



Overview of Social Impacts of the North East Link Project



Prepared for North East Link Project (NELP)

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1 Introduction

The North East Link Project ('the Project') is a proposed major road infrastructure project designed to improve Melbourne's cross-city transport network, by linking the M80 Ring Road to an upgraded Eastern Freeway.

The works to be undertaken to deliver the Project were declared public works under the *Environment Effects Act 1978* on 8 February 2018, and subsequently an Environment Effects Statement (EES) has been prepared in accordance with scoping requirements issued by the Minister for Planning. To assist members of the public in appreciating the large volume of material presented as part of the EES, North East Link Project (NELP) has requested that Public Place prepare an overview of the potential social impacts of the Project, focussing on:

- Traffic and transport.
- Acquisition of residential and commercial properties.
- Amenity during construction and operation.
- Temporary and permanent acquisition of sport and recreation facilities and open space.

This document provides an overview of the Project's more significant potential social impacts as identified in the Social Impact Assessment (SIA) for the Project and accompanying materials, using maps and figures to highlight changes and impacts. The Summary comprises four sections, the Introduction as well as: Section 2, which outlines the significant potential positive impacts of the Project; Section 3, which outlines the significant potential negative impacts of the Project; and Section 4 which provides some concluding remarks.

Where relevant, the Summary identifies Environmental Performance Requirements (EPR's) adopted for the Project, to manage Project's potential negative social impacts. The complete Environmental Management Framework ('EMF') can be found at Chapter 27 of the EES.

The Summary has been prepared with the assistance of the technical experts who prepared the SIA and various other technical assessments that informed the development of the SIA. Readers who are seeking more detail with respect to the potential changes and impacts brought about by the Project are encouraged to refer to the relevant Sections of the EES which can be accessed at <https://northeastlink.vic.gov.au/environment/environment-effects-statement-ees>.

2 Positive Impacts

2.1 Introduction

Over the past 50 years, Melbourne has experienced major changes in population, economic structure and urban built environment. These changes have and will continue to generate demand for travel, placing the city's existing transport networks under increasing strain. The Project is designed to improve Melbourne's cross-city transport network, to address a number of these pressures. The potential positive social impacts of the Project are outlined below.

2.2 Traffic and Transport

2.2.1 Road Transport

The Project would improve traffic flow, reduce travel times and increase reliability for road users, leaving greater time available for important social activities such as spending time with family and friends, participating in community activities and exercising, as well as reducing 'commuting stress'. To illustrate, Figure 2-1 (a-c) shows the level of travel time improvement that would be delivered as at 2036, for trips initiated at three origin points, Epping, Greensborough and Doncaster. As the Figure shows, for those travelling from Epping in a south to south-east direction, travel times would be significantly improved. For example, the Project would allow a motorist travelling from Epping to reach destinations such as the Box Hill and Ringwood Metropolitan Activity Centres (MAC), 10-20 minutes faster during the AM Peak period compared with a no-project scenario. Similarly, in the AM peak period, car based trips from Doncaster to the Epping MAC (more than 20 minute improvement) would be faster if the Project is developed.

Improved traffic flows delivered by the Project would result in greater access to jobs, services, education and other social opportunities for households throughout metropolitan Melbourne. To illustrate, Figure 2-2 shows the number of additional jobs accessible to residents as at 2036 within a 45 minute commute (car and public transport). As the Figure shows, people living across the metropolitan area would benefit from improvements in traffic flows, with many residents enjoying access to more than 150,000 additional jobs within a 45 minute drive. Improvements in access to employment by car would be particularly significant for future residents of the City of Banyule, where many residents would enjoy access to more than 200,000 additional jobs within a 45 minute commute. Improvements in access to employment for public transport users would be concentrated in areas near the project, but still significant. For example, residents of Bulleen, Doncaster and Templestowe would enjoy access to large numbers of additional jobs via the public transport network.

Improving access to opportunities including employment, education and other social opportunities would assist people to build skills, confidence and financial security, and thereby contribute to the health and wellbeing of individuals and families.

The travel time savings and consequent improvements in access to jobs, services, education and other social opportunities, would benefit a large number of people, and would be enjoyed over the operational life of the infrastructure.

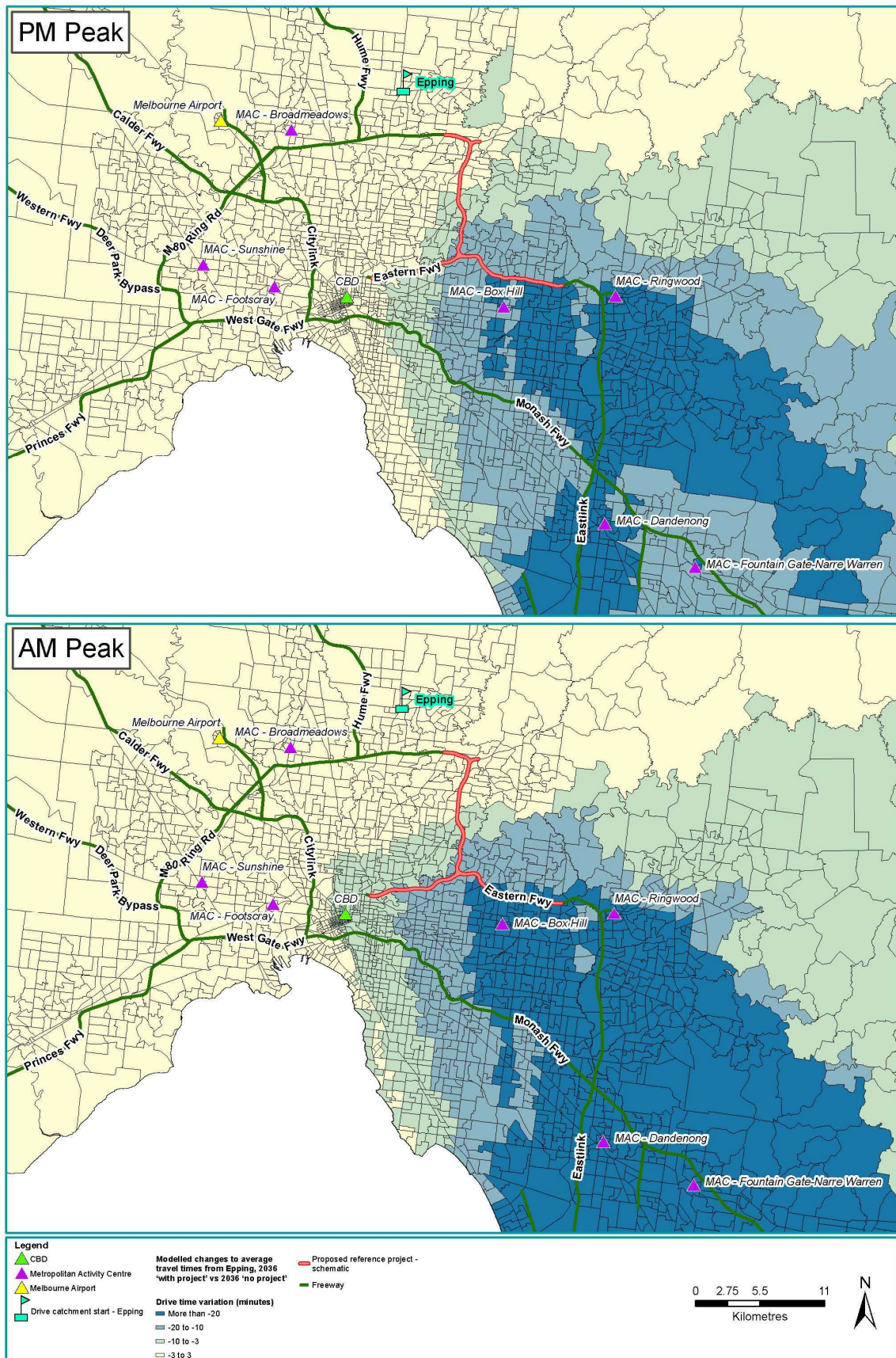


Figure 2-1a Time Travel Savings for Car Based Trips from Epping (with Project in 2036)

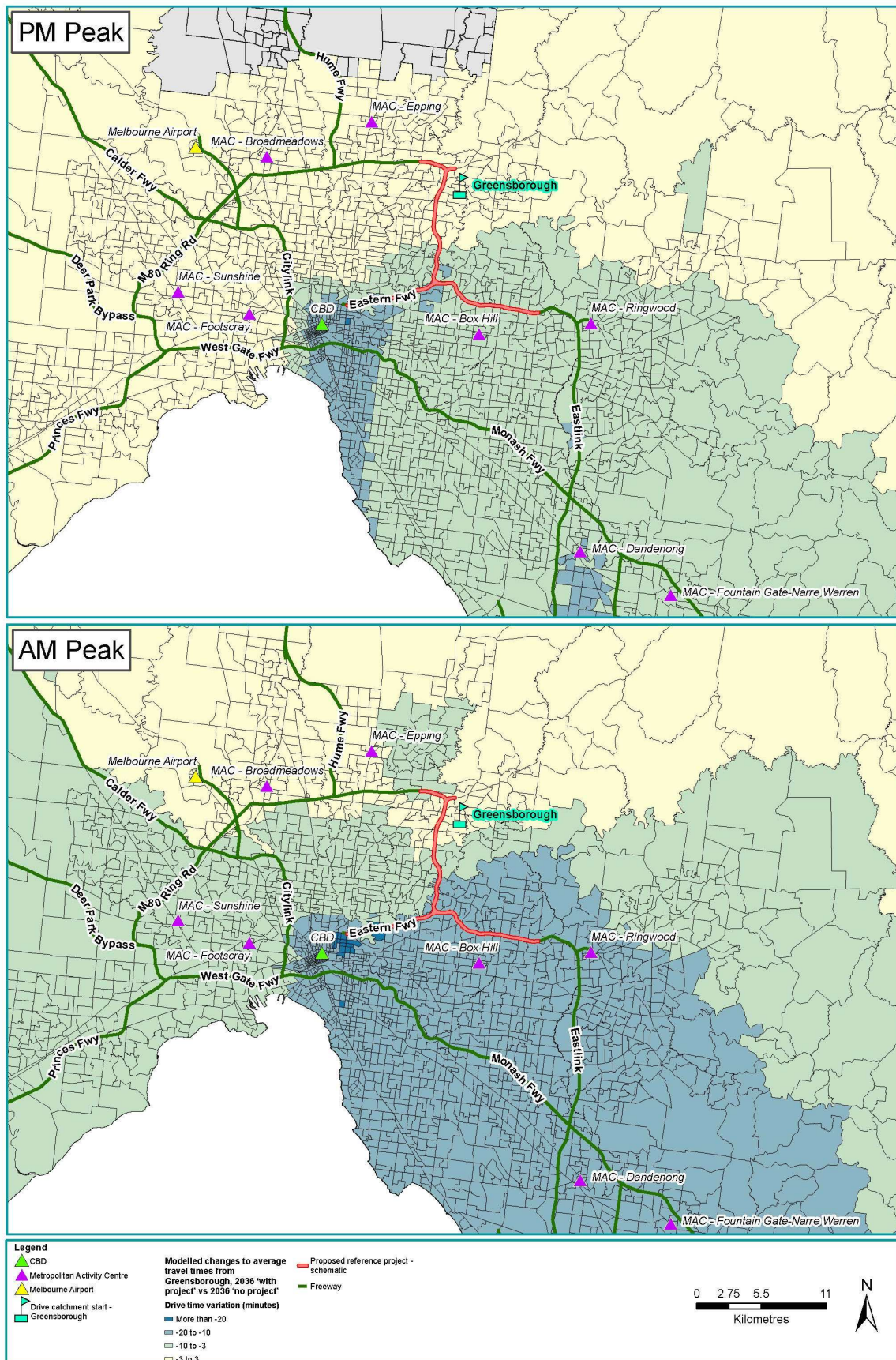


Figure 2-1b Time Travel Savings for Car Based Trips from Greensborough (with Project in 2036)

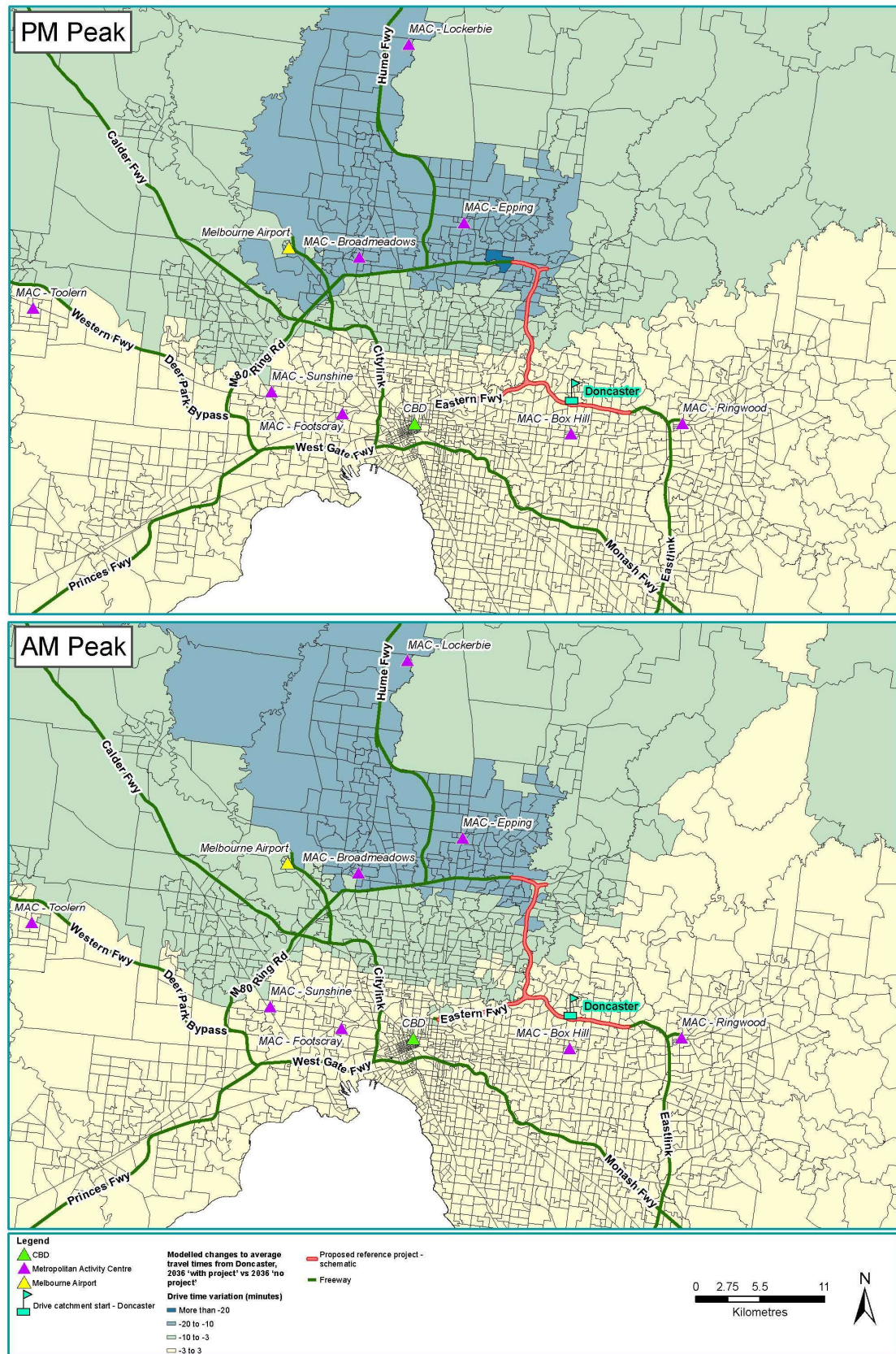


Figure 2-1c Time Travel Savings for Car Based Trips from Doncaster (with Project in 2036)

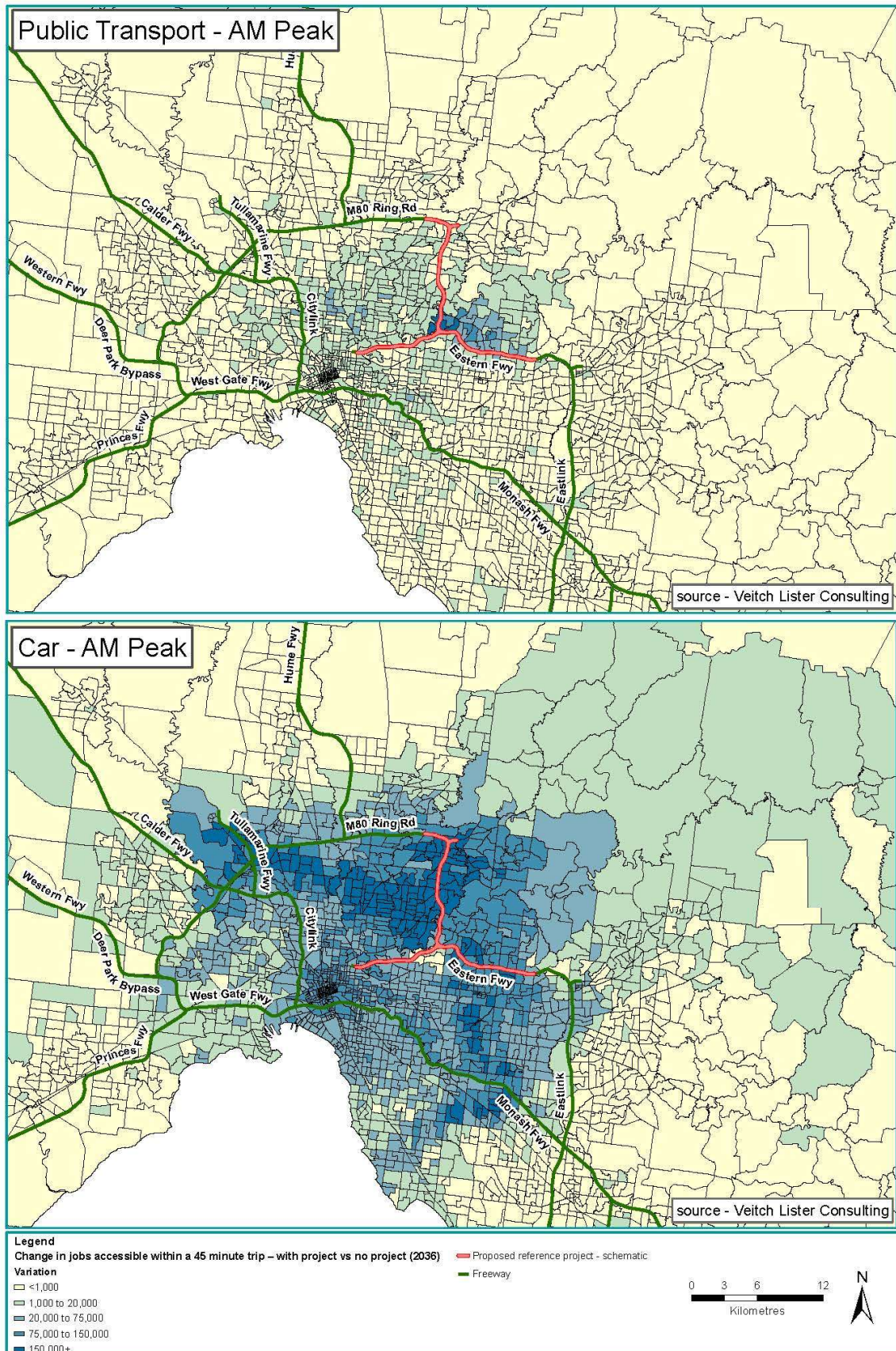


Figure 2-2 Increased Access to Jobs by Public Transport and Car (with Project in 2036)

2.2.2 Walking and Cycling Paths

The Project would involve significant improvements to the existing shared use path network near the project (see Figure 2-3). In total, around 25 kilometres of new and upgraded walking and cycling links would be provided. New paths would be sealed and generally three metres wide, and where practicable, separated footpath and bicycle paths would be provided.

Collectively the proposed upgrades deliver a continuous off-road cycling corridor linking the M80 Ring Road Path with the Main Yarra Trail and Koonung Creek Trail. Noteworthy improvements in connectivity at the local level include:

- The proposed overpass across the Eastern Freeway adjacent to the Bulleen Road Bridge, new path along both sides of Bulleen Road from Avon Street to Thompsons Road and new path from Banksia Street to intersection of Avon Street and Bulleen Road link communities to the north and south, with facilities and open space within and near Bulleen Park.
- Between Lower Plenty Road and the M80 Interchange, proposed improvements to shared use paths would allow for north-south and east-west movement within areas such as Watsonia, Greensborough, MacLeod and Yallambie, where there are number community facilities including schools located either side of the Project.
- As the insets on Figure 2-3 show, proposed improvements would provide a more direct alternative to the Main Yarra Trail, specifically:
 - A proposed new underpass at Burke Road combined with sections of new path result in a shortening of the trail network by 700 metres (Inset A).
 - A proposed new path from the Main Yarra Trail at Merri Creek to east of Chandler Highway, combined with a new underpass at Chandler Highway and new Yarra River crossing, result in a shortening of the trail network by 1.1 kilometres (Inset B).

Parts of the existing shared use trail network near the Project are relatively poorly utilised and participation in active transport is low in Melbourne's north-east. This reflects in part lower-quality bicycle infrastructure in this area, and limited connectivity to feeder routes and activity centres. The proposed improvements to the shared use path network are substantial and would improve pedestrian and cyclist connectivity across a wide area. These improvements would encourage greater levels of active transport, which has physical and psychological health benefits. The proposed improvements would also provide greater access to facilities, services and open spaces for those who rely on non-motorised transport.

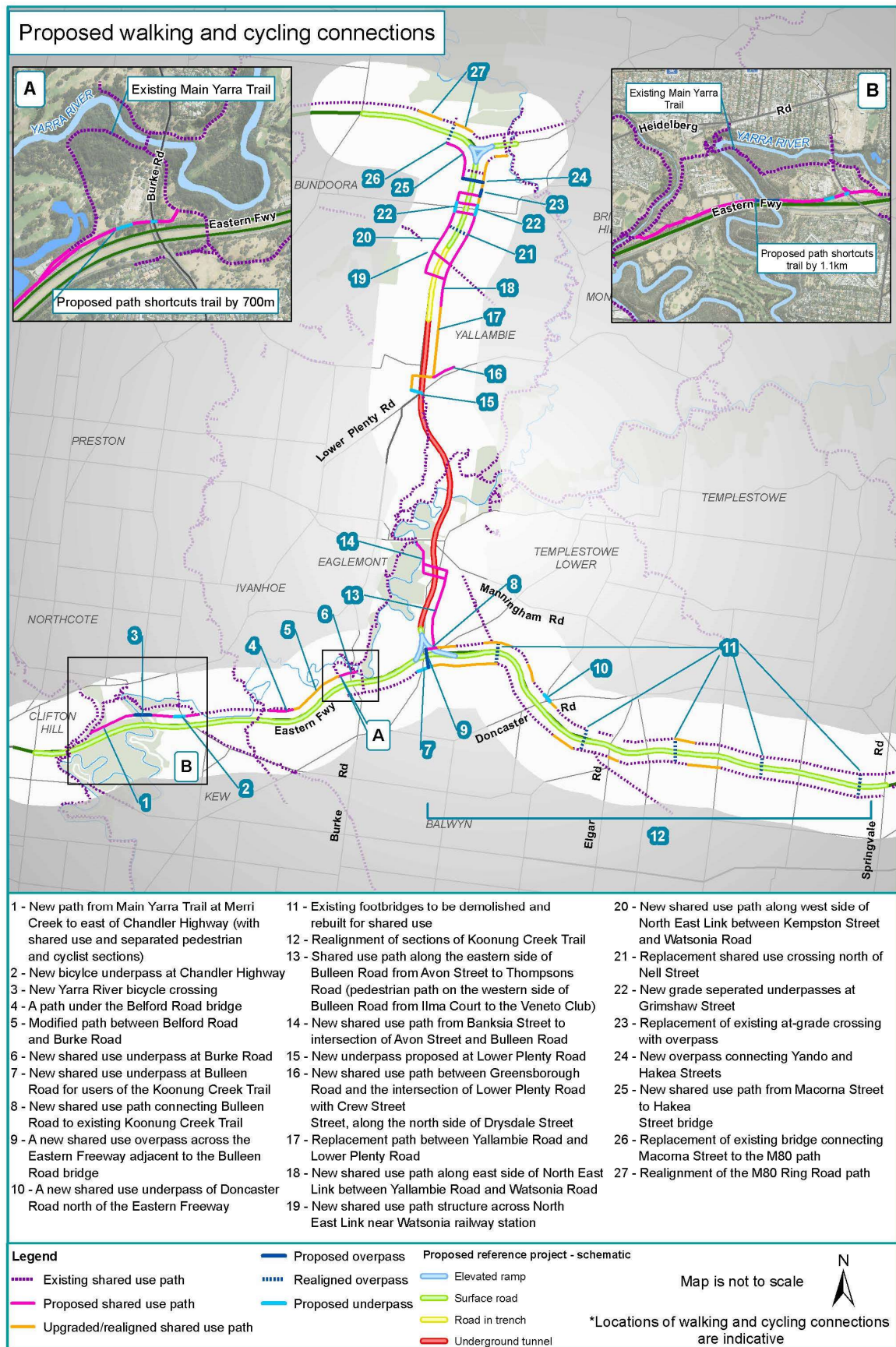


Figure 2-1: Walking and Cycling Improvements

2.3 Residential Amenity

The amenity of people's homes and neighbourhoods is influenced by a wide variety of factors, including the presence or absence of noise, dust and odours in the neighbourhood environment, traffic levels on local roads and the availability of local open space. Homes and neighbourhoods which are perceived to be pleasant, safe and with convenient access to social and recreational opportunities, contribute positively to the health and wellbeing of their residents. The Project would result in improvements in amenity across a wide area, by reducing traffic on local roads and decreasing traffic noise in some areas.

Traffic

The Project would remove significant volumes of non-local traffic from local roads (see Figure 2-4a, Figure 2-4b and Table 2-1). Roads such as Rosanna Road, Greensborough Road and Fitzsimons Lane currently act as a link for commuter and freight traffic between the northern suburbs east and south-east of Melbourne, and experience high levels of congestion as a result. Rosanna Road and Greensborough Road are fronted by residential properties and existing commuter and freight traffic on these and other roads increases noise levels, detracts from local amenity and perceptions of safety and is the source of considerable community concern.

The Project would deliver a significant reduction in car and truck traffic on roads such as Rosanna Road and Greensborough Road and make a significant contribution to residential amenity and perceptions of road safety at the local level. The projected reductions in traffic are consistent with the aspirations and goals of local communities articulated in municipal level strategic plans and by residents directly during the consultation phase of the Project.

Table 2-1: Traffic Volumes (No-Project) and Reductions as at 2036 if the Project is Developed

Location	All Vehicles		Trucks	
	No-Project Volume	Reduction	No-Project Volume	Reduction
Rosanna Road - Brown St to Reid St	41,000 - 54,000	11,600	3,800 - 4,900	2900
Greensborough Road – Yallambie Rd to Watsonia Rd	63,000 - 81,000	19,000	8,400 - 10,800	7,400
Manningham Road/Banksia Street – At Yarra River	75,000 - 96,000	13,300	6,700 - 8,700	3,000
Fitzsimons Lane – At Yarra River	64,000 - 83,000	16,600	5,000 - 6,500	2,100

Traffic Noise

The Project would involve the development or upgrading of infrastructure such as noise walls, and as result would reduce the number of residential dwellings exposed to high levels of traffic noise compared with a no-project scenario. Specifically, 2,300 properties are expected to experience noticeable noise reductions of greater than 2 dBA, with 417 of these are expected to experience significant noise reductions of 5 dBA or more. Noise reductions would occur along the length of the alignment and would be most common for residences where existing traffic noises are currently relatively high. That is, the reductions would occur in situations where there is a significant opportunity to improve residential amenity.

The Project would also result in traffic noise increases for some nearby residences which may result in noise levels exceeding relevant standards (see Section 3.4.2).

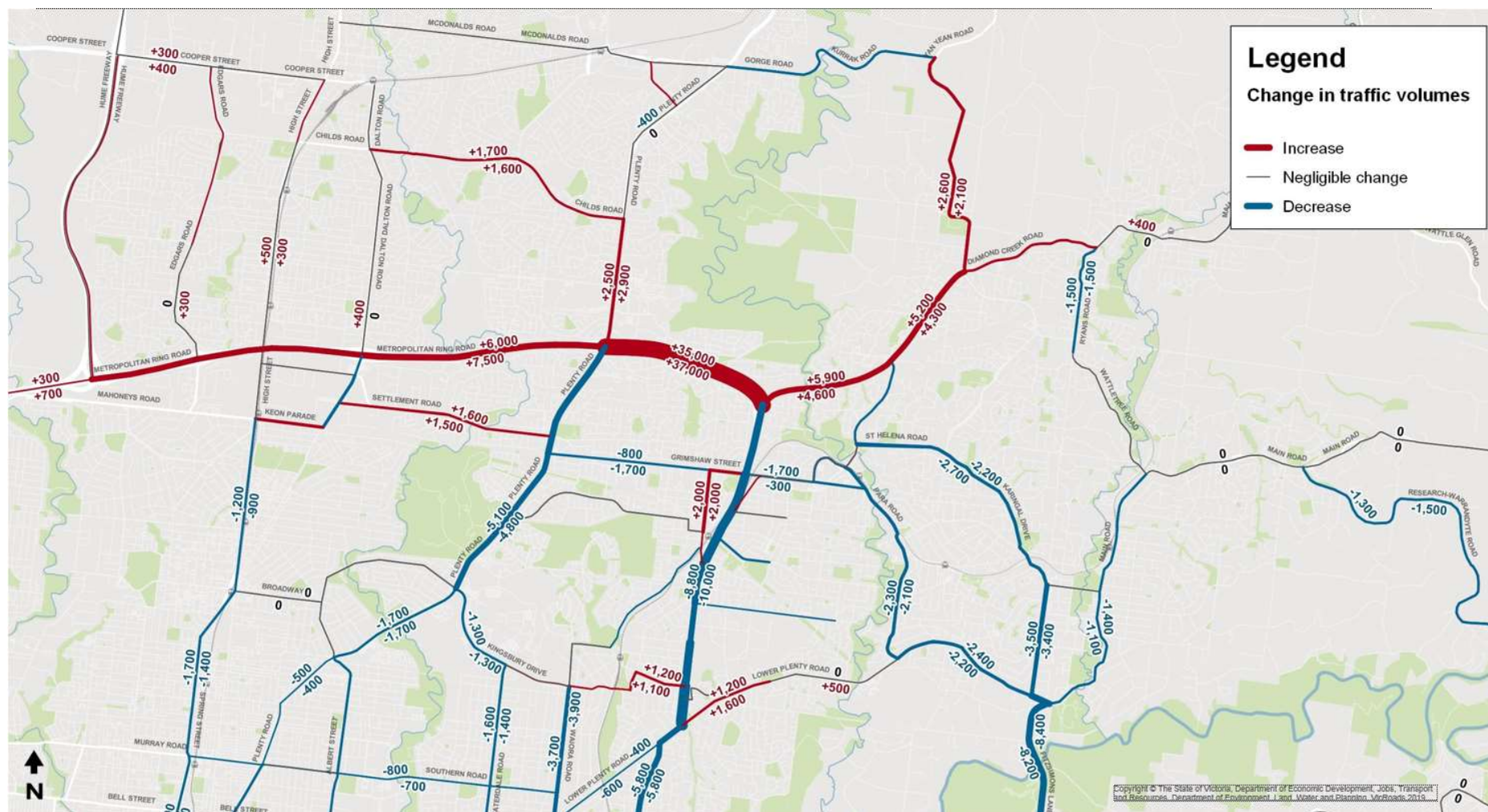


Figure 2-4a: Change in total average weekday traffic volumes (AWDT), 2036 'with project' versus 2036 'no project' – study area north

This figure is from the EES Technical report A – Traffic and transport and should be read in conjunction with that report

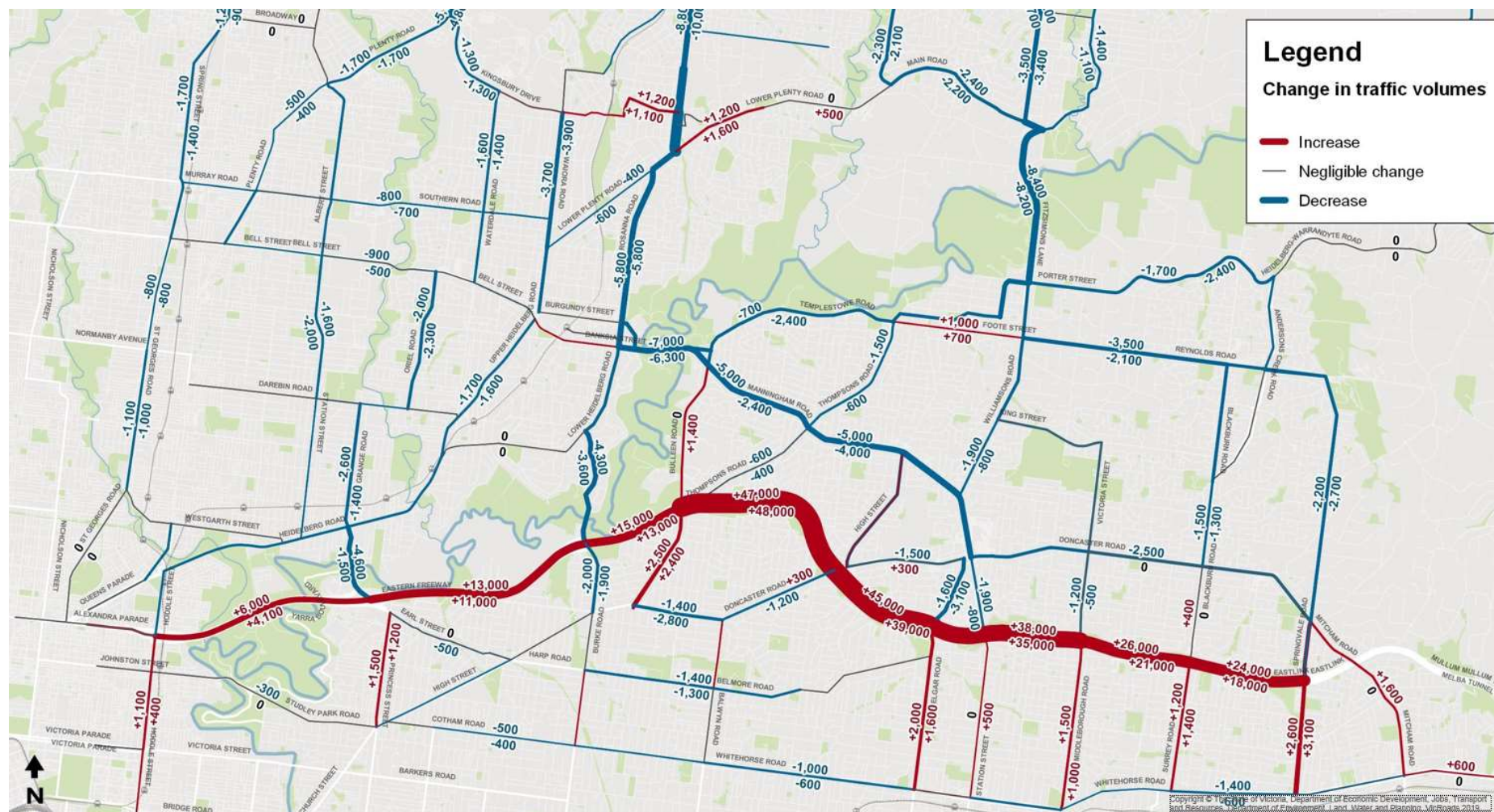


Figure 2-4b Change in total average weekday traffic volumes (AWDT), 2036 'with project' versus 2036 'no project' – study area south

This figure is from the EES Technical report A – Traffic and transport and should be read in conjunction with that report

3 Negative Impacts

3.1 Introduction

The Project covers an extensive linear area which traverses heavily populated sections of metropolitan Melbourne. To illustrate, there are more than 20,000 residential dwellings located within 500 metres of the Project and a wide array of community facilities and open spaces. Delivery of large scale infrastructure such as the Project within existing urban areas is a significant challenge.

To minimise disruption to existing communities, the Project makes use of existing road corridors, open space areas and tunnelling. However, some individuals and groups who live near the Project or make use of facilities and services in these areas, will experience disruption during the construction and operation of the Project. The nature and severity of the associated impacts is discussed below.

3.2 Residential Acquisition

The reference design for the Project directly affects 36 residential properties. These properties would be compulsorily acquired to enable development of the Project, displacing the current occupants and potentially affecting residential amenity for occupants of nearby dwellings. Figure 3-1 shows the location of the affected properties. Table 3-1 provides information about the potential impacts of acquisition in each location.

As Table 3-1 indicates, the households directly affected by acquisition have differing circumstances and capacity to cope with the challenges presented by forced relocation. For example, the affected households include individuals who are ageing and who have limited financial resources. These 'vulnerable' individuals and households may find the process of relocation particularly challenging. The directly affected households also include several families with children enrolled in local schools and sporting and social activities and/or who have extensive social ties in their local neighbourhoods. For these households, forced relocation has the potential to interrupt well-established and valued lifestyles. In contrast, some directly affected households do not have a strong connection to their local area or current dwelling and for these households forced relocation would be unlikely to result in significant impacts.

The potential for residential amenity to be affected by acquisition is also outlined in Table 3-1 and is discussed further in Section 3.4.

All households who are affected by forced relocation would be eligible for compensation in accordance with the *Land Acquisition and Compensation Act 1986* ('LAC Act') and the *Major Transport Projects Facilitation Act 2009* ('MTPF Act'). In addition, EPR SC1 would be used to manage social impacts resulting from acquisition and forced relocation (see Table 3-2).

Table 3-1: Residential Acquisition

Location	No. acquired	Direct Impacts	Amenity Impacts
Greensborough and Watsonia	10	With the affected dwellings there is some risk of displacement of the household from the local area. This has the potential to sever existing social ties and necessitate significant lifestyle adjustments.	Three of the acquisitions affect part of a small unit complex in Greensborough. Remaining units share common land with the dwellings acquired. The acquisitions would alter the functioning of the complex.
Macleod	8	Dwellings are low cost rental dwellings. Similarly priced rental accommodation may not be available nearby. Affected households may be displaced from the local area, potentially severing existing social ties and necessitating significant lifestyle adjustments.	Neighbourhood amenity would not be materially affected.
Yallambie.	12	Affected dwellings are primarily ex-army housing units, which offer a relatively affordable housing option. Similarly priced housing may not be available in the local area, potentially resulting in displacement of the affected households. The current occupants include younger families with children who attend local schools and/or who have well-developed social connections in their neighbourhood. These households would face significant lifestyle adjustments if displaced	The acquisitions in Yallambie are clustered in and near small residential courts. The number of dwellings within the courts would be reduced and access arrangements affected, which may impact on the perceived liveability of the courts.
Bulleen	6	Directly affected households in this location include older couples with a strong emotional attachment to their home, where they have lived and raised a family over an extended period.	Properties would be acquired from within a small residential neighbourhood. The affected neighbourhood offers a high level of amenity and privacy, which existing residents value and are keen to preserve. Acquisition is perceived to be a significant threat to existing residential amenity and lifestyles in this location.

3.3 Commercial Acquisition

Delivery of the reference design for the Project would necessitate the acquisition of a substantial number of commercial properties, displacing a total of 96 businesses. Figure 3-1 shows the location of the affected properties:

- Between the M80 Ring Road and the northern portal permanent acquisition of commercial property would displace 6 businesses. One additional business which is run from a residential home would be displaced by residential acquisition in this area. In total the Project would displace 7 businesses which employ 77 people.
- Between the northern portal and southern portal it is expected that 85 businesses employing approximately 830 people, would be displaced as a direct result of the Project. The majority of the affected properties are located within the Bulleen Industrial Precinct. The precinct comprises approximately 110 businesses which provide direct employment for approximately 1,000 people.
- Four properties at the Eastern Freeway interchange would be displaced.

Many of the affected businesses serve a local customer base. A large number of the business affected by the Project have been established for long periods (as long as 70 years) and/or are family run businesses. That is, in some cases, the affected businesses represent a life's work for their owners and/or a major asset and source of income.

For these businesses, relocation within the Bulleen area is generally preferred, however it should be noted there are limited suitable sites for relocation locally or within the City of Manningham. There are additional options in a 5-10 kilometre radius of Bulleen (e.g. precincts in adjacent municipalities) however these locations may not be suitable for some businesses. As a result, the Project may put at risk the viability of businesses and the current employment of a number of people. NELP is identifying further potential relocation options in the area in consultation with businesses and local councils.

Not ignoring the difficulties that business owners may experience as result of the Project, it is noteworthy that they would be eligible for compensation in accordance with relevant legislation (LAC Act and MTPF Act). In addition, EPR SC1 (see Table 3-2) and B1 - B6 would be used to manage social impacts resulting from acquisition and forced relocation.

In contrast, existing employees would not be eligible for compensation, and the proposed acquisitions may necessitate them finding alternative employment, severing existing workplace relationships and creating the potential for lower workplace satisfaction or even unemployment. If unemployment occurs, the potential impacts may be quite serious and could include financial difficulties, reduced confidence and sense of identity and social isolation. The Bulleen Industrial Precinct is a significant source of local employment. To illustrate, approximately 31% of all job opportunities available within the Bulleen area are provided by businesses which operate within the

Bulleen Industrial Precinct. Also, many of those work within the Precinct live within 10 kilometres and therefore, displacement of employment from the site has the potential to lead to increased commuting times for those affected.

Irrespective of the outcome for particular businesses and employees, the Project will involve considerable disruption and generate uncertainty for those affected while they navigate a challenging transition period. Understandably, the proposed commercial acquisitions are a source of considerable stress and worry for those affected.

In addition to implications for business owners and employees, acquisition of commercial land and the resulting displacement of businesses would result in community members having to access services elsewhere, potentially increasing time spent travelling for those affected.

Table 3-2: Environmental Performance Requirement: SC1 Reduce community disruption

Design and construct the project to reduce disruption to residences and community infrastructure facilities from direct acquisition or temporary occupation of land, as far as is practicable. Where residential land is to be permanently acquired:

- Use a case-management approach for project interactions with affected land owners and occupants
- Endeavour to reach agreement on the terms for possession of the land
- Consider the relative vulnerability and special needs of land owners and occupants.

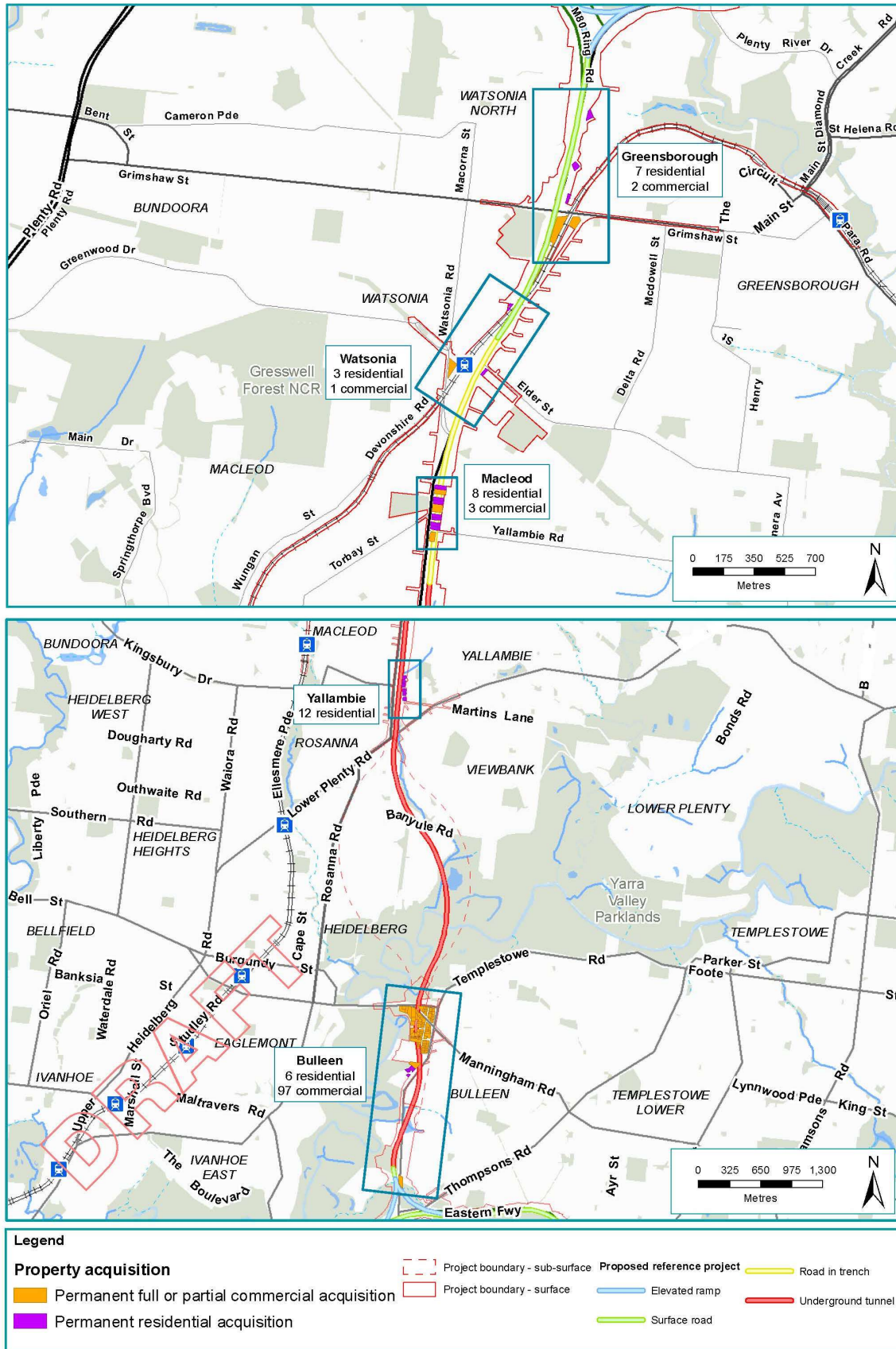


Figure 3-1: Proposed permanent residential and commercial acquisition

3.4 Residential Amenity

3.4.1 Construction

The construction of the Project would occur over a period of up to seven years and take place within existing residential neighbourhoods and in close proximity to homes. Construction activities would generate noise, dust and vibration as well as additional traffic, involve the use of traffic staging measures which would affect traffic flows, the occupation of open space areas and the building of temporary structures such as acoustic sheds, site establishment compounds and lay down areas.

As identified in the SIA, for the majority of people who live near the Project, construction activity would result in short term and/or intermittent nuisance and at times may make travelling on local roads more difficult. In some locations however, construction activities would result in greater reductions in amenity and/or persist over longer periods, and thus would have greater potential to result in negative social impacts. Figure 3-2 identifies these areas and indicates, reductions in residential amenity expected near the Northern Tunnel Boring Machine (TBM) launch site would have the greatest potential to result in negative social impacts during construction. Other areas where changes to amenity have considerable potential to result in negative social impacts include those near the Southern TBM launch site, the M80 interchange and Eastern Freeway interchange and various bridge demolition sites.

Two options for the location of the launch site for the TBM are being considered, the Northern and Southern Launch Sites (see Figure 3-2). Ultimately, only one of these locations would be used. At the selected launch site, works to establish the site would be undertaken and the site would be the location for collection and disposal of spoil created by the tunnelling process.

Northern TBM launch site and trench

Cut and cover tunnelling and open cut trenching construction methods would be used from Lower Plenty Road to Watsonia Station. Also in this section of the alignment, a large construction compound would be established which would contain the Tunnel Boring Machine (TBM) launch site and supporting facilities (if the northern launch option is used). The compound would extend from Lower Plenty Road northward to Blamey Road. Compounds would also be located on Winsor Reserve and Gabonia Reserve for laydown areas, including car parking for the construction workforce. Figure 3-3 shows the relationship between the proposed construction areas and methods and adjoining residential areas and community facilities. Construction activity in this area would affect the amenity of adjacent residential areas in multiple ways, for up to seven years.

- Works associated with preparing the TBM launch site and excavation of the trench would generate noise which would be audible in adjoining areas during the day. During the noisiest stage of construction (lasting up to 18 months), as many as 73 residential dwellings would be exposed to significant noise increases and noise would be perceptible throughout adjoining

areas. Approximately three dwellings would be 'highly noise affected', while the TBM launch site is being prepared.

- Tunnelling activity would start at the TBM launch site and last for up to two years. This activity would generate large volumes of spoil which would be temporarily stored in a purpose built spoil shed. The shed is expected to be a large bulky structure which would be clearly visible from adjoining neighbourhoods. Each minute, one truck removing spoil would leave the site and one enter the site (that is, 120 movements per hour) via Greensborough Road and there is potential for the intermittent release of dust and diesel fumes into adjoining residential areas.
- Section 10.3.2 of the TTIA states that there will be up to 120 trucks an hour accessing the TBM site (two way). That would be 2 trucks a minute or one truck in each direction.
- Borlase Reserve, Winsor Reserve, and Gabonia Reserve would be occupied during construction for site compounds, car parking and laydown areas. These areas support passive recreation for local residents and contribute to neighbourhood character and visual amenity and are highly valued. Winsor Reserve and Gabonia Reserve also support active recreation (discussed in Section 3.5). The occupation of these open spaces would further reduce neighbourhood amenity.

Residents of areas near the potential northern TBM launch site in particular would be affected by multiple construction activities over an extended period, and changes to amenity in this location would have significant implications for residents' lifestyle and wellbeing. For example, at times residents may not feel comfortable using outdoor areas and/or feel the need to close doors and windows, reducing air flow in homes.

The exposure and sensitivity of affected residents would vary depending on their lifestyle (employed people may be at work during the day, for example) and individual tolerance for construction activity, noise, dust, etc. However, the length of time over which exposures would occur will challenge even the most resilient of neighbours. In this context, it is noteworthy that affected residents include those living within the Bapcare Strathalan Community residential aged care facility which abuts the proposed construction compound. Residents of the facility spend a considerable proportion of their time within the facility, and may have aged related sensitivities to construction noise. Also of note, the Greensborough Road Early Learning and Kinder childcare centre is located in this area, which would be occupied during the day by children and childcare workers. Potential impacts for residents of the Bapcare Strathalan Community and users the Greensborough Road Early Learning and Kinder would be managed in accordance with EPR SC4 (see Table 3-5).

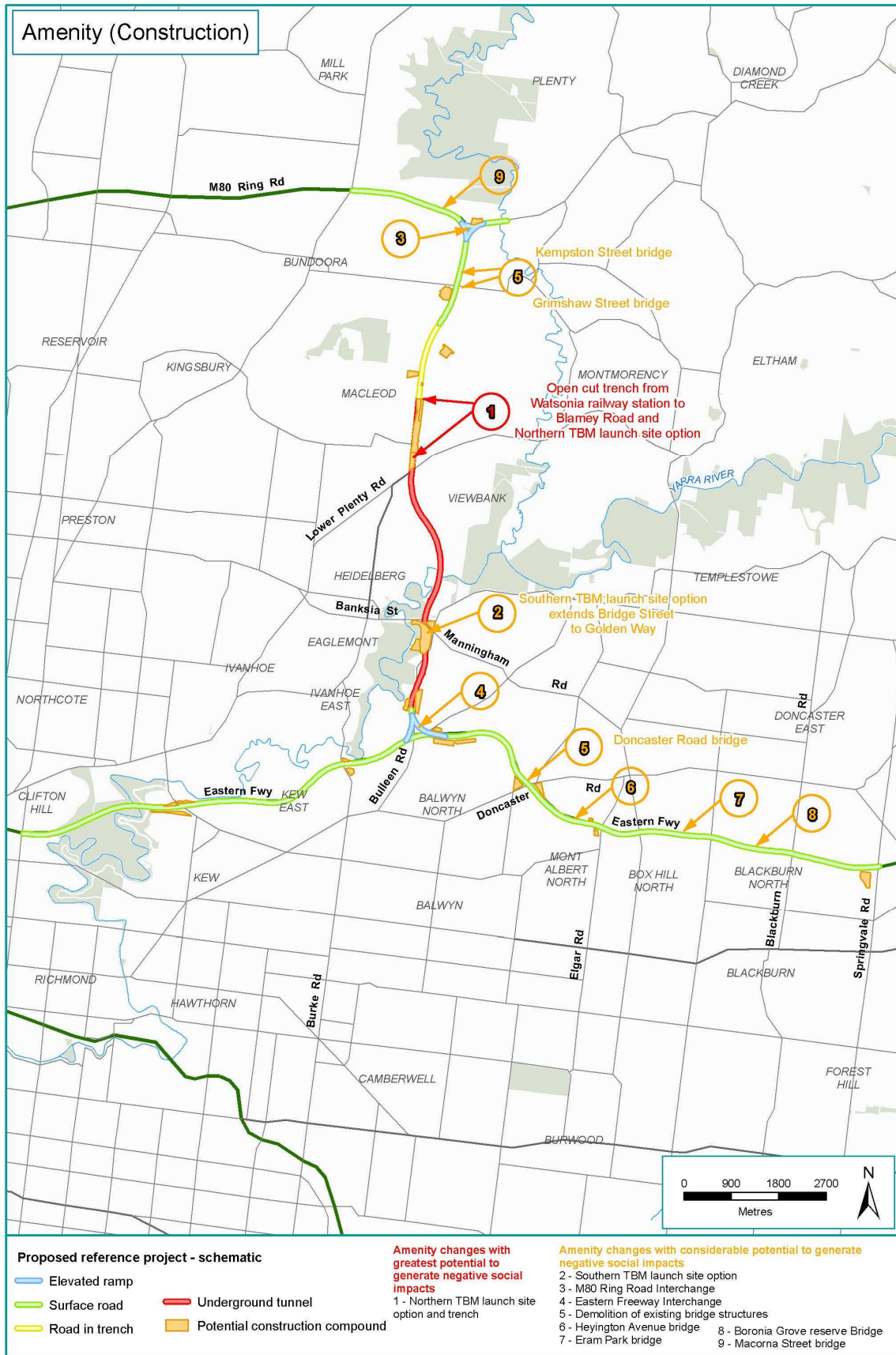


Figure 3-2: Residential Amenity – Construction

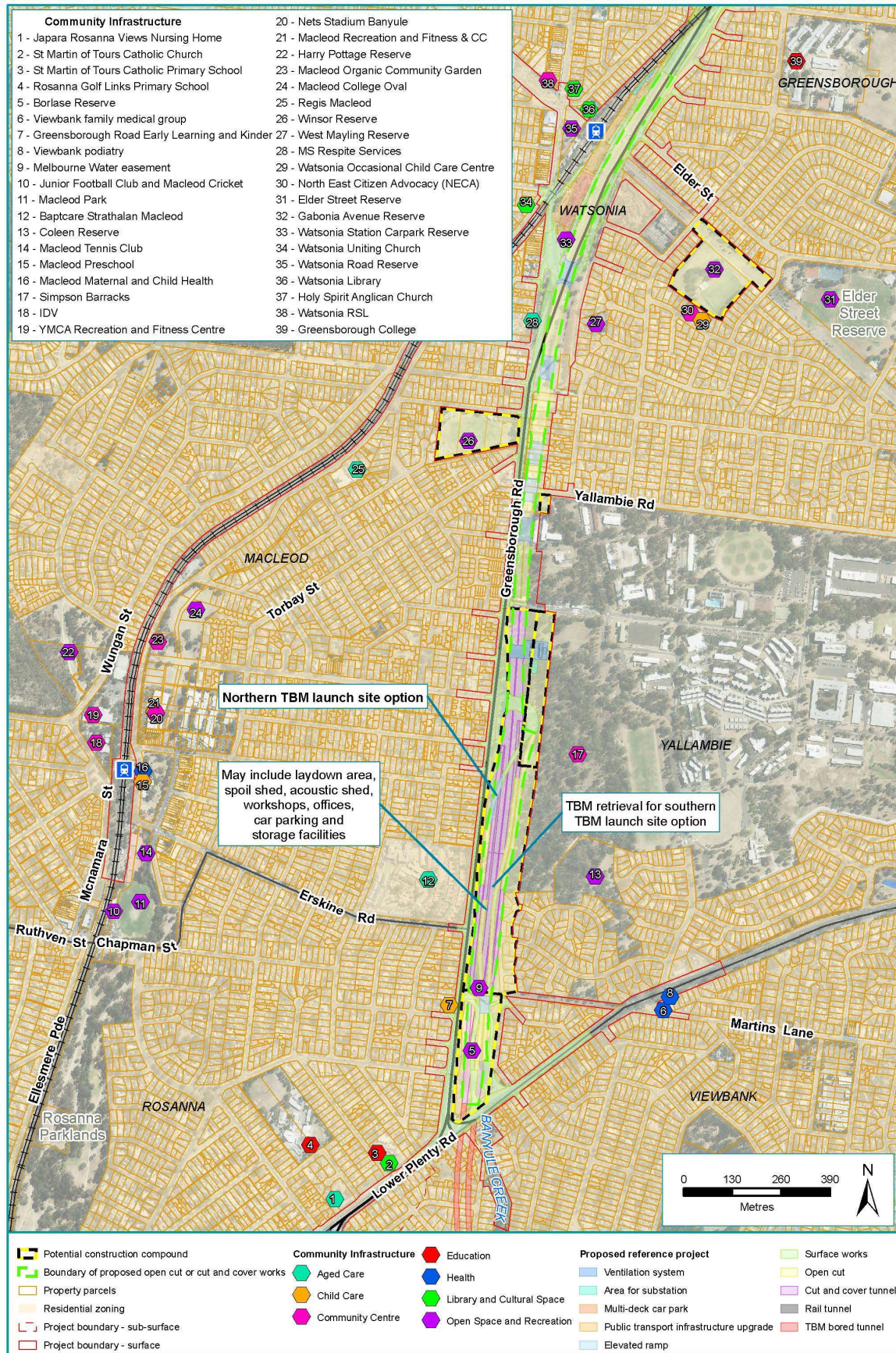


Figure 3-3: Residential Amenity, Northern TBM Launch Site and Trench

Southern TBM launch site

A large construction compound would be established on the western side of Bulleen Road between Bridge Street and Golden Way, occupying land within the Bulleen Industrial Precinct and Banksia Park. This compound may be used to accommodate the Southern TBM launch site. If this approach is used, amenity impacts for nearby residential properties would be intensified, as construction activities associated with establishment of the Southern TBM launch site, construction of acoustic sheds, storage and haulage of spoil etc., would occur at this location (rather than to north of Plenty Road).

Open space areas flank the southern construction compound to the north and west, which limits the number of residential areas that would be subject to amenity impacts. Also, the nearest residential dwellings would be approximately 150 to 250 metres from the proposed Southern TBM launch site (compared with 30 to 50 metres in the north). That is, while the Southern TBM launch site has the potential to impact residential amenity, the increased offset of the site to existing residential areas limits the extent and intensity of impacts.

Figure 3-4 shows the relationship between the relevant construction compound and Southern TBM launch site and adjoining residential areas and community facilities.

Interchanges and Bridge Demolition Sites

At the M80 interchange and Eastern Freeway interchange, elevated ramps and viaducts would be built, and three road bridges (Grimshaw Street, Kempston Street and Doncaster Road) and four pedestrian bridges (Heyinton Avenue, Eram Park, Boronia Avenue and Macorna Street) would be demolished. Particular stages of the construction process at these locations would generate significant noise including during the evening and night time period. As a result, many nearby residences would be exposed to significant noise levels and some nearby dwellings would be 'highly noise affected'. Construction noise at the levels projected has the potential to interfere with use of outdoor and indoor activities as well as sleeping, with consequent impacts on quality of life and wellbeing. It also possible that, due to the intensity of construction activity at these locations that local residential areas may be subject to dust emissions from the construction sites, which would be a source of nuisance.

Construction of the interchanges is expected to last for 12 to 18 months, whereas works associated with bridge demolition and reconstruction are expected to occur over a 3 to 6 month period. Within these periods, construction activity with the potential to significantly reduce amenity would be limited to a number of discrete, shorter periods. For example, the demolition phase of the bridge works is expected to last for a period of up to a week (24 hours per day during this period) and for the remainder of the time (during the reconstruction phase) noise and dust levels would be lower and at a level that would not interfere with indoor activities and sleeping.

To illustrate further, Figures 3-5 and Figure 3-6 shows the relationship between the proposed M80 interchange and Eastern Freeway Interchange and adjoining residential areas and community facilities.

Other Notable Changes to Amenity

Other notable changes to residential amenity would arise as follows:

- Construction compounds would be established at various locations along the length of the alignment. The compounds would occupy existing open space areas, and reduce opportunities for passive recreation for local residents and diminish the visual appeal of the surrounding neighbourhood. The compounds would also be a source of some construction noise. The compound proposed for the Koonung Creek Reserve in particular has been the source of significant concern within the local community.
- Existing noise walls would be demolished in some locations to facilitate road widening and in some instances this may occur before new replacement walls are constructed. As a result, for a short period (weeks) a number of residences along the Eastern Freeway may be exposed to elevated traffic noise from the existing freeway and as well as dust from construction.
- Vibration caused by the TBM may be perceptible for residents of several hundred dwellings below or near the tunnel alignment. However, vibration levels are not expected to be sufficient to cause annoyance, and would affect particular receivers for a short period (2-3 days for up to a week).

Changes to residential amenity resulting from construction activity would be addressed through implementation of EPRs developed as part of Technical report A – Traffic and transport, Technical report B – Air quality, Technical report C – Surface noise and vibration, Technical report D – Tunnel vibration and Technical report H – Landscape and visual.

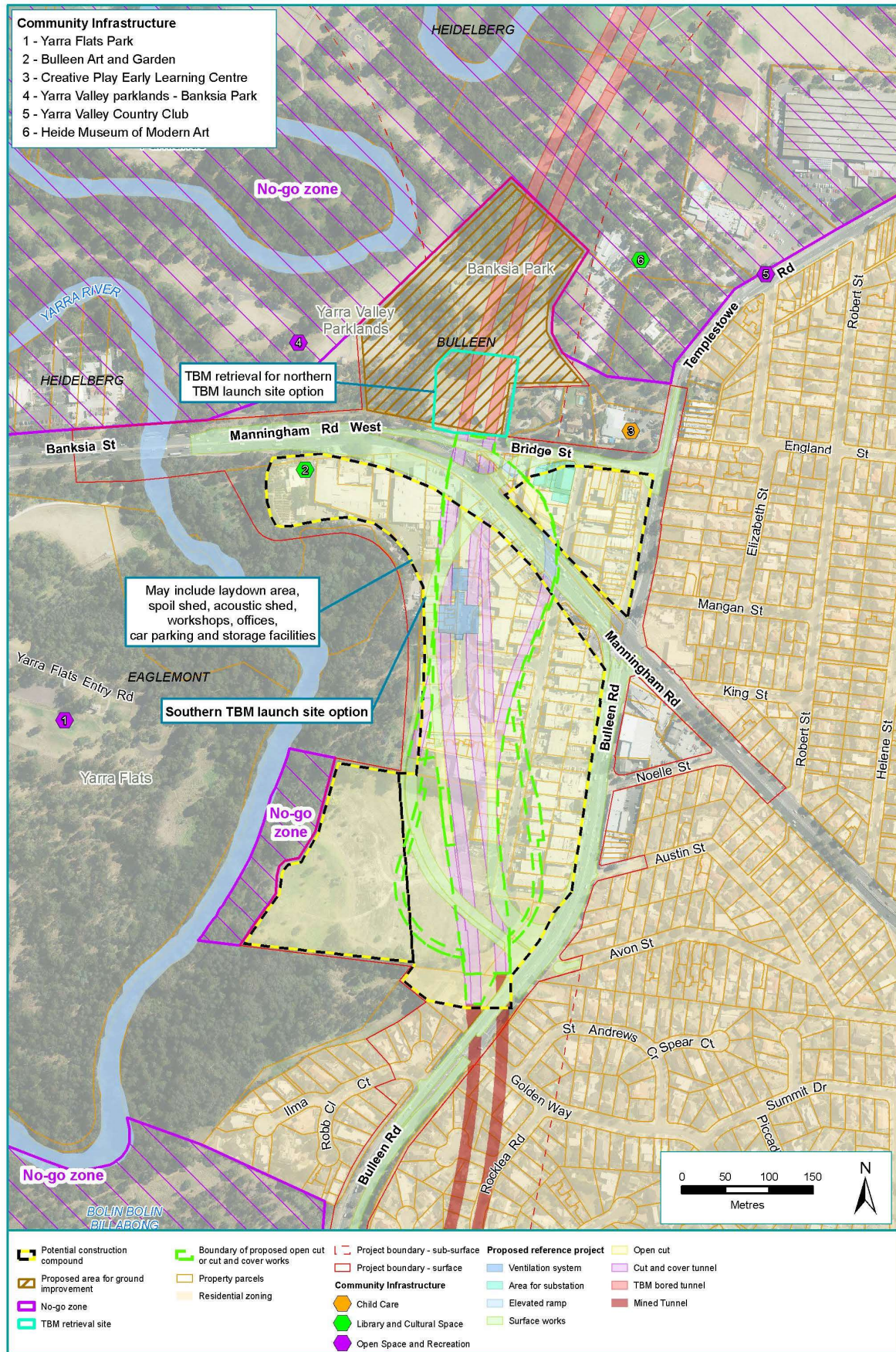


Figure 3-4: Residential Amenity, Southern TBM Launch Site



Figure 3-5 Residential Amenity, M80 Interchange

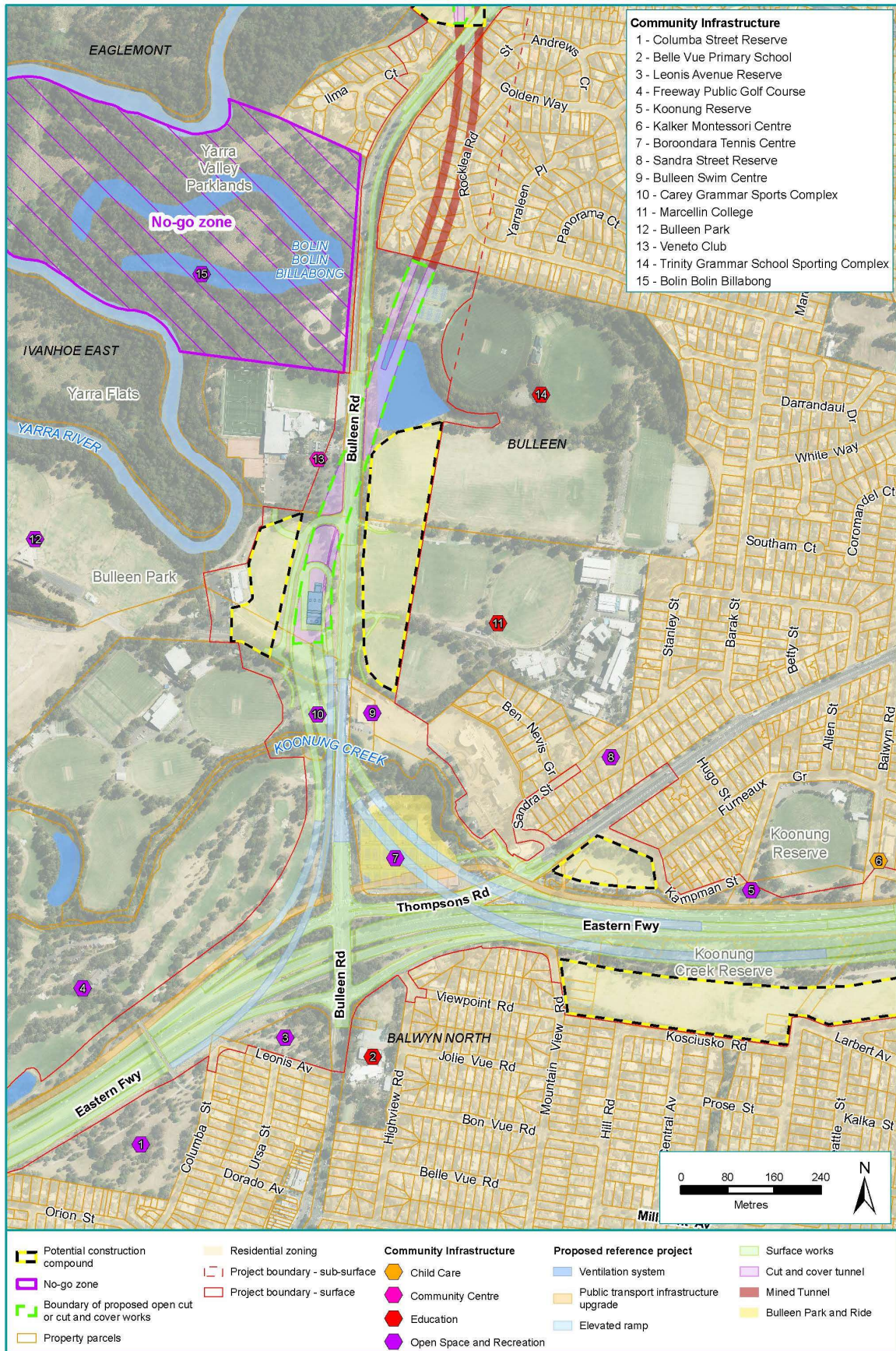


Figure 3-6 Residential Amenity, Eastern Freeway Interchange

3.4.2 Operation

For the majority of people living near the Project, the Project would not impact negatively on their residential amenity. Indeed, as discussed in Section 2.3, the Project would reduce traffic levels on local roads near the Project, and in many locations traffic noise would be reduced by the introduction of infrastructure such as noise walls. However, there are a number of notable exceptions:

- The Project would create new infrastructure such as noise walls, viaducts, elevated road structures, shared use overpasses and lighting and would require the permanent removal of open space. As a consequence, the amenity of some homes and neighbourhoods near the Project could be negatively affected through the introduction of visually dominant road infrastructure, light spill, overlooking from the road corridor and shadowing. The most significant changes would occur in residential areas south of the M80 Ring Road Corridor, south-west of the M80 Ring Road interchange and south of the Eastern Freeway east of the Bulleen interchange, where noise walls are proposed to increase in height or move closer to properties due to the increased width of the road corridor. In these areas, residents may experience reduced enjoyment and sense of pride in their properties, particularly their backyards. Significant visual changes would also occur around the southern portal, where open space and sports fields would be in close proximity to a proposed ventilation structure. However, in this location there is space available for landscaping and the new infrastructure would be located at a distance from residences, and as result the changes have less potential to result in negative social impacts.
- Permanent acquisition of passive open space and removal of vegetation would lower residential amenity in some locations. However, in virtually all cases the land acquired within each open space area is minimal and would not interfere with the use of the space for passive recreation. A notable exception would be the permanent acquisition of land within Borlase Reserve, which would affect the character of the adjoining residential area and displace existing passive recreational activity. However, local residents would have access to local open space areas within 400 metres, and therefore the proposed acquisition would not result in an unacceptable reduction in access to open space for local residents.
- As discussed in Section 3.2, acquisition of residential properties in Greensborough, Yallambie and Bulleen would have implications for the character of some streets and potentially change how particular dwellings are accessed. The amenity of a small number of adjacent dwellings may be severely compromised and further investigation is warranted to ensure a suitable outcome is achieved for the affected dwellings and their occupants.

It is also noteworthy that noise modelling indicates that the reference design would result in approximately 159 residential homes being subject to traffic noise increases which exceed relevant standards (noting the properties have not been assessed for existing acoustic treatment measures). However, the predicted exceedances are typically small and through the detailed design process

and/or through the use of 'at property treatments', noise levels at these dwellings would be reduced to an acceptable standard. The dwellings in question are not clustered in any particular location along the alignment, but are generally very close to the Project.

3.5 Formal Recreation

3.5.1 Introduction

The Project would result in the temporary occupation and permanent acquisition of a number of sports fields and facilities located in three main clusters: the Bulleen Park Area; the Northern Area; and the Southern Area (see Figure 3-6). Details of land to be occupied and/or acquired and the affected sporting groups are outlined below. The EPR that would be used to manage impacts is detailed in Table 3-5 below. Many of the sporting facilities that are impacted do not comply with current standards such as outdated pavilions, female friendly change rooms, and flood lights and these impacted facilities will be reinstated in line with current standards providing quality and functional facilities for the community.

3.5.2 Bulleen Park Area

Within the Bulleen Park Area there is a significant cluster of sports fields and facilities on public and private land (See Figure 3-8 and Table 3-3). Development of the Project would require permanent acquisition of public land occupied by Bulleen Park Oval 1, the Boroondara Tennis Centre, and part of the Freeway Golf Course along Bulleen Road. The affected facilities accommodate sporting clubs with a significant member base and also facilitate casual participation in active recreation.
































































Recognising the potentially significant impact of the Project to participants in the Bulleen Park area, NELP has been working to identify alternate relocation sites to enable the community to continue to participate in their selected activity. Given the permanent impacts in the area, it has been necessary to reconsider the layout of the entire Bulleen Park Area, in consultation with Councils and affected clubs, in order to mitigate the direct impacts of the project. As a result, there will be flow on implications for users of all spaces and facilities in the area. As Table 3-3 shows, seven different options for Bulleen Park have been explored by NELP, each having varying implications for current users, ranging from 'no impact' to 'not viable'. A preferred option has not yet been determined. However, Option 3 is the only option that achieves suitable replacement facilities for all clubs and users as demonstrated by Table 3-3.

Work to date indicates that NELP is able to deliver suitable replacement facilities for all clubs and users in the Bulleen Park Area. Nevertheless, impacts would still arise as affected clubs and users navigate the relocation process and/or construction period. For example, the affected sporting clubs are run by volunteers and the Project would place additional demands on this labour. Moreover, the amenity and accessibility of the Bulleen Park Area would be negatively affected during construction,

potentially detracting from the enjoyment obtained from sporting activity by participants and spectators and the ability of affected clubs to attract and retain members.







NELP is engaging with clubs, councils and state sporting associations to assess and finalise the options. Notwithstanding these difficulties, ultimately the Project would potentially benefit a large number of the affected sporting groups through provision of newly developed facilities which are in keeping with modern provision standards.

Table 3-3: Relocation Options for Users of Public Facilities - Bulleen Park Area

Facility	Club/user	Option						
		1	2	3	4	5	6	7
Veneto Club sporting facilities**	Bulleen Lions Football Club							
Oval 1	Yarra Junior Football League, Marcellin Old Collegians FC							
Oval 2	Bulleen Templestowe Junior FC, Yarraleen CC							
Oval 3	Bulleen Templestowe Junior FC, Yarraleen CC							
Soccer fields x 2 Senior sized	Templestowe United Football Club, Bulleen Lions FC							
Aero-modellers field	Doncaster Aeromodellers Club							
Freeway Public Golf Course	Camberwell Golf Club, Harp Golf Club, casual							
Boroondara Tennis Centre	Public facility, social, tournaments, casual							
Archery Field	Yarra Bowmen Archery Club							

**Sports fields at Veneto Club may be upgraded to synthetic pitch to accommodate increased usage.

Key

Impact	
No impact	
Relocation within Bulleen Park Area to new purpose built facilities	
Relocation to an alternative site to new purpose built facility	
Retained on site with reduction in facilities within acceptable range	
Retained on site but with unacceptable outcome	
Not viable	

All options identified in Table 3-3 are based on the reference design and are subject to change. The Project would also require acquisition of land occupied by private recreational facilities:

- Permanent acquisition of the Bulleen Swim Centre site (a private business that would be acquired for the project), displacing this facility.
- Permanent partial acquisition of land within the Carey Grammar Sporting Complex currently occupied by multi-use playing courts (netball/tennis courts).
- Temporary occupation of land within Marcellin College grounds occupied by playing fields.
- Temporary occupation of land within Trinity Grammar currently occupied by playing fields and tennis courts.

The relocation options outlined in Table 3-3 exclude relocation options for the private schools: Trinity College, Marcellin College and Carey Grammar. Separate discussions are underway with the private schools regarding options to address the impact on their respective facilities and needs.

Notwithstanding, the Project may interrupt the activities that these facilities support, potentially inconveniencing those who rely on them.

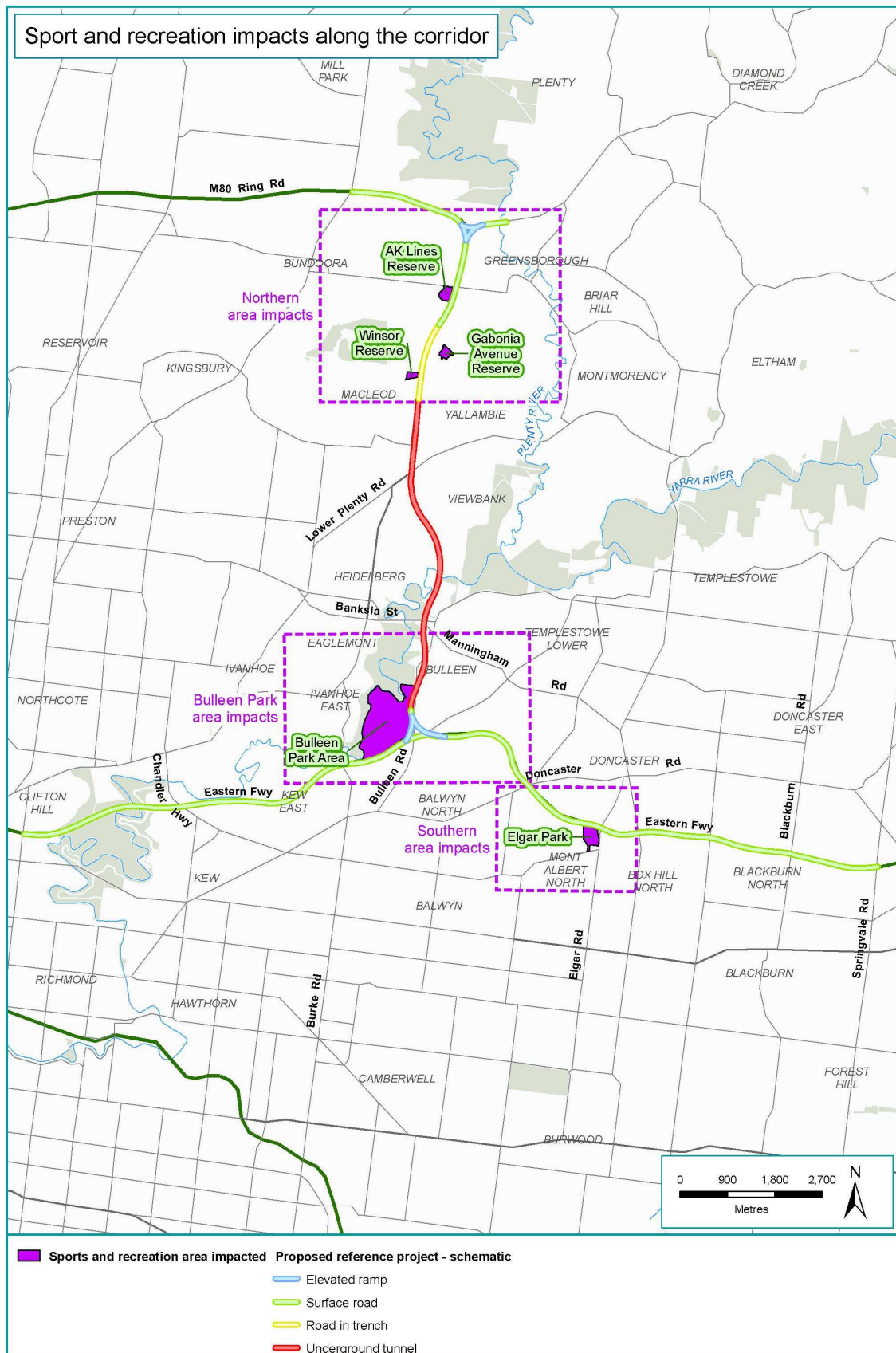


Figure 3-7: Sport and Recreation Impacts along the corridor

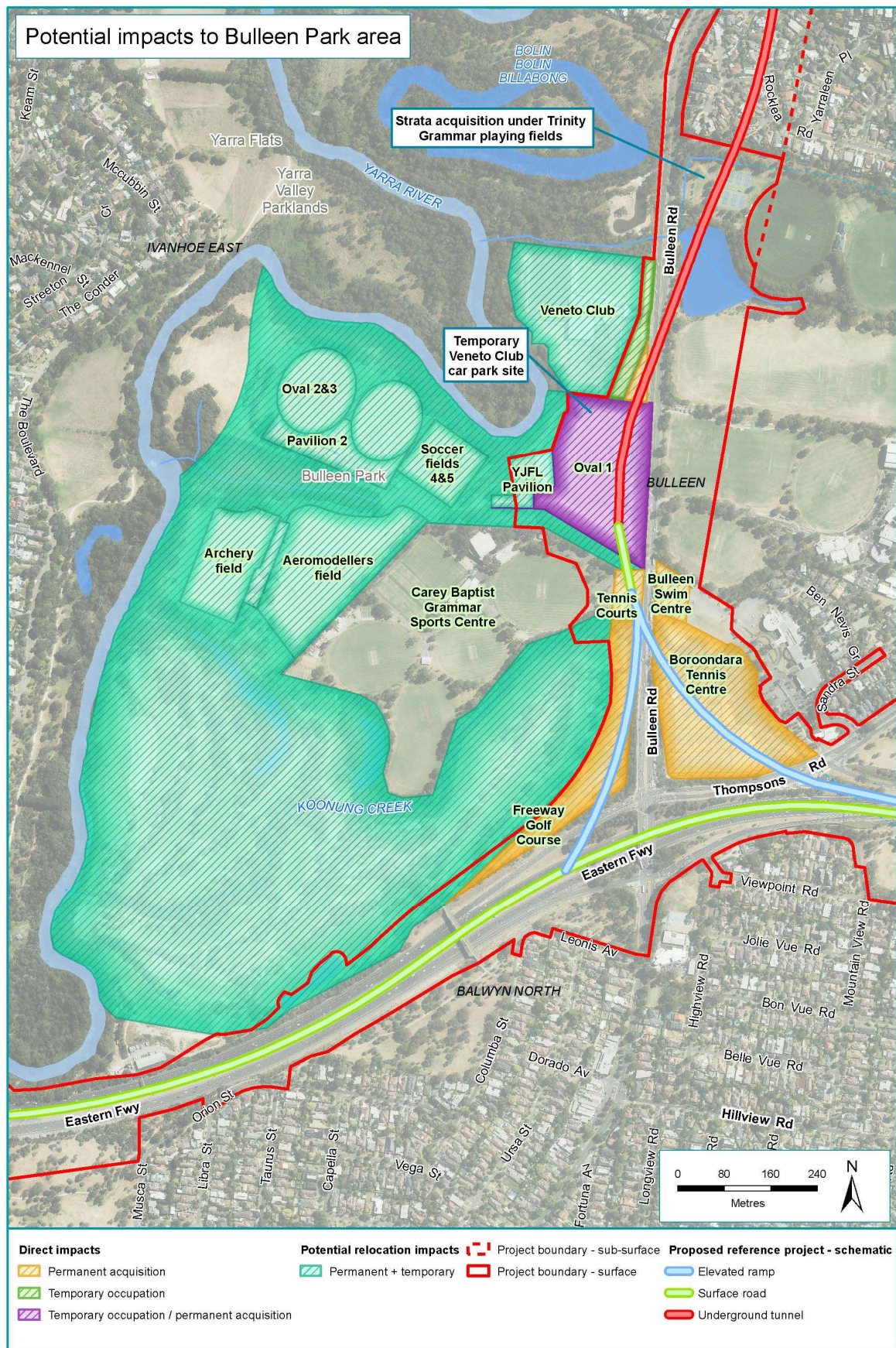


Figure 3-8: Potential Impacts to the Bulleen Park Area

3.6 Northern and Southern Area

Development of the Project would require temporary occupation and permanent acquisition of public land within the Northern and Southern Areas, which would temporarily displace sporting clubs and organisations for an extended period (up to 6 years) (see Figures 3-9 to 3-12).

As with the Bulleen Park Area, the affected facilities accommodate sporting clubs with a significant member base. To ensure the ongoing functioning of these sporting clubs NELP has been working to identify alternate relocation sites during the construction phase of the Project. A number of potential relocation sites have been identified and are currently under consideration. NELP is engaging with clubs, councils and state sporting associations to assess and finalise the options.

As discussed above in the context of the Bulleen Park Area, the affected sporting clubs are run by volunteers and the Project would place additional demands on this labour and relocation of club activity may present challenges for the affected clubs in attracting and retaining members.

Table 3-4: Relocation Options for Users of Public Facilities – Northern and Southern Areas

Area	Impacted site	Club	Proposed temporary relocation site
Northern	AK Lines Reserve	Plenty Valley CC	Binnack Park, Watsonia North
		St Mary's Junior FC	Greensborough Secondary College, Greensborough
		Watsonia Sporting Club (football)	Binnack Park, Watsonia North
	Gabonia Ave Reserve	Watsonia Heights FC (soccer)	Greensborough Secondary College, Greensborough
	Winsor Reserve	Macleod Junior FC (competition)	De Winton Park, Rosanna
		Macleod Junior FC (training)	Greensborough Secondary College
		Macleod CC	Greensborough Secondary College
Southern	Elgar Park Nth West Oval	Mont Albert Cricket Club	Wilsons Reserve, Doncaster
			Springfield Reserve, Box Hill North
	Elgar Park Nth East Oval	Mont Albert Junior CC	Bennetswood Reserve, Burwood

All options identified in Table 3-4 are based on the reference design and are subject to change.

The EPR that would be used to manage social impacts arising due to the displacement of formal recreation facilities is outlined in Table 3.5- below.

Table 3-5: Environmental Performance Requirement: SC4 Minimise impacts on sporting, recreation and other facilities.

Where recreation facilities are displaced by the construction or operation of the project, work in collaboration with facility operators, local Councils and relevant State authorities to identify relocation opportunities with the objective of accommodating displaced facilities and maintaining the continuity of those recreational activities, where practicable.

Where construction or operation activities directly impact on community infrastructure facilities such as schools, child care centres, and aged care centres, consultation must occur with facility operators and user groups to understand and, where appropriate, implement any practical measures can be taken to avoid or minimise impacts.



Figure 3-9: Potential Impacts to AK Lines Reserve



Figure 3-10: Potential Impacts to Gabonia Reserve



Figure 3-11 Potential Impacts to Winsor Reserve



Figure 3-12 Potential Impacts to Elgar Park

4 Concluding Remarks

The Project has the potential to generate significant positive social impacts by increasing time available for socially beneficial activities, improving access to jobs, services, education and other social opportunities and reducing stress associated with commuting on an unreliable network. Furthermore, a number of sporting facilities that are impacted will be reinstated in line with current standards providing quality and functional facilities for the community. In addition, the temporary relocation of these sporting clubs in the interim would result in upgraded facilities at both the temporary site and the re-instated permanent site. The positive impacts generated by the Project would be experienced over a wide area, by large numbers of people and for an extended period (decades).

The Project would also result in a number of significant negative impacts, particularly during the construction phase. These impacts would be experienced within discreet sections of the communities which live, work and recreate near the Project.

A number of EPRs have been devised to minimise the Project's potential negative social impacts. Efforts to minimise all identified potential social impacts under the mandate of the EPRs, will be important to ensure that impacts are kept to a minimum. A particular focus on impacts arising due to acquisition of residential and commercial property, the relocation of formal recreation facilities (where significant work has already been undertaken) and reductions in residential amenity near the northern TBM launch site, would be appropriate.