



North East Link – Preliminary Issues and Opportunities



Interpreter service

9840 9355

普通话 | 廣東話 | Ελληνικά

Italiano | عربي | فارسی



TABLE OF CONTENTS

NORTH EAST LINK – PRELIMINARY ISSUES AND OPPORTUNITIES	3
1. Executive Summary	4
1.1. Overview	4
1.2. Summary of Recommendations	4
2. Principle Objectives	6
3. Road Infrastructure	7
3.1. Templestowe Road Upgrade	7
3.2. Bulleen Road Impacts	8
3.3. Thompsons Road, Bulleen	8
4. Public Transport	9
4.1. Doncaster Busway	9
4.2. Bus Network Enhancements	10
4.2.1. Bus Rapid Transit (BRT)	10
4.2.2. Doncaster Area Rapid Transit (DART) Network	11
4.2.3. Other local bus network improvements	12
4.3. Doncaster Park & Ride	12
4.4. Doncaster Rail	13
5. Active Transport	14
5.1. Proposed North-South Walking and Cycling Path (Bulleen)	14
5.2. Walking and Cycling Opportunities	14
6. Bulleen / Banksia Industrial Precinct	16
7. Recreation and Open Space	17
7.1. Bulleen Park	17
7.2. Koonung Creek Linear Park (Eastern Freeway Corridor)	17
7.2.1. General areas to be preserved:	18
7.2.2. Specific areas along the corridor:	18
7.2.3. General matters for consideration:	19
7.3. Other Specific Sites of Significance	19
8. Public Art & Community Facilities	21
8.1. City ‘Gateway’ Entrances	21
8.2. Impact to Existing Gateway Sculptures	21
8.3. Heide Museum of Modern Art	21

9. Water Management	23
9.1. Drought-proofing the Bulleen Flats	23
9.2. Flood Mitigation along the Koonung Creek Corridor	23
9.3. Working Effectively with other Authorities	23
10. Environment and General Amenity	24
10.1. Environmental Considerations	24
10.2. Noise Impacts	24
10.3. Eastern Freeway	25
Appendix A – Map Location of Issues and Opportunities	26

NORTH EAST LINK – PRELIMINARY ISSUES AND OPPORTUNITIES

Manningham Council – June 2018

1. Executive Summary

1.1. Overview

The following document outlines Manningham Council's current identified issues and opportunities in relation to the proposed North East Link project. It is sought that the following information is considered by the North East Link Authority (NELA) in its ongoing planning, design and technical assessment of the project, and project impact.

The new freeway and expansion of the Eastern Freeway will physically impact the City of Manningham. It is therefore expected that the planning and design of the project can incorporate to consider a number of improvements in the following spaces:

- the overall road network and infrastructure;
- public transport;
- walking and cycling networks;
- recreation and open space;
- public art;
- water management; and
- environment and general amenity.

The outline of the following issues and development of opportunities is based on the preliminary information received to date from NELA, including technical information presented to Council officers at regular fortnightly meetings, presentations to Council by NELA's CEO, Duncan Elliott, information provided in the recent release of the *'Early Design Schematics and Artists Impressions (April 2018)'* and *'Walking and Cycling Early Concepts Maps (April 2018)'* and matters considered in the urban design workshops held between Council, NELA and GHD on 15 May and 4 June 2018.

The following report was prepared prior to the release of the *North East Link Project Business Case (May 2018)*. Therefore, this report does not take into consideration the project proposal and details contained within the Business Case.

Notwithstanding the issues and opportunities that are outlined in this document, it is expected that environmental and planning impacts of the project would be further assessed and mitigated through the Environment Effects Statement (EES) process that is currently being undertaken by the Department of Environment, Land, Water and Planning (DELWP).

1.2. Summary of Recommendations

Based on the preliminary information provided on the proposed North East Link (NEL) project, the following recommendations to the North East Link Authority (NELA) are provided:

1. The upgrade of Templestowe Road (including an off-road shared path) should be included as part of the NEL project.
2. That NELA work closely with Council to improve Bulleen Road, including local access, safety and pedestrian and cycling connectivity.
3. Enhance Thompsons Road in Bulleen to create a 'gateway boulevard', support a safer pedestrian environment and cater for public transport.

4. That a Bus Rapid Transit (BRT) service between the CBD and Manningham is incorporated as part of the Doncaster Busway proposal.
5. Ensure that public transport infrastructure and service improvements to the Doncaster Area Rapid Transit (DART) are provided.
6. Provide a number of improvements to the local bus network to support public transport connections between the City of Manningham and the La Trobe National Employment and Innovation Cluster.
7. Develop the existing Doncaster Park & Ride site to create a mixed-use Transit-Oriented-Development (TOD).
8. That a corridor along the Eastern Freeway is preserved for a future heavy rail link to Doncaster (or that the Doncaster Busway is designed to allow for future transition to heavy rail).
9. To deliver a number of walking and cycling improvements including a new shared-path bridge across the Yarra River between Bulleen and Heidelberg and safer pedestrian crossings in various locations.
10. That NELA:
 - a. seeks to ensure a well-balanced outcome for the businesses affected in the Bulleen / Banksia Industrial Precinct, so as to result in no nett loss to the business community and employment opportunities within Manningham; and
 - b. work constructively with Council to identify suitable future (employment-focused) land uses at the current Bulleen / Banksia industrial precinct (to maintain employment opportunities within Manningham).
11. Preserve the operation of Bulleen Park for public recreation activities, and identify other suitable sites to locate impacted facilities, such as the Yarra Junior Football League football oval (Bulleen Park Oval 1).
12. Enhance the Koonung Creek Linear Park and associated trails, including a safe crossing point at Doncaster Road and maintain the existing natural landscape environment.
13. Minimise or mitigate impact to several sites of (cultural, recreational or community) significance throughout the municipality.
14. Provide prominent public art at key 'gateway' entrances to Manningham.
15. Enhance access and promote increased visitation to the Heide Museum of Modern Art.
16. That NELA work with Council during the design phase to identify effective and sustainable water management measures in Bulleen Flats and Koonung Creek corridors.
17. Ensure that the project provides an overall environmental net-benefit, by adhering to DELWP's 'avoid, minimise, offset' approach and providing to support roadside planting, the urban forest and offsetting vegetation loss locally within the City of Manningham.
18. Address the potential impacts to the community as a result of traffic noise.
19. Ensure that no road tolls are introduced to the Eastern Freeway.

The above recommendations would require NELA to continue to work in collaboration with Council to ensure a suitable outcome for the Manningham community and its visitors.

A map illustrating the location of all issues and opportunities identified in this report, is contained as Appendix A.

2. Principle Objectives

At the 26 September 2017 Manningham Council meeting, Council resolved to support the North East Link (missing freeway) proposal in principle. However, Council remained to not support the selected 'Option A' route through Bulleen, until detailed information is provided to Council, so as to further understand the impact and implications of the proposal. As such, Council is keen to work closely with NELA to further understand the social, physical and economic impact and implications of the new freeway.

Notwithstanding the above, Council resolved to advocate to NELA that the following key principles are achieved:

- That the Link should avoid socially and physically dividing communities;
- To improve local connectivity and access to jobs and social services;
- To preserve along the Eastern Freeway for public transport purposes both the existing median reservation from Hoddle Street to Bulleen Road, and an additional alignment from Bulleen Road to Doncaster Road;
- To maintain general amenity and minimise disturbance to existing residential and environmentally sensitive areas;
- To provide complimentary projects that promote and facilitate walking, cycling and public transport uptake;
- To ensure there is no net-loss of community recreation or sporting facilities during and after construction, by ensuring that NELA constructs at its cost, equivalent replacement facilities within Manningham prior to the closure of any facilities;
- To ensure that any Council infrastructure damaged as a result of construction or ancillary works is repaired or replaced at NELA expense;
- To ensure that no tolls are applied to any existing freeway, existing road or new arterial road;
- To ensure that, should NELA seek to acquire any part of any property, then they are required to offer to acquire the entire property at the full market value; and
- To ensure that , should NELA seek to acquire commercial property, that any business operating on the property is reimbursed for all and any loss of income and is provided with full assistance to relocate in a suitable location with emphasis on remaining in a location within Manningham.

We trust that these principles are aligned with NELA's Project Objectives and Guiding Principles.

3. Road Infrastructure

The proposed NEL has the potential to significantly alter the transport network in Manningham and the wider north east region of Melbourne. The proposal may result in a redistribution of traffic, specifically along Templestowe and Bulleen Roads, potentially requiring an upgrade of these roads to cater for future traffic demand.

3.1. Templestowe Road Upgrade

Recommendation 1:

It is recommended that an upgrade of Templestowe Road should be delivered as part of the NEL project. This should include an associated off-road shared path alongside the road corridor.

This corridor will serve as a key route to the Manningham Road interchange. It is reasonable to expect that the proposed freeway/tunnel interchange at Manningham and Bulleen Roads will generate traffic demand along Templestowe Road, as it will be a major attractor for motorists to access the NEL at Bulleen. Templestowe Road also serves as part of the Yarra Scenic Drive to the Yarra Ranges.

In addition to the above, Templestowe Road could also serve as a rat-run for motorists travelling to or from Melbourne's north-east. The current design of the Lower Plenty Road interchange in Rosanna, would require motorists to travel one kilometer north of Lower Plenty Road to Strathallan Road so as to enter the NEL tunnel to head southbound via the NEL tunnel. Coupled with the toll-fee for the tunnel, it could be reasonably assumed that motorists travelling from the Eltham, Research or North Warrandyte areas, may opt to access the NEL at the Manningham Road interchange by detouring via Fitzsimons Lane / Foote Street and Templestowe Road – generating increased traffic demand of these routes.

To date, Council has not been provided any detailed traffic modelling projections for Templestowe Road. However, it is considered reasonable to assume that traffic on this route will increase from the current 13,300 vpd (VicRoads Traffic Volume Data, 2017) once the NEL is operational.

Council would request that an upgrade of Templestowe Road should include:

1. To incorporate, fund and deliver the road upgrade as part of the NEL project;
2. Improve motorist safety by formalizing the road with kerb and channel;
3. Accommodate regular bus services by providing bus stops, bus shelters and safe pedestrian crossing points (refuge islands) between bus stops;
4. Improve access to the Heide Museum of Modern Art by providing pedestrian operated signals at this location and improved conditions for motorists to safely enter the property;
5. Provide pedestrian operated signals on Foote Street, Templestowe (at McLachlan Street) as part of the Ruffey Creek Linear Park trail (given the expected increase in vehicle traffic along this corridor);
6. Provide a dedicated off-road shared pedestrian / cycling path (~3 kilometres in length) between Bridge Street and Thompsons Road; and
7. Signalise the intersection with Bridge Street.

It should be noted that the owners of the existing Yarra Valley Country Club, located at 9-15 Templestowe Road, have expressed interest in redeveloping the site as a residential development. This proposal may further necessitate the need for the improvements outlined above.

3.2. Bulleen Road Impacts

Recommendation 2:

It is recommended that NELA continue to consult and work in collaboration with Council to ensure the best outcome for Bulleen Road, to maintain or improve access to the local road network and adjoining land uses and strengthen links and connectivity across Bulleen Road for pedestrians and cyclists.

The demand and purpose of the existing Bulleen Road may change once the NEL is operational. However, the road will still need to cater to provide local access to adjoining land uses, including residential, community sporting facilities, recreational spaces, community facilities such as the Veneto Club, school grounds and sporting grounds.

3.3. Thompsons Road, Bulleen

Recommendation 3:

Enhance Thompsons Road in Bulleen to create a gateway boulevard, with associated improvements to support public transport, safer pedestrian crossings and overall urban / streetscape design.

Thompsons Road in Bulleen, currently serves as a key arterial link to the Bulleen Road interchange and the Eastern Freeway. In 2016, approximately 15,800 vehicles travel daily on Thompsons Road between Manningham Road and the Eastern Freeway outbound on-ramp. It could be reasonably assumed, that this will increase as proposed North East Link interchange with the Eastern Freeway may attract additional daily demand.

To enhance this corridor, and promote Thompsons Road as a 'gateway' to the City of Manningham, the following improvements should be considered (NOTE: some of these recommendations are already contained within other sections of this report):

1. Provision of a new landscaped center-median boulevard between the Freeway and Manningham Road;
2. Provide two (2) new safe pedestrian crossing points (refuge island or median-break) at Stanley Street / Allen Street and at Millicent Ave / Kathleen Grove;
3. A dedicated bus lane on the southwest-bound approach between Hugo Street and the proposed Bulleen Park & Ride / Doncaster Busway entrance;
4. Provide streetscape improvements (improved landscaping, pedestrian access and lighting) to enhance the Thompsons Heights shopping strip, including a bus shelter at the associated bus stop;
5. Ensure that the Doncaster Busway provides an entrance at Thompsons Road to allow buses to access the local road network directly from the Busway; and
6. Provide a bus shelter at two in-bound / southwest-bound bus stops – at Hugo Street and Balwyn Road.

4. Public Transport

We welcome the proposal to provide a Doncaster Busway as part of the North East Link project. The provision of public transport infrastructure improvements alongside the proposed freeway link is supported, and demonstrates a positive shift towards considering sustainable transport modes as part of the freeway project. To further enhance public transport in the region, and support the objectives of Council's *Making Manningham Mobile (2009)* Integrated Transport Strategy, we provide the following recommendations for consideration:

4.1. Doncaster Busway

Recommendation 4:

It is requested that the Doncaster Busway (including the Bulleen Park & Ride) be designed to operate and function as part of a network-wide Bus Rapid Transit (BRT) system, beyond the defines of the Busway corridor (that is currently contained along the Eastern Freeway between Hoddle Street and Doncaster Road).

To enable the Doncaster Busway to service both a BRT and local buses, the following suggestions should be considered in the design and planning:

1. Grade-separation along the entire length to allow for exclusive use by buses only;
2. Ensure the Busway is a suitable width (at least 12 metres wide) to provide for overtaking / breakdown lanes within the Busway and access for emergency vehicles;
3. Grade-separated access directly to the Doncaster Park & Ride;
4. Provide for seamless transition of buses from the Busway onto Hoddle Street (grade-separated or on-road priority for buses);
5. Ensure that the proposed Bulleen Park & Ride provides for an integrated park & ride and bus interchange facility that supports a BRT-standard network;
6. Provide access to the Busway at Thompsons Road (at the Bulleen Park & Ride), to allow buses to feed into the arterial road network;
7. Reconsider the need for the Busway to terminate into a proposed Victoria Park interchange (particularly if this would require bus passengers to transfer to a train or another bus service);
8. Design for and preserve a future footprint for BRT stations at the Chandler Highway and Burke Road interchanges;
9. Design the Busway so as to allow it to be transitioned to heavy rail in the future (ensure adequate grades and curvatures and sufficient overhead clearance (including for electricity cables) at all overpasses and bridges).

4.2. Bus Network Enhancements

4.2.1. Bus Rapid Transit (BRT)

Recommendation 4.1:

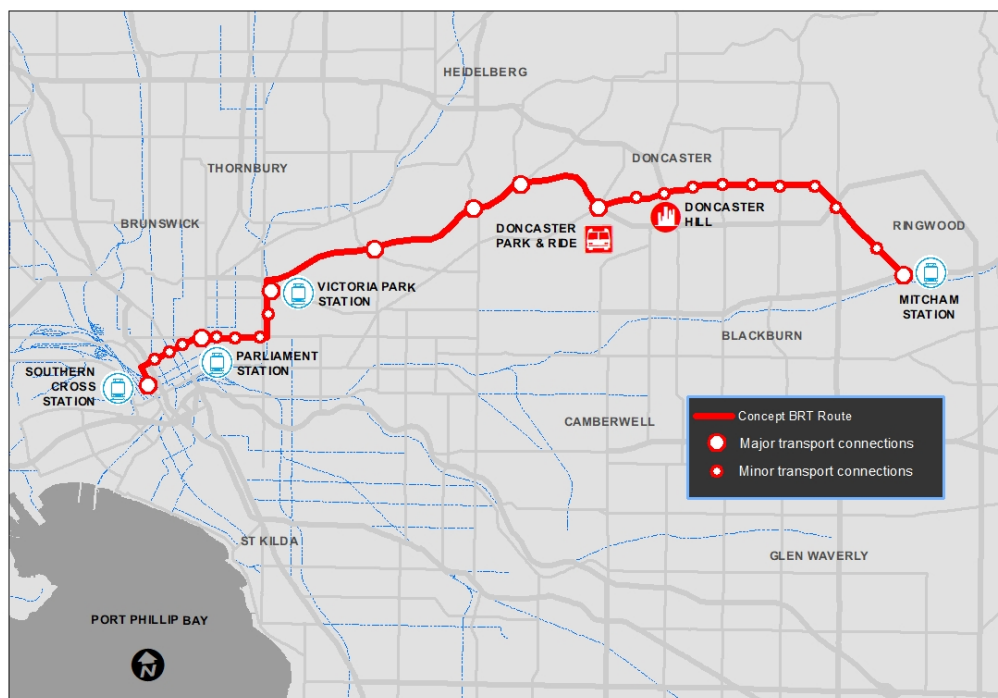
In association with the proposed Doncaster Busway, Council is strongly advocating for the provision of a Bus Rapid Transit (BRT) network between the CBD and the City of Manningham (Doncaster Road corridor to Mitcham).

In recent years, there has been a significant growth in demand for bus and public transport services between Manningham and the CBD, with demand expected to continue to rise. DART buses that travel along the busy Doncaster Road, Eastern Freeway, Hoddle Street, Victoria Parade and Lonsdale Street corridors have experienced overcrowding and saturation, with their reliability compromised by increased traffic congestion on the local road and freeway network.

Council is currently concerned that the proposed Doncaster Busway is being considered as an independent public transport feature, and not in association as an end-to-end public transport improvement to the region. Therefore, we are recommending that the Busway is delivered as part of a network-wide BRT initiative.

BRT is a bus-based public transport system that combines the recognised features of rail with the flexibility and cost advantages of road transport. It is considered that busways can reduce travel time by 0.9-1.25 minutes per kilometre when compared with conventional buses [Transit Capacity and Quality of Service Manual, 2003].

The conversion of the existing 907 DART route (27 kilometres in length) to a BRT standard could provide a dedicated 24/7 busway between the CBD and Manningham. This would prioritise buses along this corridor and increase capacity of buses to cater for the expected growth in patronage. The potential route and suggested stations are illustrated in the figure below:



Some of the suggested key features of a BRT line would include:

- To utilise the proposed Doncaster Busway;
- 'Stations' at each intersecting overpass (Chandler Highway, Burke Road and Bulleen Road);
- Priority for buses along Doncaster Road and Hoddle Street (including continuous bus-only lanes from the end of the Eastern Freeway into the CBD);
- A transition of Lonsdale Street in the CBD as a prioritised BRT corridor;
- Dedicated access on and off the Eastern Freeway (via grade-separated infrastructure) from both Hoddle Street and Doncaster Road;
- Rationalising the spacing of bus stops/stations (to at least 500-800 metres apart) with improved passenger facilities at each station such as bus shelters, seating, lighting, real-time information, footpath access and accessibility and off-board ticketing facilities; and
- Expanded Park & Ride facilities, to include additional parking spaces and commercial / retail development and support future Transit Oriented Development.

A BRT service can support the growing Doncaster Hill Major Activity Centre. Council projects that over the next 20 years, the population of Doncaster Hill will more than quadruple (+372%) from 2,370 residents in 2016, to 11,187 by 2036 – to grow at an annual rate of 10.46%. This growth is supported by an expected 350% increase in the number of dwellings during this time (from 1,232 to 5,505 dwellings).

There is already an existing high demand from Doncaster Hill residents to travel to work by public transport, with 14.3% of residents within the locality travelling by bus (double the wider Manningham average of 7.5%). With walking, cycling and public transport combined – currently 19% of all travel journeys in Doncaster Hill are undertaken by sustainable transport modes. A BRT will further support Council's objective to seek a 30% mode-shift to public transport or other sustainable modes (i.e. cycling, walking) by 2030, as supported by Council's *'Doncaster Hill Mode Shift Plan 2014'*.

The recommendation for a BRT line to Manningham (Doncaster) is supported by Infrastructure Victoria's *'30-Year Infrastructure Strategy'* (recommendation 10.6.4, page 126) as it can carry more people far more quickly between Doncaster and the City at a moderate cost to deliver – thereby adequately meeting the travel needs of the Doncaster corridor in the short to medium term. Further details of the BRT ('Doncaster Bus Improvement') proposal is provided in Infrastructure Victoria's *'Options Book: A supporting Document for Victoria's 30-Year Infrastructure Strategy, December 2016'* [page 240].

4.2.2. Doncaster Area Rapid Transit (DART) Network

Recommendation 5:

That the NEL project accommodate infrastructure improvements to support the DART bus network, particularly where it interacts with the NEL.

Currently, 17,000 people use the four DART routes each weekday (PTV, 2016). We anticipate that the Doncaster Busway will be designed in a manner that enables these DART services to use the Busway.

To achieve this recommendation, we suggest that the following is provided:

1. **Thompsons Road, Bulleen:** provide direct access for DART 905 services from Thompsons Road into the proposed Bulleen Park & Ride site and the Busway, including bus priority (bus lanes) along Thompsons Road between Bulleen and Manningham Roads.
2. **Doncaster Road, Doncaster:** improve bus priority in and out of the Doncaster Park & Ride, for

907 and 908 DART services (along with other local bus services) travelling to Doncaster Hill and onto the Doncaster Busway. This includes bus priority through the intersections of Elgar, Williamsons and Tram Roads in Doncaster Hill.

3. **Eastern Freeway, between Doncaster and Springvale Roads:** ensure that on-road priority is provided for 906 DART services along this section of the freeway, including the ability to exit and re-enter at Middleborough Road to access bus stops at this interchange.
4. **Eastern Freeway at Doncaster Road interchange:** ensure that 906 DART services operating along the freeway (east of Doncaster Road) can enter onto the Doncaster Busway, and potentially into the Doncaster Park & Ride.
5. **Blackburn Road, Doncaster East:** provide bus priority improvements along Blackburn Road between the Eastern Freeway and Doncaster Road.

4.2.3. Other local bus network improvements

Recommendation 6:

That the NEL provide a number of improvements to the local bus network to support public transport connections between the City of Manningham and the La Trobe National Employment and Innovation Cluster.

To support this recommendation, we suggest that the following is provided:

1. **Manningham Road / Banksia Street (Yarra River bridge):** provide bus priority (bus lanes) between Lower Heidelberg Road in Heidelberg and Helene Street in Bulleen (across the bridge and through the Bulleen Road intersection) to support the 903 Orbital SmartBus and any other new services along this corridor. (Note: The 903 is Melbourne's most patronized bus service, with over 5 million annual boardings).
2. **Templestowe Road, Bulleen:** as part of the upgrade of the road, to provide for bus services to enable a preferred future bus service to connect between Templestowe Village and Heidelberg railway station (across the Yarra River bridge). A service along Templestowe Road will also provide a suitable connection to the Heide Museum of Modern Art.

Further information regarding the aforementioned (and all other) bus network improvements, is contained within *Manningham' Bus Network Review 2017* document, available on Council's website.

4.3. Doncaster Park & Ride

The current Doncaster Park & Ride site is owned by VicRoads, and provides over 400 parking spaces for public transport commuters. It is the only major Park & Ride facility in the region, and provides as a major bus interchange – serving seven (7) bus routes, including the 907 and 908 DART SmartBus.

Recommendation 7:

Consider further developing the Doncaster Park & Ride site to create a mixed-use Transit-Oriented-Development (TOD) that would support the proposed Doncaster Busway.

It is considered that the existing Doncaster Park & Ride could be further developed to provide a Transit Oriented Development (TOD) as support operations of the Doncaster Busway. This would support both public transport services and enhanced land use (mixed-use) development opportunities.

This proposal could also consider the incorporation of state government offices at this location to provide local employment opportunities in the region (i.e. a VicRoads or North East Link operator headquarters) or intensify the use of the site as a commercial / retail or possibly a residential precinct.

4.4. Doncaster Rail

Recommendation 8:

Council is strongly advocating that a heavy rail reservation is maintained along the Eastern Freeway corridor to allow for future provision (or transition of the Doncaster Busway) to heavy rail.

It has been long understood, that the median strip of the Eastern Freeway between Hoddle Street and Bulleen Road, along with the land reservation on the north side of the Freeway between Bulleen and Doncaster Roads, is land that would be appropriated for a future heavy rail link to Doncaster. This reservation has been preserved for this purpose, with the construction of the railway acknowledged in the former *Eastern Freeway Lands Act 1971*.

With the proposed widening of the Eastern Freeway to accommodate the NEL, and development of the Doncaster Busway, the median strip will effectively be consumed. Although the Doncaster Busway is being provided, Council want to ensure that the Busway is being designed to:

1. allow it to be transitioned for heavy rail in the future;
2. maintain adequate grades and curvatures, and sufficient overhead clearance (including for electricity cables) at all overpasses and bridges to enable future heavy rail;
3. provide a footprint to allow for future railway stations at Chandler Highway, Burke Road, the proposed Bulleen Park & Ride site and Doncaster Park & Ride.

5. Active Transport

We welcome the many proposals to provide for active transport along the North East Link and Eastern Freeway corridors, particularly the grade-separation of trails. The provision of new and enhanced walking and cycling trails and connections will help encourage further uptake of active travel within the local community, and strengthen connections across many existing physical barriers such as rivers, creeks and busy arterial roads. To further enhance walking and cycling networks in the region, we provide the following recommendations for consideration:

5.1. Proposed North-South Walking and Cycling Path (Bulleen)

Council welcome NELA's proposed walking and cycling path along Bulleen Road between the Eastern Freeway and the Yarra River bridge crossing at Manningham Road. In order to enhance the proposal, we provide the following suggestions:

1. The path through the proposed Bulleen Park & Ride site should be located to allow for seamless and safe connectivity across intersecting road networks and the proposed Park & Ride car park.
2. A safe grade-separated connection should be provided across Manningham Road, east of the Yarra River bridge crossing, as an alternative to the current underpass which is considered unsafe due to steep grades and, sharp bends and susceptibility of the area to flooding.

5.2. Walking and Cycling Opportunities

Recommendation 9:

A number of walking and cycling improvement opportunities should be incorporated within the NEL network, including a new shared-user bridge across the Yarra River between Bulleen and Heidelberg and safe pedestrian crossing points in Bulleen and safer pedestrian crossings in various locations.

To support an enhancement of walking and cycling connections along the NEL corridor, the following improvements should be delivered as part of the project:

1. **Banksia Park, Bulleen:** A new shared path bridge should be provided across the Yarra River. The bridge should provide an east-west connection between Banksia Park in Bulleen and the Main Yarra Trail in Heidelberg (connecting with Dora Street where it aligns with Yarra Street). This will provide for a safe and dedicated river crossing in this region and connect to the NEL's proposed north-south walking and cycling path. Council has worked in collaboration with Banyule City Council to prepare a feasibility study and preferred design of the bridge, and will happily provide this information to NELA for incorporation to the design and planning.
2. **Manningham Road (Yarra River bridge crossing), Bulleen/Heidelberg:** Existing footpaths across the bridge will need to be widened with safety barriers provided to improve pedestrian safety and protect pedestrians from motorists (due to the steep height difference between the footpath kerb and roadway). The footpath in this location is less than 1.2 metres wide (down to 1.0m in some sections). A pedestrian barrier cannot be accommodated without footpath widening.
3. **Eastern Freeway overpass (Bulleen Road):** Council support NELA's proposal for a new pedestrian/cycling bridge across the Eastern Freeway, located east of the Bulleen Road overpass and grade separation of the trail across Bulleen Road, south of the Freeway. This will

provide a critical connection between Bulleen and North Balwyn, and support active travel between local schools.

4. **Safe Crossing Points:**

- a. **Manningham Road, Bulleen:** Pedestrian Operated Signals should be provided across Manningham Road at Robert Street to connect to the pedestrian walkway to Austin Street. This would support a more walkable neighbourhood within Bulleen.
 - b. **High Street, Doncaster:** Safe pedestrian crossing points (refuge islands) should be provided at two (2) separate locations at Stutt Ave / Ayr Street and Winters Way across this 4-lane arterial road.
 - c. **Tram Road, Doncaster:** Pedestrian Operated Signals should be provide at Grand Boulevard (with vehicle detector loops in Grand Boulevard), to improve pedestrian and vehicle access to the Applewood Retirement Village.
5. **Veneto Club, Bulleen Road:** A safe pedestrian crossing point should be provided across Bulleen Road between the Veneto Club and the school sporting grounds to the east.
6. **High Street, Doncaster:** An off-road shared path (~850 metres in length) should be provided along High Street between Braeside Drive and Doncaster Road.

Further walking and cycling improvements specific to the Koonung Creek Trail corridor, are identified and listed in Section 7.2 of this report.

To support the aforementioned active transport opportunities, further details are contained within several of Council's plans and strategies, including the *Manningham Bicycle Strategy 2013*, *Walk Manningham Plan 2011-2020* and *Healthy City Strategy 2017-2021*. The aforementioned recommendations will also support the further development of Manningham's *Principal Pedestrian Network (PPN)* plan.

6. Bulleen / Banksia Industrial Precinct

Recommendations 10a & 10b:

- a) Council seeks to ensure a well-balanced outcome for the businesses affected in the Bulleen / Banksia Industrial Precinct, so as to result in no nett loss to the business community and employment opportunities within Manningham. It is important that these decisions, and their subsequent realisation, are undertaken before any disruption occurs from the works associated with the NEL.
- b) We are keen to constructively work with NELA and other relevant State land authorities, to identify suitable uses and development opportunities at the Bulleen/Banksia Industrial precinct once construction of the NEL is completed. We are keen to ensure that the area is retained as an employment precinct to provide jobs to support the local economy.

It is understood that around 12 hectares of light industry will be lost around the intersection of Manningham and Bulleen Roads, to accommodate an underground interchange at this location. This precinct represents a significant proportion of the little existing industrial-zoned land within Manningham, and its replacement within the municipality is vital. Although it is understood that there may be some potential to incorporate industrial land uses on a portion of the land around the new Manningham Road Interchange in Bulleen (post construction of the NEL), there would still be a significant overall net-loss of jobs in the municipality.

The Bulleen/Banksia industrial precinct currently employs over 1,200 jobs across a range of industry sectors. Early indications are estimating a loss of up to \$600 million to the GDP of Manningham as a result of the impact to this precinct. This is based on economic modelling data conducted by Council via desktop analysis. Further data, through an economic impact assessment will be gathered to understand the full impact.

NELA will need to consult closely with the affected businesses in the Precinct, and to identify other suitable sites either within Manningham or the wider metropolitan region in which to relocate affected businesses.

Future land-uses, built form and landscape surrounding the future Manningham Road Interchange will form a north-eastern gateway to Manningham. While it is understood that some of the land area will be undevelopable, there will be areas that can support new built form. Opportunity exists for the creation of a new business / health / or education precinct with built form wrapping around and over the interchange ramps and portals.

Council is keen to maintain this precinct for employment purposes incorporating future commercial, office or retail uses. This precinct could also be considered to locate a possible North East Link traffic management center / facility, given its central location of the new link road and proximity to the tunnels.

It is imperative that NELA and/or other relevant government departments actively consult with Council to optimize the redevelopment of the area to provide for jobs and employment and support the local economy.

7. Recreation and Open Space

The proposed NEL, and associated widening of the Eastern Freeway, will impact on adjoining land uses. Many of these uses are currently recreational and passive open space, including the prominent Bulleen Park and Koonung Creek Linear Park. The following outlines matters that should be considered, and provides opportunities for improvements to these facilities.

7.1. Bulleen Park

Recommendation 11:

We are recommending that the impacted Bulleen Park football Oval 1, used by the Yarra Junior Football League, is relocated within Bulleen Park to further develop AFL football activities and associated pavilions at this location. In addition, other suitable sites need to be identified to locate any other impacted sporting facility, such as soccer or cricket pitches.

Based on the preliminary information available to date, the NEL roadway will be aligned west of the existing Bulleen Road, with a tunnel portal entrance to be located just south of the Veneto Club property. This will result in the loss of the existing Bulleen Park football oval (oval No. 1), either temporarily during construction, or long term.

The oval is currently the headquarters of the Yarra Junior Football League (YJFL) and is a full-sized premier AFL ground serviced by 100-lux lighting and a high-quality pavilion (opened in 2010). The oval is used exclusively by the YJFL and occasionally by the Bulleen Lions Football (Soccer) Club as a training facility. YJFL is one of the largest clubs in Melbourne, representing 32 teams and has over 400 umpires and 120 female junior teams.

NELA will need to work with all impacted stakeholders (Council, community and sporting clubs) to develop a masterplan for the redevelopment of Bulleen Park and associated facilities.

There is limited ability to reconfigure sporting facilities elsewhere within Bulleen Park due to the proximity of the Yarra River and the presence of indigenous vegetation including large old trees. Bulleen Park also caters to Archery & Aeromodellers clubs (which are located at the rear of Bulleen Park). Access to these facilities and clubs will also need to be protected.

7.2. Koonung Creek Linear Park (Eastern Freeway Corridor)

Recommendation 12:

We are recommending:

1. Overall improvements to the Koonung Trail to enhance walking, cycling and recreation facilities along the entire corridor, particularly on the north side of the Freeway; and
2. That the grade separation of the Koonung Trail across Doncaster Road (north of the Freeway) is included as part of the upgrade of the Eastern Freeway corridor. This will provide a critical missing link along the trail, and promote a safer environment for pedestrians and cyclists.
3. Maintain, and avoid impacting or loss of the natural landscape environment along the corridor (i.e. wetlands, established vegetation and tree canopy and general senses of nature).

Koonung Creek Linear Park is one of Manningham's most significant open spaces. The mostly

Manningham owned Koonung Creek Linear Park on the northern side of the Eastern Freeway between Thompsons and Springvale Roads is nearly 10 kilometres in length.

The Koonung Trail is one of Melbourne's major commuter cycling routes, with the main and secondary trails running variously along each side of the creek and/or freeway. This corridor also contains numerous wetlands. The landscape character is predominantly secluded and natural and this experience is highly valued by local and regional users.

Council is keen to enhance the corridor for passive and active recreation, and recognize the Koonung Creek not as a boundary, but as a central corridor that provides a crucial link between the Cities of Manningham Whitehorse and Boroondara.

Details on the existing and proposed conditions of the corridor are contained in the *Koonung Creek Linear Park Management Plan 2011*, available on Council's website.

7.2.1. General areas to be preserved:

It is expected that the widening of the Eastern Freeway will impact on this corridor. The following are some of the key areas along the Koonung Creek Linear Park corridor that will need to be protected:

- Protection of the Koonung Creek (waterway) and adjacent wetlands.
- Protection of remnant vegetation including riparian and aquatic, and grassed areas which provide habitat and amenity.
- It will be critical to preserve the secluded bushland character of the Linear Park and its trails throughout the upgrade of the Eastern Freeway. A hard or heavily engineered path may achieve connections but would lack many of the open space values currently provided.
- Council is keen to preserve the existing Koonung Trail (3 metre wide commuter trail) where it is located on the north side of the Freeway between the footbridge at Eram Park (Church Street, Doncaster) through to the Eastlink Trail. This is the priority trail to be protected and enhanced in the region.
- The existing minimum widths of the open space area that exists along Estelle Street in Bulleen between the sound wall and Estelle Street should be maintained. This part of Bulleen generally lacks areas of open space, therefore this site provides a crucial public space for local residents.

7.2.2. Specific areas along the corridor:

- **Doncaster Road / Eastern Freeway, Doncaster:** That the grade separation of the Koonung Trail across Doncaster Road (north of the Freeway) is included as part of the upgrade of the Eastern Freeway corridor. This will provide a critical missing link along the trail, and promote a safer environment for pedestrians and cyclists.
- **Katrina Gully Reserve (20 Katrina Street, Doncaster):** Forms part of Koonung Creek Linear Park and provides a much needed green space for this high density area. Provide a sealed pedestrian path to Blossom Court to improve pedestrian connectivity to Birrale Primary School, Doncaster Park & Ride, Westfield Doncaster and the footbridge across the freeway.
- **Estelle Street and Marjorie Close, Bulleen:** Extend the footpaths from both the end of Estelle Street and Marjorie Close to connect with the existing linear trail.
- **Wilsons Road, Doncaster:** Provide a sealed pedestrian path between the linear trail to the existing footpaths on Wilsons Road.
- **Colston Close, Doncaster:** Provide a sealed pedestrian path between the linear trail to Colston Close, to improve access to the Hampshire Road Reserve.

7.2.3. General matters for consideration:

- In some places where the freeway pushes close to residential streets or dwellings, the linear park and trail experience is constrained and at times claustrophobic as the path is funneled between high fences or sheer walls with little or no room for trees or other planting. Council is keen to ensure that this type of treatment does not occur in any new areas.
- In 2005 Council signed an agreement with VicRoads to the exchange of land following the freeway extension. This agreement took many years to reach and implement and Council would hope that any land acquisition/exchange as a result of NEL will not be as protracted.
- Eastern Freeway pedestrian overpasses: Should there be a requirement to redevelop any existing overpasses, it would be expected that the overpasses are reinstated at the current location, or within very close proximity to their current location, and designed to meet current *Disability and Discrimination Act 1992* (DDA) compliancy requirements. Opportunities to incorporate architecturally designed and appealing structures will be welcomed.

7.3. Other Specific Sites of Significance

Recommendation 13:

Minimise or mitigate impact to several sites of (cultural, recreational or community) significance throughout the municipality.

- **39 Bridge Street, Bulleen:** The large River Red Gum at the Caltex Service station is both culturally and environmentally significant as well as being a major local landmark that needs to be protected. This tree is protected by a heritage overlay (HO24) in Council's Planning Scheme. Works in the region should avoid impacting (or loss to) this significant tree.
- **Park Reserve Soccer Facility (17 Park Avenue, Doncaster):** Council is keen to ensure that this facility is not impacted by the freeway widening. Currently there is only 19.5 meters between the edge of the freeway asphalt and the synthetic soccer surface and within this gap is the sound wall, shared path and landscaping. Council has recently invested \$2.5 million to upgrade the facility and provide a brand new synthetic soccer pitch and pavilion (2017). In addition, the local club has invested \$500,000 over the past 10 years.
- **Veneto Club (191 Bulleen Road, Bulleen):** Any impact to the Veneto Club and their car park will directly impact additional demand on Council open space to provide car parking. And any loss of facilities at the Veneto Club, such as soccer, highball and tennis, will place extra pressure on Council facilities to accommodate demand for these uses.
- **Koonung Park Reserve (2-30 Kampman Street, Bulleen):** Council is keen to ensure that this facility is not impacted by the freeway widening. Currently there is 43 meters between the edge of the freeway asphalt and the oval and 26 meters between the freeway asphalt and the cricket nets. The facility is heavily utilized for cricket, football, tennis and as a playground. Council recently upgraded the pavilion (2013) and sports field lighting (2016). In addition, an application for funding for a cricket net training facility is pending.
- **School sporting facilities (Bulleen):** Any loss to private school sporting facilities (Marcelin College, Carey Grammar and Trinity Grammar) will have a direct impact on clubs needing access to council venues. This is compounded by the recent introduction of female AFL programs which has seen an increase in participation at these venues.
- **Boroondara Tennis Centre (150 Bulleen Road, North Balwyn):** This tennis facility which is located within the City of Boroondara, should be considered for relocation within Boroondara. Although, the loss of the tennis courts from this location will have an impact on the 383

Manningham residents who play at this facility. To put this into context, this is 26% of all of Boroondara Tennis Centre's registered participants (1,447) and 11% of all of registered Manningham players (3,417).

- **Greythorn Bowling Club (7 Gregory Court, Doncaster):** This privately owned sports facility provides bowls facilities for Manningham residents. A loss to this facility would impact on other bowls venues within the Cities of Manningham and Boroondara.
- **Boronia Grove Reserve, 105 Leeds Street, Doncaster East:** Generally improve pedestrian trails and footpaths between the Reserve and the surrounding pedestrian network. For further detail regarding works around Boronia Grove, please refer to Map M contained in the *Koonung Creek Linear Park Management Plan 2011*.
- **Bolin Bolin Billabong:** The Billabong was a significant meeting place for the Wurundjeri and the Kulin Nation. There is an opportunity to respectfully recognise this culturally significant site and provide educational and interpretive material via the creation of a Bolin Bolin Cultural Heritage Trail, in collaboration with the Wurundjeri.

8. Public Art & Community Facilities

8.1. City ‘Gateway’ Entrances

Recommendation 14:

High quality public landscape elements, iconic public art and signage should be incorporated along the NEL route and at the main road entrances to the City of Manningham.

The ‘gateways’ to the City of Manningham are located at a number of locations, notably at the three Yarra River crossings in Bulleen, Templestowe and Warrandyte, and at various Eastern Freeway overpasses between Manningham and the Cities of Boroondara and Whitehorse.

The NEL proposes significant change to many entrance points to the City of Manningham. Any changes and impacts to these areas as a result of the new NEL or Eastern Freeway widening works needs to provide high quality, sculptural landscape elements, iconic public art and signage to enhance the gateways and contribute to positive urban design outcomes for the City.

8.2. Impact to Existing Gateway Sculptures

Recommendation 14.1:

NELA would need to protect two key pieces of artwork (the ‘Sentinel’ and ‘Helmet’) that may be affected by the NEL works to ensure the sculptures and their viewing experience are carefully protected and managed.

There are two prominent existing public artworks that will be affected by the NEL works that are part of Council’s Civic Art Collection. These include the Inge King ‘Sentinel’ sculpture located within the Eastern Freeway off-ramp to Doncaster Road, and the ‘Helmet’, located within Banksia Park in Bulleen north of the Bridge Street and Manningham Road intersection.

Council (along with the artists) will need to be consulted as part of any relocation of the public art works to protect these iconic cultural landmarks, should they need to be relocated to accommodate the NEL and Eastern Freeway widening works.

8.3. Heide Museum of Modern Art

Recommendation 15:

That NELA protects and improves access to the Heide MOMA, and enhances its exposure from Manningham Road and the proposed NEL freeway.

The renowned Heide Museum of Modern Art (MOMA) is a prominent tourist attraction in this region, attracting almost 120,000 visitors annually (including 65,000 paid admissions to the galleries). Heide also provides a significant economic contribution to the region, generating over \$5 million to the local economy annually and employing 39 people (plus 250 volunteers).

Heide MOMA is a unique site in Melbourne – combining the legacy and history of its founders (John and Sunday Reed) with the gardens and galleries that today present modern art and sculptures along with

significant indigenous trees and song-lines along the Yarra River. It is unique in that it is an oasis in the middle of suburbia – a resource for people to utilise and enjoy.

As part of the NEL development in the area, we suggest that the following upgrades are incorporated to improve access and promotion of the site:

- Improve the exposure and prominence of the site from Manningham Road.
- Protect or relocate the 'Helmet' sculpture, which is currently located in Banksia Park north of the intersection of Bridge Street and Manningham Road.
- Improve transport access to the site (including a safer vehicle entrance from Templestowe Road), improved pedestrian connectivity to local bus stops and provide for improved cycling connections from Banksia Park, with connections to Heidelberg railway station, along with bicycle facilities at the site.
- Promote the Heide MOMA along the NEL roadway, similar to how the McClelland Gallery in Frankston was promoted as part of the East Link project.

9. Water Management

Recommendation 16:

That NELA work with Council and other stakeholders to identify and provide suitable infrastructure in the Bulleen Flats area and Koonung Creek corridor to support effective and sustainable water management measures.

9.1. Drought-proofing the Bulleen Flats

Sports playing surfaces in the area are currently irrigated with a combination of water extracted from the Yarra River and stormwater running off residential catchments to the east and north of the Trinity Grammar School Sporting Complex. A number of storages (ponds and tanks) and treatment wetlands have been established to treat urban stormwater and provide storage capacity for water extracted from the Yarra River. Currently two schemes exist, one involves Marcellin College and Trinity Grammar to the east of Bulleen Road, while the second involves Manningham Council, Carey Grammar Sports Complex and the Freeway Public Golf Course to the west of Bulleen Road.

Both these schemes are vulnerable in a future climate change scenario, as they currently rely on river water which may not be available in dry summers. The reliability of stormwater yields can be increased by enlarging the catchment and storages.

The Eastern Freeway / NEL interchange alignment may provide an opportunity to access urban runoff that is flowing in the Koonung Creek, thus greatly expanding the supply catchment. Depending on how levels are managed (e.g. ramps) additional storage could be provided. Extending a connection between the east and western irrigation schemes (effectively creating a ring main) would have the potential to drought-proof all the active playing surfaces in the area with an environmentally preferred watering option.

Council's sportsground irrigation and drainage systems are approaching 25 years in age with a typical operational life of somewhere between 20 and 30 years. Where disturbance to the irrigated playing surfaces occurs, the opportunity to replace these systems should be taken.

9.2. Flood Mitigation along the Koonung Creek Corridor

There are a number of other opportunities to collaborate on projects to resolve local flooding issues within the Koonung Creek corridor. Manningham's flood models should inform local flooding hotspots; these may be resolved through a combination of upgraded drainage infrastructure and improved storage capacity. These measures and options should be further explored in the design phase.

Please contact Council's Engineering and Technical Services Unit to obtain extensive Manningham Flood Mapping (2015) data and information.

9.3. Working Effectively with other Authorities

Yarra Valley Water (YVW) have announced Eram Park as their preferred location for a water treatment facility to produce Class A water to supply the Doncaster Hill mandated supply area. We would encourage NELA to work with YVW to develop an integrated proposal that would minimise disruption for the local community and protect local amenity.

10. Environment and General Amenity

10.1. Environmental Considerations

Recommendation 17:

Ensure that the project provides an overall environmental net-benefit, by adhering to DELWP's 'avoid, minimise, offset' approach and providing to support roadside planting, the urban forest and offsetting vegetation loss locally within the City of Manningham.

It is acknowledged that environmental matters in association with the project, will be assessed and determined through the associated Environment Effects Statement (EES) process. However, notwithstanding this, it is prudent of Council to highlight the following key issues and opportunities:

- Consideration to be given to provide roadside planting with large canopy trees where possible;
- With regards to impacting native vegetation, it is important to adhere to the Department of Environment, Land, Water and Planning's (DELWP) Native Vegetation Policy Guidelines, to ensure an 'avoid, minimise, offset' approach is considered in the first instance;
- The project should aim to enhance the urban forest in Manningham and protect habitat corridors;
- Consider locating vegetation offset planting opportunities locally, within the City of Manningham;
- Consider to provide funding for 10-Year land management plan implementation for selected bushland reserves (in locations such as Currawong Bush Park in Warrandyte or 'The 100 Acres' Flora and Fauna Reserve in Park Orchards). Such funding would assist with removal of Woody Weed and provide pest animal control.

To protect the environmental and cultural significance of the Yarra River corridor, DELWP is currently preparing the Cultural River Precinct Structure Plan. The structure plan for the Banyule-Bulleen River Valley (including Bulleen Park and Banyule Flats) aims to guide future land uses and infrastructure investment. The Plan is due to be developed by December 2018. Planning for the North East Link should have consideration of the objectives of this Plan.

10.2. Noise Impacts

Recommendation 18:

Recognise the significant impact to the community as a result of traffic noise, and take appropriate measures to consider suitable noise attenuation, including more appropriately sited sound walls and road surface treatments to reduce noise.

The sound barriers along the project, including along the Eastern Freeway, are to be "state-of-the-art" and best practice in design and form, and are to be constructed so that their extent protects all impacted properties, including those not directly abutting the freeway.

The impact of traffic noise is currently a significant issue to local residents who live along the existing Eastern Freeway and Bulleen Road corridors. Although many of these areas contain sound walls, the noise impacts continue to resonate in the area. It is anticipated that the expanded Eastern Freeway will accommodate an increase in truck and freight vehicles and a significant increase in general traffic. This will lead to further noise impacts to local residents.

10.3. Eastern Freeway

Recommendation 19:

Ensure that no road tolls are introduced to the Eastern Freeway.

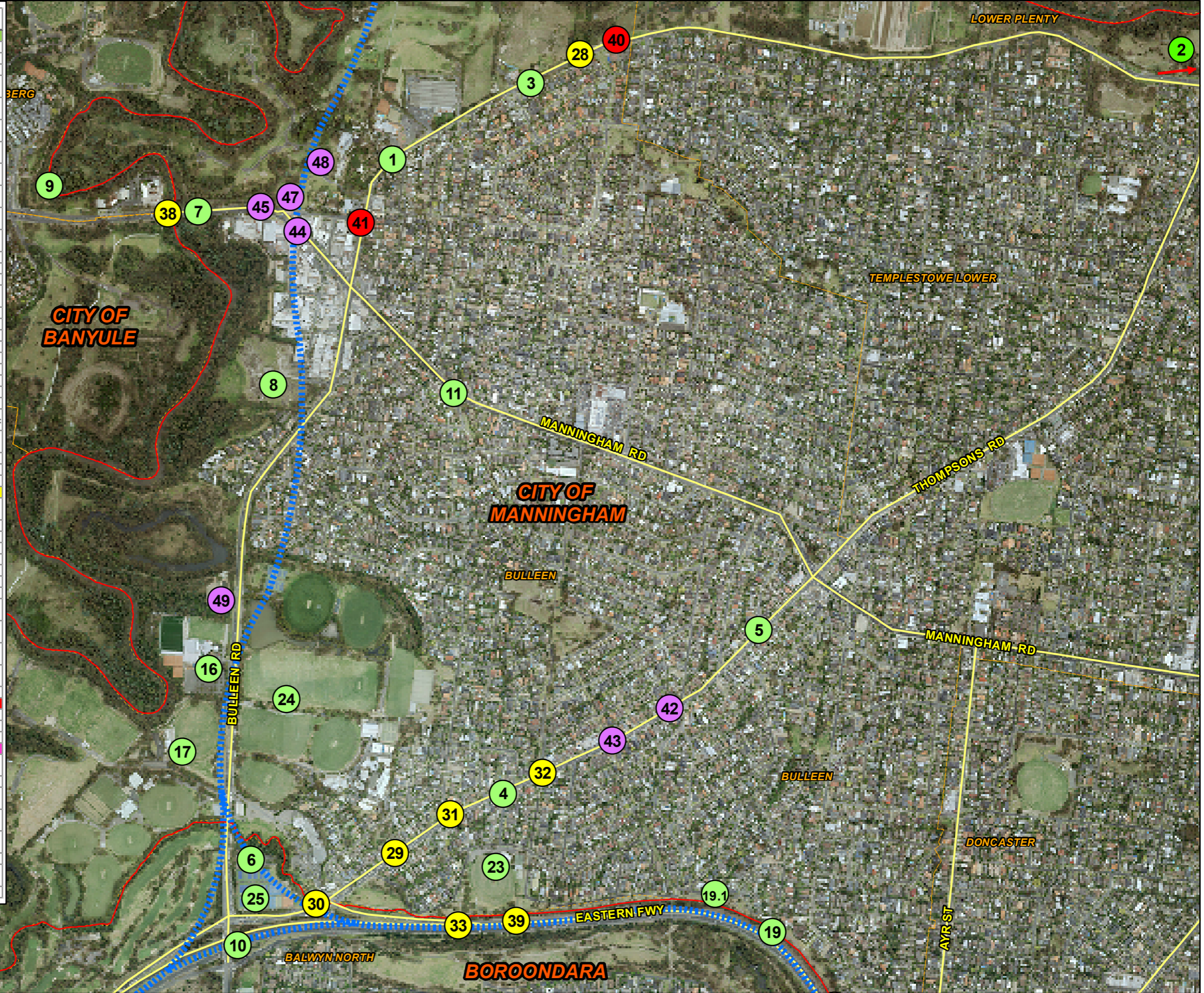
Council is aware of the intended scale of widening proposed along the Eastern Freeway, between Bulleen and Springvale Roads, and will be advocating for the best possible outcomes in relation to noise control, visual impact, shared paths, the Koonung Linear Park and overall amenity.

The scale and standard of noise barriers and landscaping along the existing Eastern Freeway needs to be at least maintained, or preferably improved, with the new freeway, as does the level of protection to abutting residents from noise and amenity impact.

Council will also be advocating for no tolls to be imposed on any traffic lanes, merging or express, along the Eastern Freeway, which should remain free to all users.

Appendix A – Map Location of Issues and Opportunities

Map Ref No.	Location	Opportunity
Walking, Cycling & Recreation		
1	Heide Museum	Pedestrian-operated traffic signals
2	Foote St / McLachlan St, Templestowe	Pedestrian-operated traffic signals
3	Templestowe Road	Off-road shared pedestrian/cycling path
4	Thompsons Rd @ Stanley/Allen St, Bulleen	Safe pedestrian crossing: refuge island
5	Thompsons Rd @ Milllicent Ave/Kathleen Gv, Bulleen	Safe pedestrian crossing: refuge island
6	Proposed Bulleen Park & Ride	Create a safe pedestrian network through Park & Ride
7	Manningham Road (Yarra River Bridge), Bulleen	Grade-separated pedestrian/cycling crossing
8	Former Bulleen Drive in site	Proposed shared path to avoid dissecting the site
9	Banksia Park, Bulleen to Dora St, Heidelberg (Yarra River)	New shared pedestrian/cycling bridge (Yarra River)
10	Bulleen Road / Eastern Freeway	New shared pedestrian/cycling bridge (freeway overpass)
11	Manningham Road @ Robert St, Bulleen	Pedestrian-operated traffic signals
12	High St @ Stutt Ave/Ayr St, Doncaster	Safe pedestrian crossing: refuge island
13	High St @ Winters Way, Doncaster	Safe pedestrian crossing: refuge island
14	High Street, Doncaster	Off-road shared pedestrian/cycling path
15	Tram Road/Grand Blvd, Doncaster (Applewood Retirement Village)	Pedestrian-operated traffic signals
16	Veneto Club, Bulleen Road, Bulleen	Pedestrian-operated traffic signals
17	Bulleen Park, Bulleen	Bulleen Park Masterplan
18	Katrina Gully Reserve, Doncaster	New pedestrian connection
19	Marjorie Close, Bulleen	New pedestrian connection
19.1	Estelle Street, Bulleen	New pedestrian connection
20	Wilson Road, Doncaster	New pedestrian connection
21	Colston Close, Doncaster	New pedestrian connection
22	Park Reserve, Doncaster	Protect the reserve from freeway development
23	Koonung Park Reserve, Bulleen	Protect the reserve from freeway development
24	School district, Bulleen Road	Protect the school grounds from freeway development
25	Boroondara Tennis Centre, North Balwyn	Relocate to a suitable location
26	Greythorn Bowling Club, Doncaster	Protect the facility from freeway development
27	Boronia Grove Reserve, Doncaster East	Improve overall pedestrian network
Public Transport		
28	Templestowe Road	Provide for bus services, bus stops and shelters
29	Thompsons Road (southwest-bound)	Bus priority (bus lanes)
30	Thompsons Road / Bulleen Park & Ride	Bus entry to Doncaster Busway
31	Thompsons Road @ Hugo Street	Bus shelter
32	Thompsons Road @ Balwyn Road	Bus shelter
33	Doncaster Busway	Bus Rapid Transit (BRT) network
34	Doncaster Road	Bus Rapid Transit (BRT) network
35	Doncaster Park & Ride	Improve bus priority and access
36	Eastern Freeway (between Doncaster & Springvale Rds)	Dedicated on-road bus priority
37	Blackburn Road (between Freeway and Doncaster Rd)	Bus priority (bus lanes)
38	Manningham Road / Banksia St (Yarra River Bridge)	Bus priority (bus lanes)
39	Eastern Freeway (Hoddle St to Doncaster Road)	Future Doncaster (heavy) rail reservation
Road Infrastructure		
40	Templestowe Road	Templestowe Road upgrade
41	Bridge Street	Traffic signals
Public Art, Streetscapes and Community Facilities		
42	Thompsons Road	Centre-median landscaped boulevard
43	Thompsons Road Shopping Strip	Streetscape improvements
44	39 Bridge St, Bulleen (Caltex Service Station)	Protect existing River Red Gum tree
45	Manningham Road, Bulleen	Public art and urban design to enhance the 'gateway' to Manningham
46	Eastern Freeway / Doncaster Road off-ramp, Doncaster	Protect or relocate the Inge King 'Sentinel' sculpture
47	Banksia Park, Bulleen	Protect or relocate the 'Helmet' sculpture
48	Heide Museum of Modern Art	Promote the museum as a key tourist attraction
49	Bolin Bolin Billabong, Bulleen	Create a Heritage Trail



Map Ref No.	Location	Opportunity
Walking, Cycling & Recreation		
1	Heide Museum	Pedestrian-operated traffic signals
2	Footie St / McLachlan St, Templestowe	Pedestrian-operated traffic signals
3	Templestowe Road	Off-road shared pedestrian/cycling path
4	Thompsons Rd @ Stanley/Allen St, Bulleen	Safe pedestrian crossing: refuge island
5	Thompsons Rd @ Millicent Ave/Kathleen Gv, Bulleen	Safe pedestrian crossing: refuge island
6	Proposed Bulleen Park & Ride	Create a safe pedestrian network through Park & Ride
7	Manningham Road (Yarra River Bridge), Bulleen	Grade-separated pedestrian/cycling crossing
8	Former Bulleen Drive in site	Proposed shared path to avoid dissecting the site
9	Banksia Park, Bulleen to Dora St, Heidelberg (Yarra River)	New shared pedestrian/cycling bridge (Yarra River)
10	Bulleen Road / Eastern Freeway	New shared pedestrian/cycling bridge (freeway overpass)
11	Manningham Road @ Robert St, Bulleen	Pedestrian-operated traffic signals
12	High St @ Stutt Ave/Ayr St, Doncaster	Safe pedestrian crossing: refuge island
13	High St @ Winters Way, Doncaster	Safe pedestrian crossing: refuge island
14	High Street, Doncaster	Off-road shared pedestrian/cycling path
15	Tram Road/Grand Blvd, Doncaster (Applewood Retirement Village)	Pedestrian-operated traffic signals
16	Veneto Club, Bulleen Road, Bulleen	Pedestrian-operated traffic signals
17	Bulleen Park, Bulleen	Bulleen Park Masterplan
18	Katrina Gully Reserve, Doncaster	New pedestrian connection
19	Marjorie Close, Bulleen	New pedestrian connection
19.1	Estelle Street, Bulleen	New pedestrian connection
20	Wilsons Road, Doncaster	New pedestrian connection
21	Colston Close, Doncaster	New pedestrian connection
22	Park Reserve, Doncaster	Protect the reserve from freeway development
23	Koonung Park Reserve, Bulleen	Protect the reserve from freeway development
24	School district, Bulleen Road	Protect the school grounds from freeway development
25	Boroondara Tennis Centre, North Balwyn	Relocate to a suitable location
26	Greythorn Bowling Club, Doncaster	Protect the facility from freeway development
27	Boronia Grove Reserve, Doncaster East	Improve overall pedestrian network
Public Transport		
28	Templestowe Road	Provide for bus services, bus stops and shelters
29	Thompsons Road (southwest-bound)	Bus priority (bus lanes)
30	Thompsons Road / Bulleen Park & Ride	Bus entry to Doncaster Busway
31	Thompsons Road @ Hugo Street	Bus shelter
32	Thompsons Road @ Balwyn Road	Bus shelter
33	Doncaster Busway	Bus Rapid Transit (BRT) network
34	Doncaster Road	Bus Rapid Transit (BRT) network
35	Doncaster Park & Ride	Improve bus priority and access
36	Eastern Freeway (between Doncaster & Springvale Rds)	Dedicated on-road bus priority
37	Blackburn Road (between Freeway and Doncaster Rd)	Bus priority (bus lanes)
38	Manningham Road / Banksia St (Yarra River Bridge)	Bus priority (bus lanes)
39	Eastern Freeway (Hoddle St to Doncaster Road)	Future Doncaster (heavy) rail reservation
Road Infrastructure		
40	Templestowe Road	Templestowe Road upgrade
41	Bridge Street	Traffic signals
Public Art, Streetscapes and Community Facilities		
42	Thompsons Road	Centre-median landscaped boulevard
43	Thompsons Road Shopping Strip	Streetscape improvements
44	39 Bridge St, Bulleen (Caltex Service Station)	Protect existing River Red Gum tree
45	Manningham Road, Bulleen	Public art and urban design to enhance the 'gateway' to Manningham
46	Eastern Freeway / Doncaster Road off-ramp, Doncaster	Protect or relocate the Inge King 'Sentinel' sculpture
47	Banksia Park, Bulleen	Protect or relocate the 'Helmet' sculpture
48	Heide Museum of Modern Art	Promote the museum as a key tourist attraction
49	Bolin Bolin Billabong, Bulleen	Create a Heritage Trail



