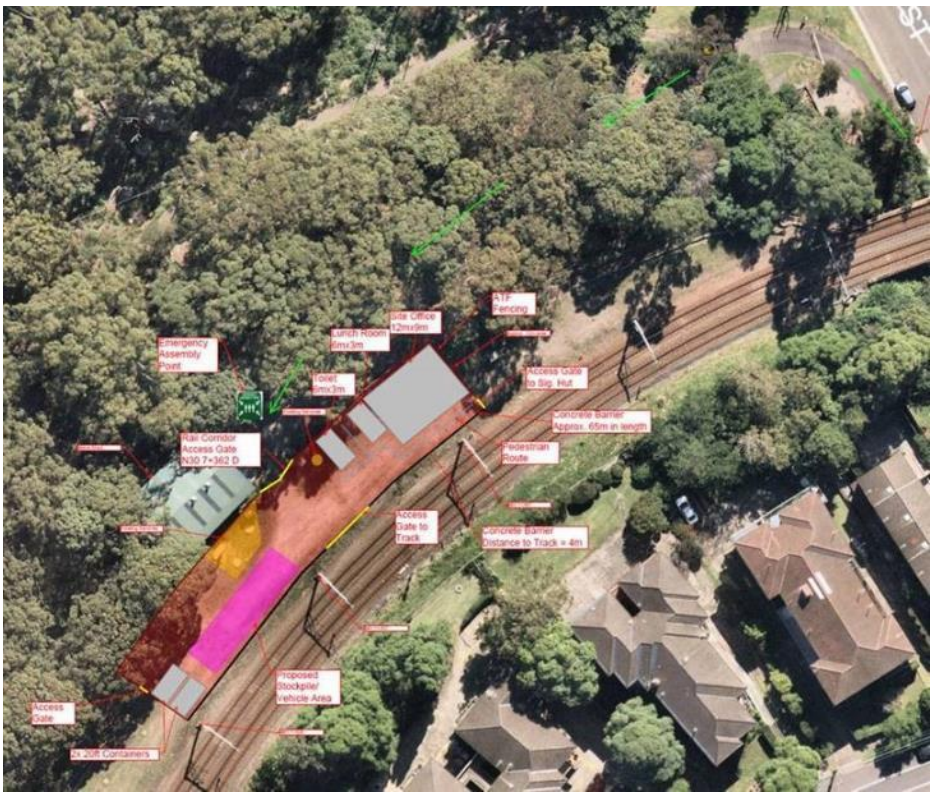

Figure 2 North-west site compound layout

2. UPDATED IMPACT ASSESSMENT AND MITIGATION

The impact assessment focuses on the site compound layout and the commuter car park. In this traffic assessment, changes in impact are related to haulage routes and parking. Impacts on traffic access and other modes remain unchanged in number and impact.

2.1 HAULAGE ROUTES

As the existing commuter car park would no longer be a construction compound and laydown area, the haulage route impacts are along Falcon Street / Shirley Road / Milner Crescent (Haulage route 1) during typical construction hours. Access from Russel Street for large vehicles may be restricted due to the narrow road width and tight curve and height difference at the Russell Street intersection. Mitigation measure should be developed in the subsequent subsection. No additional impacts are expected during the typical construction hours as the Proposal includes a small number of vehicles (five heavy vehicle movements per week throughout Proposal).

During rail shutdown periods, the commuter car park would be used for the construction workforce. The shift of haulage route impacts would move to Falcon Street / Shirley Road (Haulage route 2) to access the existing commuter car park. Haulage route impacts would then be split between Haulage route 1 and 2. For Haulage route 2, turning movements may be restrictive for heavy vehicles at the Shirley Road / Newlands Street / Belmont Avenue roundabout due to an existing tree located at the centre of the roundabout island. No additional impacts are expected during the rail shutdown periods as the Proposal includes a small number of vehicles (15 heavy vehicle movements per week during rail shut downs).

Haulage route 1 and 2 are shown in Figure 3 and Figure 4, respectively for comparison between typical construction hours and rail shutdown periods.

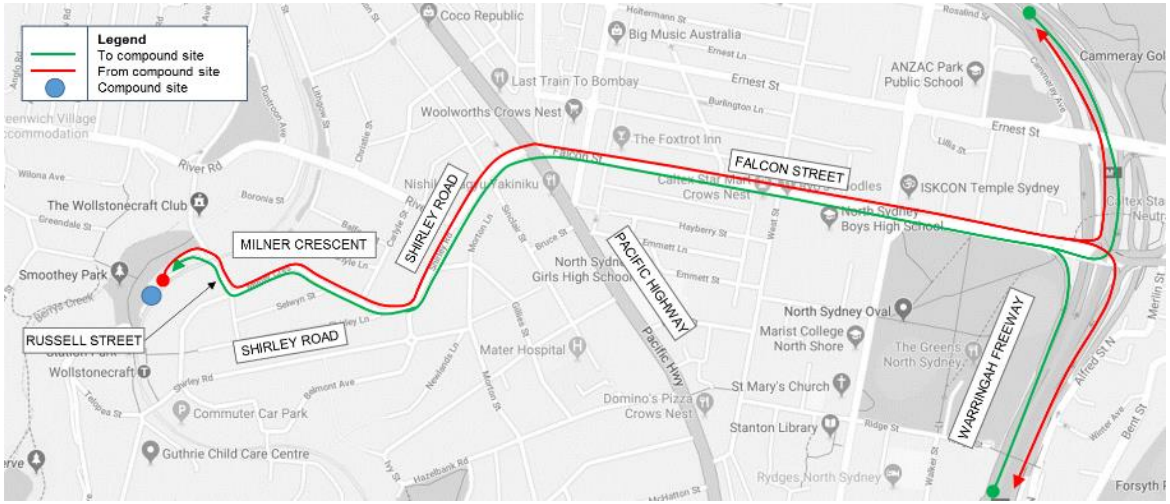

Figure 3 Haulage route 1: access using the north-west rail compound area (normal construction hours only)

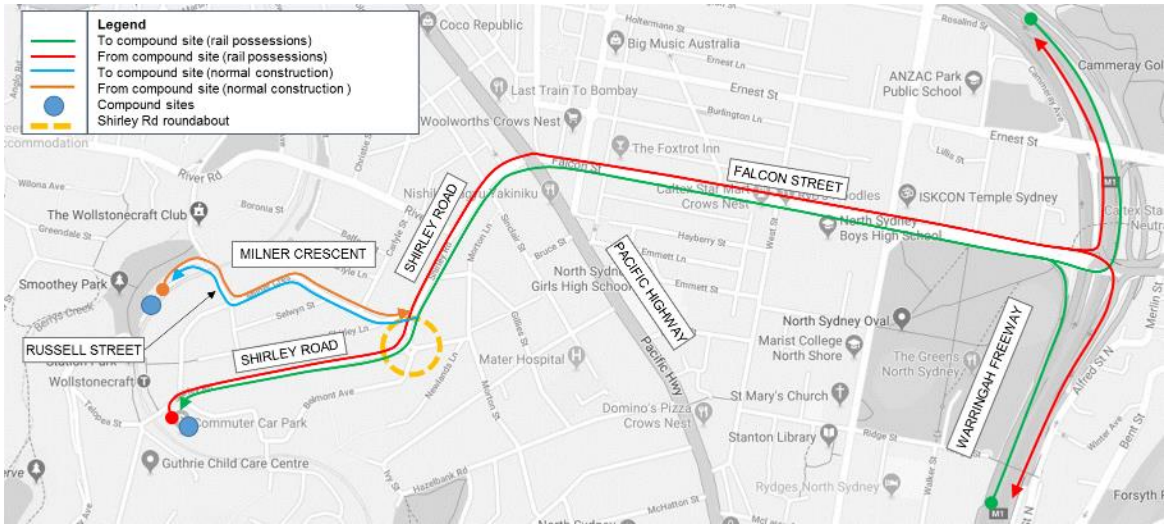

Figure 4 Haulage route 2: access using the north-west rail compound area and the existing commuter car park (rail shutdown periods only)

Mitigation measures

Heavy vehicle access plans would be prepared as a part of the construction traffic management plan that would be implemented along Haulage route 1 and 2 during the construction period. For the noted turning movement access impacts, qualified traffic controllers would be needed to ensure safe and efficient movement of vehicle and pedestrian traffic on the external road as well as in and out of the construction site.

As described in the Traffic, Transport and Access Impact Assessment, the north-west compound area would be accessed from the southern approach based on driveway/entrance orientation. Swept path analysis would also be undertaken using the design vehicle identified along the proposed haulage routes to ensure sufficient manoeuvring space is provided.

2.2 PARKING

During typical construction hours, the existing commuter car park would be accessible to the public as the construction workforce would park in the north-west rail compound area with additional parking overflow available along Russell Street. There are no expected parking impacts during typical construction hours as the expected number of workforces is low (e.g. 15 workers) in which are able to park within the north-west rail compound area and along Russell Street. There would also be a positive impact for the community as access to the existing commuter car park would be available.

During rail shutdown periods, the existing commuter car park would be occupied by the construction workforce. There would be no parking impacts to the commuter car park as there would be no train services during rail shut down periods. However, the Proposal assumes approximately 100 workers per rail shut down periods, when there would not be available parking across the north-west rail compound area, along Russell Street and the existing commuter car park. After the application of parking mitigations for the construction workforce, impacts to parking in the area would be minor.

Mitigation measures

Although most workers would be accommodated in the north-west compound area during typical construction hours, there would be additional parking overflow on Russell Street. As there are 4P time restricted on-street parking spaces on Russell Street (between 8:30 am to 6:00 pm on Monday to Friday) between River Road and Milner Crescent, the Construction Contractor may consider consulting with the North Sydney Council to establish a work zone on Russell Street or special parking permits during the construction period.

As described in the Traffic, Transport and Access Impact Assessment, the mitigation measure during rail shutdown periods of the Construction Contractor considering to provide shuttle buses to/from the nearest open railway station to minimise the impact on surrounding roads would still be valid.

3. CONCLUSION

The construction traffic assessment for the Proposal has been updated based on the revised construction compounds and parking assumptions. The outcomes of the updated traffic assessment do not include any further impacts as previously conducted in the Traffic, Transport and Access Impact Assessment. Reduced impacts from the commuter car park are expected during the typical construction period as access would be maintained for the community. During rail shut down periods, there would be no impacts to the commuter car park as the station would be closed. All other mitigation measures noted in the Traffic, Transport and Access Impact Assessment are still valid.

Appendix D Revised noise and vibration impact assessment

TECHNICAL MEMO

TO:	Transport for NSW
FROM:	WSP – Rebecca Warren and Tom Gouvernet
SUBJECT:	**Wollstonecraft Station Upgrade – Transport Access Program (Amendment to Noise and Vibration assessment)**
OUR REF:	PS118200-WSC_NV_Update
DATE:	**17 June 2020**

Transport for NSW has proposed the Wollstonecraft Station Upgrade (the 'Proposal'). The Proposal forms part of the Transport Access Program (TAP). TAP is a New South Wales (NSW) Government initiative to improve existing transport infrastructure, such as train stations, so they are modern, accessible and secure. The primary aim is to improve station access in accordance with the *Disability Discrimination Act 1992*, so they are more accessible for the mobility impaired, elderly person, parents, carers and persons with a disability.

WSP Australia has been commissioned by Transport for NSW to prepare a Noise and Vibration Impact Assessment (NVIA) for the Proposal. This technical memo is an addendum to this assessment to reflect the revised construction equipment selections and revised project footprint of the changes in construction compound site locations. Additionally, the noise modelling method has been updated to reduce the degree of conservatism included in the initial assessment and better predict actual likely noise impacts at receiver locations.

This technical advice note outlines the revised equipment and associated sound power levels, updated predicted noise levels at nearby receivers, and resultant changes to noise mitigation and management measures.

1. UPDATES AND CHANGES

1.1 ADDITIONAL EQUIPMENT AND REVISED PROJECT FOOTPRINT

Table 1.1 summarises the revised equipment, sound power levels, and associated scenarios.

Table 1.1 Updated assessment scenarios and sound power levels

EQUIPMENT	SOUND POWER LEVEL (dBA)	CONSTRUCTION SCENARIO WITH ADDITIONAL EQUIPMENT
Shotcrete machine	99	Lift work (Scenario 2)
Anchoring rig	117	Lift work (Scenario 2)

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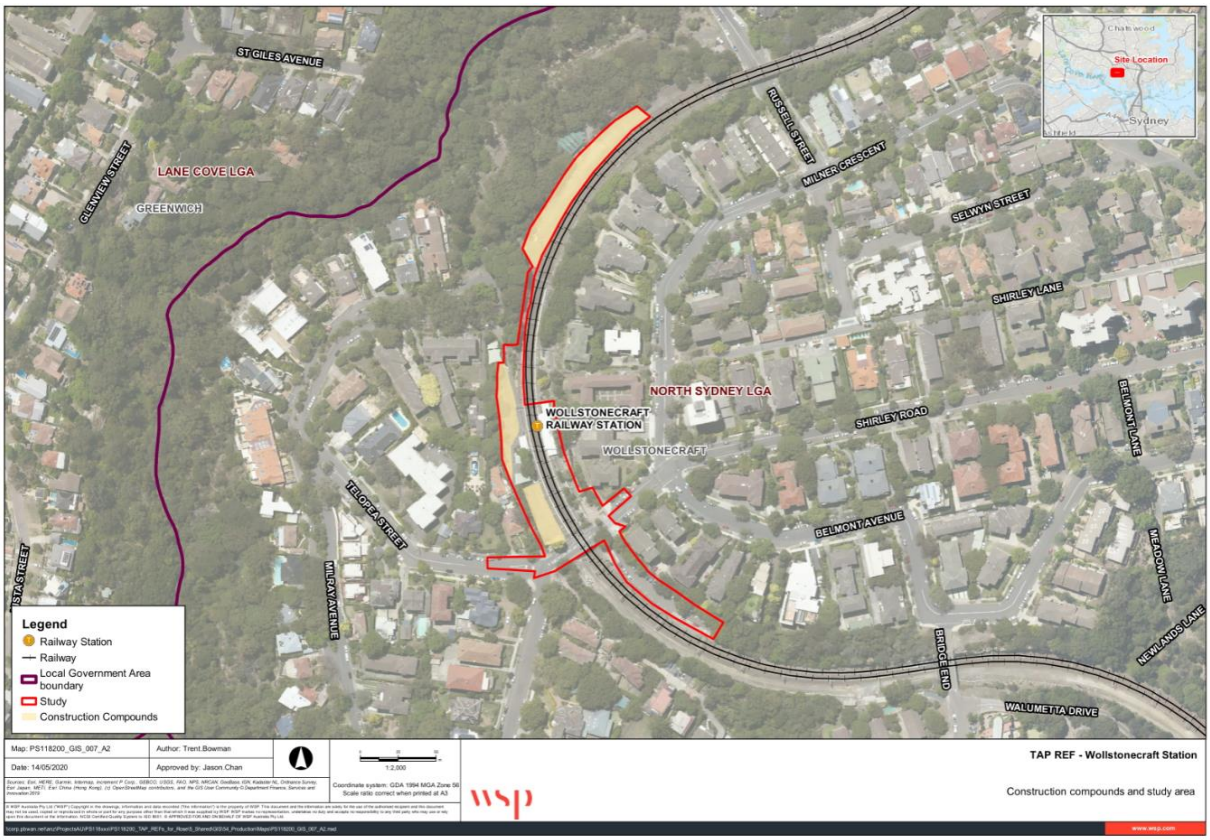

Figure 1.1 Revised project footprint

1.2 UPDATED MODELLING

1.2.1 MODELLING ASSUMPTIONS

3D noise modelling has been undertaken largely in line with the methodology applied in the TAP Wollstonecraft NVIA. The additional equipment and revised project footprint, summarised in Table 1.1 and Figure 1.1 respectively, have been updated.

The initial report considered the unlikely scenario that all equipment would be operating simultaneously and at the nearest point to each receiver. Following the receipt of additional information, the modelling now assumes that only the loudest piece of equipment is in operation during any construction scenario.

Additionally, potential maximum noise impacts associated with each work scenario have been reviewed to better reflect the updated equipment lists and work areas.

1.2.2 PREDICTED CONSTRUCTION NOISE LEVELS

Construction noise levels were predicted for the revised assessment scenarios at the nearest representative receivers (outlined in Chapter 1 of the TAP Wollstonecraft NVIA). The predicted noise levels are assessed against Noise Management Levels (NMLs) and sleep disturbance screening criteria outlined in Chapter 2 of the TAP Wollstonecraft NVIA.

A summary of the predicted $L_{eq(15min)}$ noise levels with the additional equipment and revised project footprint is presented in **Error! Reference source not found.**. A summary of the predicted L_{max} noise levels is presented in Table 1.3. All noise sources were modelled as operating individually, with the impacts of the loudest and quietest equipment for each scenario assessed and presented as a range.

Façade noise maps are presented in Appendix A of this technical memo.

The formatting of the construction noise assessment results (**Error! Reference source not found.**) indicates the following:

- The orange shaded cells show exceedances of the Standard Hours, Out-of-Hours 1 (OOH 1), and Out-of-Hours 2 (OOH 2) NMLs.
- The yellow shaded cells show exceedances of the Out-of-Hours 1, and Out-of-Hours 2 NMLs.
- The green shaded cells show exceedances of the Out-of-Hours 2 NMLs.
- The **cells with red text** show exceedances of highly noise affected NMLs.

Table 1.2 Predicted construction noise levels and indicative exceedances per scenario

NCA	RECEIVER ID	NML, DBA $L_{eq(15min)}$				MODELLED MAXIMUM NOISE LEVEL PER SCENARIO AT CLOSEST POINT TO RECEIVER, dBA $L_{EQ(15MIN)}$							
		SH	OOH 1	OOH 2	HNA	S01	S02	S03	S04	S05	S06	S07	S08
1	RES1	52	45	40	75	62 to 79	52 to 70	62 to 83	50 to 67	27 to 64	45 to 82	45 to 83	68 to 77
2	RES2	50	45	40	75	63 to 80	52 to 70	55 to 76	42 to 59	27 to 64	47 to 83	47 to 85	69 to 78
2	RES3	50	45	40	75	66 to 83	66 to 84	61 to 82	52 to 69	41 to 78	44 to 81	45 to 83	72 to 81
1	AR1	60	n/a	n/a	n/a	68 to 85	49 to 67	56 to 77	49 to 66	27 to 64	43 to 80	52 to 90	74 to 83
1	COM1	70	n/a	n/a	n/a	83 to >90	61 to 79	62 to 83	55 to 72	36 to 73	55 to >90	63 to >90	89 to >90
2	COM2	70	n/a	n/a	n/a	83 to >90	53 to 71	62 to 83	50 to 67	31 to 68	66 to >90	67 to >90	89 to >90
1	HOS1	55	55	55	75	46 to 63	49 to 67	44 to 65	43 to 60	26 to 63	26 to 63	24 to 62	52 to 61

*Note: Time periods as defined in Section **Error! Reference source not found.** of the TAP Wollstonecraft NVIA, HNA – Highly noise affected*

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The blue shaded cells within the maximum noise level results (Table 1.3**Error! Reference source not found.**) indicates exceedances of the L_{max} and $L_{eq(15min)}$ criteria.

Table 1.3 Predicted sleep disturbance noise impacts (residences only)

NCA	RECEIVER ID	RECEIVER TYPE	NML dBA L_{max}[1]		MODELLED MAXIMUM NOISE LEVEL PER SCENARIO, dBA L_{max}						
			RNP SCREENING CRITERION	**RNP AWAKENING GOAL**	**S01**	**S02**	**S03**	**S04**	**S05**	**S06**	**S07**
1	RES1	Residential	52	65	70 to 87	60 to 78	70 to >90	58 to 75	35 to 72	53 to 90	53 to >90
2	RES2	Residential	52	65	71 to 88	60 to 78	63 to 84	50 to 67	35 to 72	55 to >90	55 to >90
2	RES3	Residential	52	65	74 to >90	74 to >90	69 to 90	60 to 77	49 to 86	52 to 89	53 to >90
1	HOS1	Hospital	52	65	54 to 71	57 to 75	52 to 73	51 to 68	34 to 71	34 to 71	32 to 70

Note: Sleep disturbance criteria applicable to residential / hospital receivers only.

2. NOISE IMPACT COMPARISON

In comparison for results from the REF, Table 2.1 generally has reduced noise level values across most scenarios. This change accounts the revised assumptions of not having equipment operating simultaneously and at the nearest point to each receiver and assumes only the loudest piece of equipment is in operation during any construction scenario. Scenario 2 for residential receivers within NCA1 has an increased noise level values due to the revised equipment including the shotcrete machine and anchoring rig for the construction of the lifts. However, the assessment in Table 2.1 has the same exceedances of highly noise affected NMLs for each scenario as assessed in the REF.

For impacts related to predicted sleep disturbance, Table 2.2 shows similar results as assessed in the REF and there is no additional exceedances or impacts.

3. NOISE MITIGATION AND MANAGEMENT

The updated predicted noise levels result in no further exceedances of NMLs and sleep disturbance goals predicted as part of the TAP Wollstonecraft NVIA, the noise mitigation and management measures outlined in Chapter 5 of the TAP Wollstonecraft NVIA are still valid.

4. CONCLUSION

Construction noise assessment scenarios for the Transport Access Program Wollstonecraft Station have been updated based on additional construction equipment selections and the revised project footprint.

The outcomes of the updated noise assessment predict no further exceedances of NMLs compared to the previously conducted assessment outlined in the TAP Wollstonecraft NVIA. Therefore, noise mitigation and management outcomes outlined in the TAP Wollstonecraft NVIA are still valid.

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APPENDIX A – FAÇADE NOISE MAPS

Map: MAP_1	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Site establishment, enabling works, site compounds

Map: MAP_2	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

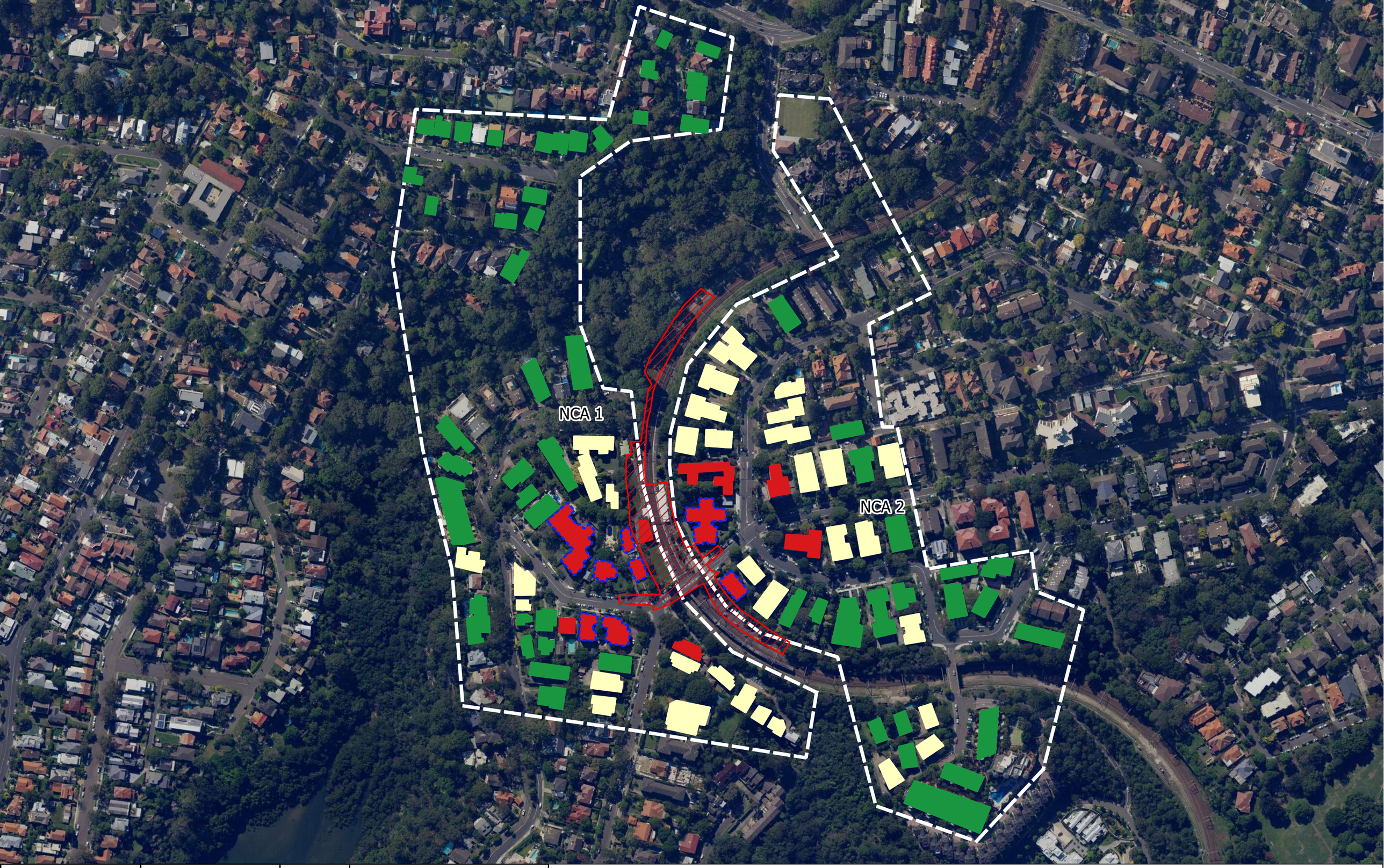
Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Site establishment, enabling works, site compounds (Out of hours)



Map: MAP_3	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

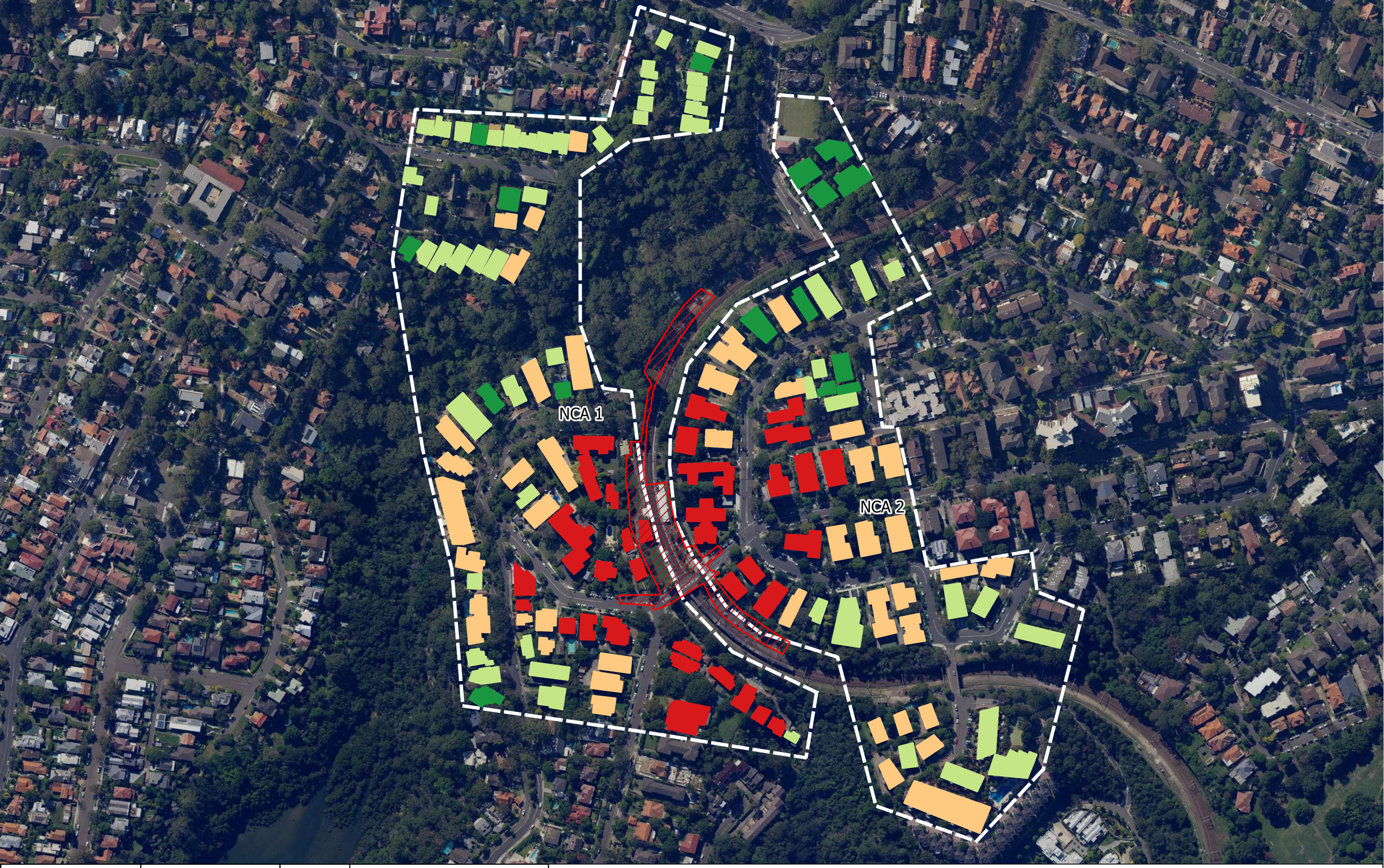
Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Lift works



Map: MAP_4	Author: TG
Date: 31/05/2020	Reviewed by: RW

N

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

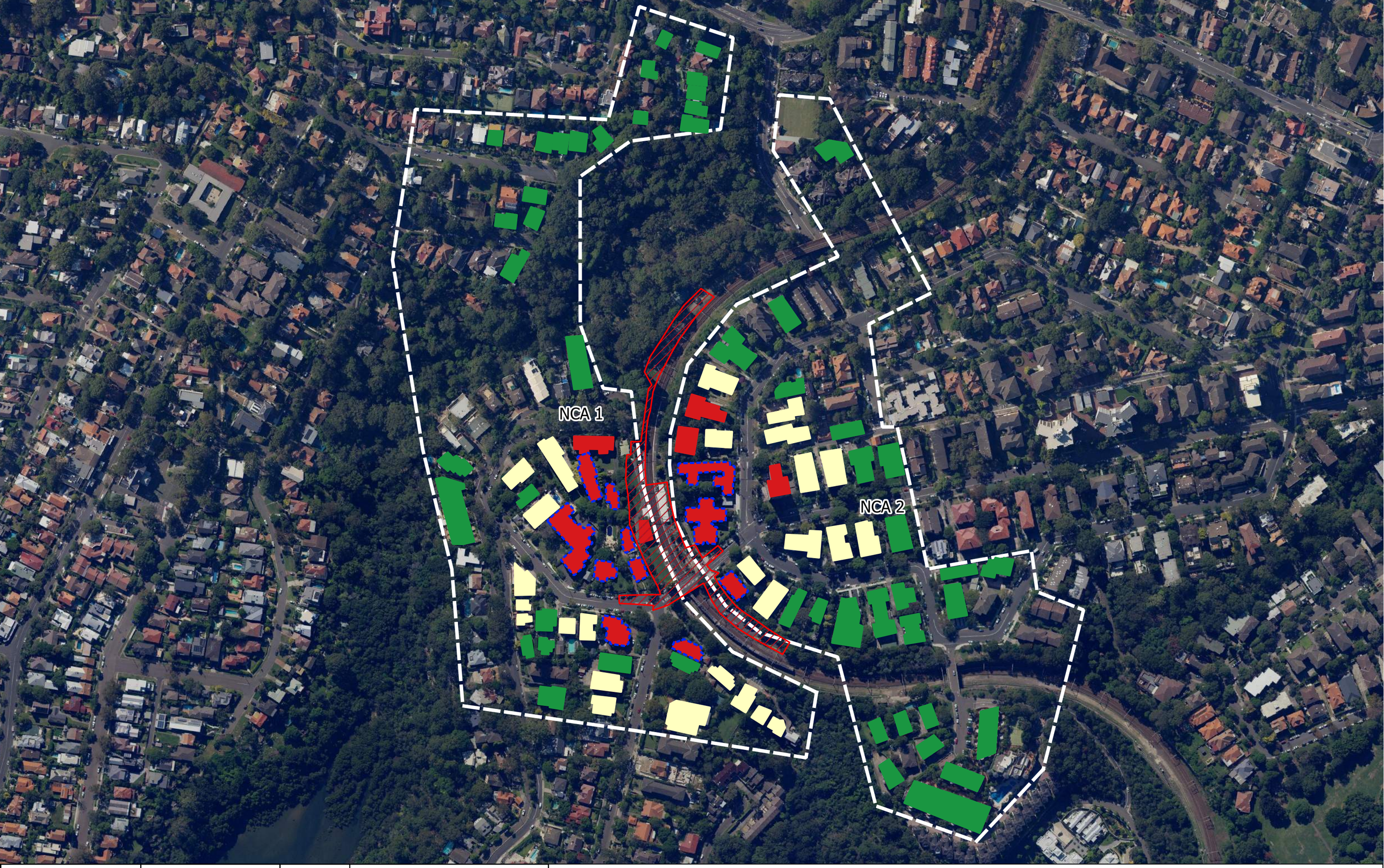
- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Lift works (Out of hours)

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps



Map: MAP_5	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

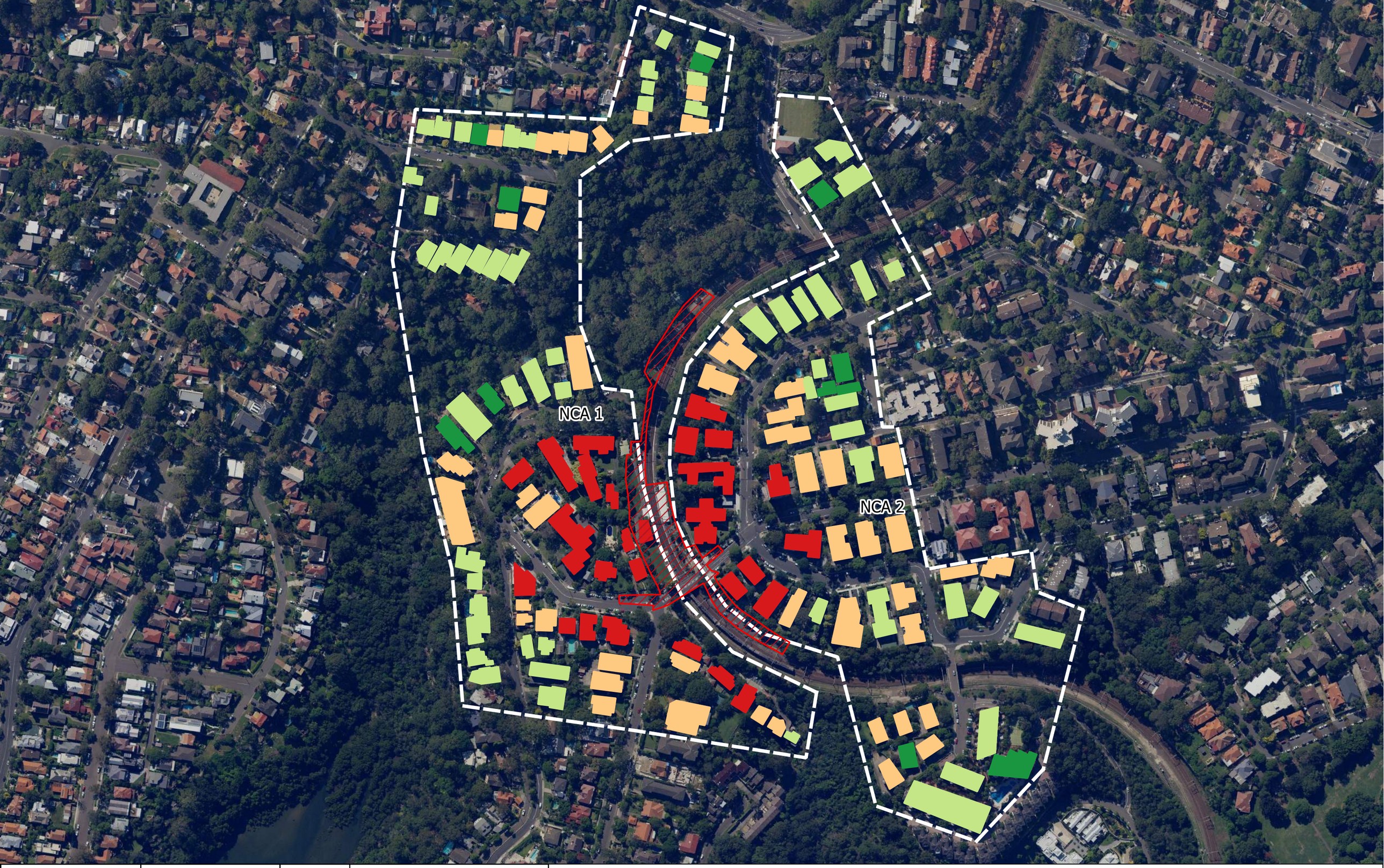
Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Ramp upgrade



Map: MAP_6	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Ramp upgrade (Out of hours)

Map: MAP_7	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

- Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Kiss and ride bay and accessible car parking space

Map: MAP_8	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

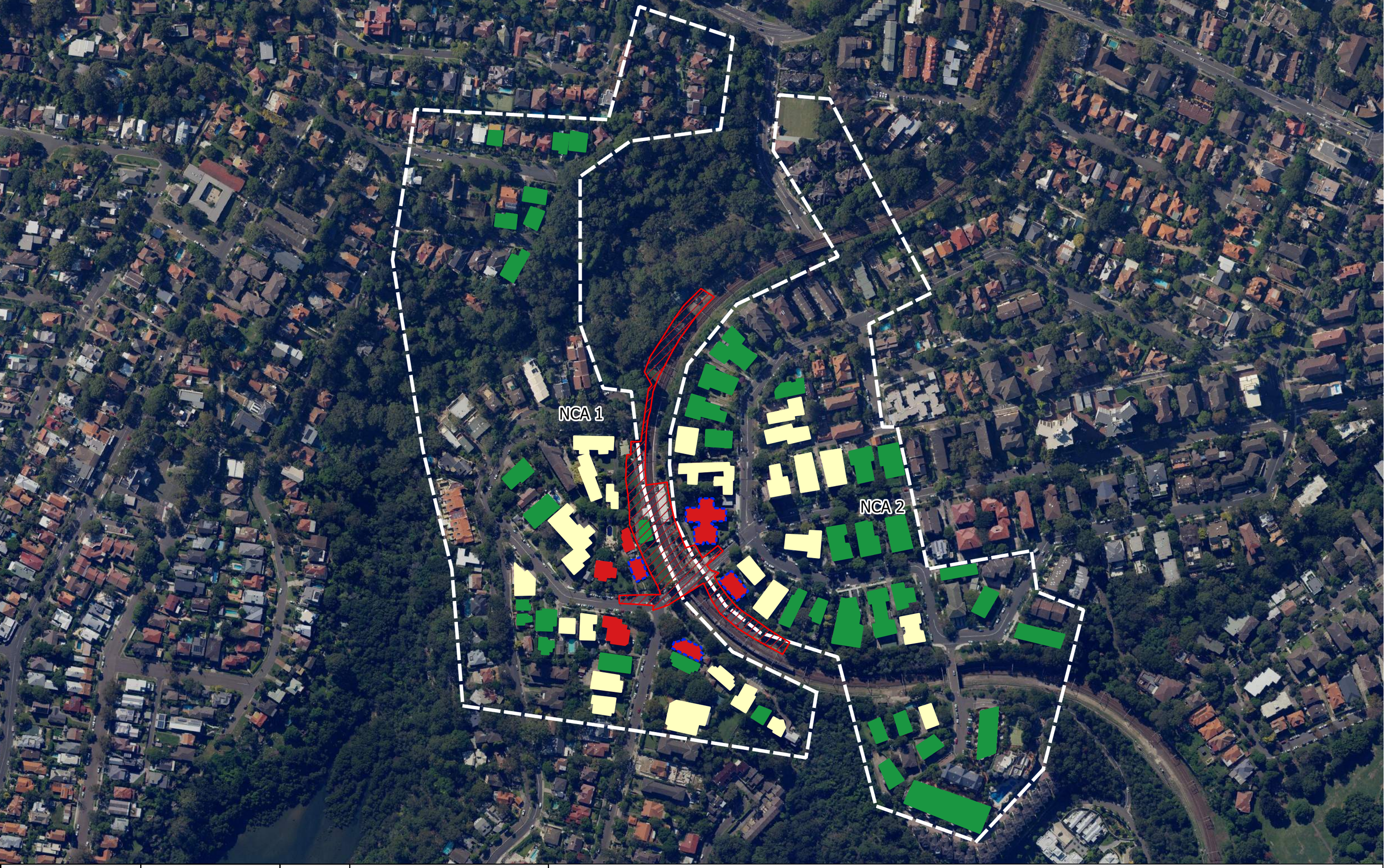
Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Kiss and ride bay and accessible car parking space (Out of hours)



Map: MAP_9	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

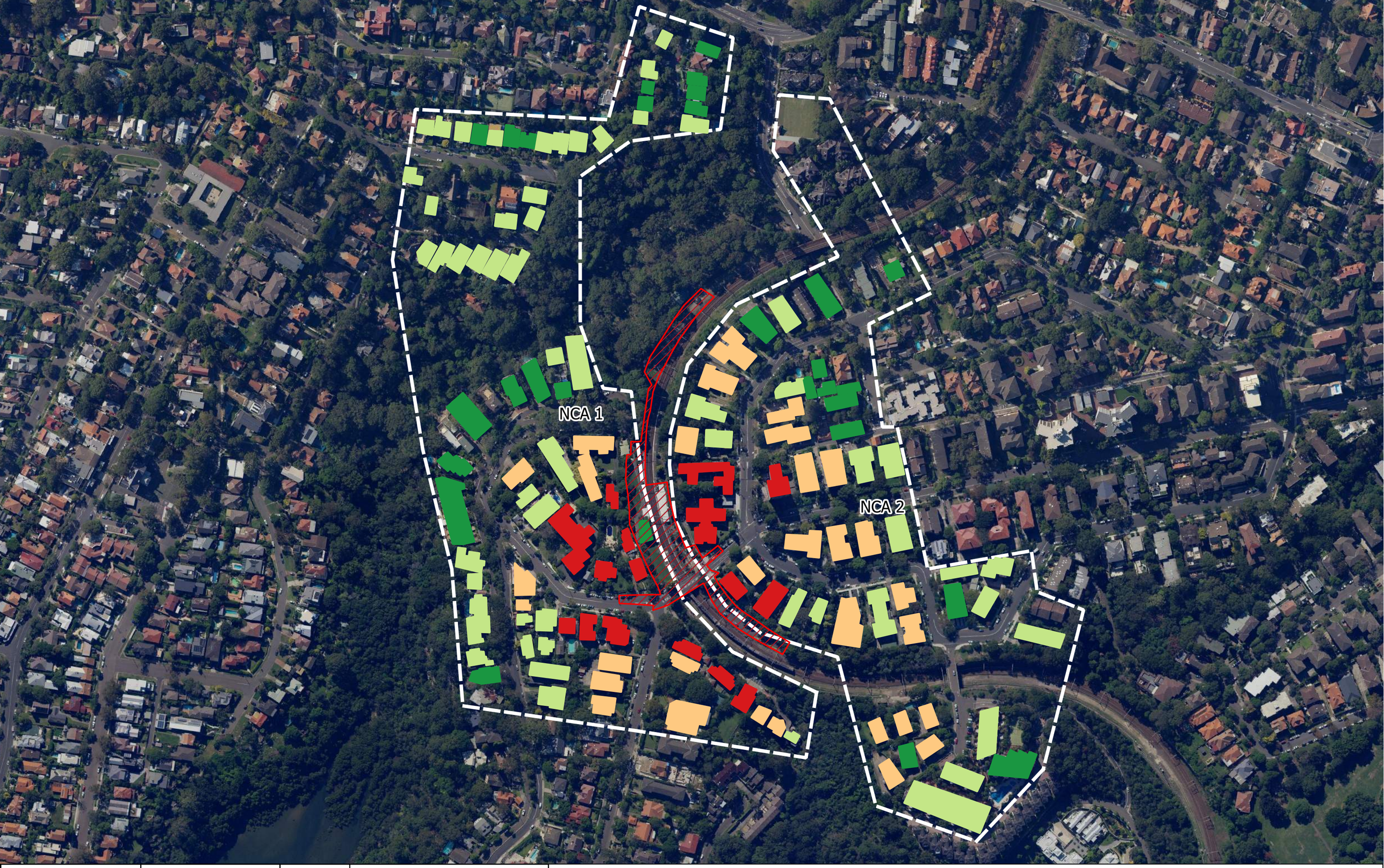
- Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Shirley Road overbridge work



Map: MAP_10	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

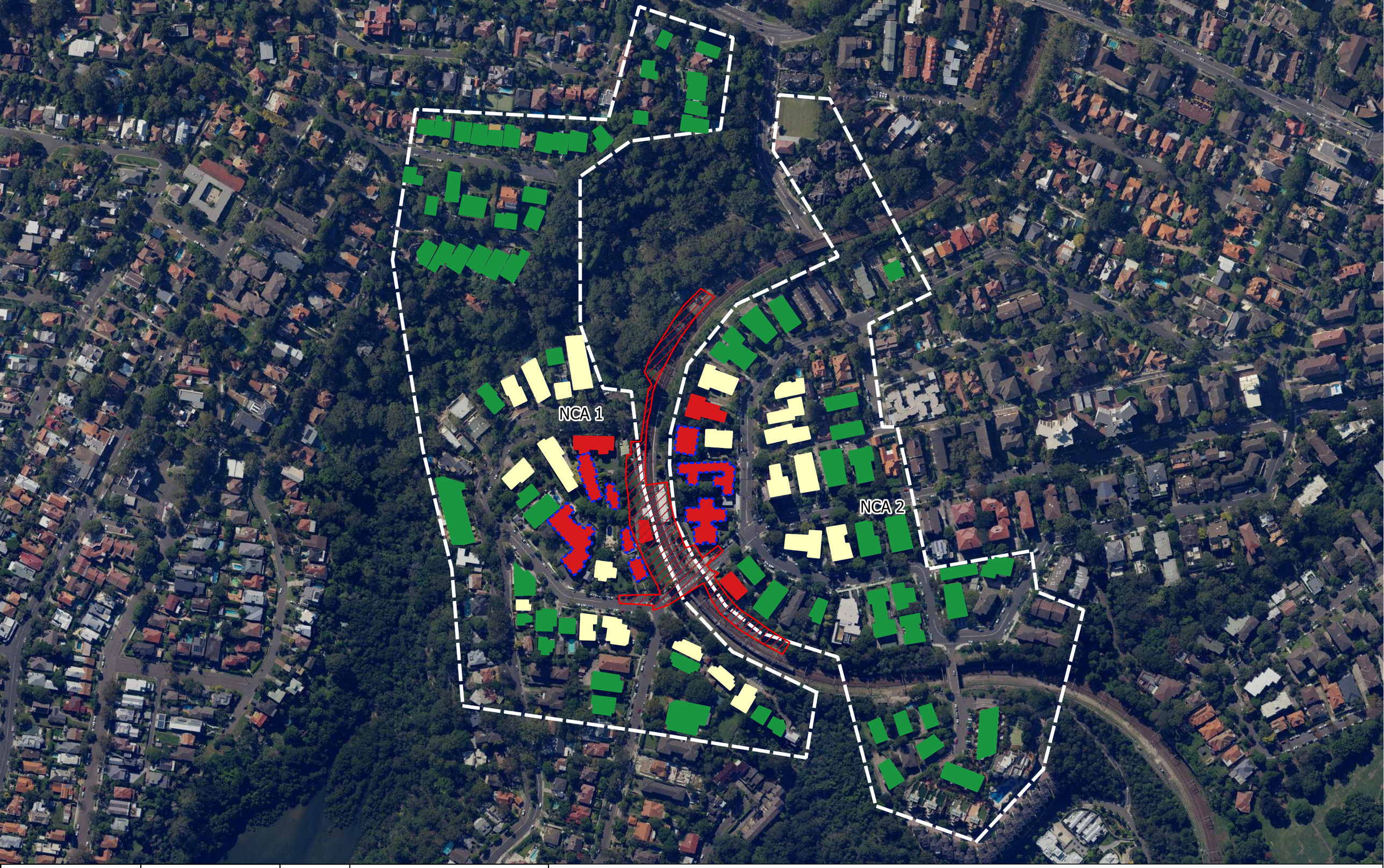
Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Shirley Road overbridge work (Out of hours)



Map: MAP_11	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Station building works

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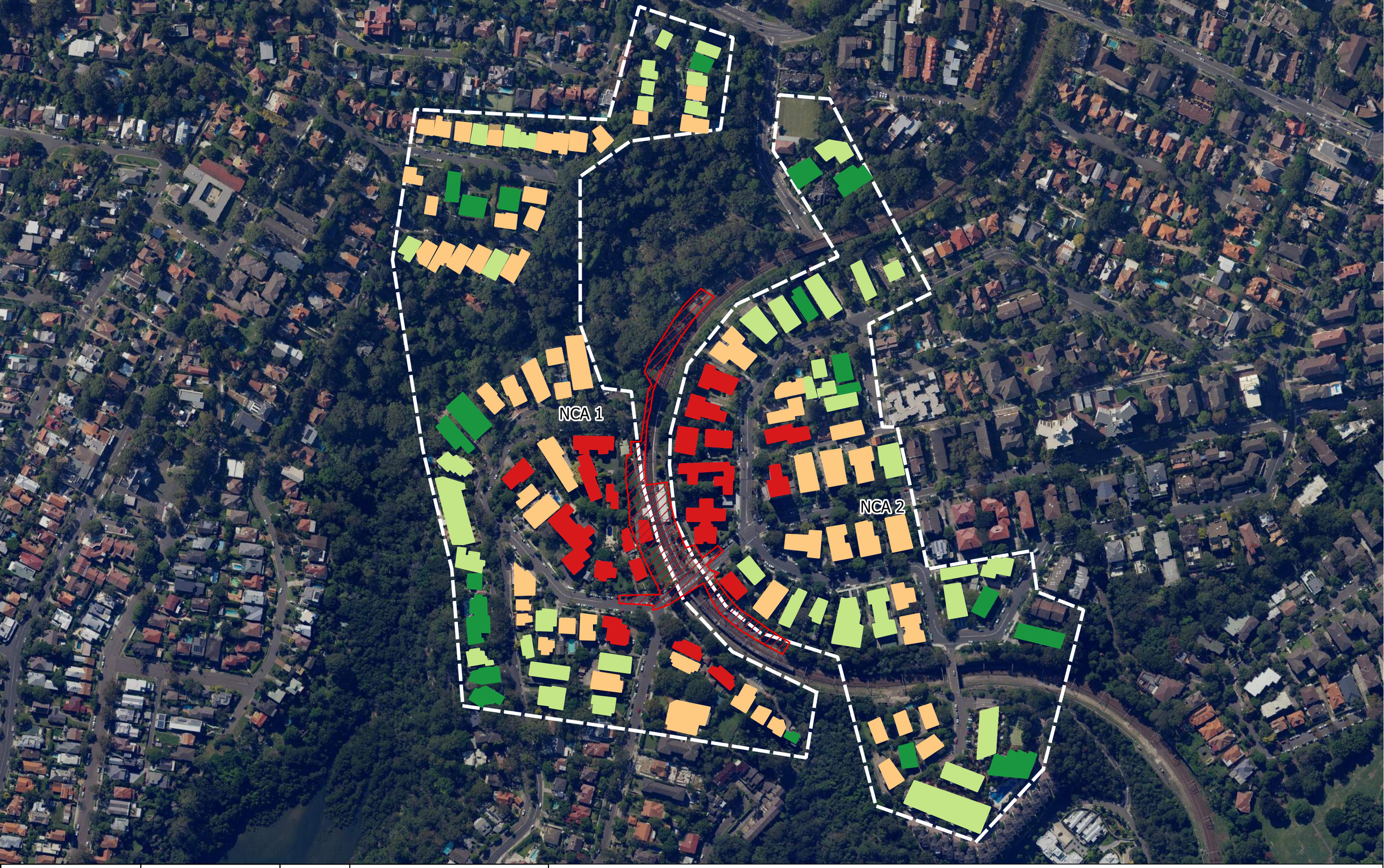


Map: MAP_12	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Station building works (Out of hours)

Map: MAP_13	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

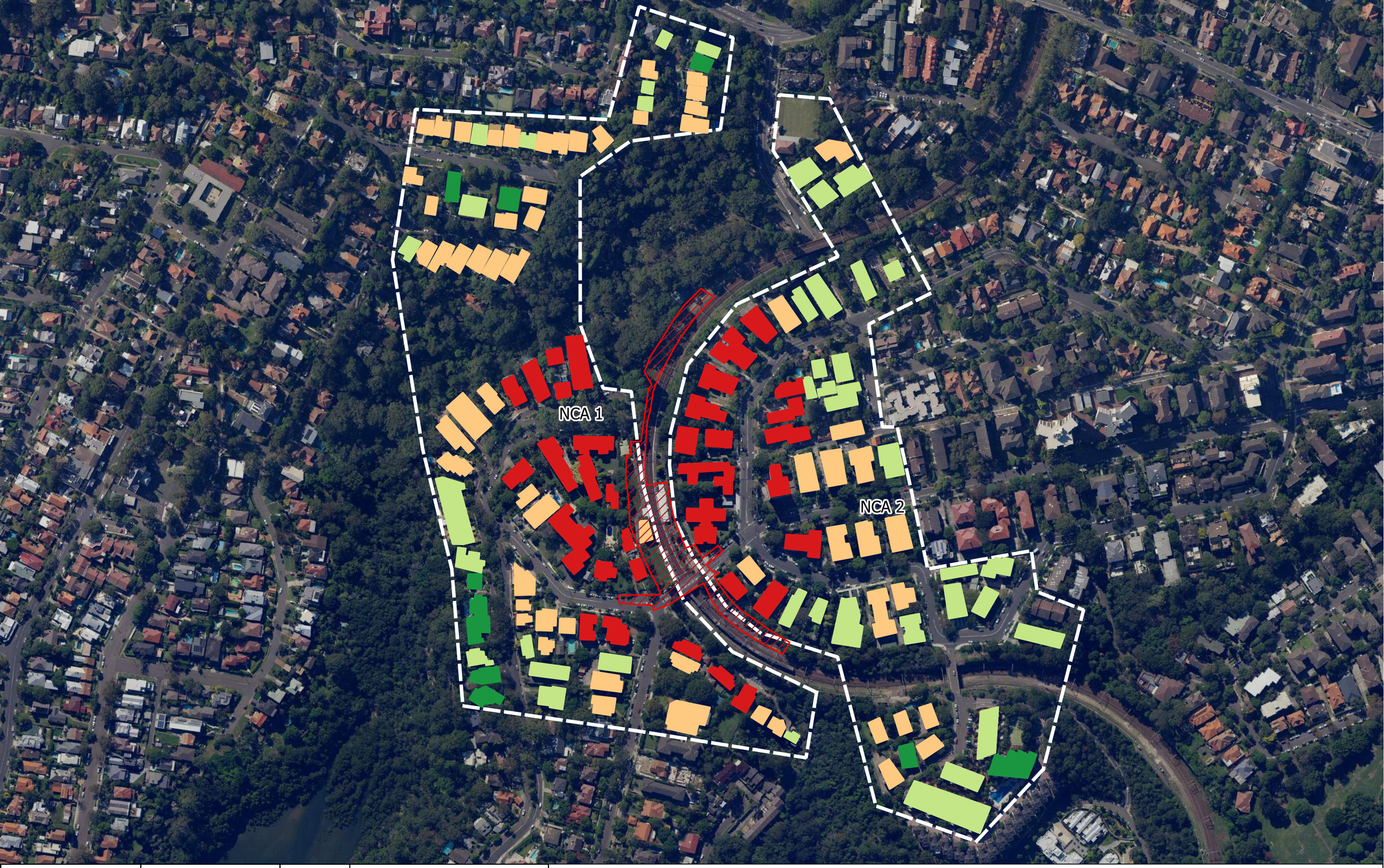
Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Platform stabilisation and upgrade work



Map: MAP_14	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 5 dB (Noticable)
- 5 to 15 dB (Clearly audible)
- 15 to 25 dB (Moderately intrusive)
- >25 dB (Highly intrusive)

Transport Access Program - Wollstonecraft

Platform stabilisation and upgrade work (Out of hours)

Map: MAP_15	Author: TG	N
Date: 31/05/2020	Reviewed by: RW	

To be read in conjunction with WSP document: <REPORT_ID>

Map Source: NSW SIX Maps

0 40 80 120 m

1:3000 at A3

Legend

Project area

Exceedance of NML, dBA Leq period

- 0 to 10 dB (Clearly audible)
- 10 to 20 dB (Moderately intrusive)
- >20 dB (Highly intrusive)
- Highly noise affected

Transport Access Program - Wollstonecraft

Demobilisation